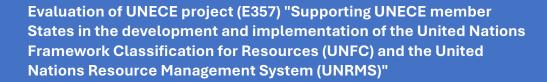
# United Nations Economic Commission for Europe





**External Evaluation**Evaluation Report

Final Report 15 July 2024

# **EXECUTIVE SUMMARY**

This report presents the independent evaluation of UNECE's extrabudgetary project (E357), "Supporting UNECE member States in the development and implementation of the United Nations Framework Classification for Resources (UNFC) and the United Nations Resource Management System (UNRMS)."

The UNECE project (E357) was anchored in UNECE's Subprogramme 5, focused on promoting affordable, clean energy and minimizing the carbon footprint in the energy sector. The project leveraged the United Nations Framework Classification for Resources (UNFC) and the United Nations Resource Management System (UNRMS) to bolster sustainable resource management aligned with the 2030 Agenda for Sustainable Development and the Paris Agreement. The project, which began in June 2020 with a EUR 2 million budget and which will close on 15 July 2024, will be followed by a second phase. The project aimed to enhance resource management capabilities across UNECE member States and globally through activities such as developing standards, conducting workshops, and facilitating expert engagement. Its objectives were to improve resource classification systems and contribute to align management practices with global sustainability goals, targeting a wide range of stakeholders. UNFC and UNRMS were endorsed by ECOSOC and were invited for global adoption.

The evaluation aimed to assess the achievements of the project in supporting the development and implementation of UNFC and UNRMS. Mandated by EU funding requirements and the UNECE Evaluation Policy, the evaluation assessed the project's relevance, coherence, effectiveness, efficiency, and sustainability in advancing sustainable resource management and socio-economic progress among UNECE member States. It also explores the project's contribution to human rights, gender equality, youth inclusion, disability, and climate change.

The evaluation used a mix of data collection and analysis methods to broaden sources and triangulate findings. The evaluation conducted a desk review of the project's management reports and outputs. Semi-structured interviews were conducted with 26 key informants. A survey compiled feedback from 275 respondents. The Evaluator attended the UNECE Resource Management Week 2024 for observation and further data gathering. The evaluation faced several limitations such as remote data collection and the broad scope of UNECE's engagement, which were mitigated by employing a variety of data collection methods and focusing on significant areas of work.

The evaluation found the project highly relevant and well-aligned with the sustainable resource management needs and priorities of UNECE member States, fostering the adoption of UNFC and UNRMS. The project supported the implementation of the 2030 Agenda for Sustainable Development by providing training and promoting the contribution of UNFC and UNRMS to the SDGs through various platforms and documents. Extensive consultations and the incorporation of stakeholder feedback have been key in steering the scope and deliverables of the project. Evaluation informants highlighted the utility of UNFC in establishing a common language among stakeholders for better harmonized energy and resource management, emphasizing its versatility across different resource types. However, there were suggestions for further enhancing alignment with specific user needs and extending the project's impact on technical knowledge areas such as the operationalization of UNFC

standards. Overall, the project was found important in fostering a standardized approach to resource management that integrates social and environmental considerations, supporting broad sustainable development objectives.

The project aimed for coherence with other UN entities and international organizations by engaging in various collaborative efforts and seeking synergies to strengthen the implementation of UNFC and UNRMS. These efforts included supporting UN initiatives, collaborating on Horizon Europe projects, and collaborating with the African Union Commission with resource classification systems tailored to their specific challenges. Around 77% of survey respondents acknowledged that UNECE's efforts were complementary to other organizations' work in the field. Despite these efforts, there were calls for greater coherence and practical engagement with a broader range of stakeholders, including industry players and governmental bodies, to ensure the frameworks' applicability to real-world scenarios. Suggestions were made to continue the integration with other global frameworks, improve capacity building, and strengthen coordination with other UN bodies and international initiatives to avoid duplicative efforts and leverage synergies more effectively.

The evaluation found the project effective in enhancing the capacities of member States to implement and utilize UNFC and UNRMS for resource classification and management. The project successfully delivered or supported training programmes, workshops, knowledge-sharing initiatives and knowledge products which were well-received and contributed to improving technical expertise and understanding among member States, especially those with limited resource management experience. Additionally, UNECE's efforts facilitated valuable exchanges of best practices and fostered collaboration across various stakeholders, which helped align national resource management policies with international standards. These activities helped with the implementation of UNFC and UNRMS and promoted the creation of a conducive regulatory environment for sustainable resource development. The evaluation found all the project's outcomes and outputs achieved or in progress.

The project utilized resources adequately (financial, human, and technological) for supporting the implementation of UNFC and UNRMS, leveraging a vast network of over 250 unpaid experts and minimal direct costs due to pro-bono contributions. One of the project's key rationales was to cover for the lack of adequate staffing capacity in UNECE to support the development and implementation of UNFC and UNRMS. Staffing accounted for 64% of the project's budget. The project's efficiency was marked by the use of online meetings and workshops, significant in-kind contributions from the network of experts, and strategic partnerships that amplified its reach and impact without substantial financial expenditures. Efficiency was also evidenced in the growing geographic and multi-sectoral deployment of UNFC and UNRMS, facilitated by the engagement of diverse stakeholders. However, there were recommendations for more strategic use of resources, including enhancing private sector engagement and further supporting the development of International Centres of Excellence on Sustainable Resource Management to optimize the frameworks' adoption and application.

The sustainability of the project was found illustrated by significant advancements in the globally harmonized classification of natural resources facilitated by the UN Framework Classification for Resources (UNFC). These enhancements include the development of sectoral specifications for various resources, bridging documents linking UNFC to other classification systems, and the

implementation of UNRMS principles. These contributions have been integrated into legislative frameworks such as the EU Critical Raw Materials Act and adopted in diverse geographical and sectoral applications, demonstrating a broad and evolving impact. Moreover, the integration of these frameworks into policy, along with the establishment of International Centres of Excellence on Sustainable Resource Management (ICE-SRMs) and partnerships with other international entities, ensures their ongoing relevance and application. The project's efforts have not only streamlined resource classification and management globally but also contributed to strengthen their alignment with the Sustainable Development Goals, suggesting long-term viability and sustainability.

The evaluation's findings and conclusions brought to formulate the following recommendations:

Recommendation 1: UNECE should continue promoting UNFC and UNRMS to the ecosystem of target adopters with strategies and interventions tailored to specific stakeholder groups. This could involve to:

- Consider reflecting concepts stemming from the theory of diffusion of innovations (e.g. early
  adopters, champions, incentives, social networks, etc.) into the design of the project's next
  phase and forthcoming activities.
- Develop and implement a partnership and engagement roadmap with public and private sector actors designing more specific or tailored interventions, such as a strengthening of outreach activities and capacity-building activities targeting the financial sector, or the promotion of the complementarity of UNFC and UNRMS with other standards.
- Facilitate the globalisation of UNFC and UNRMS through joint events and activities with other
  UN entities and the Regional Economic Commissions as well as by inviting UN partners in UN
  Energy to engage a discussion on the globalisation of UNFC and UNRMS and foster the
  mainstreaming of the frameworks in UNDA and other UN development projects, and by
  considering governance modalities and working arrangements that facilitate global
  representation and participation.
- Continue facilitating the collaborations and partnerships engaged in the Expert Group on Resource Management (EGRM) and supporting the implementation of the actions of its working groups and task forces (e.g. UNFC Adoption Group, Women in Resource Management Working Group, Resource Management Young Member Group, etc.) and formulate a theory of change that clarifies how these activities target specific stakeholder groups, i.e. the outcomes to be achieved per type of stakeholder and the joint or respective causal chains leading to those.

# Recommendation 2: UNECE should continue developing the capacities of target users of UNFC and UNRMS with a view to accelerate adoption. This could involve to:

- Develop the capacities of public institutions and other partners in EU countries with a view to support the implementation of the EU Critical Raw Materials Act and provide a classification of projects according to UNFC.
- Capitalize on the vast network of sustainable resource management experts across countries and sectors to deliver capacity-building and to promote UNFC and UNRMS to their respective networks of national institutions and industry partners including by considering to co-sponsor participation to these activities.
- Continue promoting the establishment and development of the ICE-SRMs and to respond to their needs, including by documenting the process towards their creation and

- operationalisation, developing and sharing good practices and lessons learned, and by facilitating their networking and contributing to their promotion.
- Consider supporting the development of a global knowledge management platform to facilitate access to UNFC and UNRMS information resources and expertise and to foster mutual support and networking among the community of UNFC and UNRMS experts and stakeholders, and consider strengthening the positioning of the frameworks as global brands for which UNECE is the technical anchor but one of the enabling policy or institutional contributors.

# Recommendation 3: UNECE should continue dedicating efforts to mobilize resources for the further development and promotion on UNFC and UNRMS. This could involve to:

- Document the efforts committed by UNECE in support of the development and implementation of UNFC and UNRMS to present a stronger business case against the hiring freeze and expedite the recruitment for the position of Economic Affairs Officer (P-4) on UNFC and UNRMS.
- Consider approaching resource partners in UNECE member States and other regions as well
  as among global funding mechanisms to advocate for an acceleration in the adoption of
  UNFC and UNRMS and promote mobilisation of resources for the institutions and modalities
  which contributes to the frameworks, including UNECE, other RECS, and the ICE-SRMs.

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# **ACRONYMS AND ABBREVIATIONS**

AMREC	African Mineral and Energy Resources Classification and Management System
AUC	African Union Commission
COP	Conference of the Parties
CRIRSCO	Committee for Mineral Reserves International Reporting Standards
CSO	Civil Society Organisation
DG GROW	Directorate-General for Internal Market, Industry, Entrepreneurship and SMEs
ECLAC	Economic Commission for Latin America and the Caribbean
ECOSOC	United Nations Economic and Social Council
EGRM	Expert Group on Resource Management
EIT	European Institute of Innovation and Technology
ERMA	European Raw Materials Alliance
ESCAP	Economic and Social Commission for Asia and the Pacific
EU	European Union
GDP	Gross Domestic Product
IAEA	International Atomic Energy Agency
ICE-SRM	International Centre of Excellence on Sustainable Resource Management
ISO	International Organization for Standardization
LNOB	Leave No-one Behind
MOU	Memorandum of Understanding
NGO	Non-governmental Organisation
PPB	Proposed Programme and Budget
PRMS	Petroleum Resource Management System
REC	Regional Economic Commission
RMYMG	Resource Management Young Member Group
SDG	Sustainable Development Goal
TOC	Theory of Change
TOR	Terms of Reference
UN	United Nations
UNCT	United Nations Country Team
UNDA	United Nations Development Account
UNDP	United Nations Development Programme
UNECA	United Nations Economic Commission for Africa
UNECE	United Nations Economic Commission for Europe
UNEP	United Nations Environment Programme
UNFC	United Nations Framework Classification for Resources
UNIDO	United Nations Industrial Development Organisation
UNRCO	United Nations Resident Coordinator Office
UNRMS	United Nations Resource Management System

# 1 Introduction

- 1. This report presents the evaluation of the UNECE extrabudgetary project (E357) "Supporting UNECE member States in the development and implementation of the United Nations Framework Classification for Resources (UNFC) and the United Nations Resource Management System (UNRMS)".
- 2. The report starts by providing a brief description of the project. The second section describes the evaluation's purpose, scope and methodology. The report continues by presenting the evaluation's findings. The final section provides the evaluation's conclusions and recommendations.

# 2 PROJECT DESCRIPTION

3. This section briefly presents the subject of the evaluation.

# 2.1 BACKGROUND

- The project under evaluation is attached to **UNECE Subprogramme 5** which contributes to the 4. objective to ensure access to affordable and clean energy for all and reduce greenhouse gas emissions and the carbon footprint of the energy sector in the region<sup>1</sup>. Among its agenda of work, the subprogramme provides support to member States, partners and stakeholders on the development of the United Nations Framework Classification for Resources (UNFC) and the United Nations Resource Management System (UNRMS). UNFC<sup>2</sup> has been under development since 1992 and available since 1997, and UNRMS<sup>3</sup> has been under development since 2018 and available since 2022. These tools are complementary and aim to support the sustainable management of natural resources in alignment with the 2030 Agenda for Sustainable Development and the Paris Agreement. UNFC is a generic and flexible classification system that covers all types of energy and mineral resources, including minerals, petroleum, nuclear fuels, renewable energy, injection projects and anthropogenic resources. UNRMS is a dynamic framework that provides guidance and best practices on sustainable resource management in different contexts and sectors, considering environmental, social, and economic aspects. Both UNFC and UNRMS have been endorsed by the United Nations Economic and Social Council (ECOSOC) for global application and have been adopted by a range of countries, regions, and organizations worldwide.
- 5. The work on UNFC and UNRMS has grown and evolved significantly since 1997 when ECOSOC endorsed the first version of UNFC for solid fuels and mineral commodities (Decision 1997/226). In the early 2000s, UNFC was broadened to encompass petroleum and nuclear fuel resources and was endorsed again by ECOSOC in 2004 (Decision 2004/233). In 2009, the Expert Group on Resource Classification was created (renamed in 2017 as the **Expert Group on Resource Management (EGRM)**) as a subsidiary body of the **Committee on Sustainable Energy** to develop and promote UNFC and UNRMS<sup>4</sup>. Since 2010, UNFC has expanded to include renewable energy resources such as bioenergy, geothermal, solar, wind, injection projects and anthropogenic resources. Work is underway to include groundwater and hydrogen as well. In 2015, UNFC started building additional guidelines to align resource management to the 2030 Agenda and the Paris Agreement, such as the social and environmental project evaluation guidelines and the bridging document for climate-smart

<sup>&</sup>lt;sup>1</sup> United Nations General Assembly. 2019. Proposed programme budget for 2020. A/74/6 (Sect. 20). New York.

<sup>&</sup>lt;sup>2</sup> UNFC Documents | UNECE

<sup>&</sup>lt;sup>3</sup> United Nations Resource Management System (UNRMS) | UNECE

<sup>&</sup>lt;sup>4</sup> EGRM and Bureau | UNECE

resource management. Attention was also focussed on gender quality, youth engagement and the protection of human rights.

6. In 2019 and 2020, the Expert Group focused on the sustainable management of natural resources, noting its fundamental role in achieving the SDGs and supporting inclusive and sustainable recovery from the COVID-19 crisis. UNECE called on ECE and non-ECE Member States, international organizations, industry, and regional commissions to deploy and develop UNFC and UNRMS. The Expert Group responded by delivering its mandated activities and updating the UNFC Category and Sub-category definitions to facilitate global application and deployment. At its 29th session, the Committee also endorsed the updated UNFC Update 2019 and requested the secretariat to publish the updated version in the six UN languages. The Committee requested the accelerated development of UNRMS. Moreover, the Committee recommended strengthened collaboration with other UNECE subprogrammes on the sustainable use of natural resources. It noted the enhanced applicability of UNFC and UNRMS to the sustainable management of critical raw materials required for energy transitions. UNECE also proposed developing a platform to coordinate the International Centres of Excellence on Sustainable Resource Management (ICE-SRM) being established worldwide to disseminate UNFC and UNRMS and sought extrabudgetary funding to support the activities.

### 2.2 THE EU SUPPORT TO UNECE MEMBER STATES ON UNFC AND UNRMS

- 7. The European Union's (EU) funded project (E357) was derived from the objectives of UNECE's Subprogramme 5 on Sustainable Energy and aligned with the EGRM work plan. It was approved by the UNECE Executive Committee (EXCOM) on 2 June 2020. The project's core objective is to improve the resource management capacities of UNECE member States by leveraging the UNFC and UNRMS frameworks. These systems offer a consolidated, comparable, and coherent approach to assess and manage resources across governmental, statistical, corporate, and financial domains, serving as pivotal tools for sustainable development.
- 8. Driven by the imperative link between natural resource management and socio-economic advancement, the project aligns with the Expert Group on Resource Management's mandate to develop universally applicable classification schemes for energy and mineral resources. This includes recent advancements in UNFC, encompassing resources including solar, geothermal, wind, bioenergy, and anthropogenic resources, with ongoing efforts to extend this classification to hydro, marine energy, groundwater resources and potentially hydrogen. The project's foundation in UNFC and UNRMS serves as an integrated toolkit for countries, aiding them in aligning natural resource management with the 2030 Agenda for Sustainable Development.
- 9. The project's activities are multifaceted, spanning the refinement and development of specifications, guidelines, best practices, and case studies for UNFC. Simultaneously, it emphasizes the establishment and maintenance of fundamental principles, concepts, structures, and data standards for UNRMS. Additionally, the project aims to support the implementation of these frameworks by synthesizing relevant knowledge, organizing outreach meetings, facilitating expert engagement, conducting capacity-building workshops, and disseminating toolkits and policy resources. Aligned with the Sustainable Development Goals (SDGs) 2, 3, 6, 7, 9, 12, and 13, the project envisions improved resource classification, enhanced management capabilities, strengthened mechanisms for sustainability and resilience, and an amplified understanding of sustainable resource production and consumption across UNECE member States and beyond.

- 10. The **main direct beneficiaries** targeted by the project include: senior officials from ministries dealing with natural resources, mining, energy, water, industry, EU geological surveys, national experts, and financial institutions within the UNECE region.
- 11. The project started in June 2020 and is scheduled for completion by July 2024. The project was initiated with an approved **budget of EUR 2 million** (Table 1).

Table 1. Project summary budget.

Expected Accomplishments	Budget (Euros)
EA1. Improved globally harmonized classification of natural resources using UNFC to	477,000.00
aid sustainable development in the UNECE region	
EA2. Improved capabilities of UNECE member States for sustainable management of	477,000.00
natural resources using UNRMS	
EA3. Strengthened mechanisms for sustainability and resiliency in natural resource	444,000.00
management in UNECE member States to aid economic recovery and growth	
EA4. Improved understanding by UNECE member States and other countries of the	434,500.00
opportunities and challenges presented by sustainable natural resources production	
and consumption	
Programme costs (7%) and evaluation (2%)	167,490.00
Total	2,000,000.00

Source: UNECE Executive Committee, Extrabudgetary project Informal Document No. 2020/31, Geneva, 20 May 2020.

12. A project manager has been responsible for regular monitoring of the activities' implementation. The progress of the intervention was reported annually by the preparation of (3) progress reports. A final report is to be prepared upon completion of the intervention (within 6 months). Furthermore, the EGRM was to be part of the action governance mechanism and to provide technical advice and recommendations on UNFC and UNRMS.

# 2.3 PROJECT OUTCOMES AND THEORY OF CHANGE

13. The E357 project was formulated without a Theory of Change. The project presented a simplified logical structure with expected achievements and activities as in Table 2. Furthermore, the EU Contribution Agreement (SI2.831304) included a Logical Framework Matrix with indicators, baselines and targets<sup>5</sup> which are presented with a progress update in Annex 3.

Table 2. Project framework.

	abto 2.11 To jour trainion of R.			
Overall project objective / Impact				
Development, maintenance and dissemination of UNFC, development of UNRMS based on UNFC, and building capacities in UNECE member States for sustainable resource management and facilitated delivery of the SDGs.				
Outcomes	Outputs			
Continuous improvement in the globally harmonised classification and management of natural resources using	Fully functional UNFC with specifications and UNRMS principles.			

<sup>&</sup>lt;sup>5</sup> Some discrepancies have been noted between the project framework presented to the UNECE Executive Committee (UNECE Executive Committee, Extrabudgetary project Informal Document No. 2020/31, Geneva, 20 May 2020) and the project logical framework matrix from the EU Contribution Agreement (European Union Contribution Agreement SI2.831304, Brussels, 16 July 2020).

UNFC and further development of UNRMS to enhance sustainable development in the UNECE region through alignment with the SDGs.	<ol> <li>Regional application guidelines, particularly a raw material-focused UNFC for Europe with emphasis on raw materials.</li> <li>Pilot and reference case studies on UNFC and UNRMS application.</li> <li>Data structures and harmonised approaches for synthesising available data for different resources with emphasis on raw materials globally to build a resource information system.</li> </ol>
2. Improve understanding of UNECE member States and other countries of the opportunities and challenges presented by sustainable natural resource production and consumption through application of UNFC and UNRMS.	<ol> <li>Outreach and coordination meetings with authorities (including all EU Member States).</li> <li>Supporting African Union in the progressive implementation of the UNFC for Africa system.</li> <li>Organising Annual EGRM meetings in Geneva; UNFC/UNRMS event during the EU Raw Materials Week.</li> </ol>
3. Strengthen capabilities of UNECE member States for sustainability and resiliency in natural resource management to aid economic recovery and growth using UNFC and UNRMS.	<ul> <li>8. Development of training materials on the application of UNFC and UNRMS.</li> <li>9. Organising capacity-building workshops/training courses on sustainable management of resources.</li> <li>10. Supporting the launch of Centres of Excellence (CoEs).</li> </ul>

Source: European Union Contribution Agreement SI2.831304, Brussels, 16 July 2020.

- 14. The articulation conveyed by the project framework and further inputs were used by the evaluation to reconstruct a simplified draft Theory of Change (Figure 1).
- 15. The following assumptions were derived from the analysis of the project design:
  - **Assumption 1**: Capacity-building is effective and targets and influences the right experts and decision makers.
  - **Assumption 2**: National policies, legislations, regulatory frameworks, partnerships and capacities installed to institutionalise UNFC and UNRMS.
  - **Assumption 3**: There is continuity of national policies and (sub)regional collaboration structures.
  - **Assumption 4**: Governments establish necessary financing mechanisms and ensure fiscal space that enable transformative and sustainable results.
- 16. The reconstructed pathways for a realization of the change processes between outcomes/intermediate states as well as the underlying assumptions are further analysed below in section 5.2 of this report.

Intermediate **Activities Outputs Outcomes Impact Outcomes** UNFC Development and maintenance of UNFC further Mechanisms for sustainability specifications, application guidelines, best developed practices, and case studies and resiliency in natural and resource management in maintained UNECE member States to aid economic recovery and Development and maintenance of the growth strengthened **A1** fundamental principles, concepts and **A4** terminology of sustainable resource Globally harmonized Capacities in UNRMS Access to management (SRM) UNECE member classification of natural developed affordable and Structure and specifications of UNRMS and States for resources using UNFC to aid and clean energy for data, information and knowledge sustainable development in sustainable maintained **A2** all in UNECE standards and guidelines the UNECE region improved management of member States is resources improved through an Trainings to Experts engaged application of Synthesis and assessment of information UNECE Capabilities of UNECE member UNFC and and knowledge on resource management **UNECE Member** Interested member States for sustainable UNRMS development and Outreach and coordination meetings with management of natural States apply the States and maintenance of strengthened investment banks, development banks, United Nations other resources using UNRMS the UNFC and financial and other key institutions Framework for partners improved UNRMS Convergence in Online communications (e.g. webinars), Resources delivered the overall legal, virtual workshops, training courses to Classification the SDGs **A3** engage experts in EGRM-related activities regulatory and policy framework, Capacity-building workshops on SRM in the UNECE region including the Greenhouse gas Understanding by UNECE development of emissions and the member States and other UNFC and UNRMS classification carbon footprint of the countries of the opportunities Training materials on UNFC and UNRMS information products systems and energy sector in the and challenges presented by guidelines UNECE region are disseminated and Dissemination of a toolkit for governments sustainable natural resources Communication of policy tools and activities and findings promoted reduced of EGRM production and consumption reporting codes to national and regional communicated improved stakeholders Multi-stakeholder workshops and training courses in the UNECE region Technical knowledge Support provided to the launch of Centres enhanced in two Centres **Assumptions** of Excellence on raw materials in EU A1: Capacity building is effective and targets and influences the right experts and of Excellence decision makers. A2: National policies, legislations, regulatory frameworks, partnerships and capacities UNFC and UNRMS Africa Support to African Union in the installed to institutionalise UNFC and UNRMS. progressive implementation of UNFC and documentation A3: There is continuity of national policies and (sub)regional collaboration structures. UNRMS developed and delivered A4: Governments establish necessary financing mechanisms and ensure fiscal space that enable transformative and sustainable results

Figure 1. Draft theory of change of the E357 project and Subprogramme on UNFC and UNRMS.

#### 3 PURPOSE, SCOPE AND METHODOLOGY OF THE EVALUATION

As required by the funding partner (EU) and in compliance with the UNECE Evaluation Policy<sup>6</sup>, an evaluation of the level of achievements of the objectives of the extrabudgetary E357 project is to be completed prior to its closure. This evaluation will inform a second evaluation which has been conducted in parallel and will form a separate report<sup>7</sup>.

#### 3.1 GOAL, PURPOSE AND OBJECTIVES OF THE EVALUATION

- The goal of this evaluative assignment is to assess the extent to which the objectives of the 18. UNECE project (E357) "Supporting UNECE member States in the development and implementation of the United Nations Framework Classification for Resources (UNFC) and the United Nations Resource Management System (UNRMS)" were achieved.
- The purpose of the evaluation is to assess the extent to which the results of project were achieved. The evaluation assessed the relevance, coherence, effectiveness, efficiency and sustainability of the project in contributing towards sustainable resource management and socioeconomic advancement within UNECE member States. The evaluation also assessed any effects the project may have had on progressing human rights, gender equality, youth, disability inclusion and climate change.
- As per the ECE Evaluation policy, the objectives of the evaluation were to: 20.
  - Promote organizational learning, by identifying lessons learned and best practices;
  - (ii) Contribute to improvement of programme performance;
  - Ensure accountability of the Secretariat to member States, senior leadership, donors, (iii) and beneficiaries.

#### 3.2 **SCOPE OF THE EVALUATION**

- The evaluation of the project followed the established objectives, indicators of achievement, and means of verification outlined in the project's logical framework. The scope covered the entire implementation period from August 2020 to July 2024, in the 56 UNECE countries.
- At the time of the evaluation, the project is set to enter a second phase (E429). Therefore the evaluation conclusions and recommendations aimed also to inform the work of UNECE and the implementation of the Phase II project. Accordingly, the evaluation took a retrospective and forwardlooking approach. It was summative but also formative aiming to support UNECE in its next steps.
- The universally recognized values and principles of human rights and gender equality were integrated into all stages of the evaluation, in compliance with the United Nations Evaluation Group's revised gender-related norms and standards. Therefore, the evaluation assessed how the sustainable resource management activities contributed to gender equality and women's empowerment, as well as the realization of human rights, with an emphasis on 'leaving no one behind'.

evaluation of the Project E357 and the evaluation of the Subprogramme 5 on UNFC and UNRMS. Both evaluations were

complementary and have been conducted in parallel.

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<sup>&</sup>lt;sup>6</sup> Item10 ECE EX 2021 35 Evaluation Policy.pdf (unece.org)

<sup>&</sup>lt;sup>7</sup> The evaluative assignment consisted of two evaluations mandated through different mechanisms. The present

# 4 EVALUATION METHODOLOGY

24. This section presents the approach implemented to conduct the evaluation.

# 4.1 KEY EVALUATION QUESTIONS

25. As per the TORs, the evaluation addressed the questions in Table 3. Annex 4 presents the evaluation framework with sub-questions and evaluation methods.

Table 3. Evaluation criteria and questions.

Criteria Project evaluation questions		
Relevance	<ol> <li>How aligned were the project's activities with the identified needs and priorities of UNECE member States regarding sustainable resource management?</li> <li>To which extent this project allowed UNECE to support its member States in the implementation of the 2030 Agenda for Sustainable Development?</li> <li>Were the project's objectives and activities consistent with the overarching goals of the UNECE subprogramme on sustainable energy and the Expert Group on Resource Management?</li> <li>To what extent were gender, youth human rights, climate change, disability and other cross-cutting perspectives mainstreamed in project? How could this be improved?</li> </ol>	
Coherence	<ol> <li>To what extent was this project coherent with those of other UN entities and international organizations working in the same area, including at country level? Has the coherence improved over the course of the project?</li> <li>Was the project design and implementation appropriate for meeting the project's logical framework?</li> <li>How coherent were the outcomes of the project (UNFC and UNRMS specifications, capacity-building workshops, guidelines, toolkits, best practices, and case studies)</li> </ol>	
F(( ) )	with respect to the diverse needs of UNECE member States?  8. How coherent was the communication strategy of the project?	
Effectiveness	<ul> <li>9. To what degree did the project successfully enhance the capacities of UNECE member States in implementing and utilizing UNFC and UNRMS for resource classification and management?</li> <li>10. How effectively did the project contribute to strengthening the mechanisms for sustainability and resilience in natural resource management within UNECE member States?</li> </ul>	
	11. Did the project's activities significantly improve the understanding of opportunities and challenges related to sustainable resource production and consumption among UNECE member States and other involved stakeholders?	
	12. Did the project adequately consider and respond to the emerging challenges and risks, especially those accentuated by the COVID-19 pandemic, during its life cycle?	
Efficiency	<ul> <li>13. How efficiently were the resources (financial, human, and technological (e.g. website, online meetings, etc.)) allocated and utilized throughout the project's implementation phase?</li> <li>14. How could the use of resources be improved? Would you propose any alternatives</li> </ul>	
	to achieve the same results?  15. How effectively did the project manage time constraints and deadlines while ensuring quality outputs and deliverables?	
	16. Were the activities implemented most efficiently compared to alternatives? In particular, how do resources' costs and use compare with similar projects (within UNECE, other regional commissions, other UN agencies, or other organizations and initiatives)?	

Sustainability	17. What measurable improvements were observed in the globally harmonized classification of natural resources, as facilitated by UNFC, following the project's interventions?
	18. What measures were implemented to ensure the continued relevance and applicability of UNFC and UNRMS beyond the project's duration?  19. How well were the principles of sustainability integrated into the fundamental
	concepts and structures of UNFC and UNRMS for long-term viability?  20. To what extent did the project foster collaboration and partnerships that could sustain efforts for ongoing resource management beyond the project's conclusion?

### 4.2 **EVALUATION METHODS**

- 26. The evaluation collected and analysed data from a range of sources to deepen understanding and triangulate the assessment. The following data collection instruments were used:
  - Desk review: Study of secondary resources including UNECE Programme Budgets, Annual Reports, Progress Reports, deliverables from project activities and outputs, strategic documents and communication content produced by UNECE and partners.
  - Interviews and focus groups: Interviews were conducted with 26 staff, partners, and stakeholders. The canvas for semi-structured interviews was tailored to ensure specific relevancy to the selected stakeholders. Consultations were conducted virtually. The following consultations per stakeholder group were conducted:

Informant groups	Number of informants
UNECE HQ*	4
EGRM Bureau	4
Other EGRM members and UNECE member State representatives	12
UN agencies and international organisations	2
Industry representatives	2
Other partners	2
Total	26

• Survey: The evaluation carried out a survey based on the evaluation framework. The survey was sent to the EGRM mailing list, a group of partners and stakeholders involved or interested in UNECE's work on sustainable resource management. The questionnaire was made available in English. The survey was anonymous and remained open for 3 weeks, from Monday 15 April to Friday 4 May 2024. In order to reduce the non-response rate, two reminder messages were sent to survey recipients. The survey was accessed by 359 persons but questionnaires that were left largely incomplete (i.e. responses not reaching the third section) were removed by the evaluation. Therefore survey results are based on the inputs provided by 275 respondents. Considering the inherent biases that confront such surveys it is worthwhile to note that the survey represents only the opinion of those who participated but not the perspectives of all the members of the EGRM mailing list nor all the broader group of UNFC and UNRMS stakeholders.

<sup>\*</sup> Some interviews jointly covered the inception and assessment phases.

- Observation: The Evaluation Consultant attended the EGRM Fifteenth Session and UNECE Resource Management Week 2024 in Geneva from 22 to 26 April to observe the organisation of meetings and learn from the training sessions and discussions. Interviews with participants were conducted at coffee and during lunch breaks to collect additional opinions on UNFC and UNRMS. In addition to the above 26 in-depth interviews, the evaluation had a dozen of useful but more informal discussions covering some specific evaluation questions.
- 27. The evaluation used a combination of complementary tools for analysis of the data collected.
  - Qualitative analysis of data, secondary resources and interviews.
  - Quantitative analysis including cross-tabulations of survey data.
- 28. A gender-responsive methodology, methods and tools, and data techniques were used during data collection and for the analysis of the survey results. The evaluation findings, conclusions and recommendations reflect a gender analysis.
- 29. The evaluation took into consideration human rights, gender, disability, youth, SDGs, and environmental matters through the desk review, the canvas of evaluation interviews, and in the survey.

# 4.3 EVALUATION LIMITATIONS

- 30. At the inception stage, the evaluation identified the following potential constraints or limitations and possible mitigation steps:
  - Remote data collection: The evaluation did not include country visits which would have allowed for face-to-face interviews and direct observations of the uptake of UNFC and UNRMS.
    - Mitigation: The evaluation used complementary data collection methods to enrich and triangulate findings. Participation in the UNECE Resource Management Week 2024, including the 15<sup>th</sup> Session of EGRM, in Geneva brought to meet participants from UNECE member States and other countries.
  - Limited availability of informants.
    - The interviews were a key instrument for this evaluation. Some target informants were not readily available or had changed positions since the start of the project.
    - Mitigation: The initial list of target informants was expanded during the evaluation to ensure a sufficient number of interviews and the appropriate representation of various informant groups.
  - UNECE and EGRM's engagement on UNFC and UNRMS has a very broad scope.
    - The number of UNECE and EGRM's Working Groups and Sub-groups, technical areas and sectors, partners and stakeholders, and deliverables did not allow for an in-depth assessment of all activities and outcomes.
    - Mitigation: With guidance from the Evaluation Manager and the Programme Manager, the evaluation concentrated on the most significant areas of work for a useful and strategic assessment.

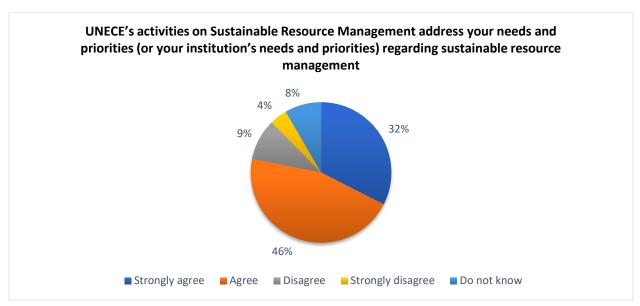
# **5 EVALUATION FINDINGS**

### 5.1 RELEVANCE

How aligned were the project's activities with the identified needs and priorities of UNECE member States regarding sustainable resource management?

- Several mechanisms have contributed to align project activities with the needs and 31. priorities of UNECE member States regarding sustainable resource management. The project is anchored in and contributes to the realization of UNECE's Subprogramme 5. In 2019, the Proposed Programme Budget (PPB) for Subprogramme 5 reported that member States had recognized that current approaches to the management of such resources as energy or raw materials do not deliver the systematic efficiency that is needed for the 2030 Agenda to be achieved. The continued development of UNFC and UNRMS was agreed by the Committee on Sustainable Energy as a path to address the lack of a universally accepted method for the national management of natural resources that enables the optimal production and use of resources and that accommodates environmental and social considerations in line with the 2030 Agenda. The PPB 2021 presented some of the consultative modalities through which UNFC and UNRMS are developed, highlighting the role of the Subprogramme in the promotion of policy dialogue and cooperation among member States, including on resource management, and in engaging stakeholders in the development of normative instruments and the activation of private and public actors in the deployment and dissemination of the instruments.
- 32. According to the EU Contribution Agreement, the design of the project also built on in-depth consultations of the EGRM with its primary stakeholders, including governments and industry. Extending the scope of UNFC from raw material resources to all natural resources, both primary and secondary (anthropogenic) was reflected in EGRM work plans for 2018-2019 and 2020-2021. Development of UNRMS was a mandated area of work and a central focus of the EGRM's work plan for 2020-2021 and beyond.
- Evaluation informants were most often on the opinion that the support provided by the project to the development and uptake of UNFC and UNRMS was contributing to a well-needed establishment of a common language and better harmonized understanding between stakeholders on energy and resource management, including for the social and environmental aspects. Informants stressed the importance of multi-faceted systems that can provide information across systems to help understand the differences and similarities and have dialogues on projects and reserves. One of the main benefits put forward by informants is that UNFC covers all kinds of resources. On several occasions, informants also recalled that a range of countries were already using UNFC. Activities such as case studies for example were therefore found useful to identify best practices to improve classification. The training and communication activities of the project were also perceived important by informants in order to explain UNFC to organisations in member States which are tasked with resource governance and resource management. Several informants also put forward the relevance of the activities implemented in support of the International Centres of Excellence, including to provide international exposure to these initiatives. According to the evaluation survey, 78% of the respondents were of the opinion that UNECE's activities on Sustainable Resource Management addressed their needs and priorities (or their institution's needs and priorities) regarding sustainable resource management (Figure 2).

Figure 2. Needs and priorities on sustainable resource management (n= 274 respondents).



Source: Independent evaluation survey, 2024.

34. The evaluation received suggestions for areas where stronger alignment could be considered between the project's activities and the needs and priorities of UNECE member States regarding sustainable resource management. Evaluation informants conveyed perspectives on further aligning project activities with their needs, with suggestions being sometimes already in the workplan of the EGRM. The evaluation noted a few demands to expand the body of knowledge (e.g. case studies) on UNFC and UNRMS in some sectors, such as anthropogenic resources, renewable energy, land use. Similarly, informants mentioned a pending need the development of technical knowledge and standards on the operationalization and evaluation of UNFC E-axis, echoing discussions held during the UNECE Resource Management Week 2024. Several informants also called for project activities to show more clearly their alignment and discriminate with the needs of specific user groups. The suggestion was also placed to continue communicating that UNFC and UNRMS bring distinct added value that complements other systems without aiming at their replacement.

# To which extent this project allowed UNECE to support its member States in the implementation of the 2030 Agenda for Sustainable Development?

- 35. Implementation of the 2030 Agenda for Sustainable Development was at the core of the project's design. The EU Contribution Agreement completed a mapping of the SDGs to which the project would contribute<sup>8</sup>. Several activities implemented by the secretariat were aimed at promoting the contribution of UNFC and UNRMS to the SDGs. This includes:
  - A training course on "UNFC and its Application" delivered in 2022 to 20 participants from EIT RawMaterials, EIT InnoEnergy and its partners (European Raw Materials Alliance, Battery Alliance), and the European Commission (DG GROW);

<sup>&</sup>lt;sup>8</sup> The EU Contribution Agreement identified and described the linkages of UNFC and UNRM with the following SDGs (and targets): SDG1 (1.4, 1.8), SDG 2 (2.3), SDG 5 (5.1, 5.A), SDG 6 (6.6.3, 6.6.4, 6.6.5), SDG 7 (7.7.1, 7.7.2), SDG 9 (9.1, 9.4), SDG 11 (11.6, 11.A), SDG 12 (12.2, 12.5, 12.6, 12.8, 12.A), SDG 13 (13.1), SDG 17 (17.3, 17.9, 17.11).

- Participation in SDG related forums and events (e.g. Geneva in October 2022; Frankfurt in July 2023):
- Development of a promotional paper presenting UNFC and discussing its position as the only global resource classification tool with direct connections to the SDGs<sup>9</sup>;
- Positioning the UNFC and UNRMS as a framework for developing the SDG risk index for extractive industries<sup>10</sup>.
- 36. The project has also supported actions from working groups linking UNFC to the SDGs, such as a webinar organized by the EGRM Women in Resource Management Working Group and the EGRM Secretariat in March 2023 or the activities of the EGRM Resource Management Young Member Group (RMYMG). The importance to link social and environmental considerations, resource management, and the SDGs was also emphasized by the Social and Environmental Considerations Working Group in a presentation and discussion during the UNECE resource Management Week 2024<sup>11</sup>. The evaluation also noted the existence of the EGRM SDGs Delivery Working group which presented a concept note on "Resource Servitization and its Role in Sustainability" during the UNECE Resource Management Week 2024.
- 37. Representation and analysis in UNECE case studies of the support provided by UNFC and UNRMS to the achievement of the SDGs has been uneven. A series of groundwater case studies<sup>13</sup> developed prior to or around the launch of the project in 2020 featured a window dedicated to a review of the benefits in using UNFC for alignment to SDGs. Other case studies developed since then for other types of resources<sup>14</sup> made seldom any explicit reference to the SDGs. Similarly, the evaluation did not find ample evidence of UNFC implementations or adoptions specifying -even less quantifying- the level of support to specific SDGs. References, when provided, are primarily to recall the anchor and generic alignment of these initiatives with the SDGs, such as with the UNFC-African Mineral and Energy Resources Classification and Management System (AMREC) and Pan African Resource Reporting Code (PARC)<sup>15</sup>, or benefits for sectors such as renewable energy<sup>16</sup>, nuclear fuel resources<sup>17</sup>, among others.
- 38. A few evaluation informants made reference to an agenda of work not specifically referred in the project description (i.e. Contribution Agreement) and its logframe which regards developing a more granular qualification of the SDG dimensions along the E axis of UNFC as well as eventually along the F and G axes.

<sup>&</sup>lt;sup>9</sup> Sabra G. & Solar S. 2023. The Potential Role of the United Nations Framework Classification for Resources in National Raw Materials Inventories.

<sup>&</sup>lt;sup>10</sup> United Nations. 2023. UN-Energy Policy Brief: Aligning Critical Raw Materials Development with sustainable development. Department of Economic and Social Affairs. New York.

<sup>&</sup>lt;sup>11</sup> McClelland C. 2024. Social and Environmental Considerations, Resource Management, and the Sustainable Development Goals. UNECE Resource Management Week 2024. Geneva. < <u>link</u>>

 $<sup>^{12}\,\</sup>underline{\text{https://unece.org/sed/documents/2024/04/presentations/resource-servitization-and-its-role-sustainability-julian}$ 

<sup>13</sup> https://unece.org/groundwater-case-studies-0

<sup>&</sup>lt;sup>14</sup> https://unece.org/sustainable-energy/sustainable-resource-management/case-studies

<sup>15</sup> https://unece.org/sites/default/files/2024-05/01.%20AMS%20presentation-23-04-2024-Nguno.pdf

<sup>16</sup> https://unece.org/sites/default/files/2021-08/ECE\_ENERGY\_GE.7\_2021\_4\_e.pdf

<sup>17</sup> https://unece.org/sites/default/files/2021-

<sup>03/</sup>UNFC%20%26amp%3B%20UNRMS%20NuclearEntryPathwaysRevised.pdf – this reference needs checking for its location

Were the project's objectives and activities consistent with the overarching goals of the UNECE subprogramme on sustainable energy and the Expert Group on Resource Management?

- 39. Project's objectives and activities were consistent with the overarching goals of the UNECE subprogramme on sustainable energy and the Expert Group on Resource Management. The strategy of the subprogramme on sustainable energy is based on the implementation of core interlinked functions, namely, international policy dialogue and cooperation among governments, energy industries and other stakeholders to foster sustainable energy development; the development and deployment of UNECE policy recommendations, norms, standards, guidelines and tools on energy-related issues; and capacity-building and assistance to member States, at their request, through training programmes, advisory services and technical cooperation projects. Since 2020, the UNECE's Proposed Programme and Budget (PPB) documents have planned for outputs supported by project activities, including training seminars, publications, case studies, establishment of centres of excellence, technical assistance, engagement of stakeholders in the development of normative instruments. The project has been reported among the list of deliverables in the PPB 2021 and 2002. Expected results of the subprogramme for the period 2020-2022 were measured by several indicators including "number of member States applying the United Nations Framework Classification for Resources".
- 40. Project's objectives and activities were aligned with the Work Plan of the Expert Group on Resource Management for 2020-2021<sup>18</sup>, 2022-2023<sup>19</sup>, and 2024-2025<sup>20</sup>. Several work streams described in the EGRM work plans were not part of the project's logframe either as not being in the scope of the Contribution Agreement or as being added after its formulation. This regards for example the EGRM's planned activities on UNFC and UNRMS specifications and guidance for women and diversity in resource management and UNFC and UNRMS specifications and guidance for youth in sustainable resource management. Nevertheless, despite not being referred in the Contribution Agreement, the secretariat exercised adaptative management to provide support to these initiatives. Conversely a couple of activities referred in the project logframe were barely described in the EGRM work plans. This regards in particular the project's planned output on data structures and harmonised approaches for synthesising available data for different resources which has been only on the work plan of the EGRM for 2022-2023.
- 41. Evaluation interviews indicated that the secretariat was found closely aligned with the EGRM. According to the evaluation survey, 83 percent of the respondents were of the opinion that UNECE's activities on UNFC and UNRMS are reflective of the expectations and agenda of work of the EGRM.

To what extent were gender, youth, human rights, climate change, disability and other cross-cutting perspectives mainstreamed in project? How could this be improved?

42. Project design did not make reference to actions specifically directed towards gender, youth, human rights, climate change, disability and other cross-cutting perspectives. The Contribution Agreement did not spell out project activities explicitly targeting women, the youth, people with disabilities, human rights or climate change. Reference to these agendas was indirect and placed under UNFC and UNRMS' contribution to the achievement of the SDGs (e.g. SDG 1, SDG 5, SDG 13). The project logframe did not include outcomes or outputs citing cross-cutting agendas.

<sup>18</sup> https://unece.org/DAM/energy/se/pdfs/CSE/comm28.2019/ECE\_ENERGY\_2019\_11\_EGRM\_Final\_.pdf

<sup>&</sup>lt;sup>19</sup> https://unece.org/sites/default/files/2021-07/ECE\_ENERGY\_2021\_7\_EGRM%20Work%20Plan%20for%202022-2023.pdf

<sup>&</sup>lt;sup>20</sup> https://unece.org/sites/default/files/2023-08/ECE\_ENERGY\_2023\_7e.pdf

Similarly, the project logframe did not include gender or vulnerability disaggregated indicators and targets. In a few cases evaluation informants indicated that a stronger representation of these crosscutting agendas in the design of the project could have been beneficial, one informant finding for example that the "human angle" in UNFC had room to be more specifically characterized and measured.

- 43. However, project implementation made room to supporting cross-cutting agendas on gender equality and women and youth empowerment. Evaluation informants commended the work of the secretariat and project's support to youth and gender perspectives, including with the creation of the Working Group on Women in Resource Management and of the Resource Management Youth Member Group. Informants found these initiatives conveyed new perspectives to the EGRM. Interviewees indicated that UNFC and UNRMS came with very technical support materials which needed to be made more accessible to the youth while the gender dimension of a just transition deserved uplifting. Encouraging the EGRM to listen to the youth and to focus on gender was sometimes perceived as one of the significant outcomes of the activities carried out since 2020 on UNFC.
- 44. Project activities strived sometimes to support the promotion of gender equality. Assistance was provided in 2020 to the development of training materials based on the study: "Women Entrepreneurship in Natural Resource Management: Challenges and Opportunities for the MSMEs Sector in the post-COVID-19 Socio-economic Recovery." The secretariat also reported gender disaggregated attendance to training events to which the project supported presentations on UNFC and UNRMS, such as the EU Raw Materials Week in 2021 or the EIT RawMaterials summits in 2022. Data availed by the project shows that resources management is an area with stronger male participation. A few informants also noted a gender unbalance in the experts participating in the EGRM and working groups.
- 45. Informants also welcomed the project's support to the Resource Management Young Member Group (RMYMG) which focused on three main objectives: providing a platform for individuals without a technical background to engage with UNFC and sustainable resource management; facilitating networking opportunities for those interested in specific resources related to projects and internships; and promoting education through activities like webinars, such as the recent "UNFC for Beginners." The RMYMG actively promoted UNFC at COP28, established relationships with YOUNGO (the UNFCCC youth group), and is developing a guidebook that introduces UNFC in a less technical manner to the youth and underscores its potential role.
- 46. According to the evaluation survey, 76% of the respondents were of the opinion that "Gender, human rights, climate change, disability and other cross-cutting perspectives were mainstreamed in UNECE's activities on UNFC and UNRMS", with gender disaggregated data showing that female respondents have a more favourable opinion than males (Table 4). However, several evaluation informants also reported room for expanding social access and inclusivity in discussions around resources management and UNFC. During the UNECE Resource Management Week 2024, issues of human rights and LNOB were referred as being added to the agenda of work of the secretariat.

Table 4. Gender disaggregated perspectives on gender, human rights, climate change, disability and other cross-cutting agendas (n=273 respondents).

Gender, human rights, climate change, disability and other cross-cutting perspectives were mainstreamed in UNECE's activities on UNFC and UNRMS	Female	Male
Strongly agree	29.17%	26.02%
Agree	54.17%	46.94%
Disagree	2.78%	2.55%

Strongly disagree	2.78%	4.08%
Do not know	11.11%	20.41%

Source: Independent evaluation survey, 2024.

## 5.2 COHERENCE

To what extent was this project coherent with those of other UN entities and international organizations working in the same area, including at country level? Has the coherence improved over the course of the project?

- 47. The project engaged in consultations and joint work with a range of UN entities and international organisations to ensure synergies and coherence. Several work streams have opened a space for information sharing and collaboration with other UN entities and international organisations. Many of the project supported trainings and meetings for example involved other RECs and various international organisations. The series of UNECE Resource Management Weeks has had member State representatives and partners, including UN agencies, contributing with presentations and discussions to UNFC developments and implementations, and lessons learned. Some highlights of activities and/or deliverables that contributed to ensure project's coherence with other organisations include:
  - Support to UN initiatives: The project supported the organisation early 2021 of a roundtable on "Extractive Industries and Sustainable Development in the UNECE region". This Roundtable was in a series of five regional Roundtables hosted by the Regional Economic Commissions. The outcome of the five roundtables was assimilated in a regional Policy Brief on "Extractive Industries Transition to Sustainable System" A few months later, UNECE's participation in the High-level UN Global Roundtable on Extractives Industries informed the global UN Policy Brief "Transforming Extractive industries for Sustainable Development" which provides an action plan that recommends, inter alia, the implementation of a shared principles-based, integrated, sustainable resource management framework using tools such as UNFC and UNRMS. An outcome of the roundtables was the creation in 2022 of the United Nations Working Group on Extractive Industries, which consists of the five Regional Economic Commissions and UNDP and UNEP.
  - Support to Horizon Europe Projects: Over the years the project has participated in a range of EU projects and initiatives with reviews, consultations, or presentations. The project was involved in the GeoERA Projects, SUMEX Project, IRTC Project, Geological Service for Europe (GSEU) Project, FutuRaM Project. For example, the UNECE Secretariat served as a stakeholder council of the GeoERA and UNECE participated in the final review of Mintell4EU project, where 19 UNFC case studies were presented. A range of workshops and seminars on UNFC have also been supported with GSEU and FutuRaM.
  - Support to the African Union: Another notable collaboration of the project regards the
    UNECE's support to the development and implementation of the African Mineral and
    Energy Resources Classification and Management System (AMREC), based on UNFC and
    UNRMS, and tailored specifically to address Africa's challenges, and an essential tool to

<sup>&</sup>lt;sup>21</sup> https://unece.org/sustainable-energy/publications/extractive-industries-transition-sustainable-system

<sup>&</sup>lt;sup>22</sup> https://unece.org/sustainable-energy/publications/policy-brief-transforming-extractive-industries-sustainable

implement African Mining Vision (AMV). In September 2021, the African Union Specialized Technical Committee of Ministers of Energy and Mining adopted AMREC-PARC. The African Heads of State endorsed the system in February 2022.

48. Around 77% of survey respondents were of the opinion that UNECE's activities on UNFC and UNRMS are complementary to those of other UN entities and international organizations working in the same area, including at country level (Figure 3).

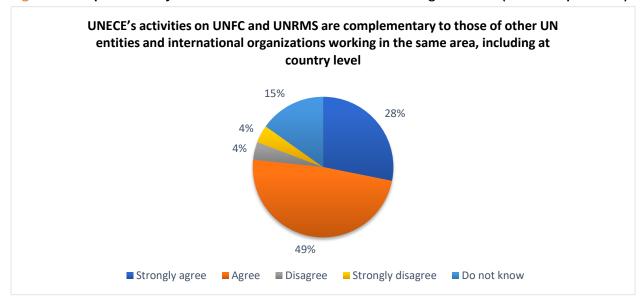


Figure 3. Complementarity with other UN entities and international organisations (n= 270 respondents).

Source: Independent evaluation survey, 2024.

- 49. This favourable assessment was complemented by many suggestions for increased coherence with other UN entities and international organizations and for more consistent support to member States and partners on UNFC and UNRMS. Some of the proposed approaches were not in the scope of the project and cannot be interpreted as an ex post assessment but are informative and forward looking. This includes:
  - Stakeholder Engagement: Several informants called for strengthening practical engagement beyond academics and UN Bodies and prioritize partnerships with key industry players, governmental bodies, and NGOs to ensure that the frameworks are practical and applicable to real-world needs. This includes forming special working groups or task forces that include both UNECE and national experts to guide the implementation of these frameworks at the national level. It was also proposed to evidence and promote how UNFC and UNRMS provide decision support to policy makers and information on how best to select or deselect projects and how to best advance selected projects with respect to the contingencies facing them or, as put forward by a private sector respondent, "How does it help me to raise money and advance new projects from prospect, discovery to resource definition to development?".
  - Integrated framework: Several informants highlighted the need for a more integrated approach that aligns UNFC and UNRMS with each other and with other international standards. Suggestions were made for UNECE to work on harmonizing these systems not

only internally but also with other global frameworks to improve interoperability and reduce redundancy. Standardizing terminology, classifications, and reporting formats across UNFC and UNRMS was found important to minimize confusion and streamline communication between stakeholders. Allowing reporting systems such as the existing CRIRSCO-based standard to continue as is and leverage the defined bridging for public organisations and institutions to easily extract information they need from published company reports was also put forward by informants.

- Capacity-building and knowledge sharing: Survey respondents called for targeted capacity-building programs to Member States, industry stakeholders, and relevant organizations to enhance their understanding and implementation of UNFC and UNRMS. This would ensure consistent application and interpretation of these systems. Furthermore, assisting Member States and stakeholders in exchanging case studies, lessons learned, and best practices would be beneficial to improve international coherence. UNECE can promote ongoing progress in resource management techniques by exchanging information and experiences. It was also asked to provide more support to developing countries, helping them apply these classifications and manage their resources more effectively.
- Coordination with other UN Bodies and international initiatives: Informants proposed to further strengthen collaboration with other UN bodies and international organizations working on related issues, such as the UN Environment Programme (UNEP) and the International Atomic Energy Agency (IAEA), to leverage synergies and avoid duplication of efforts. Exposure of UN Resident Coordinator Offices and UN Country Teams to UNFC and UNRMS was also unclear. Furthermore, several other initiatives complement UNECE's efforts in resource management, classification, and sustainability, with room eventually to increase information sharing. The Global Reporting Initiative (GRI) for example offers standards for sustainability reporting, enabling organizations to disclose their resource use and environmental impacts transparently. Initiatives such as the International Resource Panel (IRP) provide scientific assessments and policy advice on resource efficiency and environmental sustainability. Circular economy initiatives advocate for a shift towards more sustainable resource use and waste reduction, while international standards organizations like ISO develop standards for environmental and energy management. Industry-specific initiatives, such as the Extractive Industries Transparency Initiative (EITI) and Responsible Mining Initiative (RMI), promote transparency, accountability, and responsible practices within the extractive sector.
- Reviews and monitoring: Evaluation informants also suggested as a means to improve coherence to install mechanisms for regular review and updates of UNFC and UNRMS guidelines to reflect evolving industry practices, technological advancements, and changing resource management needs. Mechanisms for assessment and monitoring would be required to keep tabs on developments and spot problems. Strong mechanisms for overseeing UNFC and UNRMS implementation should be established by UNECE. Through consistent performance evaluations and feedback gathering, UNECE would be able to pinpoint areas in need of development and adapt its strategies accordingly.
- 50. Evaluation interviewees highlighted that the development of international collaborations was coherent with the ECOSOC Decision 2021/50 which recommended global dissemination of UNFC

and invited global application worldwide<sup>23</sup>. Most survey respondents viewed benefits in a global adoption of UNFC and UNRMS with a majority of respondents being of the opinion that UNECE, as a Regional Economic Commission with a regional constituency, did not impede the further development and global application of UNFC and UNRMS<sup>24</sup>. A few respondents who stated that the geographic mandate of UNECE was a limiting factor in the globalisation of UNFC and UNRMS grounded this assessment in the perception that higher resources would be required to promote and support UNFC's adoption outside of Europe. A few respondents also questioned the extent of shared ownership in the existing governance structure and decision-making processes. One member of a professional association indicated for example that "Although there seems to be some involvement with representatives from Latin America, Africa and Asia, they are not formally part of UNECE. It is not always clear how decisions on the future direction of UNFC and UNRMS are taken and whether representatives from those countries have any say in such decisions." The evaluation collected various suggestions on how to further globalise UNFC and UNRMS, including to expand UNECE's support and assistance; bolster communication lines, fortifying coordinating systems, and encouraging increased synergy between regional and global projects; consider engaging more collaboration and outreach with UN Resident Coordinators, UN agencies and Regional Commissions; create UNFC and UNRMS divisions in the other UN-RECs; etc. During the UNECE Resource Management Week 2024 the secretariat also presented additional options such as linking more closely UNFC and UNRMS to ECOSOC, which conveyed mixed comments from evaluation informants (see also section 6).

# Was the project design and implementation appropriate for meeting the project's logical framework?

51. On multiple fronts, project implementation went beyond the project's logical framework. Project implementation exercised significant adaptive management as a means to meet and also go beyond the project logframe. An example is the Covid-19 crisis which created a significant challenge in the delivery of many activities. For example, the 11th EGRM Session could not take place in April 2020 in Geneva and was postponed to September 2020 in an online format. Most of the planned meetings, workshops and training workshops were required to be transformed into a virtual or hybrid mode. The war in Ukraine led to the 13<sup>th</sup> session of EGRM being postponed and being reduced to a one-day session in October 2022. It also led to disruptions in the work of some EGRM Working Groups and to a shift in priorities (see also §78). The release of the Critical Raw Materials Act proposal also set a slightly different direction of activities, intensifying some activities, and giving less focus on other ones. The release of the Critical Raw Materials Act proposal and the inclusion of UNFC therein

<sup>&</sup>lt;sup>23</sup> The Economic and Social Council of the United Nations (ECOSOC) at its 12th plenary meeting, on 21 July 2021, issued <u>Decision 2021/250</u> on the Updated United Nations Framework Classification for Resources in which it endorsed the updated <u>United Nations Framework Classification for Resources of 2019</u>, recommended that the updated Framework Classification be disseminated widely, invited States Members of the United Nations, international organizations and the regional commissions to consider the possibility of taking appropriate measures to ensure the application of the updated Framework Classification in countries worldwide, and proposed to the Council that it recommend the application of the updated Framework Classification worldwide, noting also that this proposal does not have financial implications, and recalling its decisions 1997/226 of 18 July 1997 and 2004/233 of 16 July 2004, invited States Members of the United Nations, international organizations and the regional commissions to consider the possibility of taking appropriate measures to ensure the application of the updated Framework Classification worldwide.

<sup>&</sup>lt;sup>24</sup> The conversion of survey respondents' qualitative opinions into quantitative results indicates that out of 102 respondents to this question, 43 found that UNECE did not impede the further development and global application of UNFC and UNRMS; 24 respondents assessed that UNECE impeded the further development and global application of UNFC and UNRMS; and 35 responses were inconclusive.

has resulted in intensified UNFC activities in support of the proposal, such as the establishment of the Coordination Team (DG GROW, UNECE, HE projects Geological Service for Europe, FutuRaM) and shifts in the activities of the Review Team (EGRM members) toward monitoring the project work related to the Critical Raw Materials Act proposal. The UNECE Resource Management Week 2023, "Assuring sustainability in resource management", 25-28 April 2022, included an EU internal meeting dedicated to the Critical Raw Materials Act proposal for European Union stakeholders. The internal meeting together with the one and half day seminar on UNFC filled the void from the previous year when there was only a one-day EGRM annual meeting due to the war in Ukraine. The project also supported the creation in November 2021 of the network of practitioners (NoPE) which supported the UNECE secretariat to accelerate progress in various areas, such as finalizing the Guidance on Application of UNFC to Mineral and Anthropogenic Resources in Europe.

The project logframe could have benefited from a more comprehensive analysis of how and why the desired changes were expected to happen. As noted earlier, the project did not develop a Theory of Change. The evaluation found this was a missed opportunity for a more systemic analysis of the project's objectives and modalities of execution and further elaborate eventually the project's logframe. A Theory of Change could have provided a more comprehensive framing of project activities and outputs, introducing linkages between causal chains, mapping the ecosystem of project partners and stakeholders, and eliciting more granularly target users and beneficiaries of project outputs and outcomes. The project logframe for example did not make reference to communication activities which were one of the significant deliverables of the project, involving the creation of a communication plan and actions to increase the visibility of UNFC and UNRMS (see below §65). The logframe also kept implicit the contribution of the EGRM and Working Groups to many deliverables. The "Availability of national, academic and industry experts, and continuous engagement with all stakeholders" was only stated as an assumption in the project logframe while regular support to the EGRM and Working Groups was a significant contribution of the project. Several informants also implied that the project design and logical framework omitted to present the different categories of users as well as contributing partners to the project. Potential stakeholder groups and users of project outputs might include Governments, Regional bodies, Industry, Capital investment entities including stock exchanges and banking sectors, Academia, Non-profits, Indigenous Communities and the Public. When specified in Theories of Change and then logframes, users categories help to formulate ad hoc causal chains and outputs/outcomes that support a more specific targeting and tailoring of activities and products. The evaluation also noted that logframe indicators were sometimes moderately specific. For example, the outcome 2 indicator "Countries applying UNFC and UNRMS for sustainable resource management" is not very clear about the type of application that is inferred as well as their owners. In some cases also the indicators were moderately aligned with the result statement, such as with the project impact stated in the logframe as "Development, maintenance and dissemination of UNFC, development of UNRMS based on UNFC, and building capacities in UNECE member States for sustainable resource management and facilitated delivery of the SDGs" and the proposed impact indicator SDG 12.2 "Raw material footprint, raw material footprint per capita, and raw material footprint per GDP and domestic material production and domestic material production per GDP".

How coherent were the outcomes of the project (UNFC and UNRMS specifications, capacity-building workshops, guidelines, toolkits, best practices, and case studies) with respect to the diverse needs of UNECE member States?

- Evaluation informants were overall on the opinion that the deliverables of the project formed a coherent response to the needs of UNECE member States. According to the evaluation survey, 81% of the respondents found that UNECE's activities on UNFC and UNRMS, which include delivering specifications, guidelines, toolkits, best practices, case studies and capacity-building workshops, formed a coherent bundle to respond to their needs or the needs of their institution (Figure 4). Several interviewees commended the secretariat for supporting the establishment of Working Groups, guiding experts' engagement, sending invitations, sharing information, chairing some meetings and preparing minutes. Facilitating the involvement of a broad range of experts and bringing consensual knowledge into the guidelines and products was reported an important contribution of the project. Several informants also emphasized the added or prospective value of the Centres of Excellence and the benefits of supporting these structures, including as a source of knowledge products. The continued development and strengthening of the ICE-SRM were flagged as key modalities to align the intended project outcome of supporting UNFC and UNRMS with the needs of UNECE member States and partners.
- While acknowledging the constraint of limited resources (see also section on Efficiency), informants also proposed to multiply webinars, trainings, and the promotion of UNFC and UNRMS by appointing experts, industry associations, CSOs and NGOs to give classes and "to go out of the UN procedural trail". Some informants indicated room to better seize the agility of associations as a way to circumvent heavier UN procedures and a pathway to expanding catalytic partnerships and outreach. The UNFC Adoption Group formulated several recommendations complementing these inputs<sup>25</sup>.

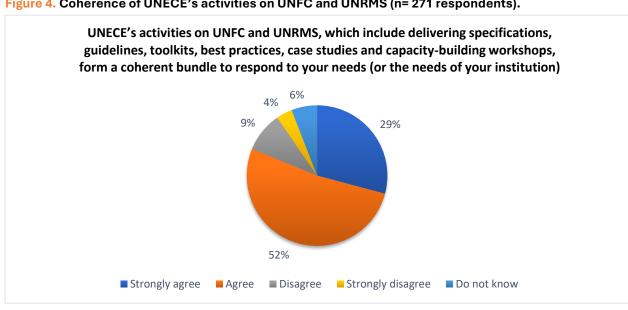


Figure 4. Coherence of UNECE's activities on UNFC and UNRMS (n= 271 respondents).

Source: Independent evaluation survey, 2024.

# How coherent was the communication strategy of the project?

<sup>&</sup>lt;sup>25</sup> United Nations. 2024. Accelerating decision support: Breaking adoption barriers . Informed Dialogue and Decisions for Sustainable Development - Adoption of the United Nations Framework Classification for Resources. ECE/ENERGY/GE.3/2024/10. Geneva.

- 55. The project has committed significant efforts to increasing the visibility and communication of UNECE's work to support all UNECE member States in the development and implementation of UNFC and UNRMS. In 2021, the project supported the development of a communications plan which was applied to address the communications objectives featured in the Contribution Agreement. The communications plan further expanded the proposed target groups and the specific communication objectives. The plan was developed with the expertise of a communications consultant, the UNECE Communications Team, and the EGRM Communications Working Group. It was presented to DG GROW to whom regular updates on communications activities are given. The plan created uniform messages for all communications outputs, i.e.: The United Nations Framework Classification for Resources (UNFC) is simple to use; combines all resources such as energy, minerals and groundwater into one global classification system; informs on environmental, social and governmental issues at local, regional and national level; aggregates information from all countries for systemic analysis.
- 56. The communication plan guided the following activities and deliverables:
  - Training Materials have been created for personalized training workshops with principal
    target audiences, including policymakers, EU-funded actors, and stakeholders across
    industry, finance and environmental governance. All training materials are now available to
    the public free of charge on the website. Individual videos of all training modules taught in
    2022 and 2023 are available on request.
  - Press releases and factsheets have been published on the UNECE website and shared
    with UN mailing lists of key stakeholders, including media professionals, to highlight the
    impact of activities and raise the profile of standard EU-UN calls to action on sustainable
    resource management. In 2022, the secretariat published 30 News & Press Releases (15
    on UNFC) and 3 Executive Secretary Blogs generating 761 news articles, of which 94 were
    about UNFC.
  - Social Media posts promoted every published press release and news item published by UNECE. Posts were shared by the Corporate UNECE Social Media accounts on Facebook, Twitter, LinkedIn and Instagram, which total over 120,000 followers across all platforms. In Autumn 2022, the UNECE Sustainable Energy LinkedIn Page was created, receiving nearly 60,000 views across UNECE's posts and events in less than a year (July 2023).
  - Various events have taken place for a variety of stakeholders and target audiences.
     Feedback surveys on select events and workshops have provided significant feedback on events. Satisfaction rates were over 85%. Concept notes and invitations to speakers were prepared for meetings such as COP27 and EU Raw Materials Week.
  - Visual elements such as infographics have been regularly created and disseminated for flagship events, social media posts, and publications. A generic graphic identity has been created with a standard PowerPoint Template, as well as certificates for attendees of workshops to spread word of mouth about sustainable resource management. Videos celebrating 30 years of the Sustainable Energy Committee highlighted the progress made in implementing sustainable resource management.
  - The UNECE website has been regularly updated with news, up-to-date information, and documents supporting stakeholders in the implementation of UNFC and UNRMS. Wikipedia pages on UNFC and UNECE were updated. This includes the dedicated project website supporting the implementation of the project. The Sustainable Resource Management homepage saw over 2,000 views between August 2021 and July 2022.

- **Different publications** have been developed to communicate UNFC and UNRMS. A regular newsletter on sustainable energy and resource management, as well as annual progress reports and communications plans are also published.
- Partnership and Collaboration were strengthened within the UN system, such as the UN
  Economic Commission for Africa and increased inter-governmental cooperation.
  Furthermore, the EGRM secretariat has enhanced joint events within UNECE by co-hosting
  with other Divisions, including the Trade and Economic Cooperation Division. UNECE
  played a leading role in creating the new UN-wide Working Group on Transforming the
  Extractive Industries for Sustainable Development.
- 57. The majority of survey respondents found that UNECE's communication strategy on UNFC and UNRMS has been appropriate (Figure 5). Survey cross-tabulations showed some variations in terms of levels of assessment. Respondents from a University or Research institute for instance agreed more strongly (strongly agree: 31%, agree: 50%) than Private sector representatives (strongly agree: 16%, agree: 47%) that UNECE's communication strategy on UNFC and UNRMS has been appropriate.

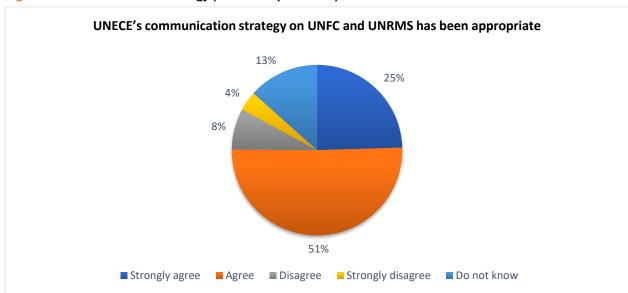


Figure 5. Communication strategy (n= 269 respondents).

Source: Independent evaluation survey, 2024.

- 58. While acknowledging the dependence on the availability of in-kind support in working groups and recognising that communication and outreach on UNFC and UNRMS were bound to available resources, evaluation interviewees and survey responses also suggested several areas on which communication and dissemination strategies could be strengthened. This includes:
  - Visibility and engagement: A few informants reported room to enhance the visibility and interaction of UNECE actions on the ground. Respondents noted an opportunity to better connect UNECE's activities with the extractive industry, emphasizing the need for increased participation in key industry events. UNECE could prioritize attending and actively participating in major mining and resource management conferences. This direct engagement could facilitate better relationships with industry players and provide firsthand insights into their needs and challenges. Similarly outreach to and engagement

with the financial sector was perceived another avenue to improve the integration and acceptance of UNFC and UNRMS. Increased outreach beyond Europe, particularly in regions where UNFC and UNRMS are less known, is also a modality for global adoption.

- Communication clarity: Some informants mentioned that effective communication was crucial for the successful dissemination of UNFC and UNRMS. The survey indicated that the current communication strategies could be made more effective by simplifying the message and reducing the use of jargon and abbreviations. This could make UNFC and UNRMS more accessible to a broader audience, including private sector representatives and grassroots actors like artisanal miners. Developing clearer, more concise communication materials that explicitly outline the complementary roles of UNFC and UNRMS could also help demystify these tools and demonstrate their practical applications.
- Communication channels: To reach a wider audience, UNECE could leverage
  complementary communication channels, such as podcasts, webinars, and recorded
  seminars. These platforms can make key topics and facts about UNFC and UNRMS more
  accessible and engaging. Regularly updated online resources, including an easily navigable
  repository of documents and specifications, was also found essential. Ensuring these
  resources are translated into multiple languages would further extend their reach and
  usability.
- Advocacy and capacity-building: The survey responses suggest an opportunity for more
  coordinated efforts and centralized governance in developing guidelines and case studies.
  Centralizing these activities could ensure uniformity, prevent varying interpretations, and
  accelerate the development process. Moreover, targeted capacity-building initiatives,
  including training programs and workshops, could enhance the understanding and
  implementation of UNFC and UNRMS principles among member states and practitioners.
  These efforts could be accompanied by clear advocacy strategies that emphasize
  grassroots impacts and practical benefits for stakeholders at all levels.
- Monitoring, evaluation, and resource allocation: Establishing robust monitoring and
  evaluation mechanisms to assess the impact and effectiveness of UNECE's activities
  related to UNFC and UNRMS could contribute to visibility and uptake. Regular feedback
  loops and data-driven assessments could inform continuous improvements and adaptive
  strategies. Additionally, addressing concerns about resource allocation by securing
  sufficient funding and strong coordination within the UN system could bolster promotional
  efforts and enhance the coherence of the UN message regarding these frameworks.

### 5.3 **EFFECTIVENESS**

To what degree did the project successfully enhance the capacities of UNECE member States in implementing and utilizing UNFC and UNRMS for resource classification and management?

59. The project has contributed to enhance the capacities of UNECE member States in implementing and utilizing UNFC and UNRMS. Products and events delivered with UNECE's support were positively assessed by evaluation informants, with UNFC principles, specifications and guidelines as well as pilot and reference case studies being found particularly useful (Figure 6). Some

of the modalities that were also reported effective to enhance the capacities of UNECE member States in implementing and utilizing UNFC and UNRMS include:

- Capacity-building: UNECE's capacity-building activities, including workshops, training programs, and knowledge-sharing initiatives, to support member States and stakeholders in implementing UNFC and UNRMS were positively assessed by most informants. These efforts helped to improve understanding and technical expertise, particularly in countries with limited resources or experience in resource management.
- Knowledge exchange and networking: UNECE's facilitation of knowledge exchange and collaboration among governments, industry representatives, academia, and other stakeholders through conferences, seminars, and working groups was found extremely valuable. The exchange of best practices, lessons learned, and case studies enhanced the implementation of UNFC and UNRMS and fostered innovation in resource management practices.
- Policy Guidance: UNECE's provision of policy guidance and technical assistance to member States in aligning their national resource management policies and regulations with international standards, including UNFC and UNRMS, was also favourably commented on. This support helped fostering a conducive regulatory environment for sustainable resource development and investment.

How do you assess the following products or services delivered with UNECE's support? 0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100% UNFC principles, generic specifications, and guidelines 36% 18% 1%% **UNRMS: Principles and Requirements** 40% 18% 2%9% UNFC Europe guidance document (with emphasis on raw 34% 1% 12% materials) Pilot and reference case studies on UNFC and UNRMS 31% 16% 1%10% application Organizing Annual EGRM meetings in Geneva 27% 13% 3% 15% Organizing capacity-building workshops/training courses 29% 11%2%11% on sustainable management of resource Highly useful Significantly useful ■ Somewhat useful ■ Not useful ■ Do not know/No opinion

Figure 6. Usefulness of the products or services delivered with UNECE's support (n= 268 respondents).

Source: Independent evaluation survey, 2024.

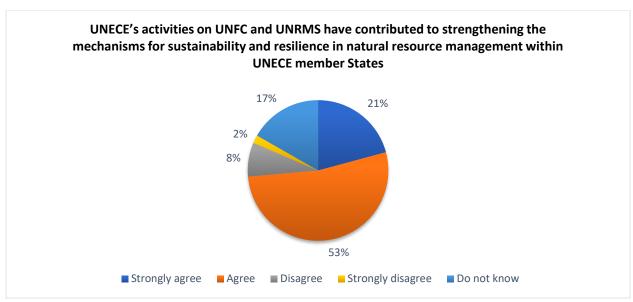
- One of the expected outcomes formulated in the project's logframe was stated as "Strengthen capabilities of UNECE member States for sustainability and resiliency in natural resource management to aid economic recovery and growth using UNFC and UNRMS". The indicator set for this outcome was "Experts from UNECE member States trained in UNFC and UNRMS application for sustainable resource management" and the target "At least 200 experts trained on the application of UNFC and UNRMS." Despite partial data, review of the project's progress reports indicates that the target has been exceeded. The first year of project implementation reported 23 training courses/workshops delivered, all events covering UNFC and UNRMS principles, specifications, guidelines, best practices, and applications. Over 1,500 unique participants from over 100 countries attended these workshops. About 700 experts were attending a workshop on UNFC and UNRMS for the first time. During the second year of project implementation, two trainings were reported. The 2days Training Workshop on UNFC and its Application hosted by the European Institute of Innovation and Technology (EIT) in February 2022 was attended by 20 participants, including 8 women. The 1.5 day Training for the EU Member States on UNFC in April 2022 was followed by 29 participants, including 14 women. The project reported three training courses in 2023, the UNFC and UNRMS workshop, the UNFC webinar for Secondary Raw Materials for EU Member States in March and the Women in Resource Management webinar in Marc. In addition, the EGRM Secretariat organized or was involved in close to 70 workshops and meetings during the period September 2022 to July 2023.
- 61. According to 76% of survey respondents, UNECE's activities on UNFC and UNRMS have enhanced the capacities of UNECE member States in implementing and utilizing UNFC and UNRMS for resource classification and management. Various informants noted that UNFC has enhanced governments and organizations' capacities to harmonize reporting processes by offering a uniform language for evaluating and classifying energy and mineral resources. Capacity-building was also referred at an organisational or institutional level, for example with the adoption of UNFC in procedures and systems in countries such as Sweden, Ukraine, India and Finland or through the support to the development and rollout of AMREC-PARC by the AUC (see also next section). Support to the establishment of the ICE-SRM is also another modality through which the project has supported institutional capacity development.
- 62. Another approach to build capacities on UNFC and UNRMS includes collaborating with universities to deliver courses on SRM that cover UNFC and URMS for example at the National University of Mexico or at the TU (Technische Universität) Bergakademie Freiberg in Germany. The latter was also supported by an EU-funded project (AGEMERA) and involved mainstreaming UNFC and UNRMS in the curriculum of university students.
- 63. The Communication Plan developed in 2021 for the period 2022-2024 considered the transfer to a Massive Online Open Course (MOOC) of training and promotion materials on UNFC and UNMRS. The aim was to share training materials with over 100 different organisations and over 1000 people. Participants would register, watch a series of interactive videos and/or slides, then take one or more automatically graded quizzes and get a score and get an automatically generated certificate. The UN has a global standard for e-learning and UNECE has been building and testing an e-learning platform. The cost for setting up the site was US\$ 15.000 and the cost for running an individual course was estimated to be about US\$ 3000/year. However, this initiative has not been implemented. A related modality to enhancing capacities on UNFC and UNRMS was also suggested to the evaluation with the establishment of a certification programme on the frameworks.
- 64. As indicated earlier, several informants suggested to make training materials more easily accessible and cohesive, to expand webinars, and to take better benefit of the network of experts and associations in order to scale training activities and/or reach specific sectors. Some informants for

example pointed out room for better tailoring and targeting capacity development activities through appropriate tools and relevant channels, to investors and financiers which were reported insufficiently reached while the "relevance and usefulness of UNFC and UNRMS would also deserve to be measured according to the bankability of the frameworks" as indicated by an interviewee.

How effectively did the project contribute to strengthening the mechanisms for sustainability and resilience in natural resource management within UNECE member States?

- The evaluation found some evidence that the project has contributed to strengthening the mechanisms for sustainability and resilience in natural resource management within UNECE member States. According to informants, UNECE played a crucial role in developing and promoting standardized frameworks for classifying and managing natural resources. UNECE's activities on UNFC and UNRMS have led to positive outcomes by enhancing transparency, capacity, and policy coherence in resource management. These efforts contribute to promoting sustainable development, facilitating investment, and supporting the efficient and responsible utilization of natural resources globally. UNFC provides a common language and methodology for assessing and reporting on various resource types, enhancing transparency and comparability across different regions and sectors. Survey respondents and interviewees also indicated that UNFC has improved investment climate by promoting transparent and consistent resource classification and reporting practices. A UNECE member State representative for example mentioned that "Through UNFC and UNRMS it became possible to remove barriers to attract investments, with banks and financial institutions, produce fair assessment of reserves, and fair assessment of countries and companies. It became easier to attract investment and taxation for the State and to understand risks". UNFC and UNRMS are also aligned with the Sustainable Development Goals (SDGs), particularly those related to responsible consumption and production, climate action, and sustainable resource management. By adopting these frameworks, countries can better track progress towards achieving the SDGs and promote sustainable development.
- 66. The evaluation survey showed 74% of respondents finding that UNECE's activities on UNFC and UNRMS have contributed to strengthening the mechanisms for sustainability and resilience in natural resource management within UNECE member States (Figure 7). Cross-tabulations indicated various degrees of agreement across stakeholder groups. Representatives from a ministry, public institution, national or local administration returned the most favourable assessment on UNECE's contribution to strengthening the mechanisms for sustainability and resilience in natural resource management within UNECE member States. Conversely, members of CSOs or NGOs had more nuanced opinions.

Figure 7. Contribution of UNFC and UNRMS to the mechanisms for sustainability and resilience in natural resource management (n= 269 respondents).



Source: Independent evaluation survey, 2024.

- 67. According to evaluation informants, some salient mechanisms for sustainability and resilience in natural resource management in UNECE member States that the project has contributed to strengthen include:
  - Normative frameworks: In various regions and countries the project has contributed to mainstream UNFC and UNRMS in policies, strategies and legislative frameworks that promote sustainability and resilience in natural resource management. The project has supported processes which informed the development of the EU Critical Raw Materials Act<sup>26</sup>. In Norway, the Government asked the Geological Survey of Norway to implement UNFC and to further develop the tools so that they can ensure that mineral resources and the possibility of future extraction are properly assessed in land use management processes<sup>27</sup>.
  - Institutional capacities: Institutional development as a mechanism for sustainability and resilience in natural resource management was referred in relation to initiatives such as the development of Centres of Excellence or the development of AMREC-PARC.
  - Participation: UNECE activities were found to provide a well-structured global platform for supporting progress of UNFC and UNRMS as a global tool by facilitating widespread participation of UNECE member States and other involved stakeholders. Inclusiveness of women and youth groups and the promotion of social equity show responsiveness to vulnerability and to enhancing resilience.
  - Partnerships: The project has supported multi-faceted partnerships and collaboration across stakeholder groups, sectors and regions. The project has also contributed to maintain or establish cooperation with international organizations and professional associations such as ISO, SPE, CRIRSCO, IGA etc. and to ensure coordination with other

<sup>&</sup>lt;sup>26</sup> https://single-market-economy.ec.europa.eu/sectors/raw-materials/areas-specific-interest/critical-raw-materials/critical-raw-materials-act\_en

 $<sup>^{27}\,</sup>https://www.regjeringen.no/contentassets/1614eb7b10cd4a7cb58fa6245159a547/norgesmineralstrategi\_engelsk\_uu.pdf$ 

Horizon EU-funded projects, such as ERA-MIN.EU, INTRAW.EU, Vectorproject.eu, Agemera.eu.

The evaluation also noted a range of hindering factors or limitations in the adoption of UNFC and UNRMS, affecting the mechanisms for sustainability and resilience in natural resource management within UNECE member States. As put forward by an informant, the project has confronted constraints which echo the barriers to accelerated adoption summarized by the UNFC Adoption Group. Survey respondents for example called to strengthen communication and awareness on UNFC and UNRMS to avoid confusion among stakeholders. Some minerals companies familiar with CRIRSCO reporting standards are confused by the need for UNFC, indicating a lack of clear communication and understanding about the benefits and differences between these frameworks. The limited industry engagement was another key factor proposed for consideration, leading some informants to challenge some of the project deliverables as being found primarily written by academics and NGOs and not fully grasping industry realities. Along this line, private sector informants proposed to ensure that frameworks are economically viable and provide clear benefits to industries. There is a call for more economic incentives and support for the adoption of these frameworks. Implementing UNFC and UNRMS requires significant technical capacity and resources, which are not always available in all regions. This includes issues with data availability, quality, and consistency. Furthermore, the frameworks can be complex to implement in diverse regulatory and institutional landscapes. Accordingly, some informants conveyed a need for flexible guidelines and tailored capacity-building efforts to address specific regional contexts. Strengthened ties with the broader 'UN system' and other stakeholders were suggested to enhance cooperation and support. In addition, efforts should be made to avoid a Eurocentric approach and to develop wider partnerships with international organizations outside the UNECE region. Finally, establishing effective monitoring and evaluation mechanisms to assess the implementation and impact of UNFC and UNRMS were found essential for continuous improvement, adaptation and further adoption. One informant for example suggested that the guidelines accompanying the EU Critical Raw Materials Act promote or recommend to monitor the use of UNFC.

Did the project's activities significantly improve the understanding of opportunities and challenges related to sustainable resource production and consumption among UNECE member States and other involved stakeholders?

69. The project has contributed to improve the understanding of opportunities and challenges related to sustainable resource production and consumption among UNECE member States and other involved stakeholders. According to the project logframe, outcome 2 involved to "Improve understanding of UNECE member States and other countries of the opportunities and challenges presented by sustainable natural resource production and consumption through application of UNFC and UNRMS". The indicator formulated for this outcome was "Countries applying UNFC and UNRMS for sustainable resource management" with a baseline in 2019 of 12 member States and other countries applying UNFC, and a target of 20 countries by the end of the project, including the majority of EU Member States. The evaluation noted a lack of consistency between data sources regarding the number of countries applying in 2019. While the project logframe referred to 12 countries, the narrative of the Contractual Agreement noted that "countries using UNFC include Bulgaria, Indonesia, Mexico, Norway, Poland, Portugal, Romania, Russian Federation, Sweden, Thailand and Ukraine" i.e. 11 countries. Simultaneously, UNECE's Programme and Budget for 2020 and 2021 indicated 23 member States applying the United Nations Framework Classification for Resources in 2019.

- 70. The evaluation found evidence of countries applying UNFC since 2020 which add to the list referred in the Contractual Agreement. This includes UK, Finland, India, Sweden, Australia. However, the extent to which 20 countries have been using the frameworks from 2020 to present is unclear. As mentioned earlier, the evaluation found that the indicator for this outcome lacked specificity. Using or applying UNFC can span from developing case studies in a given country to anchoring UNFC in the national legislation. Table 5 presents recent milestones in the adoption of UNFC and UNRMS. The evaluation found that a detailed, clear and comprehensive mapping of UNFC and UNRMS' adoptions per country and sector would have facilitated project's monitoring and supported its management.
- 71. Overall, the adoption of UNFC has increased since 2020. Many informants referred to the EU Critical Raw Materials Act as "a game changer" as it brings 27 EU countries to implementing UNFC. The adoption of AMREC-PARC by the AUC and endorsement by the African Heads of States was another significant achievement highlighted by interviewees. As of February 2023, AMREC has been promoted in 25 countries.

Table 5. Selected milestones in the uptake of UNFC and UNRMS.

Region or country	Milestones	Year or period
Global	Updated UNFC endorsed by ECOSOC for global application	2021
Global	UNRMS endorsed by ECOSOC for global application	2023
Africa	AMREC-PARC endorsed by African Heads of State	2022
Asia and the Pacific	Energy Ministers in Asia-Pacific invite member States and other relevant stakeholders to consider applying UNRMS	2023
Australia	UNFC mandated as reporting code for geothermal energy in Queensland	2022
China	Bridging documents updated	2021-2023
New Zealand	Geothermal inventory of the Waikato Region	2023
Europe	EU Critical Raw Materials Act calls for MS to report in UNFC for strategic projects, exploration, monitoring, and extractive wastes	2024
Finland	Geological Survey of Finland's Practical guidelines for application of the UNFC resource code	2020
Norway	Norwegian Mineral Strategy commissions the Geological Survey of Norway to implement the UNFC standard in the national resource databases	2023
UK	Establishment of ICE-SRM UK	2024
Ukraine	Assessment of graphite deposits	2024
Russian	Creation of ICE-SRM Russian Federation	2021
Federation		2021
Latin America & Caribbean		
Mexico	Creation of ICE-SRM Latin America	2021

Source: Project's progress reports and independent evaluation, 2024.

72. About 77% of survey respondents were on the opinion that UNECE's activities on UNFC and UNRMS have significantly improved the understanding of opportunities and challenges related to sustainable resource production and consumption among UNECE member States and other involved stakeholders. However, several informants also underlined that understanding of UNFC and uptake by the private sector and the financial sectors was not strong enough.

Did the project adequately consider and respond to the emerging challenges and risks, especially those accentuated by the COVID-19 pandemic, during its life cycle?

73. Project implementation demonstrated significant adaptive management to stay on course and execute the project's logframe. The COVID-19 crisis created a significant challenge in

the delivery of many activities. The 11th EGRM Session for example could not take place in April 2020 in Geneva and was postponed to September 2020 in an online format. Most of the planned meetings, workshops and training workshops were required to be transformed into a virtual or hybrid mode. The secretariat identified several benefits and limitations of going virtual (Table 6). The response to the COVID-19 difficulties implied rescheduling unfinished activities of the first year into the next three years of project duration.

Table 6. Highlights of the effects of the COVID-19 crisis on project activities.

Positive elements of virtualisation of events	Negative elements of virtualisation of events
1. Participation has increased in absolute number and seniority of speakers and representation from far-away places 2. Costs and carbon footprints are much lower (no travel: hotels, planes, others) 3. Time of experts is reduced (travel time, notably) 4. Flexibility on meeting timing and duration 5. Extensive range of means of interacting available (whiteboards, break-out rooms, polling, etc.)	1. No out-of-meeting interactions, either social or professional 2. Given time differences, challenging for participants from North America to join morning meetings and from Asia to join afternoon meetings 3. Technology can be challenged (internet connections, audio/video setups) 4. Not all users are adept with technology 5. Zoom fatigue with no work/life balance with multiple meetings in parallel, in sequence, and either early morning or late evening

Source: Project's progress report, 2022.

- 74. The war in Ukraine led also to disruptions in the work of some EGRM Working Groups and to a shift in priorities. Some important events, such as the 13th Session of the Expert Group on Resource Management (EGRM), scheduled in April 2022, had to be postponed. Instead, a two-day meeting was instigated with a focus on possible ways to reorganize EGRM (hybrid, several members were physically present). A one-day EGRM-13 session was held on 25 October. The UNECE Resource Management Week 2022, "Enabling Sustainability Principles in Resource Management," planned for the week of 25-29 April 2022, was postponed due to the war in Ukraine. The preparations for the Week started in October 2021.
- 75. The third year of project implementation was marked by release of the Critical Raw Materials Act proposal. The latter was not seen as a difficulty, but more as setting a slightly different direction of activities, intensifying some activities, and giving less focus on other ones. The release of the Critical Raw Materials Act proposal and the inclusion of UNFC therein has resulted in intensified UNFC activities in support of the proposal, such as the establishment of the Coordination Team (DG GROW, UNECE, HE projects Geological Service for Europe, FutuRaM) and shifts in the activities of the Review Team (EGRM members) toward monitoring the project work related to the Critical Raw Materials Act proposal. The UNECE Resource Management Week 2023, "Assuring sustainability in resource management", 25-28 April 2023, included an EU internal meeting dedicated to the Critical Raw Materials Act proposal for European Union stakeholders. The internal meeting together with the one and half day seminar on UNFC filled the void from the previous year when there was only a one-day EGRM annual meeting.
- 76. Altogether the project addressed adequately the challenges of the first and second years and adjustments were made to respond to the inclusion of UNFC in the Critical Raw Materials Act proposal. The evaluation survey saw 60% of the respondents on the opinion that UNECE's activities on UNFC and UNRMS have considered and responded to the emerging challenges and risks, especially those accentuated by the COVID-19 pandemic. About 30% of survey participants

indicated not knowing the extent to which UNECE's activities had considered and responded to external challenges.

77. The delivery of the project logframe was found satisfactory (Figures 8 & 9).

Figure 8. Status of outcome indicators.

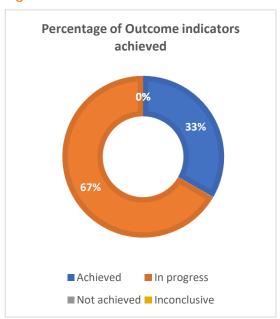
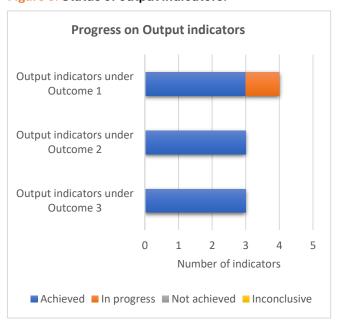


Figure 9. Status of output indicators.



Source: Project's progress reports and independent evaluation, 2024.

#### 5.4 EFFICIENCY

How efficiently were the resources (financial, human, and technological (e.g. website, online meetings, etc.)) allocated and utilized throughout the project's implementation phase?

The project leveraged resources adequately to ensure cost-effective implementation and catalytic effects. A key attribute of the project and source of overall efficiency in the development of UNFC and UNRMS is the vast network of experts, partners and stakeholders engaged in delivering the project outputs on a pro-bono basis. More than 250 experts contribute to the implementation of EGRM's work plan which the project relates to. The vast majority participate on a voluntary and unpaid basis. EGRM has established more than 20 Working Groups, subgroups, and task forces focusing on different technical areas, sectors, or socio-groups that receive support from the secretariat. Usually work is performed online and contributions are therefore in-kind (e.g. time, information resources, etc.). Travel expenses involved in the development of UNFC and UNRMS are also most often covered by the experts, their institution or companies, or other projects. This includes for example the attendance to the UNECE Resources Management Weeks or participation in meetings of the working groups. The work of the UNFC Adoption Working Group for example was initiated in Stavanger, Norway, in September 2023 at an in-person/hybrid meeting sponsored by the Norwegian Offshore Directorate. The report went later through a summary hybrid session hosted by Shell Information Technology International Ltd in London in December 2023. Close to 40 persons participated in the making of the report, providing "free advice" for furthering the adoption of UNFC and UNRMS.

- 79. Experts have also been providing presentations in technical or business events that offered another platform to promote UNFC and UNRMS, without any significant costs for UNECE but feedback on the presentation material. One expert for example conveyed UNFC and UNRMS in a research work presented to the 19th International Symposium on Waste Management, Resources Recovery and Sustainable Landfilling in Sardinia in 2023.
- 80. Informants highlighted other modalities that have been furthering and bringing catalytic effects to the project, in particular the development of the Centres of Excellence. The ICE-SRM in Russia for example has signed partnership action plans for the promotion of UNFC and UNRMS with Tajikistan, Uzbekistan, Belarus, and Kyrgyzstan; and promoted the frameworks in events such as the Third Asian and Pacific Energy Forum (UN ESCAP, Bangkok) and the Third Almaty Energy Forum<sup>28</sup>. Another example of cost-effective spillover stemming from ECOSOC's decisions was provided by ESCAP through the creation of the Critical Energy Transition Minerals (CETM) Toolkit which promotes UNFC and UNRMS, among other tools, for UN Resident Coordinator Offices, Country Teams and Resident Agencies<sup>29</sup>. ESCAP has also designed a UNDA project to support UNRMS, i.e. project 2427E on "Enhancing capacities in the sustainable production of the critical raw materials required for low-carbon transitions".
- 81. A few informants also commended the broadcasting of the UNECE Resources Management Weeks on UN TV as well as their recording and the transcription of all presentations. This practice was found cost effective as allowing broader visibility and outreach including outside the region, facilitating future reuse of materials and exchanges, and ensuring institutional memory.
- 82. In addition to the technical content produced by the secretariat, the coordination, facilitation, convening of experts for the development of UNFC and UNRMS were reported demanding activities. All evaluation informants found that UNECE secretariat's staffing capacities to support UNFC and UNRMS were inadequate considering both the tasks at hand and the strategic importance and objectives of UNFC and UNRMS. Informants also highlighted that the endorsement of UNFC and UNRMS by ECOSOC for global application had changed the agenda without necessarily granting matching resources. The secretariat has currently on the regular budget a P5 staff committing 50% of this position's time to UNFC and UNRMS and a G staff dedicating 30% of the time to these activities. In 2022, UNECE formulated the request to establish a post of Economic Affairs Officer at the P-4 level, to support work on both building resilient energy systems and resource management, but this was only partially approved i.e. the post is approved against General Temporary Assistance (GTA) as opposed to the Regular Budget and recruitment is still to be executed due to the hiring freeze<sup>30</sup>. Therefore the project's provisioning of one UNECE Economics Affairs Officer at P-4 level for years and one UNECE Economics Affairs Officer at P-3 level for 3 years (this post was subsequently

<sup>&</sup>lt;sup>28</sup> https://unece.org/sites/default/files/2024-04/1.%20lgor%20Shpurov%20and%20Vera%20Bratkova%20ICE-SRM%20Russia.pdf

<sup>&</sup>lt;sup>29</sup> https://www.unescap.org/our-work/energy/CETMToolkit

<sup>&</sup>lt;sup>30</sup> The request to establish a post of Economic Affairs Officer at the P-4 level (\$114,200, at a 50 per cent vacancy rate) under section 20, Economic development in Europe, for a total cost of \$156.000 per year (i.e. including administration, assessment, etc.) was formulated by UNECE in 2022. However, in October 2023, the Advisory Committee on Administrative and Budgetary Questions reported not being fully convinced that the functions sought under the proposed post could not be carried out over the long term within the existing staffing complement of the Commission. The Advisory Committee further recommended "that the post of Economic Affairs Officer (P-4) be established as a position funded through general temporary assistance resources and that an update thereon be provided to the General Assembly in the context of the next budget submission" (https://undocs.org/A/78/7/Add.8). The UN General Assembly in December 2023 endorsed the conclusions and recommendations of the Advisory Committee and appropriated 468,300 dollars under section 20, Economic development in Europe, and 3,800 dollars under section 29E, Administration, Geneva, of the proposed programme budget for 2024, representing a charge against the contingency fund (https://www.undocs.org/a/res/78/253).

increased to P-4 level for the last year of the project in recognition of the level of work required) was perceived critical to allow successful delivery of the work plan. There were no slack resources and sufficient absorbative capacity in the secretariat to ensure the logframe would be achieved without proper resourcing. The appropriateness of the project's attribution of funds to outcomes and outputs and financial execution was validated by the donor. As of 4 December 2023, the project utilized 1,624,740 Euros, with 64% of the funds covering staff costs (Figure 10).

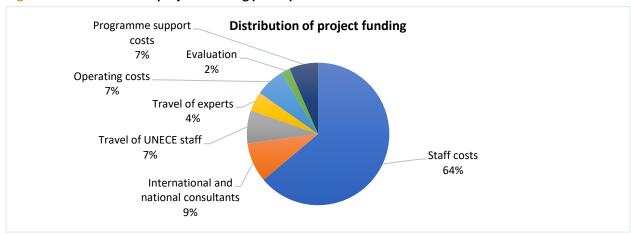


Figure 10. Distribution of project funding per expenditure item.

Source: Project's progress reports, 2024.

83. According to the evaluation survey, a majority of respondents found that UNECE has made an appropriate utilization of the resources (financial, human, and technological) allocated to support UNFC and UNRMS while a significant proportion of respondents (32%) could not formulate an opinion (Figure 11).

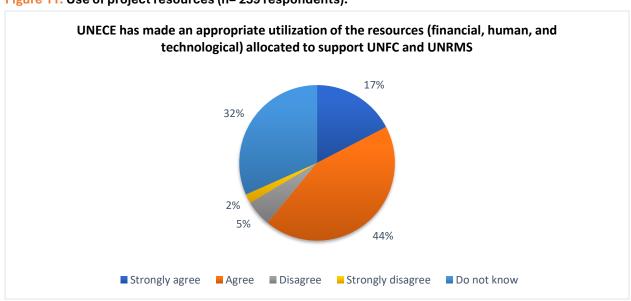


Figure 11. Use of project resources (n= 259 respondents).

Source: Independent evaluation survey, 2024.

How could the use of resources be improved? Would you propose any alternatives to achieve the same results?

- Approaches suggested to the evaluation to strengthen the adoption of UNFC and UNRMS involved most often increasing resources rather than making more efficient use of existing ones. A consensus was expressed by informants that funds availed to support UNFC and UNRMS were not aligned with the set objectives. As previously mentioned, close to two thirds of the project funds were dedicated to staffing the capacity required to facilitate activities which were largely implemented by the EGRM and working groups. In that context, evaluation informants shared the opinion of limited avenues to be more cost effective. Interviewees rather indicated that adequate staffing of the secretariat through UNECE's regular budget would be the most appropriate and sustainable way forward. However, considering the UN financial constraints which translate into a hiring freeze as well as other cost-saving measures, several informants pointed out a strong rationale for increasing the extrabudgetary resource mobilisation efforts of the secretariat and partners. In view of the goal to globalise the adoption of UNFC and UNRMS, informants suggested that funding coherence could be strengthened by actively pursuing global funders and increasing lobbying efforts, especially focusing on the importance of these frameworks in climate change mitigation and the transition to green energy. Informants proposed to address funding limitations by attracting donors from other regions and promoting donors' support to other RECs.
- 85. Against this backdrop, scenarios formulated by informants to engage cost effective approaches that would achieve similar results concentrated on leveraging or expanding existing partnerships or optimizing activities:
  - Private sector engagement: Suggestions on developing partnerships with the private sector were frequent and multi-faceted. Informants proposed to direct more efforts to promoting the use of UNFC and UNRMS in combination to specific approaches which are industry standards. Increased participation of network members in industry events was a modality often emphasized by informants. Designing and implementing a dedicated strategy promoting UNFC and UNRMS to the financial sector was also perceived another avenue yielding the potential of positive returns.
  - Fostering the establishment of ICE-SRMs: Establishing Centres of Excellence, i.e.
    developing a vision and model, recruiting, coordinating, supporting operations, was noted
    as another cost-effective modality for UNECE to accelerate the development and adoption
    of UNFC and UNRMS.
  - UN partnerships: At global level furthering collaborations with UN partners such as UNDP, UNEP, UNIDO, ISO was considered another cost-effective approach. At regional level, as illustrated by ESCAP and UNECA, continued engagement of the RECs with member States was referred to hold the potential of catalytic effects. At national level, increased collaboration with UNRCOs and UNCTs was put forward as an additional strategy with multiplier effects. Mainstreaming UNFC and UNRMS in development projects; designing national or regional projects to pilot or systematize the adoption of the frameworks; and developing projects to mitigate the socio-economic-environmental effects identified through the application of the frameworks were among the alternatives proposed to support the adoption of UNFC and UNRMS.
  - Scope and focus: Several informants proposed to increase clarity on the scope and focus
    of the frameworks per sector, suggesting to elaborate more specific strategies according

to the level of maturity of UNFC per sector. While some informants called to expand technical guidelines for some sectors, others suggested to concentrate efforts on the adoption of the frameworks. It was sometimes perceived that focusing on uptake would be more cost-effective than developing new tools. It was also indicated that the "attempt to rapidly expand the application to all resources is beginning to affect progress".

- Centralization and delegation: A few informants proposed to increase mechanisms for centralized coordination when developing key products of UNFC and UNRMS. This would help standardize formats, structures, and interpretations, leading to more homogeneous guidelines and specifications that are easier for various stakeholders to adopt. More guidelines, trainings of trainers, templates to support distributed promotion would contribute to ensure that regionalisation or sectorisation are compatible with centralized quality assurance.
- Expert Engagement: Some informants proposed more detailed terms of reference for participants involved in the development and dissemination of UNFC and UNRMS and clearer criteria for membership and volunteering experts. Enlarging the network of contributors while ensuring that the most knowledgeable experts are incentivized to contribute was found holding the potential to increase efficiencies. It was advised to develop sustainable work models that do not overburden individuals. This might involve broadening the volunteer base, offering incentives for participation, seeking additional funding to potentially hire more full-time staff and open positions such as visiting research fellows and invited expert.
- Digital tools: The development and deployment of digital tools to facilitate the consistent application of the frameworks across different regions and sectors was highlighted by informants. This could include online platforms, apps, and other digital resources that make it easier to implement and track adherence to the frameworks. Similarly the establishment of a knowledge management platform making all UNFC documentation and learning materials more accessible (e.g. standalone platform, multi-faceted taxonomy, search facility, Al-based user support, communities, etc.) would have positive effects in terms of visibility, reuse, and cost effectiveness when considered the efforts committed to developing and promoting the frameworks.

# How effectively did the project manage time constraints and deadlines while ensuring quality outputs and deliverables?

- 86. The project was found efficient in terms of managing time constraints and deadlines while ensuring quality outputs and deliverables. As noted earlier, the project confronted several unexpected events that affected the scheduling of its activities and delivery. This includes primarily:
  - The COVID-19 crisis did not allow for the 11th EGRM Session to take place in April 2020 in Geneva. It was postponed to September 2020 in an online format.
  - The war in Ukraine led to disruptions in the work of some EGRM Working Groups and to a shift in priorities. The 13<sup>th</sup> EGRM Session scheduled in April 2022 had to be postponed. Instead, a one-day meeting was organized with a focus on possible ways to reorganize EGRM (hybrid, several members were physically present). A one-day EGRM-13 session was held on 25 October 2022.

- The release of the European Critical Raw Materials Act proposal and the inclusion of UNFC resulted in intensified UNFC activities in support of the proposal, such as the establishment of the Coordination Team (DG GROW, UNECE, HE projects Geological Service for Europe, FutuRaM) and shifts in the activities of the Review Team (EGRM members) toward monitoring the project work related to the Critical Raw Materials Act proposal.
- 87. Informants perceived these adjustments adequate. External factors were not reported to have negatively affected the overall timing of project implementation. The evaluation noted a low delivery rate in the first of project implementation execution which was compensated in the third year of execution<sup>31</sup>. The initial workplan set in the Contractual Agreement was followed, except for the activities on the ICE-SRM (outcome 3 output 10) which were expanded until 2024 and for the development of the CRM Dashboard (Outcome 1 output 4) which have remained in progress.
- 88. According to the evaluation survey, 68% of the respondents found that UNECE has managed time constraints and deadlines satisfactorily while 27% did not state an opinion (Figure 12).

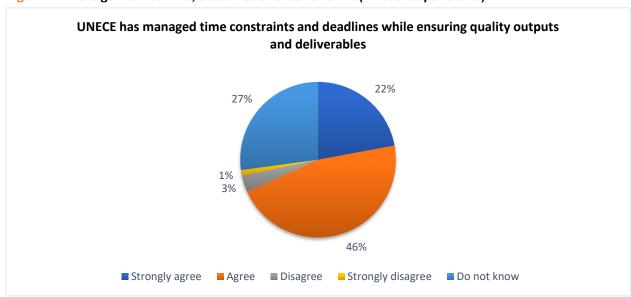


Figure 12. Management of time, deadlines and constraints (n= 258 respondents).

Source: Independent evaluation survey, 2024.

89. Despite such findings, a few informants also highlighted broader difficulties that UNECE's efforts on UNFC and UNRMS have encountered over the last four years, such as capacity limitations, knowledge gaps, and issues with data quality. These problems have slowed down the process of achieving the desired outcomes, making it more difficult to use the frameworks effectively and reducing their potential influence. UNECE has taken a number of actions to address these issues, including stepping up efforts to increase capacity, increasing awareness through outreach and communication campaigns, offering technical support to member States, and developing standardization techniques to enhance data quality and comparability. Nevertheless, informants

<sup>&</sup>lt;sup>31</sup> According to progress reports, project costs from August 1, 2020, to July 31, 2021, were 239,792.70 EUR; project costs in the second year (August 2021 – July 2022) were 414.936,64 EUR; and project costs in the third year (August 2022 – July 2023) were 605.760 EUR.

conveyed the perspective that the pace at which awareness of different stakeholders (including local policy makers and private sector actors) has been increasing and UNFC and UNRMS have been taken up globally would benefit from further acceleration.

Were the activities implemented most efficiently compared to alternatives? In particular, how do resources' costs and use compare with similar projects (within UNECE, other regional commissions, other UN agencies, or other organizations and initiatives)?

90. The evaluation found that the cost effectiveness of project activities has been adequate. UNECE does not have a cost accounting system allowing a detailed analysis of spendings per project outcome and output. Furthermore, the setup of the project whereby many deliverables have been authored by experts working on a pro bono basis, but with significant support and oversight and guidance from the secretariat, does not facilitate comparisons with other initiatives. Nevertheless for the period 2020-2023 the project has supported the production of close to 50 reports, guidelines and case studies (Figure 13). Comparing the volume of products over the last 4 years to earlier periods makes moderate sense as different types of reports can be differently demanding to develop. Nevertheless it can be observed that a higher number of case studies was produced on average per year during the period 2014-2019 compared to the last 4 years. Conversely, since 2020 a higher number of specification reports and bridging documents have been produced for UNFC, and concept notes and guiding documents for UNRMS. Development of specifications and bridging documents is much more time and labour intensive, particularly if a public consultation is required. Furthermore the project has contributed to the production of more than 50 news articles and press releases (Figure 14).

Figure 13. Number of products supported by the project per year.

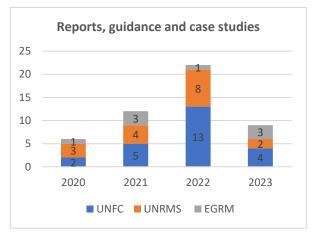
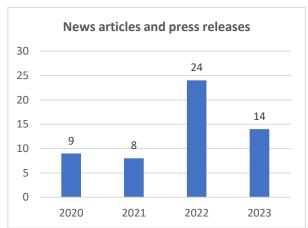


Figure 14. Number of press articles produced and disseminated by the project per year.



Source: Project's progress reports, 2024.

91. Informants shared the perspective that developing reports on UNFC and UNRMS implied a real investment in terms of time. Furthermore, the approach of advancing the agenda on UNFC and UNRMS through consensus building was noted as leading to longer cycle times. The translation of knowledge products in several languages also implied additional efforts to account for, especially as this was sometimes perceived lessening the benefits of having spent much time to find the perfect English words in the original document. A few informants also noted that fewer subject matter

experts availed themselves for publications review. These factors were found mitigating the cost efficiency of activities and were put forward as possible areas for improvement.

### 5.5 SUSTAINABILITY

What measurable improvements were observed in the globally harmonized classification of natural resources, as facilitated by UNFC, following the project's interventions?

- Several measurable improvements were observed in the globally harmonized 92. classification of natural resources, as facilitated by UNFC, following the project's interventions. Outcome 1 of the project expected to achieve "Continuous improvement in the globally harmonised classification and management of natural resources using UNFC and further development of UNRMS to enhance sustainable development in the UNECE region through alignment with the SDGs." The indicator formulated for this outcome was "UNFC and UNRMS principles, specifications, guidelines and advanced case studies and data infrastructure" and the target set as "Updated UNFC principles, generic specifications and sectoral specifications and guidelines for all resources, including raw materials developed. UNRMS principles and guidelines developed. Five advanced case studies on minerals/metals developed. Demonstration version of the data infrastructure developed.". During the course of project execution, sectoral specifications have been developed for minerals<sup>32</sup>, petroleum<sup>33</sup>, geothermal<sup>34</sup>, and nuclear fuel resources<sup>35</sup>. Bridging documents have been produced between UNFC and PRMS<sup>36</sup>, the CRIRSCO Template<sup>37</sup>, the Russian Federation classification of reserves of oil and combustible gases<sup>38</sup>, the National Standards of the People's Republic of China for solid minerals and for petroleum<sup>39</sup>. The UNRMS Principles and Requirements were published together with close to a dozen background and concept notes<sup>40</sup>. Five case studies on minerals/metals have been developed<sup>41</sup>.
- 93. Evaluation informants shared evidence of applications of UNFC and UNRMS that were sometimes within the sphere of influence of the project. The applications of UNFC and UNRMS that were most often put forward regard the integration of the frameworks in the EU Critical Raw Materials Act; the initiation of ICE-SRMs in several countries and regions and ongoing discussions for further ICE-SRMs; and the development of AMREC-PARC with adoption of UNRMS in AUC's mining strategy. Informants also highlighted a range of examples of UNFC adoptions that an indirect effect of the project but an evidence of improvements in the globally harmonized classification of natural resources, as facilitated by UNFC. This includes the uptake of UNFC in countries such as Finland, Norway, Sweden, Poland, Czech Republic, Slovenia, Hungary, Romania, or Spain. In Sweden for instance, UNFC has been used for a classification of mining waste. In Ukraine, UNFC is being applied to the classification of reserves and for introduction of modern classifications of mineral reserves.

<sup>32</sup> https://unece.org/sites/default/files/2022-01/UNFC%20Mineral%20Specifications%202021.pdf

<sup>33</sup> https://unece.org/sites/default/files/2022-01/UNFC%20Petroleum%20Specifications%202021.pdf

<sup>34</sup> https://unece.org/sites/default/files/2022-12/UNFC\_Geothermal\_Specs\_25October2022.pdf

 $<sup>^{35}\,</sup>https://unece.org/sites/default/files/2021-04/ECE\_ENERGY\_GE.3\_2021\_7\_EGRM\%20V ision.pdf$ 

<sup>36</sup> https://unece.org/sites/default/files/2023-12/PRMS\_UNFC\_Bridging\_Document\_Update\_2023.pdf

<sup>&</sup>lt;sup>37</sup> https://unece.org/sites/default/files/2024-02/CRIRSCO\_Template\_UNFC\_BD\_ECE\_ENERGY\_GE.3\_2024\_5.pdf

<sup>38</sup> https://unece.org/sites/default/files/2023-12/RF-UNFC\_BD\_Petroleum\_2023.pdf

<sup>&</sup>lt;sup>39</sup> https://unece.org/DAM/energy/se/pdfs/UNFC/UNFC-China-Bridging-Document-Public-

Comment/Chinese\_Petroleum\_BD\_Final.pdf

<sup>40</sup> https://unece.org/sustainable-energy/unfc-and-sustainable-resource-management/unrms

<sup>41</sup> https://unece.org/mineral-case-studies

UNFC has also been applied to geothermal energy in Albania and a similar use was referred underway in the Netherlands. UNFC's adoption was indicated being underway in New Zealand by a regional regulator to help manage geothermal resources, and for communicating to public and government about future potential. In India, the implementation of the MEMC Rules (based on UNFC classification of mineral resources) have played a crucial role in auction of the mineral concessions. Informants also noted positive outcomes with the greater engagement of the minerals standards body CRIRSCO with EGRM; updates of the PRMS (Petroleum Resources Management System) according to UNFC and UNRMS recommendation; and update of the CSMS (Carbon Storage Management System) also according to UNFC and UNRMS recommendation. UNFC is also used by ERMA (European Raw Materials Alliance) as a tool to assist in project ranking and selection<sup>42</sup>. UNFC is part of the evaluation process of ERMA, contributing to due diligence and to the body of evidence that can serve to connect projects with investors. Other survey respondents made unspecific references to UNFC being used in government policy decisions regarding the management of natural resources to classify and categorize different types of resources according to their economic viability and potential for development. This classification system has reportedly helped policymakers prioritize their allocations of resources and investments in a more efficient and sustainable manner. Similarly, in a corporate decision-making process, a mining company was also mentioned using UNRMS to assess the environmental and social impacts of their operations. By integrating UNRMS into their decision-making framework, the company was able to identify potential risks and opportunities associated with their projects, leading to more responsible and sustainable business practices.

94. Around 75% of survey respondents found that UNECE's facilitation of interventions on UNFC and UNRMS has brought some measurable improvements in the globally harmonized classification of natural resources (Figure 15).

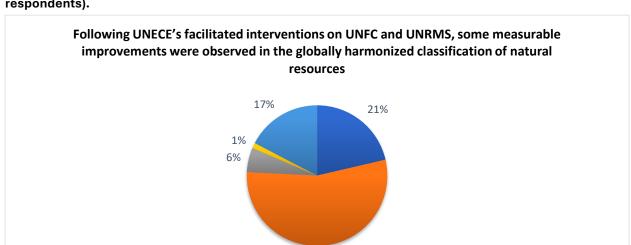


Figure 15. Improvements in the globally harmonized classification of natural resources (n= 248 respondents).

Source: Independent evaluation survey, 2024.

■ Strongly agree

Agree

54%

■ Disagree ■ Strongly disagree

 $<sup>^{42}\</sup> https://unece.org/sites/default/files/2023-04/08.\%20 Massimo\%20 Gasparon\%20 ERMA\%20 for\%20 UNFC\%202023.pdf$ 

# What measures were implemented to ensure the continued relevance and applicability of UNFC and UNRMS beyond the project's duration?

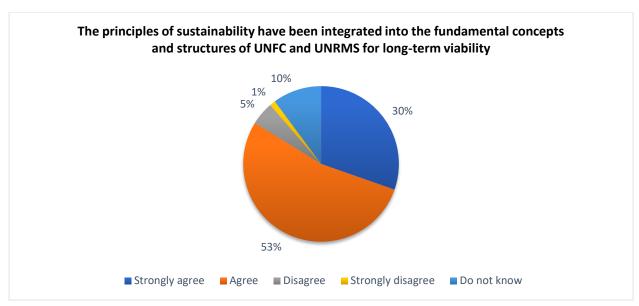
- Various measures contribute to ensuring the continued relevance and applicability of UNFC and UNRMS beyond the project's duration. Informants recalled UNECE's commitment to the achievements of the SDGs as a long-term enabling factor ensuring the continued strategic relevance and applicability of UNFC and UNRMS. On a similar line, the endorsement by ECOSOC and invitation to globalise UNFC and UNRMS is another important support to sustainability. On more immediate grounds, UNFC and UNRMS have been mainstreamed in several Horizon Europe Projects which contribute to the sustainability of project outcomes. Likewise, the integration of UNFC and UNRMS in policy, legislative and regulatory frameworks, such as the CRMA, ensures continued relevance and applicability. Evaluation informants underlined for example the critical importance of an on-going engagement of experts in the development and furthering of UNFC and UNRMS in view of the CRMA application and reporting. Structures such as the ICE-SRMs are another highly important modality to ensure the continued relevance and applicability of UNFC and UNRMS. The project has also contributed to the delivery of specifications, bridging documents, case studies and other information materials that will remain reference materials after the end of the project. Several informants made also reference to MOUs established by UNECE with other organisations<sup>43</sup>. These agreements were set before the project but can be considered an additional instrument to ensuring the relevance and application of project outputs.
- 96. Another key measure that will ensure the continued relevance and applicability of UNFC and UNRMS was installed by the EU by funding a second phase to the project.

# How well were the principles of sustainability integrated into the fundamental concepts and structures of UNFC and UNRMS for long-term viability?

97. The integration of sustainability principles into the fundamental concepts and structures of UNFC and UNRMS appears to be multi-faceted and pursuing a long-term viability. The evaluation survey showed that a large majority of respondents finding that the principles of sustainability have been integrated into the fundamental concepts and structures of UNFC and UNRMS for long-term viability (Figure 16).

Figure 16. Integration of sustainability principle in UNFC and UNRMS (n= 247 respondents).

<sup>43</sup> https://unece.org/sustainable-energy/unfc-and-sustainable-resource-management/mous



Source: Independent evaluation survey, 2024.

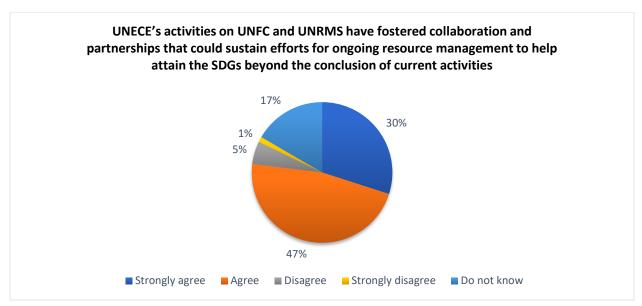
- 98. The analysis of informants' inputs reveals several key aspects that contribute to sustainability. This includes:
  - Stakeholder engagement and ownership: The frameworks actively engage stakeholders, including governments, academia, industry players, and NGOs, in their development and implementation. This inclusive approach not only promotes broader acceptance and utilization but also facilitates continuous feedback and improvement, important for learning and adapting to evolving needs and circumstances.
  - Policy integration and institutionalization: The uptake of both UNFC and UNRMS is bolstered by their incorporation into national and international policies. This integration into legal and regulatory frameworks implies a commitment to their application and enhances their credibility and enforceability, which are important enabling factors for sustainable resource management.
  - Capacity building and knowledge transfer: The emphasis on building local capacities
    and transferring knowledge through workshops, training sessions, and technical
    assistance has been pivotal. These efforts ensure that countries and stakeholders possess
    the expertise required to effectively implement and maintain these frameworks, thereby
    enhancing their sustainability.
  - International cooperation and collaboration: The design of UNFC and UNRMS
    encourages international cooperation, facilitating a global exchange of good practices and
    knowledge. This promotes consistency in the use of the frameworks across different
    regions. This also increases the added value of the frameworks by supporting global
    standardization of resource classification and management, facilitating comparisons and
    enlarging options for decision makers.
  - Legal and regulatory support: The integration of UNFC into EU law is a significant
    endorsement that enhances the sustainability of project outputs and outcomes and
    ensures the framework becomes part of the modus operandi for resource management
    within 27 EU countries.

99. Nevertheless, the evaluation also noted several challenges and opportunities to improve the sustainability of the concepts and structures of UNFC and UNRMS. A key constraint highlighted earlier regards the level of staffing and financial support on UNFC and UNRMS in UNECE. The viability and acceleration of UNFC and UNRMS remain bound to adequate capacities and technical resources. Continued investment in these areas is key to maintaining momentum and addressing emerging challenges and opportunities. Another area for improvement with likely positive effects on the sustainability of the frameworks regards their monitoring, evaluation, and adaptation. The establishment of mechanisms for continuous monitoring and evaluation would allow for the identification of areas needing improvement and the adaptation of strategies to meet changing conditions. Such a dynamic approach would support the resilience and relevance of UNFC and UNRMS.

To what extent did the project foster collaboration and partnerships that could sustain efforts for ongoing resource management beyond the project's conclusion?

- 100. Collaboration and partnerships were anchored in the project's design and have contributed to strengthening the sustainability of project outputs. The initial Contribution Agreement featured SDG 17 among the objectives and applications of UNFC and UNRMS. Several project deliverables were directly aimed at developing UNECE's partnerships and engagement with other organisations. This includes the direct collaboration of the project with the AUC and the support to the ICE-SRMs. A few informants mentioned the spillover effects of these collaborations as both the AUC and ICE-SRMs have been engaged with many partners in actions that contribute to the institutionalisation and uptake of UNFC and UNRMS. The Centre of Excellence in Mexico for example referred to collaborations with ECLAC, UNDP, UNIDO, and UN-Habitat in addition to the primary target recipients of the centre's services which are private sector actors and public institutions.
- 101. Informants also acknowledged that over the last 4 years UNECE has fostered collaborative partnerships with governments, industry associations, academia, and other organizations to promote the adoption and implementation of UNFC and UNRMS principles. These partnerships were found to facilitate knowledge exchange, joint initiatives, and coordinated efforts to address common challenges and priorities. Indirectly, most project deliverables were the result of some form of collaboration between experts from different types of organisations. Informants also highlighted strengthened relationships since 2020 with other frameworks, for example through bridging documents, and with their originating institutions (e.g. with CRIRSCO). Part of the project staff's time was also committed to UN processes, such as through inputs to the development of policy briefs. The evaluation noted a growing uptake of UNFC and UNRMS in other RECs as well as the establishment of a partnership with UNDP and UNEP through the creation in 2022 of the United Nations Working Group on Transforming the Extractive Industries for Sustainable Development. The evaluation also noted consultations with the International Organization for Standardization (ISO) during the UNECE Resources Management Week 2024.
- 102. The evaluation survey confirmed the participation of several interventions to the sustainability of resource management efforts beyond the project's conclusion. About 77% of survey respondents found that UNECE's activities on UNFC and UNRMS have fostered collaboration and partnerships that could sustain efforts for ongoing resource management to help attain the SDGs beyond the conclusion of current activities (Figure 17).

Figure 17. Collaboration and partnerships (n= 247 respondents).



Source: Independent evaluation survey, 2024.

103. Despite these achievements, many informants stressed room to foster further collaboration and partnerships in particular with private sector actors as a pathway to higher impact and sustainability. One respondent for example mentioned that a "deep and rapid progress [on] a stronger public-private partnership environment is required". Informants called frequently to enhance engagement with financial institutions to recognize and integrate UNFC and UNRMS into their assessment criteria, thereby increasing the frameworks' visibility and perceived value. Several interviewees put forward an opportunity to enhance engagement with financiers and development banks, highlighting for example a need for "Efforts towards strengthening common reporting codes and their complete acceptance by the global investors and international stock exchange" or noting that "there is a mismatch now with no development bank in the EGRM Bureau". Increased efforts in getting UNFC better recognised by financial institutions was put forward by the UNFC Adoption Group. It was further proposed to promote greater cooperation with international bodies and nonmember countries to expand the adoption and standardization of the frameworks globally. A survey respondent for example shared the perspective that "The UNECE's efforts in working with existing organisations in sectors such as petroleum (SPE - PRMS) and mining (CRIRSCO) should be continued so as to enhance the uptake of UNFC in such sectors by demonstrating how it can add benefits in terms of resource classification and management rather than just placing extra burdens on industries which already have well established reporting regulations and tools to use. In sectors with wellestablished resource project management procedures it is easier to increase uptake of UNFC/UNRMS by presenting them as complementary 'tools' which can add to the 'tools/procedures' which are already widely used in such sectors." Several informants also stressed the need to globalise partnerships in view of the invitation that encouraged the universal adoption of UNFC and UNRMS. It was also frequently advocated that the ICE-SRMs should be considered as the most promising way forward. Other informants called for a strong engagement with the broader expert community, which would entail larger financial support for their activities and to expand the delivery of trainings. One informant mentioned for example that "The focus for the past 10 years has been on developing the system. Now the focus should be on roll out and implementation."

104. Partnerships and the improvement of the interface between policy-science-industry was most frequently reported the top priority by survey respondents for UNFC and UNRMS going forward (Figure

18). Capacity-building of policymakers was the second objective most often prioritized by survey respondents.

On the basis of the UNECE mandate and past achievements on UNFC and UNRMS, and on your own needs and priorities, what could UNECE consider in the coming years to further support your objectives? Improve the interface between policy-science-industry 23% 49% 23% Continue strengthening the capacities of policymakers to understand, interpret and use UNFC and UNRMS to 21% 52% 22% formulate and monitor policies and strategies Foster cross-collaboration and knowledge exchanges 19% 52% 24% between countries UNECE should explore how to engage more countries 18% 41% 28% outside its region Continue providing advisory support services to policymakers on focused sectoral areas and the 16% 56% 22% formulation of policies that aim to improve resource management Monitor the impact of UNFC and UNRMS applications to 11% 52% 30% highlight best practices and success stories 10% 20% 30% 40% 50% 60% 70% 80% 90% 100% ■ Top priority High priority ■ Moderate priority Low priority Not a priority

Figure 18. Needs and priorities going forward (n= 237 respondents).

Source: Independent evaluation survey, 2024.

## 6 Conclusions and Recommendations

## 6.1 CONCLUSIONS

105. The above findings brought the evaluation to formulate the following conclusions per evaluation criteria.

#### Relevance

106. The evaluation found the project highly relevant for supporting UNECE member States in the development and implementation of UNFC and UNRMS. The project was designed with a strong

focus on implementing the 2030 Agenda for Sustainable Development, aligning its objectives and activities with the overarching goals of the UNECE subprogramme on sustainable energy and the Expert Group on Resource Management. Throughout its implementation, several mechanisms effectively aligned the project's activities with the needs and priorities of UNECE member States in terms of sustainable resource management. Despite initial project design not specifically referencing actions directed towards gender, youth, human rights, climate change, disability, and other cross-cutting perspectives, implementation phases adapted to include support for gender equality and the empowerment of women and youth.

### Coherence

107. The project showcased a commitment to enhancing the coherence and synergies of its activities by engaging in consultations and joint work with various UN entities and international organizations, focusing on the development and implementation of UNFC and UNRMS. This approach was largely viewed favourably, although there were numerous recommendations for increased coherence and more consistent support across areas such as stakeholder engagement, integrated frameworks, and capacity building. Furthermore, while the project's deliverables were perceived as coherent with the needs of UNECE member States, there was an acknowledgment that the project's logical framework could have been more analytically detailed and comprehensive in explaining the expected changes. Implementation often surpassed the scope of the original framework, highlighting a dynamic and adaptable management approach. Despite these successes, there were calls for stronger efforts in visibility, engagement, and communication strategies to better meet the varying needs of stakeholders, suggesting that enhancing these areas could further solidify the project's impact and alignment with global sustainable resource management objectives.

### **Effectiveness**

108. The project effectively enhanced the capacity of UNECE member States to implement and utilize the UNFC and UNRMS frameworks, through successful modalities such as capacity building, knowledge exchange, networking, and policy guidance. It also contributed to strengthening sustainability and resilience mechanisms within natural resource management, including normative frameworks, institutional capacities, participatory approaches, and partnerships. Additionally, the project improved understanding among member states and stakeholders of the opportunities and challenges associated with sustainable resource production and consumption. Demonstrating significant adaptive management, the project remained aligned with its objectives despite challenges in the first two years. The project also made necessary adjustments in response to the inclusion of UNFC in the European Critical Raw Materials Act proposal. Overall, the implementation of the project's logframe was evaluated as satisfactory, reflecting its adaptability and effectiveness in addressing evolving requirements and enhancing resource management capabilities.

## **Efficiency**

109. The project efficiently utilized resources to ensure cost-effective implementation while producing catalytic effects. Nevertheless several strategies were put forward to strengthen the adoption of UNFC and UNRMS through smarter allocation of resources. Evaluation suggestions emphasized approaches like expanding existing partnerships, enhancing private sector engagement, fostering the establishment of ICE-SRMs, maximizing UN partnerships, focusing on strategic activity areas, and better dispatching the centralization and delegation of activities. Additionally, leveraging

digital tools and increasing expert engagement were identified as methods to enhance project efficiency further. Despite facing challenges such as capacity limitations, knowledge gaps, and data quality issues, the project was notably effective in managing time constraints and meeting deadlines while maintaining the quality of outputs and deliverables, underscoring its overall cost-effectiveness.

### Sustainability

110. The evaluation found promising prospects in terms of sustainability to the project's outputs and outcomes. Enhancements in sectoral specifications, bridging documents, and the integration of the frameworks into substantial policies like the EU Critical Raw Materials Act underscore the project's tangible advancements. Furthermore, ECOSOC's endorsements have solidified the frameworks' global relevance and promote their applicability beyond the project's lifespan. This is supported by varying degrees of implementation in several countries and sectors and conducive modalities through the growing establishment of ICE-SRMs. The project's contribution to fostering international collaborations and partnerships, as illustrated by the links with the Horizon Europe Projects, along with the setup for a project's second phase, provides a sound foundation for persistent effects. However, the sustained engagement and expanded adoption of UNFC and UNRMS across regions remain bound to a range of critical enablers including stronger and sustainable capacity in UNECE on UNFC and UNRMS, closer partnerships with the private sector, further engagement of the frameworks in other regions and at local level, and ongoing capacity building and international cooperation.

#### 6.2 RECOMMENDATIONS

111. The proposed recommendations are drawn from the findings and conclusions reached through the evaluation process.

Recommendation 1: UNECE should continue promoting UNFC and UNRMS to the ecosystem of target adopters with strategies and interventions tailored to specific stakeholder groups. This could involve to:

- Consider reflecting concepts stemming from the theory of diffusion of innovations (e.g. early adopters, champions, incentives, social networks, etc.) into the design of the project's next phase and forthcoming activities.
- Develop and implement a partnership and engagement roadmap with public and private sector actors designing more specific or tailored interventions, such as a strengthening of outreach activities and capacity-building activities targeting the financial sector, or the promotion of the complementarity of UNFC and UNRMS with other standards.
- Facilitate the globalisation of UNFC and UNRMS through joint events and activities with other
  UN entities and the Regional Economic Commissions as well as by inviting UN partners in UN
  Energy to engage a discussion on the globalisation of UNFC and UNRMS and foster the
  mainstreaming of the frameworks in UNDA and other UN development projects, and by
  considering governance modalities and working arrangements that facilitate global
  representation and participation.
- Continue facilitating the collaborations and partnerships engaged in the EGRM and supporting the implementation of the actions of its working groups and task forces (e.g. UNFC Adoption Group, Women in Resource Management, Resource Management Young Member Group, etc.) and formulate a theory of change that clarifies how these activities target specific

stakeholder groups, i.e. the outcomes to be achieved per type of stakeholder and the joint or respective causal chains leading to those.

# Recommendation 2: UNECE should continue developing the capacities of target users of UNFC and UNRMS with a view to accelerate adoption. This could involve to:

- Develop the capacities of public institutions and other partners in EU countries with a view to support the implementation of the EU Critical Raw Materials Act and provide a classification of projects according to UNFC.
- Capitalize on the vast network of SRM experts across countries and sectors to deliver capacity-building and to promote UNFC and UNRMS to their respective networks of national institutions and industry partners including by considering to co-sponsor participation to these activities.
- Continue promoting the establishment and development of the ICE-SRMs and to respond to their needs, including by documenting the process towards their creation and operationalisation, developing and sharing good practices and lessons learned, and by facilitating their networking and contributing to their promotion.
- Consider supporting the development of a global knowledge management platform to facilitate access to UNFC and UNRMS information resources and expertise and to foster mutual support and networking among the community of UNFC and UNRMS experts and stakeholders, and consider strengthening the positioning of the frameworks as global brands for which UNECE is the technical anchor but one of the enabling policy or institutional contributors.

# Recommendation 3: UNECE should continue dedicating efforts to mobilize resources for the further development and promotion on UNFC and UNRMS. This could involve to:

- Document the efforts committed by UNECE in support of the development and implementation of UNFC and UNRMS to present a stronger business case against the hiring freeze and expedite the recruitment for the position of Economic Affairs Officer (P-4) on UNFC and UNRMS.
- Consider approaching resource partners in UNECE member States and other regions as well
  as among global funding mechanisms to advocate for an acceleration in the adoption of
  UNFC and UNRMS and promote mobilisation of resources for the institutions and modalities
  which contributes to the frameworks, including UNECE, other RECS, and the ICE-SRMs.

# **A**NNEXES

## **ANNEX 1: LIST OF EVALUATION INTERVIEWS**

- 1. Antje Wittenberg, Policy Officer, German Geological Survey (BGR)
- 2. Bianca Neumann, Chair, RMYMG
- 3. Charlotte Griffiths, Chief of Section, Sustainable Energy Division, UNECE
- 4. Cristina Marras Robinson, Co-Chair, EGRM Women in Resource Management Working Group
- 5. Dario Liguti, Director, Sustainable Energy Division, UNECE
- 6. David MacDonald, Independent Expert, Former Chair of UNECE EGRM
- 7. Dr Marit Brommer, Executive Director, International Geothermal Association (IGA)
- 8. Dr Massimo Gasparon, European Raw Materials Alliance (ERMA) Director, EIT RawMaterials GmbH
- 9. Elisa Tonda, Chief, Resources and Markets Branch, Industry and Economy Division, UNEP
- 10. Ghadi Sabra, Member, RMYMG and UNECE Consultant, Politechnico di Torino
- 11. Harikrishnan Tulsidas, Economic Affairs Officer, Sustainable Energy Division, UNECE
- 12. Henri Paillère, Section Head, Planning and Economic Studies, IAEA
- 13. Igor Shpurov, General Director, Russian State Committee on Mineral Reserves
- 14. Janja K. Solberg, Geological Survey of Norway
- 15. Janne Hokka, Senior Specialist, Mineral Economy Solutions, Geological Survey of Finland
- 16. Julie Hollis, Secretary General, EuroGeoSurveys
- 17. Karen Hanghøj, Director, British Geological Survey, Chair of UNECE EGRM
- 18. Martin Niemetz, Sustainable Development Officer, UNDESA
- 19. Matthew Wittenstein, Chief of Section, Energy Division, ESCAP
- 20. Matthias Hartung, Advisor Business Management
- 21. **Milan Grohol,** Policy Officer, Unit GROW I.01 Energy Intensive Industries, Raw Materials, Hydrogen; DG for Internal Market, Industry, Entrepreneurship and SMEs, European Commission
- 22. **Robert Tomas,** Policy Officer, Unit GROW I.01 Energy Intensive Industries, Raw Materials, Hydrogen; DG for Internal Market, Industry, Entrepreneurship and SMEs, European Commission
- 23. Satinder Purewal, Professor, Petroleum Engineering, Imperial College
- 24. Sergii Paiuk, Chairman, State Commission of Ukraine on Mineral Resources
- 25. Slavko Solar, Economic Affairs Officer, Sustainable Energy Division, UNECE
- 26. **Tunde Muritala Arisekola**, AMDC's Senior Advisor on Geological and Minerals Information Systems (GMIS), African Union Commission
- 27. Ulises Neri, Executive Director, ICE-SRM Latin America

## ANNEX 2: LIST OF RESOURCES CONSULTED

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# **ANNEX 3: PROJECT LOGFRAME**

	Results chain	Indicators	Baselines (including reference year)	Targets (by the end of the action)	Status by May 2024	Comments
Overall Objective: Impact	Development, maintenance and dissemination of UNFC, development of UNRMS based on UNFC, and building capacities in UNECE member States for sustainable resource management and facilitated delivery of the SDGs.	Raw material footprint, raw material footprint per capita, and raw material footprint per GDP and domestic material production and domestic material production per GDP.	In 2017, worldwide material consumption was 92.1 billion tons.	By 2030, a substantial increase in sustainability indicators of raw material production, with increased production as co-/by-products and application of best practices.	Unknown:     No interim     data from     national     reports on     the     progress of     SDG 12.2.	<ul> <li>Gap between impact statement and indicator.</li> <li>Gap between geographic scope of impact statement and indicator/baseline.</li> </ul>
Specific Objectives: Outcomes	1. Continuous improvement in the globally harmonised classification and management of natural resources using UNFC and further development of UNRMS to enhance sustainable development in the UNECE region through alignment with the SDGs.	UNFC and UNRMS principles, specifications, guidelines and advanced case studies and data infrastructure.	In 2019, UNFC principles updated and generic specifications and guidelines available. Preliminary UNRMS concept developed.	Updated UNFC principles, generic specifications and sectoral specifications and guidelines for all resources, including raw materials developed. UNRMS principles and guidelines developed. Five advanced case studies on minerals/metals developed. Demonstration version of the data infrastructure developed.	In progress.	All targets achieved except for the development of the demonstration version of the data infrastructure.

	2. Improve understanding of UNECE member States and other countries of the opportunities and challenges presented by sustainable natural resource production and consumption through application of UNFC and UNRMS.	Countries applying UNFC and UNRMS for sustainable resource management.	In 2019, the number of member States and other countries applying UNFC is 12.	At the end of the action, the number of member States applying UNFC and UNRMS for sustainable resource management will be 20, including the majority of EU Member States.	In progress.	<ul> <li>UNFC applications already reported in: Finland, Norway, Sweden, Poland, Czech Republic, Slovenia, Hungary, Romania, Spain, India, Russian Federation, Ukraine, Mexico.</li> <li>Critical Raw Materials Act entering into force in 2024 and applicable in 27 EU countries.</li> </ul>
	3. Strengthen capabilities of UNECE member States for sustainability and resiliency in natural resource management to aid economic recovery and growth using UNFC and UNRMS.	Experts from UNECE member States trained in UNFC and UNRMS application for sustainable resource management.	-	At least 200 experts trained on the application of UNFC and UNRMS.	Achieved.	More than 200 experts participating in the UNECE Resource Management Week(s) and having attended trainings and webinars.
Outputs/Deliverables	Fully functional     UNFC with     specifications and     UNRMS principles.	Fully functional UNFC and UNRMS documentation.	In 2019, Principles updated and generic specifications and guidelines available. Preliminary UNRMS concept developed.	Updated UNFC principles, generic specifications and sectoral specifications and guidelines for all resources, including raw materials developed. UNRMS principles and guidelines developed.	Achieved.	<ul> <li>Updated UNFC principles, generic specifications and sectoral specifications and guidelines.</li> <li>UNRMS principles and requirements.</li> </ul>
Outputs	2. Regional application guidelines, particularly a raw material-focused UNFC for Europe with emphasis on raw materials.	UNFC Europe guidance document.	-	UNFC Europe guidance document developed.	Achieved.	<ul> <li>UNFC Europe guidance document published in 2022.</li> <li>Finland issued guidelines in 2020 to apply UNFC for harmonized natural resource management.</li> </ul>

		Pilot and reference case studies.	-	Five advanced case studies on minerals/metals developed.	Achieved.	• Five case studies on minerals since 2020.
harmonise approache synthesisi data for di resources emphasis	es for ng available fferent with on raw globally to cource	Information system specifications.	-	Demonstration version developed.	In progress.	The concept for a "CRM Information Dashboard" is being developed.

5. Outreach an coordination n with authoritie (including all E	and coordination meetings with uthorities, industry,	-	Four outreach and coordination meetings conducted.	Achieved.	High-level Roundtable on Extractive Industries and Sustainable Development in the UNECE region (January 2021)
Member States	s). investment banks, development banks, financial and other				High-level UN Global Roundtable on Extractives Industries (May 2021)
	key institutions				Mineral deposits safeguarding as a basis of mineral raw materials safety" conference (May 2022)
					EIT RAW MATERIALS SUMMIT 2022 (May 2022)
					Policy Committee meeting of Euromines (September 2022)
					EuroGeoSurveys 50th Anniversary (October 2022)
					Roundtable on "Obtaining Reliable data on mineral resources to support supply security and enhance strategic resources management" (January 2023)
					GSEU Project Meeting, SCRREEN Symposium, and GzO'23 (March 2023)
					UNFC Training Course (April 2023)
					FutuRaM Advisory Board Meeting (June 2023)
6. Supporting A Union in the progressive implementatio UNFC for Afric system.	implementation of UNFC Africa documentation.	Preliminary documentation available in 2019.	UNFC Africa guidelines and information documents developed.	Achieved.	African Mineral and Energy Resources Management System (AMREC) system based on UNFC and UNRMS. The African Heads of State endorsed the system in February 2022.

7. Organising Annual EGRM meetings in Geneva; UNFC/UNRMS event during the EU Raw Materials Week.	Annual EGRM meetings, UNFC/UNRMS event during the EU Raw Materials Week.	-	Annual EGRM meetings, UNFC/UNRMS event during the EU Raw Materials Week organised.	Achieved.	11th Session of the Expert Group on Resource Management (September 2020)     12 <sup>th</sup> Session of the EGRM (April 2021)     13 <sup>th</sup> Session of the EGRM (October 2022)     14 <sup>th</sup> Session of the EGRM (April 2023)     15 <sup>th</sup> Session of the EGRM (April 2024)     EU Raw Materials Week (November 2021; November 2022)
8. Development of training materials on the application of UNFC and UNRMS	Training materials, briefing notes and working documents.	-	UNFC and UNRMS training materials developed.	Achieved.	Training materials from recent webinars are available on the UNECE website to view
9. Organising capacity-building workshops/training courses on sustainable management of resources.	Conduct capacity-building workshops/training courses on sustainable management of resources.	-	Organise 2 capacity-building workshops/training courses on sustainable management of resources per year (1 per year in EU).	Achieved.	UNECE Resource Management Week 2020, 2021, 2022, 2023 2024  Training workshop on Training Workshop on UNFC and its Application at the European Institute of Innovation and Technology (February 2022)  UNECE Training Course for Member States (April 2022)  UNFC and UNRMS workshop at IRTC (February 2023)  Women in Resource Management webinar (March 2023)
10. Supporting the launch of Centres of Excellence (CoEs).	Supporting the launch of Centres of Excellence in EU.	-	2 Centres of Excellence on raw materials in EU to be launched by the end of the action	Achieved.	ICE-SRM, established in Moscow in 2021     ICE-SRM, based in Mexico

# ANNEX 4: EVALUATION MATRIX

Project evaluation questions	Evidence or indicators	Methods
Relevance		
How aligned were the project's activities with the identified needs and priorities of UNECE member States regarding sustainable resource management?	<ul> <li>References of country consultations in the Contribution Agreement and progress reports.</li> <li>Evidence of consultative meetings.</li> <li>References by UNECE staff, MS representatives (UNECE and other regions), and stakeholders as evidence.</li> </ul>	Desk review: Project document, annual progress reports, project outputs, relevant documents produced by Member States. Interviews: UNECE staff, MS representatives (UNECE and other regions), and stakeholders. Survey: MS representatives (UNECE and other regions), partners and stakeholders.
2. To which extent this project allowed UNECE to support its member States in the implementation of the 2030 Agenda for Sustainable Development?	<ul> <li>References to the 2030 Agenda in project activities and deliverables.</li> <li>References to the 2030 Agenda by UNECE staff, MS representatives (UNECE and other regions), and stakeholders as evidence.</li> </ul>	Desk review: Project document, annual progress reports, project outputs. Interviews: UNECE staff, MS representatives (UNECE and other regions), and stakeholders. Survey: MS representatives (UNECE and other regions), partners and stakeholders.
3. Were the project's objectives and activities consistent with the overarching goals of the UNECE subprogramme on sustainable energy and the Expert Group on Resource Management?	<ul> <li>References to the project in UNECE subprogramme workplans and activities and in UNECE corporate reporting.</li> <li>Opinions of UNECE staff and representatives from the EGRM.</li> </ul>	Desk review: Workplans, annual progress reports, project outputs. Interviews: UNECE staff, EGRM members.
4. To what extent were gender, human rights, climate change, disability and other cross-cutting perspectives mainstreamed in project? How could this be improved?	<ul> <li>Evidence in Contribution Agreement and secondary resources (e.g. Gender strategy).</li> <li>Evidence in activities/project outputs.</li> <li>Evidence in progress reports.</li> <li>Reported contributions to gender mainstreaming and human rights by UNECE staff, MS representatives (UNECE and other regions) and stakeholders.</li> </ul>	Desk review: Project document, annual progress reports, project outputs. Interviews: UNECE staff, MS representatives (UNECE and other regions), and stakeholders.
Coherence		
5. To what extent was this project coherent with those of other UN entities and international organizations working in the same area, including at country level? Has the coherence improved over the course of the project?	<ul> <li>Evidence in project progress reports and UN documents.</li> <li>References by UNECE staff, MS representatives (UNECE and other regions), UN partners and stakeholders as evidence.</li> </ul>	Desk review: Annual progress reports, UN reports, project outputs. Interviews: UNECE staff, MS representatives (UNECE and other regions), UN partners and stakeholders.

		<b>Survey:</b> MS representatives (UNECE and other regions), partners and stakeholders.
6. Was the project design and implementation appropriate for meeting the project's logical framework?	<ul> <li>Evidence in the Contribution Agreement and project progress reports.</li> <li>References by UNECE staff, MS representatives (UNECE and other regions), partners and stakeholders as evidence.</li> </ul>	Desk review: Project document, annual progress reports. Interviews: UNECE staff, MS representatives (UNECE and other regions), partners and stakeholders.
7. How coherent were the outcomes of the project (UNFC and UNRMS specifications, capacity-building workshops, guidelines, toolkits, best practices, and case studies) with respect to the diverse needs of UNECE member States?	<ul> <li>Evidence in Project deliverables aligned with the Contribution Agreement.</li> <li>References by UNECE staff, MS representatives (UNECE and other regions), partners and stakeholders as evidence.</li> </ul>	Desk review: Project document, annual progress reports, project outputs. Interviews: UNECE staff, MS representatives (UNECE and other regions), partners and stakeholders. Survey: MS representatives (UNECE and other regions), partners and stakeholders.
8. How coherent was the communication strategy of the project?	<ul> <li>Evidence in communication materials (press releases) and web metrics.</li> <li>References by UNECE staff, MS representatives (UNECE and other regions), partners and stakeholders as evidence.</li> </ul>	Desk review: Project document, progress reports, communication materials, web data. Interviews: UNECE staff, MS representatives (UNECE and other regions), partners and stakeholders.
Effectiveness		
9. To what degree did the project successfully enhance the capacities of UNECE member States in implementing and utilizing UNFC and UNRMS for resource classification and management?	Number of MS representatives (UNECE and other regions) and stakeholders trained that confirm increased capacity to use UNFC/UNRMS.     Evidence that target users have taken initial steps to implement UNFC/UNRMS.     Evidence of increased capacities in MS to train on the UNFC/UNRMS.     Evidence in progress reports.     References by UNECE staff, MS representatives (UNECE and other regions) and stakeholders as evidence.	Desk review: Project surveys, progress reports, project outputs. Interviews: UNECE staff, MS representatives (UNECE and other regions), UN partners and stakeholders. Survey: MS representatives (UNECE and other regions), partners and stakeholders.
10. How effectively did the project contribute to strengthening the mechanisms for sustainability and resilience in natural resource management within UNECE member States?	Evidence of conceptual, methodological and normative frameworks defined and articulated for Member States.     Evidence of UNFC and UNRMS used in project countries.     Evidence in progress reports.	Desk review: Progress reports, MS reports, policies and legislative acts. Interviews: UNECE staff, MS representatives (UNECE and other regions), partners and stakeholders.

	References by UNECE staff, MS representatives (UNECE and other regions), partners and stakeholders as evidence.	<b>Survey</b> : MS representatives (UNECE and other regions), partners and stakeholders.
11. Did the project's activities significantly improve the understanding of opportunities and challenges related to sustainable resource production and consumption among UNECE member States and other involved stakeholders?	Evidence in progress reports.     References by UNECE staff, MS representatives (UNECE and other regions), partners and stakeholders as evidence.	Desk review: Project surveys, progress reports, project outputs. Interviews: UNECE staff, MS representatives (UNECE and other regions), partners and stakeholders. Survey: MS representatives (UNECE and other regions), partners and stakeholders.
12. Did the project adequately consider and respond to the emerging challenges and risks, especially those accentuated by the COVID-19 pandemic, during its life cycle?	Evidence in Programme Budget reports and progress reports.     Evidence of project activities and outputs during COVID-19 crisis.     References by UNECE staff, MS representatives (UNECE and other regions), partners and stakeholders as evidence.	Desk review: Progress reports, project outputs. Interviews: UNECE staff, MS representatives (UNECE and other regions), partners and stakeholders. Survey: MS representatives (UNECE and other regions), partners and stakeholders.
Efficiency		
13. How efficiently were the resources (financial, human, and technological) allocated and utilized throughout the project's implementation phase?	<ul> <li>Evidence and/or examples of systematic use of UNECE's individual staff or partnerships.</li> <li>Evidence and/or examples of cost-saving measures put in place.</li> <li>References by UNECE staff and partners as evidence.</li> </ul>	Desk review: Progress reports, financial reports. Interviews: UNECE staff, partners.
14. How could the use of resources be improved? Would you propose any alternatives to achieve the same results?	References by UNECE staff and partners as evidence.	Interviews: UNECE staff, partners Survey: UNECE staff, partners.
15. How effectively did the project manage time constraints and deadlines while ensuring quality outputs and deliverables?	References by UNECE staff and partners as evidence.	Desk review: Progress reports. Interviews: UNECE staff, partners.
16. Were the activities implemented most efficiently compared to alternatives? In particular, how do resources' costs and use compare with similar projects (within UNECE, other regional commissions, other UN agencies, or other organizations and initiatives)?	<ul> <li>Financial analysis including cost over output ratios.</li> <li>References by UNECE staff, MS representatives (UNECE and other regions), partners and stakeholders as evidence.</li> </ul>	Desk review: Progress reports, financial reports. Interviews: UNECE staff, MS representatives (UNECE and other regions), partners and stakeholders. Survey: MS representatives (UNECE and other regions), partners and stakeholders.
Sustainability		
17. What measurable improvements were observed in the globally harmonized classification of natural	Evidence in project progress reports and country documents.	<b>Desk review</b> : Progress reports, MS reports, policies and legislative acts.

resources, as facilitated by UNFC, following the project's interventions?	References by UNECE staff, MS representatives (UNECE and other regions), partners and stakeholders as evidence.	Interviews: UNECE staff, MS representatives (UNECE and other regions), partners and stakeholders. Survey: MS representatives (UNECE and other regions), partners and stakeholders.
18. What measures were implemented to ensure the continued relevance and applicability of UNFC and UNRMS beyond the project's duration?	<ul> <li>Evidence in project progress reports and country documents.</li> <li>References by UNECE staff, MS representatives (UNECE and other regions), partners and stakeholders as evidence.</li> </ul>	Desk review: Progress reports. Interviews: UNECE staff, MS representatives (UNECE and other regions), partners and stakeholders. Survey: MS representatives (UNECE and other regions), partners and stakeholders.
19. How well were the principles of sustainability integrated into the fundamental concepts and structures of UNFC and UNRMS for long-term viability?	Evidence in project outputs and progress reports.     References by UNECE staff, MS representatives (UNECE and other regions), partners and stakeholders as evidence.	Desk review: Project outputs, progress reports. Interviews: UNECE staff, MS representatives (UNECE and other regions), partners and stakeholders.
20. To what extent did the project foster collaboration and partnerships that could sustain efforts for ongoing resource management beyond the project's conclusion?	Evidence in project outputs and progress reports.     References by UNECE staff, MS representatives (UNECE and other regions), partners and stakeholders as evidence.	Desk review: Project outputs, progress reports. Interviews: UNECE staff, MS representatives (UNECE and other regions), partners and stakeholders. Survey: MS representatives (UNECE and other regions), partners and stakeholders.

# **ANNEX 5: INTERVIEW CANVASES**

### **Informants: UNECE partners and stakeholders**

Date:	
Interviewee:	
Position:	
Organization:	
Location:	
Interviewer:	Patrick Breard

#### **INTRODUCTION AND INTERVIEW OBJECTIVES**

5min.

- 1. **Thank you** for taking the time, introduce the evaluation and consultant.
- 2. Scope: Focus on the EU-funded project to support UNFC/UNRMS and on SP5-related findings.
- 3. The **main purpose** of this evaluation is to:
  - Assess the degree to which the UNECE activities and desired project results on UNFC and UNRMS have been realized (including the extent of gender and human rights mainstreaming); and
  - b. Identify good practices and lessons learned from the E357 Project that could feed into and enhance the implementation of related interventions.
- 4. About this meeting:
  - Confidentiality in all interviews
  - Do you give your permission to record this interview?
- 5. Do you have **any questions** on the process or any other part of the evaluation of the E357 UNFC/UNRMS Project?

## About you

- What is your job function?
- What has been your role or involvement in the UNECE's activities on UNFC and UNRMS?
- Are you familiar with the EC E357 project ("the project") that provides support to UNECE and its member States with the development and application of UNFC and UNRMS?

## Relevance

- How do UNECE activities on Resource Management (or "the project") respond to the needs and priorities of your institution (or country) regarding sustainable resource management?
- 2. How do these activities relate to and contribute to the 2030 Agenda and the SDGs?

- 3. To what extent and how were the UNECE's activities on UNFC and UNRMS (or "the project") are consistent with the goals of the Expert Group on Resource Management?
- 4. To what extent were gender, human rights, climate change, disability and other cross-cutting perspectives mainstreamed in UNECE's activities on UNFC and UNRMS (or "in the project")? How could this be improved?

#### Coherence

- 5. To what extent were UNECE's activities on UNFC and UNRMS (or "the project") coherent with those of other UN entities and international organizations working in the same area, including at country level? Has the coherence improved over the course of the past 4 years?
- 6. Was the design and implementation of UNECE's activities on UNFC and UNRMS (or "the project") appropriate for building the capacities in member States for sustainable management of resources through application of UNFC and UNRMS? Were there any activities missing to achieve this objective?
- 7. How coherent were the outcomes of the UNECE's activities on UNFC and UNRMS (UNFC and UNRMS specifications, capacity-building workshops, guidelines, toolkits, best practices, and case studies) with respect to the needs of your institution (or country)?
- 8. How coherent has been the communication strategy of UNECE on UNFC and UNRMS? What were the good practices? What could be improved?

### **Effectiveness**

- 9. In your opinion, to what extent and how did UNECE's activities on UNFC and UNRMS (or "the project") enhance the capacities of UNECE member States in implementing and utilizing UNFC and UNRMS for resource classification and management?
- 10. How effectively did UNECE's activities on UNFC and UNRMS (or "the project") contribute to strengthening the mechanisms for sustainability and resilience in natural resource

management within UNECE member States? What were the most effective activities? What were the least effective activities?

- 11. Did UNECE's activities on UNFC and UNRMS (or "the project") significantly improve the understanding of opportunities and challenges related to sustainable resource production and consumption among UNECE member States and other involved stakeholders? How?
- 12. How did UNECE's activities on UNFC and UNRMS (or "the project") consider and respond to the emerging challenges and risks, especially those accentuated by the COVID-19 pandemic?

#### **Efficiency**

- 13. How efficiently were the resources (financial, human, and technological) allocated and utilized by UNECE to support UNFC and UNRMS in the past 4 years?
- 14. How could the use of resources be improved? Would you propose any alternatives to achieve the same results?
- 15. How effectively did UNECE's team (or "the project") manage time constraints and deadlines while ensuring quality outputs and deliverables?
- 16. Were the activities implemented most efficiently compared to alternatives? In particular, how do resources' costs and use compare with similar initiatives (within UNECE, other UN regional commissions, other UN agencies, or other organizations and initiatives)?

#### Sustainability

- 17. What measurable improvements can be observed in the globally harmonized classification of natural resources, as facilitated by UNFC, following the project's interventions?
- 18. What measures were implemented to ensure the continued relevance and applicability of UNFC and UNRMS beyond the project's duration?

- 19. How well were the principles of sustainability integrated into the fundamental concepts and structures of UNFC and UNRMS for long-term viability?
- 20. To what extent did UNECE's activities on UNFC and UNRMS (or "the project") foster collaboration and partnerships that could sustain efforts for ongoing resource management beyond the conclusion of these activities?

### Overall

- Would there be any success stories or good practices to share from UNECE's activities on the UNFC and UNRMS (or "the project") (e.g. outcomes, target beneficiaries, partnerships, etc.)? Why were these activities successful? What were the enabling factors? Any unintended positive outcomes?
- What are the main constraints or challenges that UNECE's activities on the UNFC and UNRMS (or "the project") have confronted? Are there any early lessons learned? Any unintended negative outcomes?

### **Looking forward**

What would you recommend for the UNECE's Sub-programme 5 going forward? How could
it best support Member States (in UNECE and other regions) and contribute to applying
UNFC and UNRMs? What could be prioritized over the next 3 to 5 years?

### **Final comments**

- Any other persons you would recommend we consult during this evaluation?
- Is there anything else you would like to share for the evaluation that we have not covered?

THANK YOU FOR YOUR TIME

### Introduction

The survey was sent to ECE Reserves, a mailing list provided by the Secretariat which gathers external partners and stakeholders involved or interested in UNECE's work on sustainable energy. The questionnaire was made available in English. The survey was anonymous and remained open for 3 weeks, from Monday 15 April to Friday 4 May 2024. In order to reduce the non-response rate, two reminder messages were sent to survey recipients. The survey was received by close to xxx target respondents with 359 persons accessing the online questionnaire. Respondents that did not sufficiently complete the questionnaire (i.e. completing at the least the three first pages) were parked by the evaluation. Accordingly, survey results are based on the feedback received from 275 respondents. The overall response rate to the survey is around XXX%.

### 1. Profile of respondents

### 1.1. Organizational background

In which type of organization do you work?	Responses
Ministry, Public institution, National or local administration	79
Private Sector	61
University or Research institute	55
Professional society or association	25
Civil Society Organization or NGO	16
UN agency or Intergovernmental Organization	14
Other (please specify)	25
Financial or banking institution	0
Bilateral Donor Organization	0
Total respondents	275

### 1.2. Type of profession

What is your primary job function?	Responses
Technical expertise	152
Management	67
Policymaking	15
Communication/advocacy	7
Other (please specify)	31
Total respondents	272

### 1.3. Geographic focus

What is the geographic area of focus of your work?	Responses
One of UNECE member States or the region	162
Other countries / another region	69
Other (please specify)	43
Total respondents	275

### 1.4. Sectoral interest

Which sector(s) are you working on/most interested in?	
Anthropogenic resources	43
Groundwater	39
Injection projects	25
Minerals	164
Nuclear fuel resources	19
Petroleum	74
Renewable energy	96
Other (please specify)	27
Total respondents	275

### 1.5. Gender of respondents

What is your gender?	Responses
Female	72
Male	197
Non-binary	1
Prefer not to say	3
Total respondents	273

# 2. Relevance of UNECE's support to member States and partners on UNFC and UNRMS

### 2.1. To what extent do you agree with the following statements?

To what extent do you agree with the following statements?	Strongl y agree	Agree	Disagree	Stongly disagree	Do not know	Total
UNECE's activities on Sustainable Resource Management address your needs and priorities (or your institution's needs and priorities)	89	125	26	11	23	274

regarding sustainable resource						
management						
UNECE's activities on UNFC and						
UNRMS are reflective of the	0.4	120	5	7	24	270
expectations and agenda of work of	94	130	5	/	34	270
the EGRM						
Gender, human rights, climate change,						
disability and other cross-cutting						
perspectives were mainstreamed in	73	133	7	11	49	273
UNECE's activities on UNFC and						
UNRMS						

### 2.2. In case you "disagree" or "strongly disagree" to any of the above statements, please briefly explain your concern:

- As a consultant we make little reference to UNFC or the other initiative as they are not directly relevant to our clients other than if making submissions to government.
- Because authorities do not set the conditions to carry out the activities of our institution
- EGRM UNECE RESOURCE MANAGEMENT UNFC United Nations Framework for classification of resources fossil energy and minerals reserves, PRMS Petroleum Resources management system CRIRSCO.COM
- Has no place in the mineral industry
- I don't have information
- I don't see how gender, etc politics have any bearing on mineral extraction. The UNFC needs closer alignment with the CRIRSCO group of codes.
- I have been following UNECE for some years now and I am confident that in the areas of gender, human rights, climate change, disability, and other cross-cutting perspectives, it is performing satisfactorily.
- I have been working in extractive industry governance for twelve years now and it seems like everything UNECE does is very disconnected from the actual sector it strives to work with. I have rarely seen anyone from UNECE at the key mining events, and when I look at UNECE events and documents, I see very little involvement from the key players (e.g. ICMM, mining company representatives)
- I think too much emphasis is being placed on developing new applications and extensions to
  the UNFC and UNRMS without enough attention being placed on some of the fundamentals.
   For instance UNFC has shifted from being an inventory classification based system to a project
  classification based system without resolving some of the differences between these different
  approaches in different application sectors.
- I'm guessing at my responses since I have not been active in at least 8 years I am retired and am involved in my cancer treatments.
- I'm sorry, but I am allergic to acronyms. I don't know what UNFC, UNRMS and EGRM mean and I don't have the time or interest to find out
- In my opinion gender and the disability issues are involved, and the human rights and climate change are indirectly involve via social axes

- In several countries, it is a legal requirement that, pertaining to geoscience resources, a
  registered/licenced, qualified professional (geoscientist or engineer) take responsibility for
  and be accountable for the geoscience portion of the report. This should be noted in
  documentation.
- It would be helpful with coordinated efforts on training according UNFC, especially since this now is a demand in the CRMA.
- More financial support for both member and non-member states who interested in the topic or agenda
- Most work I related to technical rather than the major underlying challenge of resource management governance. This weakens the effect the initiatives otherwise would have on governments and industry, and the impact on society and the environment at micro and macro level.
- Not sure UNECE's work has added to PPRMS for petroleum
- Our work on sustainable resource management is based on other frameworks, not UNFC and UNRMS.
- The minerals industry already has an effective reporting system: a series of standards under the CRIRSCO umbrella, recognised by mining and exploration companies and by financial institutions, and with a well-defined competence requirement for persons completing reports. There is a long established bridge to UNFC. The CRIRSCO standards address sustainability objectives. Some are incorporated into national legal systems. Attempts to promote UNFC to the industry would only confuse and are counter-productive.
- The UNECE system of classification and ranking of mineral deposits are of limited significance for the future need of the societies
- There are some fundamental changes when going from fossil to renewable energy (i.e. land use). This issues are not well covered.
- There is no UNECE impact on Ajayi Crowther University, Oyo where I work.
- They are focused and developed the tools that were developed for European, developed countries.
- This is a very bureaucratic organisation. I participated few times in the meetings and the level of people talking about reserves was very low, then I did not go anymore
- UNECCE's does not take in consideration the energy security supply by all means and the energy needs of the developing countries
- UNFC/UNRMS is a methodology tool for a coherent assessment of various resources, not a political tool to promote particular views.
- Unfortunately UNFC is not implemented well
- Very little information around anthropogenic resources
- What is needed, in addition to a globally agreed reporting framework on hydrocarbon or mineral resources and reserves by degree of knowledge and data certainty, which UNFC provides, is a full, internationally implemented (compulsory?) reporting standard on, one hand, mineral resources exploration projects (up to the completion of the feasibility study), and on the other hand, an international reporting standard on mining and/or processing and/or metallurgical/ refining activities detailing impacts and risks, as well as mitigation strategies. Transparency, publicity, and reliability (further, for instance, to the generalized application of the "competent person" principle imposed by the Canadian stock market authority for the reporting of mineral exploration project, should be enshrined in any reporting standard, as it is a formidable tool to foster trust among stakeholders, and to reduce

the ESG (Environment, Social and Governance) risks, considered as the most important risk by the mining industry itself, according to recent annual EY surveys of risk perception by the minerals and metals industry

So far the two most comprehensive developments addressing, at least partly, the need for public, reliable information and data are:

- for mineral exploration activities, the Canadian NI 43-101 reporting standard.

- for minerals and metals production projects the Standard developed by the Initiative for Responsible Mining Assurance.

These are two foundations which could and should be used to develop much needed international reporting practice and transparency, and against which all the about 90 existing pro-governance initiatives should align, including UNFC and UNRMS (see the 2020 UN International Resource Panel report on Mineral Resources Governance in the 21st Century for an overview of these initiatives).

- When it comes to the operationalization and evaluation of UNFC E-six, it is to a large extent subjective, and not harmonized, even for similar projects in the same jurisdiction.
- Your actions are not visible on ground much more interaction needs to be done at all levels
- You are framing and problematizing instead of solving real-life problems with practicable and pragmatic approaches. Huge disconnect between the objectives and the applicability in the real world.

# 3. Coherence of the UNECE's support to member States and partners on UNFC and UNRMS

### 3.1. To what extent do you agree with the following statements?

To what extent do you agree with the	Strongl			Strongly	Do not	
following statements?	y agree	Agree	Disagree	disagree	know	Total
UNECE's activities on UNFC and UNRMS, which include delivering specifications, guidelines, toolkits, best practices, case studies and capacity-building workshops, form a coherent bundle to respond to your needs (or the needs of your institution)	79	141	25	10	16	271
UNECE's activities on UNFC and UNRMS are complementary to those of other UN entities and international organizations working in the same area, including at country level	76	131	11	11	41	270
UNECE's communication strategy on UNFC and UNRMS has been appropriate	66	136	21	10	36	269

### 3.2. If you have suggestions on how to improve the coherence of UNECE's activities on UNFC and UNRMS, please briefly explain:

- 90% of people that I know in the minerals industry are not aware of UNFC or its relevance to industry especially as we, industry, use CRIRSCO.
- A podcast for large audience on key topics and facts
- Advocacy should continue with more emphasis on how it will get down to the grassroots like the artisans miners
- An overview of available documents and linkages to other initiatives would be helpful
- As before, UNFC and UNRMS don't play much of a role for our approach to natural resource management.
- As previously commented on, coordinated efforts with GSEU of the EU Geological surveys, CRISCO etc. to communicate common ground. Needs to be improved in the future. Recorded open seminars etc., e.g. UNFC is still relatively unknown among the actors who's supposed to use it
- At the national level, in my opinion, a special working group (UNECE and National experts) should be formed that would work on the implementation of the UNFC and UNRMS systems in the classification and management of mineral resources, because now there are no significant and official-formal activities in this direction (only individual cases).
- Be more clear in your communications only expert groups are able to find that fine line distinction in the activities
- Case histories as learning while doing could better address barriers
- Change the commission names. Collaborate with sector bodies to promote integration of commissions work, access and relevance.
- Clearer vision and communication on the complementary role of UNFC and UNRMS would be helpful, together with closer integration of the work on these two tools.
- Clearer vision and the complementary role of UNFC and UNRMS, including the use of UNFC as an a framework for common information to facilitate dialogue and decisions for sustainable resource management.
- Communication and training needs to take a priority
- Communication strategy is not efficient
- Comparisons between tools
- Energy
- Engage with industry and other stakeholders, and less academics and UN bodies.
- Enhancing resource management practices at the regional and global levels requires strengthening the coherence of the United Nations Economic Commission for Europe's (UNECE) work on the United Nations Framework Classification for Resources (UNFC) and the United Nations Resource Management System (UNRMS). In order to do this, UNECE needs to take a few crucial actions. First and foremost, it's critical to define the goals of UNFC and UNRMS. UNECE may make sure that its operations are in line with the organization's larger mandates and priorities by outlining their overarching aims in detail. This clarity will serve as a strong basis for creating a unified plan that smoothly combines UNFC and UNRMS operations. Encouraging coherence requires an integrated approach. In resource classification and management, UNECE should create a comprehensive plan that emphasizes the complementary responsibilities of UNFC and UNRMS. Through highlighting the

interdependence of various frameworks, UNECE can encourage a more comprehensive comprehension among interested parties. Involving stakeholders is another essential component of enhancing coherence. In its endeavours, UNECE must aggressively engage member nations, business partners, academic institutions, and pertinent international organizations. UNECE can foster a common understanding of UNFC and UNRMS principles and implementation strategies by means of cooperation and communication. Building capacity is necessary to make sure UNFC and UNRMS procedures are applied effectively. Member states and stakeholders should receive technical assistance, training, and workshops from UNECE. UNECE can help the UNFC and UNRMS standards be adopted by strengthening their ability to classify and manage resources. It is also essential to harmonize with other international frameworks and standards. In order to encourage interoperability and consistency in resource management methods, UNECE should endeavour to align UNFC and UNRMS with pertinent international initiatives. Harmonization will make it easier to coordinate and work together across various sectors and areas. Mechanisms for assessment and monitoring are required to keep tabs on developments and spot problems. Strong mechanisms for overseeing UNFC and UNRMS implementation should be established by UNECE. Through consistent performance evaluations and feedback gathering, UNECE is able to pinpoint areas in need of development and adapt its strategies accordingly. And last, in order to foster learning and creativity, knowledge exchange is essential. UNECE should assist member states and stakeholders in exchanging case studies, lessons learned, and best practices. UNECE can promote ongoing progress in resource management techniques by exchanging information and experiences. In closing, UNECE can improve the coherence of its efforts on UNFC and UNRMS by putting these steps into practice. This will ultimately benefit both the current and the future generations by leading to more efficient and sustainable resource management techniques.

- Focus on governmental and NGO sectors for minerals inventories and strategic planning, while allowing the existing CRIRSCO-based reporting system to continue as is. The defined bridging means that public organisations and institutions can easily extract information they need from published company reports.
- for deep and rapid progress a stronger public private partnership environment is required.
   this establish and mature fastest with leadership from UN this requires both resources / funding and active commitment to work with public and private organisations.
- Going forward both UNFC and UNRMS should evolve in the direction of providing decision support, UNFC in describing the current status projects producing the resources and the UNRMS in providing information on how best to select or deselect projects and how to best advance selected projects with respect to the contingencies facing them.
- How does it help me to raise money and advance new projects from prospect, discovery to resource definition to development? How does any framework help me to make investors understand what mining is all about, and degrees of uncertainties (rather than certainties) are all about not only with regards to resources and reserves but with regards to the mine cycle in general. So the question is, how can the UN help instead of making more difficult to understand what mining is? And how can you make it easier instead of increasing to cost of doing mining, specially the early stages to discovery of new critical mineral resources?
- I am reasonably well informed about UNFC but knew nothing about UNRMS.
- I don't have an opinion

- I don't think UNECE has received the resources needed to promote the use of these tools sufficiently. Even within the UN umbrella additional coordination might be needed to ensure that there is a consistent and coherent UN message being delivered.
- I have had difficulty finding the UNRMS specifications online.
- I suggest even more exchange w other UN bodies in order to avoid duplicated work.
- I think there is room to improve the communication on the work related to UNFC and UNRMS especially outside Europe.
- I think UNFC must be discussed (modified if needed) with other regional and country classifications.
- Implementing in business and stock markets procedures
  - Improving the coherence of UNECE's activities on UNFC (United Nations Framework Classification for Resources) and UNRMS (United Nations Resource Management System) involves several key strategies: Integrated Framework: Develop a comprehensive framework that integrates both UNFC and UNRMS principles and methodologies. This framework should provide clear guidelines on how to apply both systems harmoniously across various resource sectors. Capacity Building: Offer targeted capacity-building programs to member states, industry stakeholders, and relevant organizations to enhance their understanding and implementation of UNFC and UNRMS. This will ensure consistent application and interpretation of these systems. Standardization: Work towards standardizing terminology, classifications, and reporting formats across UNFC and UNRMS to minimize confusion and streamline communication between stakeholders. Alignment with Sustainable Development Goals (SDGs): Ensure that the activities under UNFC and UNRMS are aligned with the SDGs, particularly those related to sustainable resource management, environmental protection, and social equity. Stakeholder Engagement: Foster active engagement with all relevant stakeholders, including governments, industry representatives, academia, and civil society, to gather feedback, address concerns, and promote ownership of UNFC and UNRMS principles. Regular Review and Updates: Establish mechanisms for regular review and updates of UNFC and UNRMS guidelines to reflect evolving industry practices, technological advancements, and changing resource management needs. Coordination with other UN Bodies: Collaborate closely with other UN bodies and international organizations working on related issues, such as the UN Environment Programme (UNEP) and the International Atomic Energy Agency (IAEA), to leverage synergies and avoid duplication of efforts.
- information dissemination on UNFC UNRMS is very key and not enough for now . Efforts should be made to improve on it
- Is necessary the coordination between UNECE, UNFC and UNRMS for the best future.
- It is expected the EGRM working groups could share their work plan, progresses and achievements on a regular basis.
- Just bear in mind that Africa already has AMREC-PARC. No need to push UNRMS on Africa but to support the domestication of AMREC-PARC
- lack of guidance in terms of granting finance (public or private) land registries and business
  registries are very useful tools when stablished already in one country. lower interest rates
  are achieved while identifiable collateral asset subject to registration exist such as land parcels
  and industrial machinery or reserves or concessions.
- More emphasis on distinguishing between inventory classification and project classification.
- More participation from Developing countries.
- More technical support to non UNECE countries applying UNFC and UNRMS

- MY SUGGESTIONS TO UNECE FOR IMPROVED COHERENCE ACTIVITIES ARE: 1. UNECE SHOULD NOT RESTRICT ITS ACTIVITIES WITHIN THE UNECE CORRIDOR ONLY, THIS IS WHY THE ASIAN GIANT, CHINA, HAS PROFITTED IN MOST COUNTRIES WHERE MOST OF UNECE MEMBER STATES HAD BEEN NON-INVOLVED OR SHOWN NO INTEREST. 2. WITH GOOD PROGRAMS AND HONESTY, WHICH MEANS WIN-WIN FOR BOTH LOCALS AND INVESTORS, THE GLOBAL RESOURCES CAN BE HARNESS FOR THE GOOD OF ALL.
- N.A.
- Nil
- NO
- No comment
- no suggestions
- No, I have no other suggestion.
- none
- Particularly respective guidelines should translated to as many languages as possible
- Pertaining to item 8., second point, in several countries, it is a legal requirement that, pertaining to geoscience resources, a registered/licenced, qualified professional (geoscientist or engineer) take responsibility for and be accountable for the geoscience portion of the report. This should be noted in documentation.
- Please to do more conferences and workshops
- practical (hands on) courses missing
- prioritize component by component alignment process
- same as before
- See my comment to #7.
- Simplify the message. From a private sector perspective, it's challenging to understand given the formal language & use of abbreviations.
- Spend more time in practical education
- Sponsor the UNECE delegates air tickets, accommodation, and breakfast in their annual meetings
- Still room for increased outreach of the system(s)
- The development of activities and products mentioned should be governed/coordinated more centrally. Guidelines, case studies, etc. for different resource/project types are heterogeneous and there are different interpretations of the UNFC principles by different experts and working groups. A central coordination of these products will 1) make them more uniform and recognizable, 2) prevent different interpretations of principles, 3) ensure that any adaptations for unique situations do not contradictory to general principles and are implemented accordingly. In addition, my feeling is that the centralized coordination of guidelines will speed-up the development (which is now much depending on the availability of in-kind support in working groups)
- The government is not implementing the latest version of UNFC. Still following 1997 UNC version and that too in bits and pieces.
- The media proves to be as important as the government in sending these communications to the private and public sectors. And although many of the UNECE's activities which include the Task Force are needing sustained coverage and perhaps organizations like UNRMS are determined to show how it can deliver their policies.
- The private sector implementation strategy would be a challenge except channelled through Government regulations and parastatals.

- The UNECE's activities must be in the real direction of Sustainable development and the whole humanity, but not a real geopolitical tool for European union. Thanks
- There are a number of relevant yet critical aspects that must be considered to improve the coherence of UNECE's activities on UNFC (United Nations Framework Classification for Resources) and UNRMS (United Nations Resource Management System). By addressing these aspects, and implementing strategic improvements based on them, UNECE can enhance the coherence of its activities on UNFC and UNRMS, leading to more impactful and integrated approaches in resource management and energy efficiency. These are: Enhanced Coordination: Foster closer collaboration and coordination among UNECE and other relevant UN entities, international organizations, and stakeholders working in the field of resource management. This could involve joint planning, shared objectives, and streamlined communication to avoid duplication of efforts. Stakeholder Engagement: Ensure active engagement of diverse stakeholders, including governments, industry representatives, academia, and civil society, in the development and implementation of UNFC and UNRMS activities. This inclusive approach can help identify common priorities and promote buy-in for coherent strategies. Clear Communication: Improve clarity and consistency in communication regarding UNFC and UNRMS initiatives. This includes effective dissemination of information, transparent reporting on progress and outcomes, and targeted outreach to Capacity Building: Invest in capacity-building efforts to enhance relevant audiences. understanding and application of UNFC and UNRMS principles among member states and practitioners. This could involve training programs, workshops, and knowledge-sharing platforms to promote best practices and standardized approaches. Monitoring and Evaluation: Establish robust monitoring and evaluation mechanisms to assess the impact and effectiveness of UNECE's activities on UNFC and UNRMS. Regular feedback loops and datadriven assessments can inform continuous improvement and adaptation of strategies. Alignment with Global Agendas: Ensure alignment of UNECE's activities with broader global agendas, such as the Sustainable Development Goals (SDGs) and international frameworks on climate change and sustainable resource management. This alignment can reinforce coherence and support collective efforts towards common objectives.
- There are still too many Mineral Classification Schemes that do not considered UNFCR for reporting
- There is a need for training for UNRMS
- These concepts must be aligned with CRIRSCO initiatives. It is a shame that the work of third parties by UN teams is not recognized.
- To me UNMRS is much less advanced than UNFC, as it essentially outlines guiding principles, while UNFC provides a robust framework on how to categorise resources and reserves, a tool that supports the efforts by some States to organise their own internal information and data on resources and reserves. There is a major role for UN in supporting the development on global, transparent and public reporting on minerals and metals related activities, this may require some streamlining of the related activities in various UN bodies, serving a clear, overarching set of objectives;
- Today's world is characterized by severe health problems, environmental degradation, predatory exploitation of natural assets, deforestation, desertification and geopolitical hegemonies related to oil and gas, while climate calamities, object of repeated scientific events, become evident and are continuously witnessed by ordinary people. There is a dissonance between the legal framework, international conventions and the practices of political and economic groups that endorse the abuse of nature, devastating huge areas

through logging, mining, industrial chemical production and "commodities"; indigenous and preservation areas are constantly at risk of invasions. Communication, advocacy, public policies, research and teaching programs should take in account the general phenomenon, in view of the transformation of the dominant paradigms of development, growth, wealth, power and freedom embedded at political, economic, educational and cultural levels. Earth's regeneration and mankind's regeneration, as faces of the same coin, should be addressed simultaneously, for their mutual support. Goals and new paths to reach them should contemplate a set of values, norms and policies that prioritizes socio-ecological objectives, human well-being, natural and built environments, the aesthetic, ethical and cultural meaning of life. The evils attributed to the "Anthropocene" are not the responsibility of all humanity; the main culprits, who have the political and economic power to shape the forms of production and consumption and define lifestyles, must be distinguished from the majority of the population, whose power to change things cannot be compared with those. "Systemic" interpretations, supported by theories of "complexity" and the "Anthropocene" as a new era in human history, may inadvertently obscure the role and effective action of people and groups that control economics and politics in today's world, who find an easy excuse to decline their responsibilities in the destinies of humanity. Publishing scientific reports, teaching and learning about essentially the same problems, but unimplemented solutions, reminds us that we should take into account the supremacy of political and economic groups which have a tough voice in propaganda, in the media, in finances and in the academic world. The focus should not be on the "bubbles" of the surface (consequences, fragmented issues), but on the configurations deep inside the "boiling pot" where the problems emerge. Instead of dealing with the bubbles (segmented, reduced issues) and instead of trying to solve isolated and localized problems without addressing the general phenomenon, problems should be defined and dealt with deep inside the "boiling pot", encompassing the current "worldsystem" with its boundaries, structures, techno-economic paradigms, support groups, rules of legitimization, and coherence. In the socio-cultural learning niches, heuristic-hermeneutic experiences can generate awareness, interpretation and understanding beyond established stereotypes, from a thematic ("what" is at stake), an epistemic ("how" to understand and define the events) and a strategic (who, when, where) point of view. Evaluation and planning, advocacy, communication, public policies, research and teaching programmes, should combine all dimensions of being-in-the-world (intimate, interactive, social and biophysical), as they intertwine, as donors and recipients, to induce the events (deficits/assets), cope with consequences (desired/undesired) and contribute for change (potential outputs). Reference: PILON, A. F. Reconnecting the Broken Bonds: Environment, Politics, Economics and the State of the World, Munich Personal RePEc Archive, 2023 [online]: https://mpra.ub.unimuenchen.de/117539/1/A%20Challenge%20for%20the%20Survival%20of%20Humanity%20 and%20Planet%20Earth-5.pdf

- Too much centralized and not reaching properly to the private sector. At the country level, it is being poorly managed by national entities.
- UNECE must support each country according to the reality on the spot
- UNECE should adapt an integrated approach that considers both UNFC and URMS together as part of a holistic resource management framework. This ensures that activities related to classification, reporting and management are coordinated.
- UNECE should also support scientists from developing countries.

- UNECE should ensure the recommendations of the UNECE Working Party on Gender-Responsive Standards are incorporated in UNFC and UNRMS moving forward (https://unece.org/trade/wp6/gender-responsive-standards).
- UNECE should plane the budget for the reimbursement of the cost of members attendance to the meetings of the working groups
- UNECE should provide letter like UNLP for visa free travel to participate in events
- UNFC and UNRMS should become global, promoted by the entire UN system
- UNFC could be much more fiercely promoted and coordinated with other organisations, including outside Europe which is where there is a much greater potential application.
- UNRMS shows great ambition but remains very vague and needs further clarification.
- We need more and updated information for timely action.
- We see that there is better communication and facilitation needed regarding the alignment between PERC/CRIRSCO and UNFC - while UNFC is more and more required to classify projects in the EU, PERC/CRIRSCO reporting is what is mainly used on company level to classify their resources. The bridging document improves interoperability to some degree - however use and purpose of both are different and thus require a coexistence.
- Well done work
- Work on policy levers for implementation (eg. CRMA's "strategic projects" label)
- UNFC provides more clarity on technical specifications for different commodity groups by sharing the complete technical reports and case studies with explanations on how a particular category of code was arrived at to educate and create skilful teams across the globe for uniform reporting standards that are easily understandable. The resource management system (UNRMS) accumulates all global resource/ reserve data of all categories stated in the UNFC and makes it available to the global users with all its parameters including the circular economy chain and its best possible usage to achieve less consumption of earth's energy. The database of all countries is to be published transparently to make all gain its facility equally, else certain country data may remain concealed and there will be unequal use of this common information.
- 3.3. In your opinion, is UNECE, as a Regional Economic Commission with a regional constituency, impeding the further development and global application of UNFC and UNRMS (both of which are recommended for global application by ECOSOC)?
  - Agree
  - Agree
  - All divisions not just UNECE should be involved in order to assure standards are developed globally with wider inputs
  - As a tech startup based in Switzerland working on transparency and traceability of the metal supply chain using tenure sensing. we would love to contribute to UNECE. Please write us to <removed by evaluation>
  - As long as UNFC/UNRMS is developed and used as a methodology tool, not a political tool, yes.

- Basically not, or shouldn't be but I can't answer this question properly as I don't have comprehensive information on the subject.
- Collaborative efforts of regional and global applications are appropriate.
- Definitely yes
- Difficult to say. We have global participation, but the UNECE member countries do not always recognise the needs of developing areas.
- Do not know
- Environment protection
- European viewpoints are probably not applicable on a global scale.
- From a personal point of view, UNECE's support for stakeholders in European to be engaged is indeed stronger than in other regions.
- Given the current global situation post-Covid, conflicts, food insecurity, and climate issues, UNECE should expand its support and assistance.
- Good continuation
- I am not sure, but UNECE may affect the normal performance of UNFC.
- I am not sure. on this.
- I believe not.
- I cannot give a general answer but with reference to the minerals industry, in my view UNFC should NOT be globally applied, as there is a perfectly workable and globally accepted reporting system already in use.
- I don't have enough experience with this yet to have an opinion.
- I don't have an opinion
- I don't see the on ground impact no can't comment
- I don't think UNECE, as a body, is impeding this, but I don't think the vision of the full benefit UNFC as a framework for common information which decision makers need has been fully grasped and some individuals are hindering the pursuit of this vision perhaps because of their lack of understanding.
- I find it true.
- I have no opinion on this
- I have not observed any impediment
- I hope that UNFC and UNRMS divisions should be created in each regional subdivisions of UN and it should not to be only regional view initiative but worldwide best practice units with a regional specifications without affecting to other regions.
- I think there needs to be an expanded and deliberate extension of the need to adopt UNFC and UNRMS to the other UN-RECs so as to promote global application.
- I think UNECE could request UN to consider UNFC and UNRMS to be considered worldwide for all the countries.
- I wouldn't say UNECE impedes further development of global application of UNFC and UNRMS, but I believe more collaboration and outreach with UN Resident Coordinators, UN agencies and Regional Commissions is key to improving both frameworks and localise (adapt and enhance) the methodologies to other regions and countries (other than Europe). Although the frameworks are all encompassing, there is a focus on the extractive industries. I believe more case studies and improvement of the methodologies pertaining to the evaluation of renewable energy resources are needed to promote the use of UNFC and UNRMS in the countries that are not resource-rich.

- IN MY OWN OPPINION, UNECE, THOUGH A BODY WITH PRIMARY ROLES TOWARD ITS BLOCK, EUROPEAN COMMUNITY, IT HAS NOT IMPEDES NOR CONDUCT ANY ACTIVITIES THAT IMPEDE DEVELOPMENT OF ANY OF UNFC AND UNRMS
- It depends on whether UNECE perceives itself to be a leader in implementation or as an equal partner in the development process
- It does not make more difficult or prevent the development and global application from happening.
- it does to some degree
- it is hard to get an overview of the areas where UNFC and UNRMS already are being applied, especially in private sector. So it is difficult to really see where the global application currently stands...
- It is imperative that UNECE actively engages with global stakeholders and aligns its operations
  with the broader mandates set forth by ECOSOC and other pertinent international entities in
  order to mitigate any potential obstacles. This could entail bolstering communication lines,
  fortifying coordinating systems, and encouraging increased synergy between regional and
  global projects.
- It's definitely a conduit. I'm just disappointed that with so many technical experts and technical papers UNECE publishes, the ultimate decision-making is political and dismissive of true expertise, which almost renders UNECE's activities pointless.
- It's difficult to make a blanket assessment of UNECE's impact on the further development and global application of UNFC and UNRMS without a comprehensive analysis of its activities and engagement with stakeholders. However, I can provide some insights in
- Might be. The question is, does UNECE recognize and integrate appropriately and adequately
  the idiosyncrasies and development objectives on other regions and local elites? Or does it
  fail and/or face resistance as a Eurocentric and/or occidental institution as an other form of
  colonialism of the West towards the rest of the world?
- N/A
- No
- No the opposite, UNECE is supporting the development of UN ICE-SRMs globally and linking key delivery actors together to enable global application.
- no (evidenced by uptake/participation of non UNECE countries)
- No comment
- No comment
- No it does not impede. Regional organizations are needed to provide appropriate inputs for global application.
- No opinion
- No!
- No, I don't think they are impeding the further development and global application of UNFC and UNRMS.
- No, important work on this going on
- No, the regional focus is a very necessary tool towards global application. European policy will
  apply to European companies in most resource rich regions, plus, there's a global normative
  competition that you already know about, where the UN cannot act as a meaningful player
  on its own, it needs regional allies.
- No, through workshops and training sessions, UNECE has effectively promoted the development and application of UNFC and UNRMS.

- No.
- No.
- No. They are doing essential work and creating blue prints for other regions to follow.
- No. This is the opposite.
- Not at all
- Not at all. UNECE is fostering the further development of UNFC.
- Not necessarily, but its activities need to be felt more globally
- Not sure
- Not true. UNECE is simply a champion of this global agenda, but needs to appreciate its role and be more inclusive by incorporating non UNECE members in this initiative
- Not yet
- Perhaps. Although there seems to be some involvement with representatives from Latin America, Africa and Asia, they are not formally part of the UNECE. It is not always clear how decisions on the future direction of UNFC and UNRMS are taken and whether representatives from those countries have any say in such decisions.
- Possibly yes.
- Probably
- See previous comments. If the previous comment information is not included in documentation, there could be confusion as to who may act as the qualified expert.
- Specific Ores are clearly not evenly distributed geographically. UNECE should have regional
  focal points to address directly on Min Class. There should be at least one for Deep Sea Mining,
  for example.
- The fact that the UNFC resource is promoted as a UNECE initiative and not a UN initiative does reduce its profile as a global tool.
- The question of whether UNECE, as a Regional Economic Commission, is impeding the further development and global application of UNFC (United Nations Framework Classification for Resources) and UNRMS (United Nations Resource Management System) is complex
- The UNFC Adaption Group is a big step in the right direction
- The UNFC resource definitions are at odds with those used by industry and regulatory standards.
- Those who are following/implementing unfc don't really understand it.
- To my view, it is complementary.
- UNECE is doing a great job but might have much greater impact if placed in a global level.
- UNECE is not impeding, rather supports the global application of UNFC.
- UNECE is promoting UNFC and UNRMS
- UNECE Must have discussions with organisations in Canada (JORC), Australia (JOrc) and South Africa (SAMREC) so as to influence institutions that grant funding to mining houses /exploration companies. Non of these institutions refer to UNFC as a scheme for financial backing of mining projects
- UNECE, as a body, is not impeding this, but I don't think the vision of the full benefit UNFC a framework for common information to assist decision makers has not been fully grasped. This is somewhat limiting the development and global application
- UNECE, as a regional economic commission, plays a significant role in promoting cooperation and standardization within its region, which can indeed impact the further development and global application of frameworks like UNFC (United Nations Framework Classification for

Fossil Energy and Mineral Reserves and Resources) and UNRMS (United Nations Resource Management System). However, whether it impedes or facilitates further development depends on how effectively it aligns its regional interests with global objectives and standards. If UNECE harmonizes its approaches with broader international frameworks, it can enhance rather than hinder the global application of UNFC and UNRMS.

- UNECE, UNFC, UNRMS, ECOSOC bah!
- UNFC and UNRMS is critically dependent on strong global governance in order to serve a global capital market, a global industry and a global cooperation of nations.
- UNFC and UNRMS were developed by a regional constituency UNECE together with other regions and countries but put into application via ECOSOC for global application. To go change as a long years governance structure may results in unsuccess.
- UNFC application is crucial for resource classification and its continuous improvements play a pivotal role to harmonize its essence
- Why not!
- Yes
- Yes but it's not a major barrier.
- yes because they are elementary institutions
- Yes Excellent great task greetings
- Yes it is
- Yes, it will be very convenient for our professional activities.
- Yes, UNFC has a much wider potential application and we are trying to apply it in Africa, Asia and Pacific, but there is absolutely no support or promotion at any level private nor governmental. Its just a good idea and we are working in a vacuum outside Europe.
- Yes, would be of advantage to have this hosted by a global UN body, e.g. UNIDO.
- Yes, a good platform for International cooperation
- Yes, absolutely.
- Yes, besides it's European, with problems, resources, funding and other that are completely different from the rest of the world.
- Yes, indeed
- Yes, the UNECE is the best in both issues
- Yes, UNECE has a very effective role
- YES, UNFC can be world framework classification. UNRMS can be different for different region of the World.
- YES. It has changed the way we were looking at things before it came on board.
- No, UNECE is not an obstruction to global application. India has framed its mineral resources classification rules [The Minerals (Evidence of Mineral Content) Rules, 2015] broadly adopting UNFC, 2009. However, the Committee on Sustainable Energy and other Group of Experts under its fold, needs to be made more broad based by including representation from other major economies like India so that the objectives of the Committee to carry out a programme of work in the field of sustainable energy with a view to providing access to affordable and clean energy to all is truly realised. the Detailed regional studies will give a way forward at the global level. However, the global agencies to follow and provide their data transparently to achieve the UN's sustainable goals.

# 4. Effectiveness of the UNECE's support to member States and partners on UNFC and UNRMS

# 4.1. How do you assess the following products or services delivered with UNECE's support?

How do you assess the following products or services delivered with UNECE's support?	Highly useful	Significantl y useful	Somewha t useful	Not useful	Do not know	Total
UNFC principles, generic specifications, and guidelines	111	97	47	2	11	268
UNRMS: Principles and Requirements	81	106	49	4	26	266
UNFC Europe guidance document (with emphasis on raw materials)	93	91	46	3	32	265
Pilot and reference case studies on UNFC and UNRMS application	110	81	42	3	28	264
Organizing Annual EGRM meetings in Geneva	111	70	35	7	41	264
Organizing capacity-building workshops/training courses on sustainable management of resource	125	77	30	4	31	267

### 4.2. To what extent do you agree with the following statements?

To what extent do you agree with the	Strongl	_		Strongly	Do not	
following statements?	y agree	Agree	Disagree	disagree	know	Total
UNECE's activities on UNFC and						
UNRMS have enhanced the capacities						
of UNECE member States in	70	133	11	5	48	267
implementing and utilizing UNFC and	70	133	11	3	70	207
UNRMS for resource classification and						
management						
UNECE's activities on UNFC and						
UNRMS have contributed to						
strengthening the mechanisms for	56	142	21	5	45	269
sustainability and resilience in natural	30	142	21	5	45	209
resource management within UNECE						
member States						
UNECE's activities on UNFC and						_
UNRMS have significantly improved	67	139	22	3	38	269
the understanding of opportunities						

and challenges related to sustainable						
resource production and consumption						
among UNECE member States and						
other involved stakeholders						
UNECE's activities on UNFC and						
UNRMS have considered and						
responded to the emerging challenges	53	108	22	4	81	268
and risks, especially those	55	100	22	4	01	200
accentuated by the COVID-19						
pandemic						

### 4.3. What are the good practices and positive effects of UNECE's activities on UNFC and UNRMS?

A number of beneficial outcomes and exemplary resource management practices have resulted from UNECE's work on the United Nations Framework Classification for Resources (UNFC) and the United Nations Resource Management System (UNRMS). Among these are a few of these: 1. Standardization and Harmonization: Through UNFC, UNECE has been instrumental in bringing standardization to resource classification techniques. UNFC helps governments and organizations harmonize reporting processes by offering a uniform language for evaluating and classifying energy and mineral resources. By improving resource evaluations' comparability, transparency, and dependability, this standardization encourages investment in resource development initiatives and helps decision-makers make wellinformed choices. 2. Capacity Building: To help member states in implementing UNFC and UNRMS, UNECE organizes capacity-building events such as training seminars, workshops, and technical assistance programs. Through the enhancement of technical experience and information, UNECE helps to promote resource management practices and more efficient use of natural resources for government officials, industry experts, and other stakeholders. 3. Promotion of Sustainable Development: The relevance of sustainable development concepts in resource management is emphasized by UNFC and UNRMS. Sustainable resource development methods that strike a balance between resource extraction, environmental conservation, and socioeconomic well-being are facilitated by UNECE's operations, which integrate environmental, social, and economic factors into resource classification and management processes. 4. Promotion of International Collaboration: On matters pertaining to resource management, UNECE provides a forum for international cooperation and information sharing. UNECE promotes communication and collaboration between member states, business stakeholders, academic institutions, and international organizations through forums, conferences, and working groups. Through this collaboration, resource management best practices, lessons learned, and creative methods may be shared, improving resource usage effectiveness and efficiency. 5. Assistance with Policy Formulation: At both the national and international levels, UNECE's work on UNFC and UNRMS offers insightful direction and assistance with policy formulation. UNECE supports governments and organizations in creating evidence-based policies and strategies to address resource-related issues, such as energy security, the resilience of the mineral supply chain, and sustainable development. It does this by providing standardized methodologies and frameworks for resource classification and management. In general, UNECE's work on UNFC and UNRMS advances the achievement of the Sustainable Development Goals (SDGs) of the UN and promotes inclusive and sustainable development globally by supporting resource management practices that are transparent, efficient, and sustainable.

- Awareness and capacity institutionally over resource management
- brings awareness to key issues
- Capacity building and building consensus
- Capacity building, collaboration, highlighting of technical best-practices
- Classification of mineral inventories for companies and countries
- Classification of resources
- Committed and coherent
- Communication between members
- Constantly working on updating
- Contextualised resource assessment
- Cooperation
- Creating awareness that it is not enough to just classify resources but also assess projects in terms of sustainable development principles is equally important.
- Development of the document and collecting pears together
- disseminating the message across the globe, increasing the number of centres of excellence, driving a central framework to assist in a shared understanding
- Do not know
- E.g. specific sessions, trainings.
- Effective management of writing, review, enactment and maintenance processes
- Energy and Environment
- Far beyond techno-scientific fixes, morality plays a crucial role in generating criticism and demands, whether 'progressive' or 'reactionary', in view of the multiple, controversial and often antagonistic ways in which social actors evaluate their actions and mediate political, economic, social and cultural demands in different places. A very important and usually underestimated issue of environmental ethics is related to the narrative of official entities on the success stories of isolated eco-fixes that offer economic growth for the few and not holistic solutions to overcome environmental and social issues from their roots, in view of development concepts, societal transformations and socio-ecological transitions: public policies, politics, economics, education and culture. Ref.: PILON, A. F., Reframing Relationships between Humans and the Earth: The "Anthropocene", a New Ideology to Justify the Status Quo? MPRA Munich Personal RePEc Archive, 2023. https://mpra.ub.unimuenchen.de/119041/1/MPRA paper 119041.pdf
- Feedback is very great.
- For much communication.
- Fostering ESG viewpoints for mining projects.
- Gearing up other regions in developing region and country specific versions of the UNFC and UNRMS that will guide the development and sustainability of their resources.
- Giving examples and setting standards
- Good continuation
- Good linkage to EU CRM legislation

- great framework for harmonization of understanding, good basis for data structuring and management for all kind of stakeholders
- Growing awareness of practices and impact
- Highlighting successful strategies, positive impacts on resource management, and improvements in the classification and reporting of resources.
- Highlighting the significant and critical importance of ESG aspects to advance sustainable resource management projects
- How to know about UNECE work? Government reps attend the UNECE meetings and treated it as a perk.
- I am not aware of the effects.
- I have no opinion on this
- I think the work being undertaken by UNECE to now mainstream UNFC and UNRMS is vital at this pivotal time for the human race the challenge of a just 'green transition' is considerably more complex from both a technical, ESG, and geo-political perspective than many realise. There will need to be genuine global cooperation and sharing of both the resources and the benefits of the transition between North-South, East-West etc if we are to avoid a climate change catastrophe I think only the UN and its agencies are positioned to achieve this.
- Important for finance
- Improved Governance based on data driven policies
- Increase seminars and workshops
- Increased attention on resource issues.
- Integrating social, environmental, and economic objectives in the estimation of resources.
- Involvement of National Consultants and creation of case studies in crisis situations, such as COVID-19, and coordination of the availability of the necessary mineral raw materials for the supply chain on the national, but also regional new
- It is difficult to answer in a survey
- La CEE ONU représente l'espace le plus adéquat pour réunir toutes les parties prenantes et réussir, comme elle le fait, l'élaboration des deux importantes réalisation : la CCNU et l'URMS.
   The UNECE represents the most appropriate space to bring together all the stakeholders and succeed, as it does, in the development of the two important achievements: the UNFC and the UNRMS.
- Leading cooperation with Internation organizations (such as ISO, SPE, CRIRSCO, IGA etc.) and national authorities.
- Meeting, discussing challenges, looking for solutions and applying, learning. It follows by checking the results...
- Meetings, training and conferences
- More discussion about the importance of natural resources, in particular mineral resources within Europe
- N/A
- no comment
- none
- Not sure what this question means. The UNECE Secretariat has made a huge contribution in convening experts, building networks, supporting the development and application of UNFC and UNRMS and publicizing.
- Not sure, limited experience

- Over time, the principles become increasingly clear. But it remains very general. Guidelines are missing in particular, the factors to be considered for the different criteria remains vague
- Overall, UNECE's activities on UNFC and UNRMS contribute to promoting sustainable resource management, fostering international cooperation, and enhancing socio-economic development, thereby yielding positive effects for both present and future generations. Some good practices and positive effects of UNECE's activities on UNFC (United Nations Framework Classification for Fossil Energy and Mineral Resources) and UNRMS (United Nations Resource Management System) include and have included: 1. Standardization and Harmonization: UNECE's efforts in developing and promoting UNFC and UNRMS have led to the establishment of standardized frameworks and guidelines. This standardization facilitates harmonization of resource classification and management practices across different regions and sectors, promoting consistency and comparability in resource assessments and reporting. 2. Enhanced Transparency and Accountability: By providing clear principles, requirements, and guidelines, UNECE contributes to enhancing transparency and accountability in resource management. Stakeholders can better understand and assess resource-related activities, ensuring responsible and sustainable utilization of resources. 3. Improved Decision-Making: The adoption of UNFC and UNRMS principles enables stakeholders to make more informed decisions regarding resource exploration, development, and management. Standardized classification frameworks help identify resource potentials, assess risks, and prioritize investment opportunities, thereby optimizing resource utilization and maximizing socioeconomic benefits. 4. Facilitation of International Cooperation: UNECE's activities on UNFC and UNRMS serve as a platform for fostering international cooperation and collaboration among governments, industry players, academia, and other stakeholders. By providing common language and methodologies, UNECE promotes dialogue, knowledge exchange, and joint initiatives aimed at addressing global resource challenges and achieving sustainable development goals. 5. Capacity Building and Knowledge Sharing: Through organizing capacity-building workshops, training courses, and annual meetings such as the EGRM (Expert Group on Resource Management), UNECE facilitates knowledge sharing and capacity development among stakeholders. These activities empower countries and organizations with the necessary skills and expertise to effectively implement UNFC and UNRMS principles, leading to improved resource management practices.
- Promote knowledge and application of UNFC and UNRMS not only in UNECE member countries but also in other regions (Africa, Asia Pacific, Western Asia and Latin America).
- Promoting and developing global system with all resources included, relatively simple to use. Important for resources management under green transition, contributing to SDG's
- Publishing relevant information manuals and organizing relevant conferences
- Regular engagement with Member States, relevant organisations, technical experts, presence at relevant policy and industry events, workshops and training, support to the expert community
- resource classification and management
- Resource management system
- See conclusions of the UNFC Adoption Group
- Sharing knowledge and information on issues like critical materials, circularity and sustainability helps implementing broader actions for lower impacts in terms of resources' management and emissions control.
- Standardized classification, maturity of project
- Streamlining the view on all aspects of resource management and supply far outside UNECE.

- Stream-lining/coordination and incorporation of regional needs and conditions
- Task forces are involved in addressing the omissions or compliance with these policies and are organized and usually frequent updates.
- That it exists. Communicates effectively to those that participate
- The business accommodation within the positive climate changes approach
- The continuous professional advices
- the coordination of the activities
- The development of UNFC, and its formalisation. But i dont see a lot more outside Europe.
- The implementing of UNFC in Russia's and China's petroleum systems. Anthropogenic resources estimations and its influence for local economics. Underground water resources calculation for Europe countries
- The incorporation of private entities
- The level of engagement and providing the medium for the exchange of opinions of such a diverse group of experts is extremely valuable. Networking between contributors is also useful.
- The open sharing of information and support for aligned in-country initiatives is accelerating the adoption and increasing the profile of UNFC and UNRMS
- the organisation of the expert working groups, Task groups and the ERGM as a whole
- The organization and facilitation of workshops where participants can ask questions and delve
  into deeper topics that are relevant to their circumstances are a highly effective tool for
  expanding the understanding of the resource management systems being developed.
- The regional (global) integration of issues and settings related to the Agenda2030 and the SDGs
- The three dimensional resource classification opportunity raising the degree of sustainability.
- The UNECE Secretariat has made a huge contribution in convening experts, building networks, supporting the development and application of UNFC and UNRMS and publicizing.
- The UNFC is really good as a thermometer on the projects process, easily showcasing the . This starts to more known, which moves the focus towards a more useful tool when estimating a projects feasibility.
- The use of resources and reserves code.
- There is the need to change the narrative from good practices to geoethical practices. Society needs to be reassured that there is a more consistent process to decide to intervene the Territory (national or international) with solid reasons, "good practices", "best knowledge available" are synonyms of greenwashing only.
- They are essential for reaching the SDGs and Climate change mitigation goals.
- They are tools that are being use to drive global responsible and sustainable mineral resources development.
- To streamline the global standard of mineral resources classification
- Training workshops for UNFC trainers. Guideline documents.
- UNECE activities provide a very well structured global platform for supporting progress of UNFC and UNRMS as a global tool by providing wide spread participation of UNECE member states and other involved stakeholders. These activities are covering integrated and sustainable management of variety of natural resources such as minerals, petroleum, renewable energy, nuclear, anthropogenetic resources, groundwater etc.
- UNECE's activities are very practical, universal and fully focused on UNFC and UNRMS

- UNECE's activities related to UNFC (United Nations Framework Classification for Resources) and UNRMS (United Nations Resource Management System) have yielded several good practices and positive effects: Standardization: UNECE has played a crucial role in developing and promoting standardized frameworks for classifying and managing natural resources. UNFC provides a common language and methodology for assessing and reporting on various resource types, enhancing transparency and comparability across different regions and sectors. Capacity Building: UNECE conducts capacity-building activities, including workshops, training programs, and knowledge-sharing initiatives, to support member states and stakeholders in implementing UNFC and UNRMS effectively. These efforts help improve understanding and technical expertise, particularly in countries with limited resources or experience in resource management. Knowledge Exchange: UNECE facilitates knowledge exchange and collaboration among governments, industry representatives, academia, and other stakeholders through conferences, seminars, and working groups. This exchange of best practices, lessons learned, and case studies enhances the implementation of UNFC and UNRMS and fosters innovation in resource management practices. Policy Guidance: UNECE provides policy guidance and technical assistance to member states in aligning their national resource management policies and regulations with international standards, including UNFC and UNRMS. This support helps create a conducive regulatory environment for sustainable resource development and investment. Improved Investment Climate: By promoting transparent and consistent resource classification and reporting practices, UNECE's activities contribute to improving the investment climate in resource-rich countries. Investors can make more informed decisions, leading to increased confidence and stability in resource markets. Alignment with Sustainable Development Goals (SDGs): UNFC and UNRMS are aligned with the Sustainable Development Goals (SDGs), particularly those related to responsible consumption and production, climate action, and sustainable resource management. By adopting these frameworks, countries can better track progress towards achieving the SDGs and promote sustainable development. Overall, UNECE's activities on UNFC and UNRMS have led to positive outcomes by enhancing transparency, capacity, and policy coherence in resource management. These efforts contribute to promoting sustainable development, facilitating investment, and supporting the efficient and responsible utilization of natural resources globally.
- UNECE's activities related to UNFC and URMS contribute to sustainable development, efficient resource management and informed decision making in the energy and mineral sectors globally.
- UNFC is very useful for all geologist to evaluate the mines and minerals in their working area.
- UNFC UNRMS EGRM Resources exploration projects ERA-MIN.EU INTRAW.EU Vectorproject.eu, Agemera.eu , etc
- Unfortunately the importance of UNFC and UNEMS is not being addressed properly at local scale
- useful and accessible guidance documents on UNFC and UNRMS
- Very useful good practices for uranium mining
- We have a simpler classification of projects in the field of mineral raw materials and groundwater
- With the push of UNECE, the work of UNFC has been able to be shown more to the world. That shouldn't be like that. The work of UNFC is supremely important and must be promoted by the United Nations, and also by UNECE.
- workshops and technical meetings

- workshops and trainings to get more people have a broader understanding of UNFC and UNRMS. In practice most people i work with didn't knew these tools. Things like inclusion of UNFC in CRMA are good to promote
- Workshops, seminars and technical meeting. Requesting UNECE member states to implement UNFC and UNRMS.
- The efforts of UNECE in promoting international policy dialogue and cooperation among governments is well appreciated. The UNFC is a Global, generic, principles-based system widly adopted across the globe. UNFC is adopted and followed in India. All national mineral inventory reporting is as per UNFC standards. The private, public and government agencies are well aware of UNFC norms in India. These reporting standards are being successfully used for its policy, sustainable growth, development and economic decisions apart from using other mineral resource/ reporting codes.

### 4.4. Any lessons learned or unintended negative effects of UNECE's activities on UNFC and UNRMS?

- A definite negative effect, unintended or otherwise, has been the sowing of confusion in some minerals companies which are familiar with, and regular users of, CRIRSCO reporting standards but do not understand or agree with the need for UNFC.
- An inability to integrate industries opinions in UNFC/ UNRMS. All of the supplementary documents I have read have been written by academics/ NGO's who have no understanding of the realities of industry and real world economics
- Debates and technical ideas exchange into the large diversity of countries and success case are an excellent support.
- Does it make life and decisions simpler or more complex in real life applications?
- Don't know
- Dont know but possible
- Don't know.
- For many countries at the time to initiate a mining intervention at a country level (going to the bank for a loan) use the simplest Min Class; it implies that UNECE has not been able to position itself as "The Mineral Classification Framework" to be compared to. UNESCO for example dictate how salinity has to be measured for example and it is the standard worldwide right now.
- For some activities, strengthened ties with 'UN family' and other stakeholders desired (e.g. UNFC Groundwater)
- Have many good effects.
- I appreciate the fact that a door has been opened for the implementation of the tools designed in Africa
- I couldn't find something of relevance
- I don't know
- I don't know anything about it
- I don't think there is, but cooperation with official government bodies should be intensified
- I have not heard from the task force on safe operations and closure and seem to think it has now been altogether extirpated. I have not been contacted even with multiple emails as a

- new chair has been chosen that the smooth integration of new personnel has impeded this extension of the cause for these UNECE. activities is also perhaps the practices that the UN requires going forward.
- I think it is important to concentrate more in ensuring uptake of UNFC and UNRMS and less on trying to modify it from what is currently published.
- I think that perhaps they may have encouraged expectations from policy makers as to what can be achieved through the use of the UNFC and UNRMS. For instance, the UNFC is referenced in the European Commission's Critical Raw Materials Act without really making clear whether this is aimed principally at developing regional mineral inventory databases, or as a project-assessment tool, or a mixture of both.
- Inclusion of UNFC in law was a necessary step for increasing the pace of uptake of UNFC. Funding for the ICE SRM will be necessary to continue this uptake.
- It must encompass the whole globe as resources affect the whole globe not just Europe
- It seems that UNECE and UNRMS are more important than UNFC. It is also important to note that the role of CRIRSCO is unknown; instead of supporting it and taking advantage of all the experience of its members. For several years UNFC and CRIRSCO have been very well aligned, complementing each other. I would recommend supporting CRIRSCO given the vast experience of its members and international non-governmental organizations that support them.
- It would help to have improve communication during the year, amongst the Secretariat and active members of EGRM, on what is happening, developments taking place etc. I appreciate this is a big challenge as so much is going on. Some reorganisation of EGRM may help to make the work a bit more integrated and focussed on key deliverables. The work programme is somewhat generic and tends to focus a bit too much on producing documents rather than achieving other measurable goals. Although I appreciate that this is challenging to develop and agree.
- Je n'en vois pas. I don't see any.
- Lack of alignment with other society as SPE etc.
- lack of communication at times
- Lessons learned yes, unintended effects no
- Maybe for us, lack of technical support
- Misinterpretation of guidelines, confusion among stakeholders, or unintended environmental or social impacts.
- N.A.
- N/A
- Need for more engagements on the member states themes.
- NIL
- No
- No negative effect
- No not really, except that the application and use of the system(s) could be better known (ref. previous comment)
- No noticeable negative effects as far as i am concerned
- No one
- No opinion
- No, I don't know any.
- No.

- none
- not enough practical experience to answer this
- Not being inclusive enough, perhaps it came become Euro centric in what needs to be a global agenda; UNECE needs to develop wider partnerships with non - UNECE's international organizations
- Not that I am aware of because I sense industry and policy makers does not know it exists or has any commercial value
- Not that I can see
- Nothing
- No negative effects!
- Nuclear power
- One lesson is the importance of adapting global frameworks to local contexts. Different countries and regions have unique geological, economic and regulatory environments, so flexibility in implementation is crucial.
- Problems in communication outside of UNECE
- Publishing scientific reports, teaching and learning about essentially the same problems, but unimplemented solutions, reminds us that we should take into account and deal with the supremacy of political and economic groups which have a tough voice in propaganda, in the media, in finances and in the academic world. New strategies and policies should be discussed and implemented to address these stumbling blocks. The United Nations Secretary-General urged world leaders to present a "Rescue Plan for People and Planet" (SDG Summit, 2023), taking into account national and global commitments to inclusion and sustainability, the impact of multiple crises and interconnected political, social, economic and environmental consequences. In the face of rapidly increasing global climate and environmental problems (first, do no harm), the Alliance of World Scientists (AWS), intent on turning accumulated knowledge into action, is calling on the world's scientists to become signatories to a document in the face of an emergency situation, in view of a collective international responsible voice. This would imply the permanent vigilance over global conventions and international pacts, on the implementation of legislation and on the actions of politicians, who may place private interests above the public good, in view of the intense lobbying of business corporations and the fleeting glare of headlines on segmented issues. Problems are deep inside the "boiling pot", not in the "bubbles" of the surface (fragmented public policies, reduced academic formats, mass-media headlines or public outcry). What is in cause is the "general phenomenon", the "world-system", with its boundaries, structures, techno-economic paradigms, support groups and rules of legitimization. Scientific efforts, teaching and learning, public policies, advocacy, communication, goals and new paths to reach them, should contemplate a set of values, norms and policies that prioritizes socio-ecological objectives, human well-being, natural and built environments, the aesthetic, ethical and cultural meaning of "being in the world". Ref.: PILON, A. F. Thinking and Acting in a Disrupted World: Governance, Environment, People, Inequality and Disease, EuroScientist Journal, 14 May, 2020 [on line]: https://www.euroscientist.com/thinking-and-acting-in-a-disrupted-worldgovernance-environment-people-inequality-and-disease/
- See conclusions of the UNFC Adoption Group
- See: https://unece.org/sites/default/files/2024-04/UNFC%20Adoption%20Group%20Report%20ECE-ENERGY-GE.3-2024-10.pdf
- Sometimes the communication should be more efficient.

- still no solution for Income gap .. you cant simply switch off oil and gas in the global south or other developing regions .... renewables and alternate energy sources will not replace the income or in many cases bring people out of poverty
- Sustainability is key to sustainable mineral resources development.
- Tendentially, bureaucracy is increasing due to too many reporting requirements. This leads to an excessively long project development phase.
- That UNFC and UNRMS could be complementary but also competing frameworks to other standards. Also, it seems that application at times it is not as straightforward as some applications make it seem.
- The EGRM meeting is good, but really expensive to travel to. Information presented live needs to be more accessible, eg. recorded. The UNFC classification presented on the EU RMW "thinking" used by EIT RawMaterials is not really as what I would expect it to be used as when it comes to identification of projects to fund only using projects classified as 111 as the selection. e.g. those who scores lower (112) might be more in need of the finance to move the 2 to the "1", which brings them nearer the market.
- The lack of engagement with the industry and key players, seems like the UNRMS inclusion in the CRMA has causes problems.
- The need to use UNFC in combination to CRIRSCO aligned codes
- The only "negative effect" is the politicians' blatant incompetency and stupidity which makes valuable contributions by organizations like UNECE almost pointless.
- There are not negative effects.
- There are so many positive sides of the UNECE. Building the capacities of experts in other region in the application of the UNFC and UNRMS is highly commendable.
- There is a risk that some individuals have undue influence on the work and pursue limited agendas.
- There is no any negative effects
- There is still a lot to do and to be improved in particular regarding the reporting and competent person
- There seems to be and overly active preponderance on fossil fuels.
- Too much closed system with no wide involvement of private sector.
- Unclear, what further priorities are and how the different work packages and workgroups interact
- UNECE must always be responsive to global political issues and respond to each crisis as it comes. This can be a significant distraction from getting the work done and can derail good initiatives.
- UNECE should plane the budget for the reimbursement of the cost of members attendance to the meetings of the working groups
- UNECE's initiatives surrounding the United Nations Framework Classification for Resources (UNFC) and the United Nations Resource Management System (UNRMS) have demonstrated significant positive impacts alongside valuable lessons learned and potential unintended negative effects. One of the primary lessons learned is the complexity inherent in implementing these frameworks, particularly within diverse regulatory and institutional landscapes. Challenges stemming from technical capacity limitations, resource constraints, and competing priorities underscore the necessity for tailored support and guidance to facilitate effective implementation across all contexts. Despite UNECE's efforts to promote UNFC and UNRMS globally, limited adoption and awareness persist among certain countries

and stakeholders. This gap underscores the need for enhanced outreach, communication, and dissemination of information regarding the benefits and applications of these frameworks. Elevating awareness and encouraging broader participation in UNFC and UNRMS activities will be essential for maximizing their impact and fostering global collaboration in resource management endeavors. Moreover, the potential unintended negative effects of UNECE's activities on UNFC and UNRMS include biases toward certain resources and exclusionary practices, particularly concerning non-energy and non-mineral resources. This imbalance could marginalize critical resources such as water, land, and biodiversity. To address this, UNECE should broaden the scope of UNFC and UNRMS to encompass a more comprehensive range of resources and consider their interlinkages and interdependencies. Additionally, ensuring the accuracy, reliability, and comparability of resource data remains paramount, necessitating continued efforts to promote data harmonization and verification mechanisms. Balancing regional and global considerations with national priorities and sovereignty will also be essential to mitigate potential conflicts and foster inclusive dialogue and cooperation among all stakeholders.

- UNFC I read on weekly basis.
- UNFC resource definitions are not the same as those used by industry and regulators and make communication more difficult between groups using different definition standards.
- UNFC 2019 could not meet the needs on nation inventory management on G axis. It will be more helpful to keep transparent and communication among EGRM working groups.
- Useless researches and speeches on gender and related it should be done by labour or social institutions. Need to focus on possibilities of mineral resources for local societies and improvements of little harm but great results
- We really have not faced any negative effects
  - While UNECE's activities on UNFC and UNRMS have generally been beneficial, there are also lessons learned and potential unintended negative effects that should be considered: Complexity and Adaptability: One lesson learned is the importance of balancing standardization with flexibility. While standardized frameworks like UNFC and UNRMS provide consistency and comparability, they may not always fully accommodate the diverse needs and contexts of different regions and resource types. It's crucial to ensure that these frameworks remain adaptable and can be tailored to specific situations without sacrificing their integrity. 2. Capacity and Implementation Challenges: Implementing UNFC and UNRMS principles requires significant technical capacity and resources, particularly in regions with limited expertise or infrastructure. Ensuring widespread adoption and effective implementation may be challenging in such contexts. Thus, efforts should be made to provide adequate support, capacity-building, and technical assistance to facilitate implementation at the national and local levels. 3. Potential for Misinterpretation or Misuse: There's a risk that UNFC and UNRMS frameworks could be misinterpreted or misused, leading to unintended consequences. For example, if classifications are applied inconsistently or inaccurately, it could undermine the reliability and credibility of resource assessments and reporting. Continued guidance, training, and oversight are necessary to mitigate this risk and ensure the proper application of these frameworks. 4. Social and Environmental Considerations: While UNFC and UNRMS primarily focus on resource classification and management, there's a need to integrate social and environmental considerations more explicitly. Failure to adequately address social and environmental impacts could result in negative consequences such as community displacement, environmental degradation, or conflicts over resource access. Incorporating robust sustainability criteria and stakeholder engagement processes is essential

- to mitigate these risks. 5. Monitoring and Evaluation: It's important to establish robust monitoring and evaluation mechanisms to assess the effectiveness and impact of UNFC and UNRMS implementation accurately. Without proper monitoring, it may be challenging to identify areas of improvement or address emerging issues promptly. Regular reviews and feedback loops can help refine the frameworks and ensure they remain relevant and responsive to evolving needs and challenges. Overall, while UNECE's activities on UNFC and UNRMS have made significant strides in promoting standardized resource classification and management practices, ongoing attention to these lessons learned and potential unintended negative effects is crucial to maximizing their benefits and minimizing risks.
- While UNECE's activities related to UNFC (United Nations Framework Classification for Resources) and UNRMS (United Nations Resource Management System) have yielded many positive outcomes, there are also some lessons learned and potential unintended negative effects: Complexity and Adaptation Challenges: One challenge is the complexity of implementing UNFC and UNRMS in diverse contexts. Some countries may struggle to adapt these frameworks to their specific resource sectors or regulatory environments, leading to inconsistencies or limited adoption. Lessons learned include the need for flexible implementation guidelines and tailored capacity-building efforts to address diverse needs effectively. Data Availability and Quality: The successful application of UNFC and UNRMS relies on accurate and reliable data on resource reserves and production. However, many countries face challenges related to data availability, quality, and consistency. This can hinder the effective implementation of these frameworks and limit their utility for decision-making. Lessons learned emphasize the importance of investing in data infrastructure and improving data collection and management practices. Inequitable Distribution of Benefits: In some cases, the application of UNFC and UNRMS may exacerbate existing inequalities in resource governance and distribution of benefits. This can occur if resource-rich regions or communities do not fully benefit from the transparent classification and management of resources, leading to social tensions or conflicts. Lessons learned highlight the importance of ensuring inclusive decision-making processes and equitable distribution of resource revenues and benefits. Environmental Considerations: While UNFC and UNRMS provide valuable tools for assessing and managing natural resources, they may not always adequately address environmental considerations. For example, focusing solely on resource reserves and production without considering environmental impacts could lead to unsustainable exploitation and environmental degradation. Lessons learned emphasize the need to integrate environmental sustainability principles into resource management frameworks and decision-making processes. Policy and Regulatory Harmonization: Achieving harmonization of policies and regulations across different jurisdictions remains a significant challenge. Inconsistencies in legal frameworks and regulatory requirements can create barriers to the effective implementation of UNFC and UNRMS and hinder cross-border cooperation. Lessons learned underscore the importance of promoting policy coherence and collaboration among stakeholders at the national, regional, and international levels. Overall, while UNECE's activities on UNFC and UNRMS have generated numerous benefits, addressing these challenges and unintended negative effects requires ongoing collaboration, learning, and adaptation to ensure the sustainable management of natural resources for the benefit of present and future generations.
- Yes
- Yes
- yes, I dont spend my time in going to those useful meetings

• No negative effects of using UNFC reporting standards to date in India. However, the other reporting code firms claim that their recognition in the international stock market is higher than the UNFC reports.

## 5. Efficiency of the UNECE's support to member States and partners on UNFC and UNRMS

### 5.1. To what extent do you agree with the following statements?

To what extent do you agree with the following statements?	Strongl y agree	Agree	Disagree	Strongly disagree	Do not know	Total
UNECE has made an appropriate utilization of the resources (financial, human, and technological) allocated to support UNFC and UNRMS	45	113	14	5	82	259
UNECE has managed time constraints and deadlines while ensuring quality outputs and deliverables	57	119	9	3	70	258

# 5.2. What were the key issues that UNECE's activities on UNFC and UNRMS confronted in the past 4 years that have affected progress towards the expected results? To what extent and how these constraints or challenges were addressed?

- 1. A large amount of work which relied on a limited number a UNECE staff and EGRM volunteers, and limited financial support. This was addressed through the dedication of individuals. This was effective but I am concerned that this level of intense work may not be sustainable. 2. Establishing effective ICEs -developing vision and model, recruiting, coordinating, supporting. This was addressed very effectively and ICE's are developing well. 3. Challenges with some individuals and countries being difficult to work with and/or pursuing their own agendas. This was managed, but has caused some disruption and reduced effectiveness of EGRM somewhat. 4. Somewhat diverse visions of how EGRM can best contribute to sustainable resource development. This was addressed through allowing different visions and associated work to coexist. Addressing this more fully is still in progress.
- A key issue could be the variety of resource classification systems worldwide. I considered it is time to agree a common resource classification system for all the countries and design its implementation.
- Achievement of the 17 goals unclear
- All perfect done

- Can't say
- Can't say as haven't been involved for up to 4 years.
- Challenges such as updating and maintaining the classification systems, ensuring consistency
  and compatibility with other international standards, addressing emerging technologies and
  changing resource landscapes, and promoting widespread adoption and implementation of
  the frameworks by member states and industries. UNECE's activities on UNFC and UNRMS
  addressed these challenges effectively.
- Classification mineral reassures.
- Climate Change and the lack of lobbying and global funders.
- Contributing to involve experts within their fields to create the constraints has been really useful, as well as case studies.
- COVID and international conflicts
- Covid problems were addressed by virtual meetings
- Covid was an issue that everyone faced but it had a pronounced slowing effect upon progress and enthusiasm. Dealing with the Russian/Ukrainian war has also added complexity to the discussions. The introduction of resources and money from EU has allowed projects to advance much more rapidly, demonstrating that the lack of financial resources is one of the constraints on the pace of progress. In all cases, staff and leaders have made good compromises to ensure that the momentum has not been lost in spite of the challenges.
- Developing basic concepts
- Development of key products of UNFC (guidelines, specifications, etc.) is mostly coordinated by the individual expert/working groups. There is a siloed approach in developing these products and the formats, structures and even interpretations are varying. A more homogenous approach and central coordination is needed in order to stimulate wide-spread adoption and acceptance by key stakeholders.
- Do not know
- Do not know.
- Financing for the development of digital tools that will allow the application of UNFC and UNRMS in a consistent way
- How pandemics and geopolitical unrest impacts resource management, as well as the new and fast evolving energy-systems changes the demands and need of the resources.
- I believe the main issue has been budget constraints, which I also believe has been addressed exceptionally, considering that the work on UNFC and UNRMS has not only continued but expanded to new areas and geographical regions.
- I do not know
- I do not know it.
- I don't feel able to comment in detail on this and the previous question as I am not entirely clear what the overall priorities of the UNECE's activities in these areas have been, what resources are available to the UNECE, and how such resources have been allocated.
- I don't have information
- I feel the rapid pivot beyond energy resources to more focussed application of the concepts to the materials that will be needed to underpin the green energy transition is timely - I'd suggest more resources are needed at the UN and country level to accelerate progress in these areas of critical raw materials and circular economy in order to meet intergenerational equity goals.

- I have no additional comments on this, aside from the fact that it appears that UNFC/UNRMS exist in an academic/ NGO echo bubble.
- I know for Covid pandemic, and the challenge was addressed perfectly by UNECE
- I think Corona virus affect the resources week meeting but we solved by virtual meetings, which is not enough to discuss all subject through online.
- I think the attempt to rapidly expand the application to all resources is beginning to affect progress, this was witnessed by the reluctance of EGRM to adopt application to groundwater resources.
- I would say the constraints related to mobility recently; however, focusing on bringing together experts only in presence also limits the possibility of having a wider audience participating that could add value. Constraints related to materials in terms of availability to All, namely critical materials, can be a problem.
- ICE SRM centers
- In evidence of resources and of prepare the strategic documents at national level.
- In my opinion, it is a fundamental thing, the lack of knowledge of the great work of UNFC. Everything seems to indicate that great work has been carried out only by UNECE and UNRMS.
- In term of financial support because to attend the assembly/ conference physically are very expensive
- inclusion of anthropogenic deposits into UNFC
- Increased interest, increased communications, base widening, more and more results in fragmentated WGs, Covid, geopolitical problems (wars), changes in experts (?). Challenges were handled properly.
- It's a quite general approach for different industries. To make it useful UNFC & UNRMS may be used in combination to specific approaches standards of every industry
- It's immaterial to most of the countries whether UNECE work or not.
- Key issues may be related with governance of EGRM; discussion on options (under ECOSOC etc) are continue, since studies are global, governance of EGRM under UNECE is being discussed. Establishing International Centres of Excellences; criteria for ICE determined, there are good examples.. Difficulties for updating of UNFC, because of long years in application by many countries for example: G axis (different needs on degree of confidence for different resources) studies need to be survived. competency in resource management For dealing all these challenges UNFC Adoption WG was established.
- Key issues: green transition in resource management, addressing competing/conflicting uses of resource management. Challenges to some extent addressed, more work needed
- Key issues- There is one framework for Europe and two different ones for the rest of the world. A solution must be found to unify or have equivalents
- Lack of progress in implementation and promotion has meant that many of the Renewables working groups have not put in the effort to update to UNFC 2019..
- Les contraintes liées surtout à la pandémie du COVID-19. Constraints linked mainly to the COVID-19 pandemic.
- LIMITED NUMBER OF PUBLICATIONS IN EGRM DUE TO TIMELINES TO CONVERT TO UN
  OFFICIAL LANGUAGES, FEWER SMES AVAILABLE FOR PUBLICATIONS REVIEW LIMITED EGRM
  PUBLICATIONS IN GENERAL
- Lots of mixed messages and constant evolving world of energy security Covid and finance
- make it more visible make alliances at local level

- More efforts for global cooperation and utilization of joint classifications and management system
- Much of the work has been done on a pro bono basis, meaning that progress is affected by the day jobs of the experts. This has for instance resulted in the absence of updates of some of the specifications to the 2019 version of UNFC, leaving practitioners with the choice of using the 2009 UNFC or the 2019 version without specifications, but with imperfect guidance from the outdated ones. Finance is a major problem and that remains. In spite of this, the past year has shown enormous progress in interest and uptake, challenging the administrative capacity of UNECE and the voluntary efforts of the Expert Group.
- N/A
- Natural resources Extractive industries exploration and extraction policies Resourcespanel.org
- NIL
- No enough governmental countries support and implication as well as.
- Not sure but I sense it would be not a good balance of practical, political and commercial input
- Not sure there has been enough dialogue between groups CRIRSCO and UNECE to align the UNFC resource definitions more with industry standards.
  - Over the past four years, several key issues have affected the progress of UNECE's activities on UNFC (United Nations Framework Classification for Fossil Energy and Mineral Resources) and UNRMS (United Nations Resource Management System). Some of these issues include: Limited Awareness and Adoption: One challenge has been the limited awareness and adoption of UNFC and UNRMS principles, particularly among certain regions and sectors. Many stakeholders may not be familiar with these frameworks or may lack the technical capacity to implement them effectively. Resource Constraints: UNECE's activities may have been constrained by limited financial and human resources, which could affect the scope and scale of its initiatives. Insufficient funding or staffing may hinder the organization's ability to carry out capacity-building activities, provide technical assistance, or conduct outreach efforts effectively. Technical Complexity: UNFC and UNRMS frameworks involve technical complexities that may pose challenges for stakeholders, especially those with limited expertise in resource classification and management. Understanding and implementing these frameworks require specialized knowledge and skills, which may not be readily available in all contexts. Regional Variations and Contextual Differences: Resource management practices vary significantly across regions and sectors due to differences in geological, regulatory, and socio-economic contexts. Adapting UNFC and UNRMS principles to these diverse contexts while maintaining consistency and comparability can be challenging. Coordination and Collaboration: Effective coordination and collaboration among stakeholders are essential for the successful implementation of UNFC and UNRMS. However, achieving consensus and alignment among diverse stakeholders with varying interests and priorities may be challenging, particularly in international settings. To address these constraints and challenges, UNECE has implemented various strategies and initiatives: Capacity Building and Training: UNECE has organized capacity-building workshops, training courses, and technical assistance programs to enhance stakeholders' understanding and implementation of UNFC and UNRMS principles. These efforts aim to build technical capacity and promote best practices in resource classification and management. Outreach and Awareness Campaigns: UNECE has conducted outreach and awareness campaigns to promote the adoption of UNFC and UNRMS principles among relevant stakeholders. These efforts include disseminating informational materials, participating in conferences and events, and engaging with key

stakeholders through various channels. Technical Support and Guidance: UNECE has provided technical support and guidance to countries and organizations seeking assistance in implementing UNFC and UNRMS frameworks. This support may include technical consultations, expert advice, and the development of practical tools and resources to Collaborative Partnerships: UNECE has fostered collaborative facilitate implementation. partnerships with governments, industry associations, academia, and other organizations to promote the adoption and implementation of UNFC and UNRMS principles. These partnerships facilitate knowledge exchange, joint initiatives, and coordinated efforts to address common challenges and priorities. Continuous Improvement and Adaptation: UNECE has continuously reviewed and refined its approaches to address emerging challenges and lessons learned. This may involve updating guidelines, conducting evaluations, and soliciting feedback from stakeholders to ensure that its activities remain relevant, effective, and responsive to evolving needs and priorities. By implementing these strategies and initiatives, UNECE has sought to overcome key issues and constraints and advance progress towards the expected results of its activities on UNFC and UNRMS, ultimately contributing to more transparent, reliable, and sustainable resource management practices globally.

- overcome the challenges
- · Possibly limited funds
- Project-based UNFC is constrained for long-term sustainable resources management, in particular at the national level. However, UNRMS provides more helpful toolkits to address these challenges and/or constraints, and explore a new way for integrated resources management in the coming future.
- -Proper use of natural resources have been addressed well. -The risk management has been tabled and action done. -Climate change impacts have been addressed but more efforts are needed. -Data on the appropriate engagement of all the partners could be updated periodically
- Reaching out to non UNECE partners, but more effort is needed; there is room for improvement in this direction
- Redefining resources management as a public good, ensuring universal energy access as well as advancing equitable energy transition.
- Slow Buying in and adoption by other regions. Issue of value addition to the raw resources
  Conflicts in some region. Governance issues in some regions Gender inclusively and
  environmental issues
- So far progress observed over the last 20 years in publicly available data and information on minerals and metals has been driven by numerous other initiatives. But the road to prosustainability use and management of minerals and metals is still at its beginning, despite all the good intents outlined in the 2002 report "Breaking New Ground" that concluded the landmark "Mining, Metals and Sustainable Development" project (MMSD project, see: https://www.iied.org/mining-minerals-sustainable-development-mmsd). The progress made since is, in my opinion, well described in this paper written by Luke Danielson, the former MMSD Project Director: Danielson L. (2022). MMSD reflections on gaps remaining. Online article. Responsible Mining Foundation. https://www.responsibleminingfoundation.org/research/mmsd-reflections/. Overcoming the stated gaps should be a top priority of any future activities on the pro-sustainability (or better: responsible) use of minerals and metals.
- Staffing is definitely needed
- Technically new systems can accelerate the rate and quality of work

- the appearance of the covid epidemic which had restricted working conditions. telework
- The benefits and advantage of both are given. It is an asset that more countries have started training and testing them, towards using both systems. Further communication in terms of workshops addressing training and use case applications.
- The collaboration with and support to regions such as, EU, Africa, Asia etc in implementing UNFC is invaluable.
- The covid 19 epidemic and the challenges of war. Analysis of the state of and proposals for the assessment of mineral resources and climate change in connection with these challenges.
   Discussion and recommendations from leading experts in these areas
- The education we received through meetings and communications contributed significantly to our reflection and unique evaluation of mineral resources and groundwater.
- The initiative within the framework of knowledge transfer and cooperation between concerned people and institutions about many of the problems of difficult settlement in today's world, encompasses crucial questions regarding questions crucial importance in our time in view of the present cultural, political, economic and environmental severe crises worldwide.
- The key challenge is to take the discussions and activities of UNECE from the "academic" space into practical applications. E.g. we can show each other a hundred presentations on methane abatement mechanisms and have discussions on pros and cons, but I'd rather we as a group reached out to, say, emitters and proposed them a specific project that UNECE members could help realize. There's an immense amount of expertise in the group enough for a properly-run commercial project.
- The key issues are that these systems are "mostly" focused on government bodies, and it would be interesting to connect these systems with industry, on a national/regional level.
- The message didn't arrived to private sector
- These issues are: human and technological development as well as quality outputs on time constraints and deadlines...
- to take into account the interests of all stakeholders
- Too many extra-mercirative factors
- UNECE needs to work more closely with local policymakers and to actively educate institutions and the private sector. Some member states cannot do implementation directly and alone because of limited capacities. Sometimes this is hard to measure.
- UNECE should reformulate and create regional UNECE according to ores, one for the ocean floor for example. There are 31 contracts for exploration towards exploitation right now. None has used UNFC. Many of those contracts have yet to classify those minerals; opportunity here for UNECE more aggressive strategy
- UNECE's efforts on UNFC and UNRMS have encountered difficulties over the last four years, such as low adoption, capacity limitations, knowledge gaps, and issues with data quality. These problems have slowed down the process of achieving the desired outcomes, making it more difficult to use the frameworks effectively and reducing their potential influence. UNECE has taken a number of actions to address these issues, including stepping up efforts to increase capacity, increasing awareness through focused outreach and communication campaigns, offering technical support to member states, and developing standardization techniques to enhance data quality and comparability. By means of these coordinated endeavours, UNECE hopes to surmount the principal obstacles and augment the adoption and execution of UNFC and UNRMS, ultimately propelling the global advancement of more sustainable and equitable resource management practices.

- UNFC G axis
- UNFC axis
- UNFC is more familiar and easy to apply. The UNRMS is more complex and does not seem to be widely applied. The treatment was done with trainings and conferences
- Unpreparedness of political actors for understanding the positive impact of UNFC and UNRMS but focus on proposed negative impacts due to reluctance to change something
- Uptake by states. I don't think there is effective progress full stop. We are at the beginning of
  a progress. Until progress starts I'm unable to pick four areas. Currently, UNFC and UNRMS
  are being highlighted as measurement systems. Whilst UNFC is being picked up by some state
  actors there is still some way to go. UNRMS is being discussed, but this is a long way from
  actually delivering change through the frameworks.
- Walking the talk resources are hugely inadequate for achieving set objectives.
- While I don't have access to specific data on UNECE's activities over the past four years, there are several key issues that commonly affect progress towards expected results in the implementation of UNFC (United Nations Framework Classification for Resources) and UNRMS (United Nations Resource Management System). Here are some potential challenges and ways they might have been addressed: Capacity Building: Limited capacity and expertise among member states and stakeholders can hinder the effective implementation of UNFC and UNRMS. UNECE likely faced challenges in providing comprehensive capacity-building programs to address diverse needs and contexts. To address this, UNECE may have expanded its training initiatives, developed tailored guidance materials, and fostered knowledge exchange platforms to enhance technical skills and understanding. Data Availability and Quality: Inaccurate, incomplete, or outdated data on resource reserves and production can undermine the reliability and utility of UNFC and UNRMS. UNECE may have encountered challenges in improving data collection, management, and reporting systems in member states. To mitigate this, UNECE likely worked with countries to enhance data infrastructure, strengthen data governance frameworks, and promote standardized reporting practices. Policy and Regulatory Harmonization: Divergent policies and regulations across jurisdictions can create barriers to the consistent application of UNFC and UNRMS. UNECE may have faced challenges in promoting policy coherence and alignment with international standards. To address this, UNECE likely engaged in advocacy efforts, policy dialogues, and technical assistance to encourage countries to harmonize their resource management policies and Stakeholder Engagement: Limited engagement and buy-in from key regulations. stakeholders, including governments, industry representatives, and civil society organizations, can impede progress in implementing UNFC and UNRMS. UNECE may have encountered challenges in fostering inclusive decision-making processes and building consensus among diverse stakeholders. To overcome this, UNECE likely prioritized stakeholder engagement efforts, facilitated multi-stakeholder dialogues, and promoted transparency and accountability in decision-making. **Environmental Considerations:** Balancing resource development with environmental sustainability goals poses a significant challenge for the implementation of UNFC and UNRMS. UNECE may have faced pressures to integrate environmental considerations more effectively into resource management frameworks and decision-making processes. To address this, UNECE likely promoted the adoption of sustainable practices, facilitated knowledge sharing on environmental best practices, and advocated for the integration of environmental criteria into resource classification and reporting. Overall, addressing these challenges requires sustained commitment, collaboration, and innovation from UNECE, member states, and other

- stakeholders. By identifying key issues and implementing targeted strategies, UNECE can continue to advance the implementation of UNFC and UNRMS and achieve meaningful progress towards their expected results.
- Ministry of Mines, Government of India has not actively participated in the meetings of UNECE on UNFC and UNRMS during the past four years.
- However, the UNFC reporting codes for the critical and latest technology minerals is a challenge as the threshold values of economic extraction are vital for reporting the reserves and the threshold values that can be economical with upgraded technology and a rise in the metal price are vital for recording the estimated resources. Any effort to synthesise and publish the threshold values of these critical minerals which are in general low in content and the complexities are associated with beneficiation and metal recovery. Subsequently, the technology of extraction may also be shared with the larger interest of many countries which lack proper economic extraction of minerals to save the earth's energy demand associated with transport etc.

# 6. Sustainability of the UNECE's support to member States and partners on UNFC and UNRMS

### 6.1. To what extent do you agree with the following statements?

To what extent do you agree with the following statements?	Strongl y agree	Agree	Disagree	Strongly disagree	Do not know	Total
Following UNECE's facilitated interventions on UNFC and UNRMS, some measurable improvements were observed in the globally harmonized classification of natural resources	53	135	14	3	43	248
The principles of sustainability have been integrated into the fundamental concepts and structures of UNFC and UNRMS for long-term viability	75	132	12	3	25	247
UNECE's activities on UNFC and UNRMS have fostered collaboration and partnerships that could sustain efforts for ongoing resource management to help attain the SDGs beyond the conclusion of current activities	74	116	13	3	41	247

6.2. Would you please have one or two examples to share about the uptake, use and influence of UNFC and UNRMS in decision making processes?

- 1) International Academy of Science, Health & Ecology, Correspondent Member, Innsbruck, Austria: http://www.ias-icsd.org/members.html / http://www.ias-icsd.org/5.html; 2) United Nations Convention to Combat Desertification, Science-Policy Interface, Committee Member, Bonn, Germany: https://www.unccd.int/science/former-spi-members/andre-francisco-pilon 3) IUCN Commission on Environmental, Economic and Social Policy, Gland, Switzerland: https://www.iucn.org/commissions/commission-environmental-economic-and-social-policy; 4) CIVICUS World Alliance for Citizen Participation, Johannesburg, South Africa,: 5) EuroScience, Strasbourg, France: http://www.euroscience.org/; 6) http://civicus.org; IUHPE: www.iuhpe.org; 7) WSSCC: http://wsscc.org; 8) Center for Research and Documentation on Healthy Cities www.cidadessaudaveis.org.br; 9) International Association for the Study of the Commons: https://www.iasc-commons.org/ext-publications-pilon/; 10) Global Alliance for the Rights of Nature https://www.garnlatinamerica.org/hubs/ 11) The Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES): https://ipbes.net/users/afpilon Muck Rack Journalism Platform: https://muckrack.com/andre-francisco-pilon Global Land Programme: 13) https://glp.earth/users/andr%C3%A9-francisco-pilon 14) Global Sustainable Futures: **Progress** Through Partnerships: https://globalsustainablefuturesprogressthroughpartnership.wordpress.com/globalsustainable-futures-progress-through-partnerships/ 15) Sydney Environment Institute member: https://sei.sydney.edu.au/ 16) Global Forum on Food Security and Nutrition (FSN Forum): https://www.fao.org/fsnforum/member/andre-francisco-pilon?check logged in=1 17) NORRAG Network https://sum-app.net/members/PA2dNROgbYIjBYsQ1p5D8w/bio 19) Global Bildung Network: https://network.globalbildung.net/about 20) Global Sustainable **Futures Progress** through Partnerships: https://globalsustainablefuturesprogressthroughpartnership.wordpress.com/ International Society for Development and Sustainability (ISDS): https://isdsnet.com/ijdsaims.html
- In case a company or government classified existing projects on different resources like coal, petroleum, renewables etc using UNFC, decision making for investment will be more right decision by comparing them.
- 1)After a public presentations I enjoyed the opportunity to discuss the frameworks effectiveness with Financial sector managers who use the the UNFC to evaluate and track mining projects for future investment considerations. 3) Working with industry organizations in a cooperative fashion to align reporting standards and UNFC to emphasise the synergies between the two systems.
- 1. A common classification system for natural resources will help citizens to compare positive and negative impact 2. Designation of competence expertise
- 1. In a government policy decision regarding the management of natural resources, the UNFC was used to classify and categorize different types of resources according to their economic viability and potential for development. This classification system helped policymakers prioritize their allocations of resources and investments in a more efficient and sustainable manner. 2. In a corporate decision-making process, a mining company used the UNRMS to assess the environmental and social impacts of their operations. By integrating the UNRMS into their decision-making framework, the company was able to identify potential risks and opportunities associated with their projects, leading to more responsible and sustainable business practices.

- 1. In the UNFC-UNECE concepts, the quality of the information for the results of an exploration target is not important. Instead in CRIRSCO, this is the most valuable information to invite potential investors to invest in green field projects. 2. It is noted that UNFC-UNECE projects are valued based on quantity (tons); in CRIRSCO, the projects are valued based on Quantity (tons) and quality (g/tons), for example. 3. The concept of Quality Assessment & Quality Control (QA/QC) is not mentioned by UNFC-UNECE. This is a critical concept to be considered for good practice in any natural resource project.
- Adoption of UNFC in the EU Critical Raw Materials Act; Initiation of ICE-SRMs in several
  countries and regions and ongoing discussions for further ICE-SRMs; somewhat greater
  engagement by the minerals standards body CRIRSCO with EGRM;
- Application of reserves classification on a new basis, introduction of modern classifications of mineral reserves in Ukraine, gradual departure from the old Soviet ones
- As a mining entity we always use UNFC to classify our ore reserves and resources which is highly valuable in taking decisions.
- At the moment, no.
- Certainly! Here are two examples of the uptake, use, and influence of UNFC and UNRMS in decision-making processes: Resource Development Planning: In a hypothetical country, the government adopts UNFC and UNRMS as the standard classification and management framework for its natural resources. Government agencies, industry stakeholders, and investors use UNFC and UNRMS to assess the country's resource potential, plan resource development projects, and make investment decisions. By providing a common language and methodology for resource classification and reporting, UNFC and UNRMS facilitate transparent and consistent decision-making processes, enhance confidence among investors, and promote sustainable resource development. International Cooperation: Two neigh boring countries with shared resource basins decide to collaborate on the development of their cross-border resources. They agree to use UNFC and UNRMS as the basis for harmonizing their resource management policies, regulations, and reporting practices. By adopting a common classification and management framework, the countries streamline regulatory processes, facilitate data sharing and exchange, and promote cross-border investment and development initiatives. UNFC and UNRMS serve as a catalyst for international cooperation, enabling the countries to leverage their collective resources more efficiently and sustainably while minimizing conflicts and maximizing socio-economic benefits for both parties. These examples illustrate how the uptake and use of UNFC and UNRMS can influence decision-making processes at both national and international levels, leading to more transparent, informed, and sustainable resource management practices. By providing a standardized approach to resource classification and reporting, UNFC and UNRMS contribute to improved governance, increased investment, and enhanced cooperation in the utilization of natural resources for the benefit of present and future generations.
- consultation and taking into account the opinions of each Nation
- Decision making processes in the minerals industry do not in general use UNFC or UNRMS
- Development of AMREC-PARC
- EU CRMA
- EU CRMA AMREC
- Evaluation of use of emerging mineral resources for electrification and decarbonization
- for anthropogenic resources there are no examples for decision making, because UNFC for anthro. resources is still on case study level. First example will probably within the CRM Act.
- For resources and reserves determinations. Environmental effects'.

- Geothermal Energy in Albania.
- Geothermal is being adopted in the Netherlands.
- I cannot provide examples.
- I can't don't know (and don't see, frankly speaking, based on what's coming out of UN)
- I have never heard either mentioned by anyone in the mining sector.
- I have no direct experience in my field of work. Asking people if it helped them, outside the realm of the UN and their partners themselves there seems to be limited influence. Maybe the CRIRSCO standardization will shield some results in our industry, if it can help make the business easier.
- I have no examples as UNFC/UNRMS has little bearing on industry
- I was lucky enough to be involved in the establishment of the UK ICE-SRM, this is now an
  operational entity that is advocating for UNFC and UNRMS into key resource sectors and
  policy channels.
- In contrast to all other guidelines for reporting mineral resources and reserves UNFC and UNRMS consider also the needs of governments to improve quality of life of their citizens and development of the country.
- In decision making process a very important role play a practical influence and fully based on scientific research the final results of involvement of UNFC and UNRMS issues
- In my exploration field I used UNFC FOR BETTER optimisation of minerals.
- In strategic planning, and energy efficiency
- Inclusion of UNFC in the CRM Act is a major contributor to increased uptake of UNFC in Europe.
- Influence on countries like China and Russia to adhere to UNFC standards
- Influenced the development of AMREC-PARC
- Integration of the UNFC into the national legislation, bring the message on UNRMS and UNFC may have contributed to the development of resource management.
- It begins with setting clear sustainability goals and objectives. Focus on, what it's to be achieve and how can our decisions influence and impact a more sustainable results.
- It's the influence on decision making that is lacking.
- Je n'ai pas d'exemples à donner. I don't have any examples to give.
- Making Decisions About Resource Investments: When a nation has abundant energy resources, policymakers use UNFC to evaluate the potential for those resources and the investment appeal of the nation. They classify and measure the country's energy resources using internationally accepted criteria by putting UNFC principles to use. Investors can feel more confident in the precision and dependability of resource assessments because to this standardized approach, which also improves openness and comparability. In order to grow the nation's energy industry sustainably, decision-makers may then manage resources wisely, draw in international investment, and make well-informed investment decisions.
- Minerals exploration G1, G20, G3, G4 for natural resources assets wealth of nations
- N/A
- National classifications often do not take into account the social and environmental factors of project implementation. Taking into account these factors and risks is necessary for decisions making and UNFC provides this opportunity
- No
- No opinion
- Not there yet, just started to get involved

- One good example is the use of UNFC as a classification system for AMREC in Africa and also the work in Mexico.
- only at conceptual stage, consideration to use the framework to promote development and harnessing of ocean energy resources (as an integral part of harnessing marine resources).
- Only the UNFC name is used but the principles are not used or understood by mistake of the professionals
- PRMS / Petroleum Resources Management System updated according to UNFC and UNRMS recommendation CSMS / Carbon Storage Management System updated according to UNFC and UNRMS recommendation
- Refer notably to work by UNFC Adoption Group, and SDG delivery work
- Russia's implementation of National Classification system Finland's anthropogenic resource case studies
- Strategic projects classification Mineral inventories for private companies
- The African continent is moving in this direction through the development of the Pan African Resource Code. A precursor to this is the African Mining Vision which if implemented by member nations in line with the UNFC and UNRMS will have positive impact on the development of the continent's resources.
- The application of these systems, on the national level, considering that they are not formally applied, and one cannot speak of a positive impact on management, but they could tentatively consider as a positive impact based on the case studies performed at the national level such as (1) recording and management of CRMs and (2) implementation of SGD. At the same time, the closing of coal mines where the coal reserves have been exhausted and the further planning of space for long-term purposes could also be considered from a positive point of view.
- The case studies in UK and Mexico
- the deployment of development of the UNFC AMREC policy document and the Pan African Resource Code AMREC PARC
- The European Commission intends to make intensive use of the UNFC/UNRMS
- The global standard of UNFC has a very important role to determine the mineral resources classification especially during the application for budget for doing follow-up/ detail survey for mineral resources.
- The integration into EU Raw Material Act The application in the processes of GSEU
- The intervention during the COVID-19 outbreak.
- The UNFC definitions are irrelevant to decision making in industry which uses CRIRSCO-type resource definition standards.
- The UNFC was used by ERMA (European Raw Materials Alliance) as a tool to assist in project ranking and selection. See: https://unece.org/sites/default/files/2023-04/08.%20Massimo%20Gasparon%20ERMA%20for%20UNFC%202023.pdf
- The United Nations Framework Classification for Fossil Energy and Mineral Reserves and Resources (UNFC) and the United Nations Resource Management System (UNRMS) have played significant roles in standardizing terminology and methodologies for assessing energy and mineral resources globally. Here are a couple of examples of their uptake, use, and influence in decision-making processes:

   Energy Sector Investment Decisions:
   Many countries, particularly those with significant energy resources, have adopted UNFC as the standard for classifying their energy reserves. For example, countries like Norway, Russia, and Canada have integrated UNFC into their national reporting systems for oil, gas, and coal

reserves. This standardization enhances transparency and facilitates investment decisions by providing consistent and comparable data to investors and stakeholders. • UNFC has also been instrumental in guiding investment decisions in renewable energy projects. By applying a unified classification system, stakeholders can assess the potential of renewable resources like wind, solar, and geothermal energy more accurately. This enables policymakers and investors to prioritize projects based on their resource potential, ultimately promoting sustainable energy development. 2. Mineral Resource Management and Governance: • In the mining sector, UNFC has been adopted by various countries to improve mineral resource management and governance. For instance, countries like Australia and South Africa have incorporated UNFC principles into their national reporting standards for mineral reserves and resources. By doing so, they enhance transparency, accountability, and comparability in reporting mineral assets, which is crucial for attracting investments and fostering sustainable • UNRMS, as a part of UNFC, provides a framework for integrating development. environmental, social, and economic considerations into resource management decisions. This holistic approach helps policymakers and industry stakeholders assess the full impact of resource extraction activities and develop strategies to mitigate negative effects on local communities and the environment. By promoting responsible resource management practices, UNRMS contributes to more informed and sustainable decision-making processes in the mining sector. These examples demonstrate how the uptake and use of UNFC and UNRMS have influenced decision-making processes in the energy and mining sectors, leading to more transparent, efficient, and sustainable resource management practices globally.

- There has been good collaboration between UNFC and CRIRSCO.
- Through the deliverables of the working groups.
- Unclear
- UNFC and UNRMS have been used to improve the ESG side of companies, so it upgrades from a checklist (more akin to greenwashing or social washing) to a real compromise with the environment and society.
- UNFC and URMS are not yet implemented in my country. We are at the stage of informing stakeholders.
- UNFC classification of mining wastes in Sweden
- UNFC has been a pilot project in Latin America, and has been trying to implement in other countries of the region, to evaluate the projects, mostly those starting in geothermal
- UNFC in mineral resource classification
- UNFC is being adopted by a New Zealand regional regulator to help manage geothermal resources, and for communicating to public and government about future potential. UNFC is being considered in east Africa for geothermal classification.
- UNFC is central in EU Critical Raw Materials Act
- UNFC is in the CRM Act. All the geo-surveys in Europe created a group to discuss, exchange and train about UNFC classification for raw materials.
- UNFC is used in the GSEU project to report mineral resources on national level
- Unfortunately in my region and in my area (deep sea mining) I have no examples.
- Uptake has been very poor. Most African countries are forced to use the frameworks of the Investors, most cases NOT European at all. Either Australian or Canadian or American
- UPTAKE USE OF UNFC IN PETROLEUM WHERE ESG IS NOT ADDRESSED
- We don't have an example, but we have started activities.

- We have highlighted and recognized the importance of social, environmental side on resource classification.
- we have not implemented UNFC/UNRMS so far.
- Why not!
- With the UNFC numerical codes, we developed digital tools for supporting life-cycle resources management and decision making processes.
- Yes
- India has been using UNFC-1997 version with suitable modifications in classification and assessment of solid mineral resources of the country. The National Mineral Policy of India also largely covers issues raised in the draft UNRMS. India expects that, adoption of UNRMS will foster sustainable use of the natural resources of the world in a more cohesive way and access to critical mineral resources will be more transparent.
- India had adopted a system of online transparent bidding for allocation of the mineral resources. There are three types of licences allocated through the tender route: (i) Mining License, (ii) Composite License and (iii) Exploration License
- The MEMC Rules (based on UNFC classification of mineral resources) have played a crucial role in Auction of the mineral concessions.

## 6.3. What is the likelihood of sustainability of the UNECE's facilitated interventions on UNFC and UNRMS?

The likelihood of sustainability of UNECE's facilitated interventions on UNFC (United Nations Framework Classification for Fossil Energy and Mineral Resources) and UNRMS (United Nations Resource Management System) depends on several factors: 1. Stakeholder Engagement and Ownership: Sustainable outcomes are more likely when stakeholders are actively engaged in the development and implementation of interventions and take ownership of the processes and outcomes. If stakeholders perceive UNFC and UNRMS frameworks as valuable tools for resource management and are committed to their continued use and improvement, sustainability is more likely. 2. Policy Integration and Institutionalization: The integration of UNFC and UNRMS principles into national policies, regulations, and institutional frameworks enhances their sustainability. When countries adopt these frameworks as official standards for resource classification and management and incorporate them into their legal and regulatory frameworks, they are more likely to endure over the long term. 3. Capacity Building and Knowledge Transfer: Sustainable interventions require the development of local capacity and expertise to effectively implement and maintain them. UNECE's capacity-building efforts, including training programs, workshops, and technical assistance, play a crucial role in building the necessary skills and knowledge among stakeholders, enhancing the likelihood of sustainability. 4. Monitoring, Evaluation, and Adaptation: Regular monitoring and evaluation of UNFC and UNRMS implementation help identify challenges, successes, and areas for improvement. By collecting feedback from stakeholders, assessing outcomes, and adapting strategies accordingly, UNECE can ensure the continued relevance and effectiveness of its interventions, increasing their sustainability. 5. Resource Commitment and Support: Sustainable interventions require sufficient resources, including financial, human, and technical support, to sustain momentum and achieve longterm impacts. Adequate funding, staffing, and technical assistance are essential to support ongoing implementation, capacity building, and outreach efforts. 6. International Cooperation and Collaboration: Sustainable outcomes are more likely when there is strong international cooperation and collaboration among governments, industry players, academia, and other stakeholders. UNECE's efforts to foster partnerships, share best practices, and facilitate knowledge exchange contribute to creating a supportive global environment for the adoption and implementation of UNFC and UNRMS frameworks. Overall, the likelihood of sustainability of UNECE's facilitated interventions on UNFC and UNRMS is influenced by the extent to which these factors are effectively addressed. By focusing on stakeholder engagement, policy integration, capacity building, monitoring and evaluation, resource commitment, and international cooperation, UNECE can enhance the sustainability of its interventions and contribute to more transparent, reliable, and sustainable resource management practices over the long term.

- It's hard to say.
- 60%
- 75 %
- Anybody's guess. All these activities are parallel activities that don't merge with other similar organisations working in these areas.
- At governmental and regional organisations levels good
- Considering the factors contributing to sustainability which include global recognition, stakeholder engagement, adaptability, capacity building and transparency, the likelihood of sustainability for UNECE's facilitated intervention of UNFC and UNRMS is generally high.
- Continued engagement of partners and thorough actions on the agreed resolutions
- Continuous appropriate involvement and support
- Do not know
- Don't know
- Eventually this will happen, but we are at the beginning of the process.
- Good
- good likelihood
- high
- High
- high probability
- High! Since UNFC start to become a part of legislations across the world, it's sustenance and impact becomes stronger and stronger
- HIGHLY LIKELY
- Highly likely, if they see positive results
- I believe the support of government agencies and European Union bodies will be key to the sustainability of UNFC and UNRMS and further promotion of both frameworks.
- I do not see this intervention as feasible, from the point of view of results. I recommend increasing support for the UNFC working group; and also, for CRIRSCO as an independent organization.
- I don think the work on UNFC and UNRMS has momentum quite broad involvement from national and regional governments. Hence I expect it to continue in the longer term. This has the potential to make significant change. Challenges will be to make sure that the changes are deep-seated, through full rather that superficial adoption, and that the adoption continues to extend globally.

- I don't know.
- I don't understand this question
- I think the probability is high.
- I would recommend further publication of success stories on how UNFC/UNRMS have resulted in globally harmonized classification of resources and sustainable implementation of UNFC/UNRMS. This would possibly stimulated wider-spread recognition
- If we keep moving ahead and making new progresses, then the likelihood will be great.
- I'm not entirely sure what is meant by this question. If I understand it correctly it will depend on how much financial and 'political' support is obtained for the UNECE's activities in these areas.
- In the socio-cultural learning niches, heuristic-hermeneutic experiences can generate awareness, interpretation and understanding beyond established stereotypes, from a thematic ("what" is at stake), an epistemic ("how" to understand and define the events) and a strategic (who, when, where) point of view. Evaluation and planning, advocacy, communication, public policies, research and teaching programmes, should combine all dimensions of being-in-the-world (intimate, interactive, social and biophysical), as they intertwine, as donors and recipients, to induce the events (deficits/assets), cope with consequences (desired/undesired) and contribute for change (potential outputs). Ref.: PILON, A. F., Reframing Relationships Between Humans and the Earth: An Ecosystem Approach [ppt presentation], 2019: https://www.researchgate.net/publication/338584804\_Reframing\_Relationships\_Between\_Humans\_and\_the\_Earth\_An\_Ecosystem\_Approach
- 'Interventions'? Not sure what this means but if suggesting intervention in the planning processes and decision-making by minerals companies, any such intervention would be seen as an extra unwanted and unnecessary imposition of bureaucracy
- Is high
- It feels without engaging the actual industry and key players, it will be difficult to be relevant and sustain interest.
- It has a great potential but there is still quite a lot to do to make it easy to use
- It is likely sustainable but concentration needs to be on expanding uptake and adoption and less on expanding application to all resources. When many people around the world appreciate how to apply UNFC and UNRMS then it is easy to expand its use to other resources.
- It should at least be discussed if land and biomass need better consideration as resources of tomorrow
- It will give the desired result.
- La CCNU et l'UNRMS sont deux concepts évolutifs et fédérateurs. Par conséquent la CEE-ONU est appelée à accompagné leur développement et leur application à long terme sur le terrain. The UNFC and the UNRMS are two evolving and unifying concepts. Consequently, the UNECE is called upon to support their development and long-term application in the field.
- lesser
- Likely
- Low
- Maybe to keep them regularly updated
- More chances than without
- More sensibility and communication.
- N/A

- NIL
- No
- not good .. most countries / companies use PRMS so why build another system ?
- Not sure the situation is too complex to easily assess with geopolitical influences and actions creating great uncertainty.
- Now that UNFC is written into EU law, its sustainability is much more likely. But to be effectively continued to be implemented, it must continue to be supported with resources to UNECE and supporting projects/organisations rolling out training, guidance etc.
- Strong likelihood
- Sustainability is the term that have been terribly overused when no specific activity exist to reduce environmental risks and disasters. I believe that environmental sustainability it is not possible, never has been. There are boundaries of comfort for the environment, that could be surpassed with holistic consequences that humans are not aware of, less to understand them to reduce damage to the whole planet. Mining interventions are one of those triggers to exceed those 9 boundaries. UNECE (we) could do better, UNECE has a mean, but must change its narrative from commercial foe to FoE.
- Sustainability plays one of the main role in the process of UNECE's facilitated interventions on UNFC and UNRMS
- sustainable
- That's the major reason why using UNFC and UNRMS.
- That's tougher as it adds more cost to doing business, that is already undervalued, discredited and unpopular.
- The activities going forward now that UNFC and UNRMS is being applied is to ensure that the core of the secretariat and their support is responsibly financed and staffed.
- The best data products at mineral sector.
- The best level of knowledge about an best sustainability level
- The contact updated with the partners.
- The global standard of UNFC should be using world wide
- The idea and purpose are very welcome. On the other hand, I think that UNECE should take a proactive active role in implementation between member states.
- The likelihood of sustainability of UNECE's facilitated interventions on UNFC (United Nations Framework Classification for Resources) and UNRMS (United Nations Resource Management System) depends on several factors: Political Will and Commitment: Sustainable implementation of UNFC and UNRMS requires strong political will and commitment from member states and other stakeholders. If governments prioritize the adoption and integration of these frameworks into national resource management policies and practices, there is a higher likelihood of sustainability over the long term. Capacity Building and Technical Support: UNECE's ongoing capacity-building efforts and technical support play a critical role in enhancing the understanding, skills, and institutional capacity of member states and stakeholders to implement UNFC and UNRMS effectively. By providing continuous support and guidance, UNECE can contribute to sustainability by ensuring that countries have the necessary expertise and resources to maintain and update these frameworks as needed. Stakeholder Engagement and Ownership: Sustainable outcomes are more likely when stakeholders are actively engaged in the decision-making process and have a sense of ownership over the implemented interventions. UNECE's efforts to foster inclusive participation, dialogue, and collaboration among governments, industry representatives,

academia, and civil society can promote stakeholder buy-in and support for UNFC and UNRMS, increasing their sustainability. Adaptation and Flexibility: The adaptability and flexibility of UNFC and UNRMS to evolving resource management challenges and contexts are essential for their long-term sustainability. UNECE should continue to monitor changes in technology, industry practices, and regulatory frameworks and update UNFC and UNRMS accordingly to ensure their relevance and effectiveness over time. Evaluation: Regular monitoring and evaluation of the implementation of UNFC and UNRMS are necessary to assess progress, identify challenges, and capture lessons learned. UNECE's efforts to establish robust monitoring and evaluation mechanisms can inform adaptive management approaches and support continuous improvement, contributing to the sustainability of interventions. Overall, the sustainability of UNECE's facilitated interventions on UNFC and UNRMS depends on the collective efforts of member states, stakeholders, and UNECE itself to maintain political commitment, build capacity, foster stakeholder engagement, promote flexibility, and monitor progress effectively. By addressing these factors comprehensively, UNECE can enhance the likelihood of sustainable outcomes and contribute to the effective and responsible management of natural resources in the long

- The realities of recent events and interaction with European partners require changes in the classification of reserves. I believe that this will be a permanent trend
- The sustainability of UNECE's facilitated interventions on UNFC and UNRMS hinges on several key factors. Firstly, continued commitment from member states to prioritize resource management and recognize the value of these frameworks is paramount. Stakeholder engagement and ownership are also vital, ensuring that interventions are tailored to meet diverse needs and priorities. Additionally, sustained capacity building efforts and knowledge transfer are crucial for empowering countries to independently apply UNFC and UNRMS methodologies. Integration of these frameworks into national and international policy frameworks is essential for mainstreaming their use and ensuring consistency in decisionmaking processes. Finally, establishing robust monitoring and evaluation mechanisms allows for ongoing assessment of progress and adaptation to emerging challenges, enhancing the likelihood of sustainability over the long term. Overall, sustained impact relies on collaborative efforts among member states, stakeholders, and UNECE to maintain commitment, engagement, capacity building, policy integration, and ongoing monitoring and evaluation. By addressing these factors comprehensively, UNECE can enhance the likelihood of sustaining positive outcomes and continue to promote effective and sustainable resource management practices globally.
- The UNECE has organized a strong collections of experts in the topic of resource management. This group brings a lot of knowledge and passion to the subject in an ongoing and sustainable fashion. However for the vision to be realized reliance on that alone will not be enough.
- There are high voluntary experts and stakeholders support and also secretary of the UNFC and UNRMS studies are extraordinarily good. Also EU funded projects like critical minerals are essential for sustain abilities of the studies. but year by year studies are enlarging may need more supports both financial, administrative and also technical.
- there is every indication of the sustainability
- They need to get over a present "hump" hurdle of uptake in order to be more self-sustaining.
- This question is not clear. Sustainability in what sense? What kind of interventions does this refer to?
- Through the legislation of EU CRM act the likelihood has increased.

- UNECE will significantly improve it.
- Unece.org working group mineral, Petroleum, injection projects, CMM, renewable energy, Hydrogen energy, water resources, nuclear energy, etc
- UNFC and UNRMS are tools developed by UNECE that help ensure sustainability and integrated resource management. UNECE supports the sector in achieving goals through those tools, including its platforms, such as this workshop. Albania is one of such examples to unlocking geothermal energy and developing a roadmap for its sustainable utilization.
- UNFC E axis need to be more specified unsure to what extend sustainable factors are included or only the permits looked at.
- unknown at present
- Values for local societies
- very likely
- Working together with Government, Industries, NGOs in same platform may be difficult for long time.
- Yes
- The interventions by UNECE on UNFC and UNRMS are very critical for bridging the gap between various diverse classification systems being followed by various countries and the UNRMS is definitely one of the most important templates for measuring the SDG's and also for other aspects of climate issues being faced by the countries while using the natural resources.
- The sharing of global data on R & D information, technology of mineral discovery, exploration, reporting, mining, beneficiation, complete use life cycle of resources, use and re-use, value chain etc will surely benefit the earth in terms of saving energy (mainly transportation of raw materials) and sustainable usage of earth resources.

## 7. Looking forward

7.1. On the basis of the UNECE mandate and past achievements on UNFC and UNRMS, and on your own needs and priorities, what could UNECE consider in the coming years to further support your objectives?

On the basis of the UNECE mandate and past achievements on UNFC and UNRMS, and on your own needs and priorities, what could UNECE consider in the coming years to further support your objectives?	Top priority	High priority	Moderat e priority	Low priorit y	Not a priorit y	Total	Index
Continue strengthening the capacities of policymakers to understand, interpret and use UNFC and UNRMS to	49	124	51	7	6	237	3.851 695

formulate and monitor policies and strategies							
Continue providing advisory support services to policymakers on focused sectoral areas and the formulation of policies that aim to improve resource management	38	133	53	7	6	237	3.800 847
Monitor the impact of UNFC and UNRMS applications to highlight best practices and success stories	27	123	71	9	6	236	3.663 83
Foster cross-collaboration and knowledge exchanges between countries	46	122	57	8	3	236	3.846 809
Improve the interface between policy-science-industry	53	114	55	8	5	235	3.858 974
UNECE should explore how to engage more countries outside its region	42	97	65	24	8	236	3.591 489

## 7.2. Other initiatives?

- 1) Translate into many languages most YouTube presentations on UNFC and UNRMS. 2) Continue and increase spreading UNFC and UNRMS on other UN organizations.
- 1. Support and foster CONSISTENCY of applications (e.g. between ICEs) so that truly global standards are implemented. 2. Foster adoption standards setters and regulatory bodies e.g. ISSB, SEC (relates to interface between policy-science-industry). 3. Continue to develop and communicate the vision and examples of how UNFC and UNRMS can assist in Sustainable Resource Management through DECISIONS.
- A greater opening towards the universities where the new generation is being trained.
  Conclusions on available and new UNFC training materials and trainings, continue the
  spreading of UNFC trainings. Collection of feedbacks from national level UNFC trainings, call
  for awards in different topics (implementation, trainings, education, publication, contribution
  to UNECE EGRM activity, etc).
- Accompagner et soutenir les pays non membres de la CEE-ONU à entreprendre la voie de la maitrise de la CCNU et de l'UNRMS. Accompany and support non-UNECE member countries to undertake the path to mastering the UNFC and UNRMS.
- always take everyone's opinions into consideration
- At the moment, in my opinion, we already have many initiatives to implement. Let's do this before we take additional initiatives.
- Attract more funding for the implementation of specific pilot projects to implement UNECE priorities.

- Based on the priorities outlined and the objectives of UNECE related to UNFC and UNRMS, here are some considerations for UNECE's future initiatives: Continue strengthening capacities of policymakers: This should be a top priority. Policymakers need robust understanding of UNFC and UNRMS to develop effective policies for resource management. This could involve targeted training, workshops, and materials tailored for policymakers. Provide advisory support services: Advising policymakers on focused sectoral areas and policy formulation is crucial for effective resource management. This should be a high priority to ensure policymakers can apply UNFC and UNRMS effectively in their decision-making processes. Monitor impact and highlight best practices: Understanding the impact of UNFC and UNRMS applications is key. Monitoring and highlighting success stories can encourage wider adoption and implementation. This is a top priority for showcasing the benefits of these Foster cross-collaboration and knowledge exchanges: Collaboration between countries is essential for sharing expertise and best practices. This should be a high priority to facilitate learning and mutual support among policymakers and practitioners. policy-science-industry interface: Enhancing communication and collaboration between policymakers, scientists, and industry stakeholders is critical for informed decision-making. This should be a top priority to bridge the gap between research and policy implementation. Engage more countries outside UNECE region: Exploring ways to involve more countries globally in adopting UNFC and UNRMS can expand the frameworks' impact and relevance. This could be a moderate to high priority to promote international cooperation and standardization. Additional initiatives could include: Developing case studies or guidelines on specific resource sectors (e.g., energy, minerals) to demonstrate effective utilization of UNFC and UNRMS. Hosting international conferences or webinars to facilitate dialogue and networking among policymakers and experts. Collaborating with other international organizations to align methodologies and standards for resource classification globally. These initiatives align with the overarching goal of UNECE to support sustainable resource management through effective policy formulation and international cooperation.
- bringing UNFC and UNRMS more in a legal context e.g. CRMA. Through CRMA many people have heard the first time of UNFC
- Build collaboration on UNFC and UNFRMS development and deployment with international development partners operating in member countries outside EU
- Change UNECE narrative. Sit down with planet earth to discuss how UNECE will foster its ecosystem interventions; in all earth's biomes
- Collaborate with already used industry standards (CRIRSCO family codes)
- Demonstrating the successful use of UNFC and its benefits to policymakers.
- develop good case studies to demonstrate the added value , functioning and impact of implementing UNFC and UNRMS, and include in university / research programmes to ensure allocated resources
- Engage with CRIRSCO as you are alienating industry.
- Extend reach outside its region
- Foment education from very early age about the necessity and criticality of mining and the minerals and metals for our life's in society. Minerals and metals are the building blocks of civilization.
- For example, in the countries of SEE Europe or the Western Balkans, connect the bearers of
  responsibility in the application of the UNFC and UNRMS systems and national experts in this
  area, for the sake of uniform access to the classification and management of resources solid
  mineral raw materials and other resources.

- Formalisation of Artisanal and Small-scale Mining practises.
- Further collaboration between UN agencies, Regional Commissions and international setting standards bodies to improve, integrate with or complement other standards and localise both UNFC and UNRMS.
- Further to the above, UNECE should review the IRMA Standard for Responsible Mining ( www.responsiblemining.net ) to ensure that all topics covered are included in UNFC specifications, guidelines, and practices pertaining to the mining sector.
- Given the overwhelming pressures on the global environment and the need to disrupt the systems that drive them, an ecosystem theoretical and practical framework for assessing and planning programs for advocacy, communications, public policy, research and education should integrate all dimensions of being in the world (intimate, interactive, social and biophysical), as donors and recipients, as they combine to elicit the events (deficits/assets), deal with consequences (desired/undesired) and contribute to change (potential outcomes). In the socio-cultural learning niches, heuristic-hermeneutic processes generate awareness, interpretation and understanding beyond established stereotypes, considering a thematic ("what is at stake"), an epistemic ("how" to understand and define things) and a strategic point of view (who, when, where). Instead of trying to solve isolated and localized problems (segmented and reduced issues), it tackles the general phenomenon, not the bubbles in the "boiling pot": the definition of the problems and the ways to deal with them is deep inside the "boiling pot", where problems emerge, encompassing the current "world-system" with its borders, its structures, its techno-economic paradigms, its support groups, its rules of legitimization and its coherence. The paradigms of development, growth, power, wealth, work and freedom, anchored at political, economic, institutional and cultural levels, should be considered in light of environmental problems, quality of life and the state of the world.
- How to deal with undiscovered resources Competence issues More concentration on environmental, social and governance issues.
- Improving integration of secondary resources and circularity should be top priority to improve reach and relevance
- International promo conference
- Invest in the visibility and promotion of commissions activities and resources at industry events and integrate resources in to industry specific regulatory bodies and platforms.
- Invite CRIRSCO to support these initiatives.
- Involve North American and Australian counterparts
- It's one of the many other systems present today.
- Just more training for us and support on our evaluation
- Lean on UNECE countries to provide funding for UNFC and UNRMS initiatives supporting the agenda.
- May set an initiative that focus mainly in the resources management and classification based on the industry usage to maintain the valuable resource.
- Modification of UNFC resource definitions to align with industry and regulatory bodies CRIRSCO type definition standards.
- More collaboration with industry so as to better understand the practical difficulties of industries which are involved in the extraction/utilisation of resources
- more communication about the need and goals of UNFC and UNRMS to the public would maybe raise more awareness for the issue

- More focus on mobilising private enterprise (funders and companies) and the tech sector who can turn the frameworks into usable products and (data) standards
- More meetings and communications.
- N/A
- Need to prepare new concrete projects of use UNFC and UNRMS system for countries of Western Balkan.
- NIL
- No
- none
- Not for now.
- Opportunities for stakeholders to spend time with UN ECE team to understand better the challenges, opportunities and processes they face in implementation.
- Outreach and case-stories
- Outreach to government agencies and financing are key areas for attention. More visibility at COP with global focus.
- Periodic awareness campaigns for sustainability along with providing capacity building...
- Please refer to this report: International Resource Panel . (2020). Mineral Resource Governance in the 21st Century: Gearing extractive industries towards sustainable development. A Report by the International Resource Panel. United Nations Environment. Coauthors: Ayuk, E. T., Pedro, A. M., Ekins, P., Gatune, J., Milligan, B., Oberle B., Christmann, P., Ali, S., Kumar, S. V, Bringezu, S., Acquatella, J., Bernaudat, L., Bodouroglou, C., Brooks, S., Buergi Bonanomi, E., Clement, J., Collins, N., Davis, K., Davy, A., Dawkins, K., Dom, A., Eslamishoar, F., Franks, D., Hamor, T., Jensen, D., Lahiri-Dutt, K., Petersen, I., Sanders, A. R. D. United Nations Environmental Programme, Nairobi, Kenya.
- Practical education of implementation of standards and methods
- Resources management Extractive industries subsurface lithosphere and ocean floor polymetallic nodules, etc
- see earlier comments/inputs
- Several other initiatives complement UNECE's efforts in resource management, classification, and sustainability. The United Nations Sustainable Development Goals (SDGs) provide a comprehensive framework for addressing global challenges, including sustainable resource use and biodiversity conservation. Additionally, the Global Reporting Initiative (GRI) offers standards for sustainability reporting, enabling organizations to disclose their resource use and environmental impacts transparently. Moreover, initiatives such as the International Resource Panel (IRP) provide scientific assessments and policy advice on resource efficiency and environmental sustainability. Circular economy initiatives advocate for a shift towards more sustainable resource use and waste reduction, while international standards organizations like ISO develop standards for environmental and energy management. Furthermore, industry-specific initiatives, such as the Extractive Industries Transparency Initiative (EITI) and Responsible Mining Initiative (RMI), promote transparency, accountability, and responsible practices within the extractive sector. These initiatives collectively contribute to a more holistic and coordinated approach to sustainable resource management at global, regional, and industry levels, fostering progress towards a more sustainable future.
- SPE Bridging development
- Stroger efforts in dissemination
- Support visits to demonstration projects and best practices

- The bridging reports with other resource classification systems should ne better explained through demonstration and verification on real life examples.
- The challenge going forward is to apply the UNFC as a decision supporting platform for resource governance, business management, capital allocation and their dynamic and integrated interrelationship in shaping solutions to reach the agreed goals.
- The key to delivery is attracting the attention of policy and evidence leads, who will then pick up the framework. Government is notoriously difficult to penetrate by externals (academics/industry/NGO). But if you can do there work for them they love that. There is a significant drive for data across governments and the framework, if embedded, into that data interpretation will be picked up. The key to delivery is to show worth, for externals to provide evidence to government using the frameworks.
- to develop a top design for the capacity building of the global ICE-SRM network, and provide necessary technical and financial supports on the fundamental conditions, such as qualified competent experts.
- Training in-person. I think that the UNECE representatives should visit the member states, providing education and training to policymakers and the private sector.
- UNECE has access to an exceptional pool of experts. Academic/theoretical work is fine, but all this knowledge could be put to use on a commercial basis.
- UNECE should plane the budget for the reimbursement of the cost of members attendance to the meetings of the working groups
- Unless the responsibility for UNFC is moved to a global body the engagement with other countries is crucial
- More focus on capacity building for scientific and economic extraction of critical minerals, byproducts and re-use technology across nations is required. Efforts towards strengthening common reporting codes and their complete acceptance by the global investors and international stock exchange.

#### 7.3. Any final comments?

- It might be best to let the existing structure of PRMS be used ... its clear many policy makers don't know anything about energy or minerals so educating them is always a great idea
- UNECE could request UN to request all countries to adopt un classification system like UNFC and UNRMS.
- Always pleased to support the development or the commission
- Among professionals in the industry, working to reduce the opportunistic opinions on the implementation of the UNFC and UNRMS systems, linking these systems to international reporting standards in a competent and qualified, and therefore recognizable way, which in my opinion would be very useful.
- As a freelance scientist working globally, I strive not for money but to aid people, the environment, and wildlife against toxic compounds. My focus lies on climate issues, particularly those related to food, as well as the conservation of biodiversity in wetlands and mountains. I am a member of various EU-related organizations. Despite this, I live in absolute poverty in Iran due to not being political and religiously affiliated. I require support for my

participation and speaking engagements at UNECE-related events. Despite my efforts in the past, I have ultimately received no assistance.

- As per above.
- Conducting analytical research and developing methodological materials should culminate in the implementation of specific projects for a larger number of countries with the achievement of real results in these countries. What is the best example for following the principles of UNECE on a global scale. It will be obvious to everyone that it works.
- Dear Colleagues, Only together, through combined work, we'll be able to build the mindful communities in the whole Europe and beyond...
- Développement énergy soutenable
- https://www.growkudos.com/profile/morufu\_raimi;
   https://sciprofiles.com/profile/Morufuolalekanraimi;
   https://scholar.google.com/citations?user=nRBW82AAAAJ&hl=en.
- Efforts to engage outside the region are superficial
- Engaging more countries? Absolutely. Without political barriers that are imposed from time to time by sanctions and other geopolitical actions of some countries and supranational organisations.
- Ensure that the projects are not too visionary but have a grounded and pragmatic aspect to ensure widespread and rapid adoption.
- Good Luck for everybody
- Good luck in the next stage.
- good work proceed
- Great work done
- Help turn mining into an attractive investment place because, and specially in the European Region, if we don't invest in new discoveries and in the development of Greenfield and brownfield mining opportunities, we are always going to be resource dependent and our industries exposed to supply chain disruptions and increased cost of our products hence less competitive industries, hence capital outflow elsewhere where the cost of doing business is generally lower.
- helpful . It depends on the Recipient(s).
- I am not sure what the purpose was of developing a whole set of UNFC resource definitions
  when a widely used set of definition standards was already available through CRIRSCO and its
  constituent organizations. It seems like a purely bureaucratic exercise and the UNFC
  definitions are now being foisted on many jurisdictions, and are at odds with the definitions
  standards used by industry and regulators.
- I commend on the proper evaluation mechanisms both during the plans and at the implementation stage.
- I don't lose my time, sorry, please don't invite me anymore
- I think that globalising the UNFC is a key initiative that needs attention.
- I want to thank UNECE and UNRMS for this survey, to explore possibilities to improve UNFC work.
- I would suggest that UNECE helps and supports African experts to participate in its activities or create a link to organize some of the workshops or activities in Africa
- In conclusion, it's clear that UNECE plays a pivotal role in advancing sustainable resource management through frameworks like UNFC and UNRMS. Strengthening the capacities of policymakers, fostering collaboration, monitoring impact, and improving interfaces between

policy, science, and industry are critical steps towards achieving these objectives. It's important for UNECE to continue its efforts in supporting countries and policymakers in adopting and implementing these frameworks effectively. By highlighting best practices, facilitating knowledge exchange, and engaging a broader international community, UNECE can enhance the global impact and relevance of UNFC and UNRMS. Moreover, as UNECE explores future initiatives, it should consider aligning with global agendas such as the Sustainable Development Goals (SDGs) to ensure coherence and maximize impact. Collaboration with other international bodies and stakeholders will be instrumental in driving progress towards sustainable resource management on a global scale. Overall, UNECE's commitment to advancing resource classification and management methodologies is crucial for promoting transparency, efficiency, and sustainability in the utilization of natural resources worldwide.

- Informative
- International Sea bed authority Www.isa.org.jm Polymetallic nodules cobalt rich crust minerals ocean floor mapping seabed2030.org
- It's crucial to strengthen the secretariat in order to truly harvest all good that has been done so far.
- It's only serving to impose its ideas other member countries of UN. Most of the countries doesn't really bother about this system.
- Keep developing the good work!
- Keep working hard and making progress on your goals. Remember to nutrition by working with partners small and large, international and local. Together we can succeed.
- Let us transform UNECE from Politically Mineral Classification Framework to a geoethical framework to intervene the planet with knowledge so as to keep as much as possible mineral resources for future generations. Let us promote EXPLORE to PROTECT so we could then go to mine responsibly.
- Mineral are key to sustainable socio-economic development
- N/A
- Need include more different professional.
- NIL
- No
- No thanks for your efforts to enhance your role in the resources management.
- no, it's ok
- none
- Policymakers often have limited industry backgrounds, which limits their understanding. The UNECE should work on this as a PPP (public-private project, including science of course), as the private sector, always has proactive involvement and a practical approach.
- some questions were a bit hard to understand for a non native english speaker. A few answers may not exactly match the question.
- Success Together by appropriate continuous improvements, innovation, ML, Digitalization, Al...for future perspective of all Resources in benefit of people!
- survey is too long, too many acronym
- Thank you so much
- The EGRM Secretariat has done a truly outstanding work over many years and deserve considerable thanks and praise!

- The potential of UNFC and UNRMS is now clear and no region is unaware of its existence but not all appreciates its importance and value, this is where effort should be placed. Also the changes being proposed to the different axis of the UNFC framework needs to be minimised to allow expanded understanding as we know it today with more practical case studies. This will allow objective discussions when changes are proposed.
- The UNECE's efforts in working with existing organisations in sectors such as petroleum (SPE PRMS) and mining (CRIRSCO) should be continued so as to enhance the uptake of UNFC in such sectors by demonstrating how it can add benefits in terms of resource classification and management rather than just placing extra burdens on industries which already have well established reporting regulations and tools to use. In sectors with well established resource project management procedures it is easier to increase uptake of UNFC/UNRMS by presenting them as complementary 'tools' which can add to the 'tools/procedures' which are already widely used in such sectors.
- The UNFC and UNRMS have proven to be comprehensive enough to adequately take care of all the facets of Resource management when compared to the existing codes like JORC, CRISCO etc.
- The use of UNFC and UNRMS should be further expanded on global scale, with the focus of having them adapted by the industry
- This project represents a rich effort of international contributions from academics, researchers, policymakers and practitioners, and addresses a rich diversity of topics in view of different contexts and content. It responds to educational needs to renew theoretical and practical approaches and to maintain its core values while responding to the current multiple crises, local demands and global needs, threats and opportunities. The initiative within the framework of knowledge transfer and cooperation between concerned people and institutions about many of the problems of difficult settlement in today's world encompasses crucial questions in our time, in view of the present cultural, political, economic and environmental severe crises worldwide.
- This type of survey is a very good initiative look forward to the results!
- To strengthen the team culture construction of the EGRM, and enhance the team cohesion for common value of SDGs.
- Tout notre respect pour les efforts que vous déployez pour la réussite de cette œuvre en adéquation avec la dynamique de la globalisation. All our respect for the efforts you deploy for the success of this work in line with the dynamics of globalization.
- Try and make Global equivalents or comparisons in Ore Reserve classification frameworks
- UNECE should have same budget to sponsor some participants from certain country to attend the seminar/ conference physically
- UNECE should plane the budget for the reimbursement of the cost of members attendance to the meetings of the working groups
- UNECE, the CSE and the EGRM with the secretariat's sterling performance with limited means is a strong asset and one that must hold up the mission of the UN never again through fostering economic interdependence between nations. .
- UNFC and UNFRMS is excellent initiative and tools for better management and development of resources, providing transparency and data driven policy making and should be well funded
- UNFC Guidelines is awesome
- We available to bring our expertise on your initiative. Together we become strong. Many thanks  $\mathbb{A}$

- We need to rethink SDGs: either the industrialised world needs to downgrade or the SDGs describe a road that is not sustainable.
- we will get there eventually
- Enhancing the reuse of metals and discovering environmentally-friendly substitutes is vital to meet the rising metal demand and minimise environmental degradation. New initiatives like collecting and reporting standards for critical and other important metals used mainly in the urban, industrial and other relevant sectors are to be evolved and the database may be maintained. This mapping is likely to enhance the recycling opportunities and will lead to carrying out R & D to recover many more metals used in various products. Serious efforts of mapping the metals in urban environment, and sharing of R & D results of economic extraction with due environmental safety are expected to meet the metal demand, minimise waste generation, lower environmental degradation and complete use of metals and minerals.



#### **TERMS OF REFERENCE**

Supporting UNECE member States in the development and implementation of the United Nations Framework Classification for Resources (UNFC) and the United Nations Resource Management System (UNRMS) (E357)

#### I. Purpose

The purpose of this evaluation is to assess the extent to which the objectives of the UNECE project (E357) "Supporting UNECE Member States in the development and implementation of the United Nations Framework Classification for Resources (UNFC) and the United Nations Resource Management System (UNRMS)" were achieved. The objective is to ensure alignment with set objectives and ascertain the project's

The evaluation will assess the relevance, coherence, effectiveness, efficiency and sustainability of the project in contributing towards sustainable resource management and socio-economic advancement within UNECE member States.

The evaluation will also assess any impacts the project may have had on progressing human rights, gender equality, disability inclusion, climate change and disaster risk reduction in the context of this engagement.

As per ECE Evaluation policy, the evaluation aims to (i) Promote organizational learning, by identifying lessons learned and best practices; (ii) Contribute to improvement of programme performance; (iii) Ensure accountability of the Secretariat to member States, senior leadership, donors, and beneficiaries.

#### II. Evaluation scope

The evaluation of the project will follow the established objectives, indicators of achievement, and means of verification outlined in the project's logical framework. The scope will cover the entire implementation period from August 2020 to July 2024, in the 56 UNECE countries.

#### III. Background

This project directly derives from the objectives of UNECE Subprogramme 5, Sustainable Energy<sup>44</sup>, and aligns with the Expert Group on Resource Management's (EGRM) work plan. It was approved by UNECE Executive Committee on 2 June 2020<sup>45</sup>.

The project core objective is to improve the resource management capacities of UNECE member States by leveraging the UNFC and UNRMS frameworks. These systems offer a consolidated, comparable, and coherent approach to assess and manage resources across governmental, statistical, corporate, and financial domains, serving as pivotal tools for sustainable development. Driven by the imperative link between natural resource management and socio-economic advancement, the project aligns with the Expert Group on Resource Management's mandate to develop universally applicable classification schemes for energy and mineral resources. This

<sup>&</sup>lt;sup>44</sup> UNECE Proposed programme budget for 2020 (<u>A/74/6(Sect.20)</u>), p.26

<sup>&</sup>lt;sup>45</sup> <u>Technical Cooperation Project Form</u>

includes recent advancements in UNFC, encompassing resources including solar, geothermal, wind, bioenergy, and anthropogenic resources, with ongoing efforts to extend this classification to hydro, marine energy, groundwater resources and potentially hydrogen. The project's foundation in UNFC and UNRMS serves as an integrated toolkit for countries, aiding them in aligning natural resource management with the 2030 Agenda for Sustainable Development.

The project's activities are multifaceted, spanning the refinement and development of specifications, guidelines, best practices, and case studies for UNFC. Simultaneously, it emphasizes the establishment and maintenance of fundamental principles, concepts, structures, and data standards for UNRMS. Additionally, the project aims to support the implementation of these frameworks by synthesizing relevant knowledge, organizing outreach meetings, facilitating expert engagement, conducting capacity-building workshops, and disseminating toolkits and policy resources. Aligned with the Sustainable Development Goals (SDGs) 2, 3, 6, 7, 9, 12, and 13, the project envisions improved resource classification, enhanced management capabilities, strengthened mechanisms for sustainability and resilience, and an amplified understanding of sustainable resource production and consumption across UNECE member States and beyond.

The target audience encompasses senior officials from ministries dealing with natural resources, mining, energy, water, industry, EU geological surveys, national experts, and financial institutions within the UNECE region.

#### IV. Issues

The evaluation will answer the following questions:

#### Relevance

- 1. How aligned were the project's activities with the identified needs and priorities of UNECE member States regarding sustainable resource management?
- 2. To which extent this project allowed ECE to support its member States in the implementation of the 2030 Agenda for Sustainable Development?
- 3. Were the project's objectives and activities consistent with the overarching goals of the UNECE subprogramme on sustainable energy and the Expert Group on Resource Management?
- 4. To what extent were gender, human rights, climate change, disability and other cross-cutting perspectives mainstreamed in project? How could this be improved?

#### Coherence

- 5. To what extent was this project coherent with those of other UN entities and international organizations working in the same area, including at country level? Has the coherence improved over the course of the project?
- 6. Was the project design and implementation appropriate for meeting the project's logical framework?
- 7. How coherent were the outcomes of the project (UNFC and UNRMS specifications, capacity-building workshops, guidelines, toolkits, best practices, and case studies) with respect to the diverse needs of UNECE member States?
- 8. How coherent was the communication strategy of the project?

#### **Effectiveness**

- 9. To what degree did the project successfully enhance the capacities of UNECE member States in implementing and utilizing UNFC and UNRMS for resource classification and management?
- 10. How effectively did the project contribute to strengthening the mechanisms for sustainability and resilience in natural resource management within UNECE member States?

- 11. Did the project's activities significantly improve the understanding of opportunities and challenges related to sustainable resource production and consumption among UNECE member States and other involved stakeholders?
- 12. Did the project adequately consider and respond to the emerging challenges and risks, especially those accentuated by the COVID-19 pandemic, during its life cycle?

#### **Efficiency**

- 13. How efficiently were the resources (financial, human, and technological) allocated and utilized throughout the project's implementation phase?
- 14. How could the use of resources be improved? Would you propose any alternatives to achieve the same results?
- 15. How effectively did the project manage time constraints and deadlines while ensuring quality outputs and deliverables?
- 16. Were the activities implemented most efficiently compared to alternatives? In particular, how do resources' costs and use compare with similar projects (within UNECE, other regional commissions, other UN agencies, or other organizations and initiatives)?

#### Sustainability

- 1. What measurable improvements were observed in the globally harmonized classification of natural resources, as facilitated by UNFC, following the project's interventions?
- 2. What measures were implemented to ensure the continued relevance and applicability of UNFC and UNRMS beyond the project's duration?
- 3. How well were the principles of sustainability integrated into the fundamental concepts and structures of UNFC and UNRMS for long-term viability?
- 4. To what extent did the project foster collaboration and partnerships that could sustain efforts for ongoing resource management beyond the project's conclusion?

#### V. Methodology

The evaluation will be conducted in accordance with: the ECE Evaluation Policy<sup>46</sup>; the Administrative instruction guiding Evaluation in the UN Secretariat<sup>47</sup>; and the United Nations Evaluation Group (UNEG) Norms and Standards for Evaluation<sup>48</sup>. Human rights and gender equality considerations will be integrated at all stages of the evaluation<sup>49</sup>: (i) in the evaluation scope and questions; (ii) in the methods, tools and data analysis techniques; (iii) in the findings, conclusions and recommendations of the final report. The evaluator will explicitly explain how human rights, gender, disability, youth, SDGs, and environmental considerations will be taken into account during the evaluation.

The evaluation will adopt a theory-driven, utilization-focused and gender and human rights responsive approach. The evaluator is required to use a mixed-method approach, including qualitative as well as quantitative data gathering and analysis as the basis for a triangulation exercise of all available data to draw conclusions and findings.

The evaluation will be conducted on the basis of:

1. A desk review of all relevant documents over the period including:

<sup>&</sup>lt;sup>46</sup> UNECE Evaluation policy

<sup>&</sup>lt;sup>47</sup> ST/AI/2021/3

<sup>&</sup>lt;sup>48</sup> UNEG 2016 Norms and Standards for Evaluation

<sup>&</sup>lt;sup>49</sup> In line with UNEG Guidance contained in <u>Integrating Human Rights and Gender Equality in Evaluations</u>

- All relevant documents including materials developed in support of the activities (UNFC and UNRMS documents, agendas, plans, participant lists, background documents, final reports and publications)
- Reports and briefs prepared under the project implementation
- Proposed programme budgets covering the evaluation period.
- 2. A tailored questionnaire will be developed by the evaluator in consultation with the project manager to assess the views of stakeholders. These stakeholders will include members of the UNECE Expert Group on Resource Management (EGRM), representatives from the participating UNECE member States, experts engaged in developing UNFC and UNRMS, and representatives from governments, international organizations, industry, academia and NGO sectors utilizing and/or testing/reviewing these frameworks.
- 3. The questionnaire will be followed by interviews of selected stakeholders (methodology to be determined by the evaluator in consultation with the UNECE Programme Management Unit and the Project Manager). These will be carried out via phone or other electronic means of communication. Results of the survey will be disaggregated by gender.

The report will summarize the findings, conclusions and recommendations of the evaluation. An executive summary (max. 2 pages) will sum up the methodology of the evaluation, key findings, conclusions and recommendations.

All material needed for the evaluation, will be provided to the consultant. In addition to the documents mentioned above in 1), the Project Manager will provide the list of persons to be interviewed by telephone. UNECE will provide support and further explanation to the evaluator as needed.

The evaluation will be conducted in accordance with the <u>ECE Evaluation Policy</u>. A gender-responsive methodology, methods and tools, and data techniques will be selected. The evaluation findings, conclusions and recommendations will reflect a gender analysis.

#### VI. Evaluation schedule<sup>50</sup>

1 December 2023 ToR finalized
5 December 2023 Evaluator selected
31 December 2023 Contract signed.

15 January Evaluator starts the desk review

15 February 2024 Evaluator submits inception report including survey design

1 March 2024 Launch of data gathering15 March 2024 Stakeholder interviews start

22-26 April 2024 Annual EGRM meeting, evaluator to present preliminary results

1 May 2024 Evaluator submits draft report1 June 2024 Evaluator submits final report

#### VII. Resources

The resources available for this evaluation are USD 37,000 (all inclusive). Payment will be made upon satisfactory delivery of work.

The Programme Management Unit (PMU) will manage the evaluation and will be involved in the following steps: Selection of the evaluator; Preparation and clearance of the Terms of Reference; Provision of guidance to the Secretary, Expert Group on Resource Management and to the evaluator

<sup>&</sup>lt;sup>50</sup> Final timetable to be agreed following engagement of the evaluator

as needed on the evaluation design and methodology; Clearance of the final report after quality assurance of the draft report.

The Project Manager, Sustainable Energy Division, in consultation with the Division Director, will be involved in the following steps: Provide all documentation needed for desk review, contact details, support and guidance to the evaluation consultant as needed throughout the timeline of the evaluation; Advise the evaluator on the recipients for the questionnaire and for follow-up interviews; Process and manage the consultancy contract of the evaluator, along the key milestones agreed with PMU.

#### VIII. Intended use / Next steps

The evaluation will be consistent with the UNECE Evaluation Policy. The results of the evaluation will be used in the planning and implementation of future activities of the Sustainable Energy subprogramme in support of the realization of the 2030 Agenda for Sustainable Development and Paris Agreement.

Following the issuance of the final report, the Project Manager, Sustainable Energy Division, in consultation with the Division Director, will develop a management response for addressing the recommendations made by the evaluator. The final evaluation report, the management response and the progress on implementation of recommendations will be publicly available on the UNECE website.

#### IX. Criteria for the evaluation

The evaluator should have:

- An advanced university degree or equivalent background in relevant disciplines, with specialized training in areas such as evaluation, project management and social statistics.
- Specialized training in areas such as evaluation, project management, social statistics, advanced statistical research and analysis.
- Knowledge of and experience in working with intergovernmental processes, energy policy, environmental policy, natural resource management policy, and/or sustainable energy concepts.
- Relevant professional experience in design and management of evaluation processes with multiple stakeholders, survey design and implementation, project planning, monitoring and management, gender mainstreaming and human-rights due diligence.
- Demonstrated methodological knowledge of evaluations, including quantitative and qualitative data collection and analysis for end-of-cycle project evaluations.
- Fluency in written and spoken English. Knowledge of another language may be an advantage.

Evaluators should declare any conflict of interest to UNECE before embarking on an evaluation project, and at any point where such conflict occurs.