



Economic Commission for Europe**Committee on Sustainable Energy****Expert Group on Resource Management****Fifteenth session**

Geneva, 22-26 April 2024

Report of the Expert Group on Resource Management**I. Introduction**

1. The fifteenth session of the Expert Group on Resource Management was held on 22-26 April 2024.
2. This report summarizes the discussions of the Expert Group on Resource Management at its fifteenth session. All the documents and presentations of the session are available on the United Nations Economic Commission for Europe (ECE) website.¹

II. Attendance

3. The session was attended by more than 300 experts, including from the following United Nations Economic Commission for Europe (ECE) member States: Albania, Armenia, Austria, Belgium, Canada, Czechia, Cyprus, Estonia, France, Germany, Georgia, Hungary, Ireland, Italy, Kazakhstan, Kyrgyzstan, Netherlands, Norway, Poland, Portugal, Russian Federation, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye, Ukraine, United Kingdom of Great Britain and Northern Ireland, and United States of America.
4. The session was attended by representatives of the European Union.
5. Experts from Algeria, Benin, Cameroon, China, Islamic Republic of Iran, Lebanon, Mexico, Mongolia, Mozambique, Namibia, Nigeria, Pakistan, Saudi Arabia, South Africa, Uganda, and Zambia participated under Article 11 of the Commission's Terms of Reference.
6. Representatives of the Regional Economic Commissions (the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP), the United Nations Economic Commission for Latin America and the Caribbean (ECLAC), the United Nations Economic and Social Commission for West Asia (ESCWA)), the United Nations Conference on Trade and Development (UNCTAD), the United Nations Development Programme (UNDP), and the United Nations Environment Programme (UNEP) were in attendance. Representatives from the European Commission (EC), represented by the EC Directorate-General (D.G.) for Internal Market, Industry, Entrepreneurship and SMEs (D.G. GROW) and the Joint Research Centre (JRC), participated. A representative from the African Minerals

¹ <https://unece.org/info/Sustainable-Energy/UNFC-and-Resource-Management/events/384762>

Development Centre (AMDC) and from the African Energy Commission (AFREC) also participated.

7. The meeting was additionally attended by representatives of international organizations, intergovernmental organizations, the financial sector, non-governmental organizations, civil society, professional societies and associations, academia and the private sector, as well as by independent experts.

III. Adoption of the agenda (agenda item 1)

Documentation: Annotated provisional agenda for the fifteenth session
(ECE/ENERGY/GE.3/2024/1)

8. The annotated provisional agenda for the fifteenth session (ECE/ENERGY/GE.3/2024/1) was adopted.

IV. Opening remarks: Reshaping Resource Management – Embracing Challenges, Prospects, and Innovative Solutions (Agenda Item 2)

9. In her opening remarks, the Executive Secretary of ECE stated that the future of resource management is anchored in innovation and responsible practices. The critical importance of minerals such as lithium, nickel, and cobalt in advancing low-carbon technologies and the transformative impact of circular economy principles on resource production was emphasised. The United Nations Framework Classification for Resources (UNFC) and the United Nations Resource Management System (UNRMS) were lauded as frameworks that guide sustainable development, advocating harmonised standards supporting informed decision-making. The significance of integrating environmental and social governance factors into business strategies and the economic importance of artisanal and small-scale mining was highlighted. The address concluded with an appeal to promote these frameworks globally, ensuring a sustainable legacy for resource management.

10. The Expert Group noted the pivotal role of UNFC and UNRMS in addressing contemporary challenges in resource management. The discussions highlighted the need for innovative solutions and international and intergenerational collaboration to integrate these frameworks into national, industry and capital allocation² (e.g., lenders, investors, governments through the fiscal system and otherwise, etc) policies effectively. It was recommended that stakeholders actively engage with UNFC and UNRMS to harness their full potential in promoting sustainable development and mitigating climate change impacts, thereby contributing to the attainment of the Sustainable Development Goals (SDGs).

V. Seminar and Workshops: The United Nations Framework Classification for Resources and the United Nations Resource Management System: A catalyst for transforming raw materials management in the United Nations Economic Commission for Europe region and beyond (22-23 April 2024) (Agenda Item 3)

11. The Seminar, workshops and short course provided a deep dive into the transformative role of the UNFC and UNRMS in revolutionizing raw materials management across the UNECE region and beyond. The presentations and discussions included a focus on the inclusion of UNFC in the European Critical Raw Materials Act and the implications of this

² The term capital allocators is explained in Annex III of the document “Informed Dialogue and Decisions for Sustainable Development – Adoption of the United Nations Framework Classification for Resources” (ECE/ENERGY/GE.3/2024/10).

in terms of needed training and capacity-building. The events facilitated critical discussions on the adoption and practical application of these frameworks, propelling innovation and offering robust solutions to the challenges of sustainable resource management. Participants from diverse backgrounds engaged in insightful discussions, fostering international cooperation and driving collective progress towards attaining the SDGs. Additionally, a short course on “UNRMS: Shaping the Future of Resource Management” was conducted, further enriching the learning experience for attendees.

12. The Expert Group noted that the seminar and workshops demonstrated the transformative potential of UNFC and UNRMS in managing raw materials across the ECE region and beyond. The shared experiences and insights underscored the versatility of these frameworks in various resource sectors. The Expert Group acknowledged the increasing adoption of UNFC and UNRMS in the ECE region and beyond, and initiatives to support their regional and global implementation. The initiatives include, if needed, fostering collaboration, developing UNFC and UNRMS, facilitating knowledge exchange, and ensuring oversight and assistance to provide the UN tools to optimize resource management for sustainable development.

13. The Expert Group noted that template proposals have been developed to support the application of UNFC, contributing to the data specification requirements for strategic projects, national exploration programmes, risk monitoring, and recycling projects. It was emphasized that the template proposals themselves should not overly burden practitioners and remain user-oriented and friendly.

VI. Energizing sustainability: Committee on Sustainable Energy’s priorities and resource management matters (Agenda Item 4)

14. The secretariat provided an update on the recent activities of the Committee on Sustainable Energy, highlighting decisions related to the Expert Group's work. Notable topics included the Platform on Resilient Energy Systems and the endorsement by the Commission of the draft decision to the United Nations Economic and Social Council (ECOSOC) for the global application of UNRMS Principles and Requirements. Progress on the application of UNFC and UNRMS to hydrogen projects was discussed, along with the outcomes of the twenty-eighth Conference of the Parties (COP28) of the United Nations Framework Convention on Climate Change (UNFCCC) and their implications for the Expert Group. Additionally, preparations for the Committee's thirty-third session (Geneva, 18-20 September 2024) were outlined, underscoring opportunities for the Expert Group's contribution to the Committee's priorities.

15. The Expert Group noted that the Committee on Sustainable Energy's recent activities and decisions are crucial for advancing global sustainability efforts. ECOSOC's endorsement of the UNRMS Principles and Requirements and the proposed application to hydrogen projects are commendable steps towards a unified approach to resource management. The Platform on Resilient Energy Systems solidifies the commitment to a sustainable energy transition. The outcomes of COP28 further emphasize the need for such initiatives.

16. The Expert Group noted that the progress made by the Committee on Sustainable Energy aligns with the broader objectives of the 2030 Agenda for Sustainable Development. The decisions taken can significantly influence the sustainable management of resources and the global energy landscape. The Expert Group recommends continued support for these programmes and active contribution to the Committee's upcoming session, ensuring that sustainable energy and resource management remains at the forefront of the Committee's agenda.

17. The Expert Group noted with appreciation ECOSOC Resolution 2023/20 to strengthen the role of the secretariat of ECE in supporting member States in building resilient energy systems and modernizing resource management systems. The Expert Group further noted with appreciation the new P4 Economic Affairs Officer post in the Sustainable Energy Division approved by the General Assembly on 22 December (Resolution 78/253) to be

funded by General Temporary Assistance. The post is to support building resilient energy systems and modernizing resource management systems. The Expert Group noted that these two Resolutions were a strong recognition by UN Member States of the value of the Expert Group's work and outputs. In view of the ongoing liquidity crisis this new P4 post is currently frozen. The Expert Group noted that this would impact the deliverables of the Expert Group on Resource Management, notably a publication forecast on UNFC and UNRMS case studies would not be issued and one of the forecasted UNFC and UNRMS workshops would not be held.

VII. Minerals for the energy transition: United Nations Working Group on the Transforming the Extractive Industry for Sustainable Development (Agenda Item 5)

18. The session on Minerals for the Energy Transition was led by the UN Working Group on Transforming the Extractive Industries for Sustainable Development session, established in 2022 to coordinate and integrate the extractive industries' efforts across the UN and beyond. This Working Group is a key knowledge hub for sharing best practices, offering policy advice, and scaling up successful initiatives. Co-led by the UN Regional Economic Commissions, UNDP, and UNEP, the Working Group collaborates closely with the Expert Group, which develops and promotes UNFC and UNRMS as tools for sustainable resource management. The session benefited from the participation of representatives of UNEP, ESCAP, UNECE, ESCWA, and UNCTAD focused on opportunities and challenges in the extractive industries, especially concerning critical raw materials for the energy transition and the circular economy, as well as initiatives like the Critical Energy Transition Minerals Toolkit and the Framework for Just Transition.

19. An update on the UN Secretary-General's Panel on Critical Energy Transition Minerals that was announced at COP28 was provided.

20. The Expert Group noted the United Nations Working Group on Transforming the Extractive Industries for Sustainable Development as a central coordinating body that is instrumental in integrating the work of the extractive industries within the UN framework and beyond. The Working Group's establishment of a knowledge hub and its role in providing policy advice and technical assistance are pivotal in disseminating good practices and scaling successful initiatives. The Expert Group, being a key stakeholder due to its development and promotion of UNFC and UNRMS, acknowledges the importance of these tools in sustainable resource management.

21. The Expert Group noted the need for enhanced collaboration between the Expert Group and the Working Group to ensure the effective integration of UNFC and UNRMS into the extractive industries. The Expert Group noted the importance of a robust transparency and traceability framework to manage the supply of critical raw materials, which is crucial for the energy transition and the circular economy. The Expert Group also noted the value of the Critical Energy Transition Minerals Toolkit, the Knowledge Hub, and the Framework for Just Transition, all deliverables of the Working Group, in addressing the demand for minerals, sharing best practices, and ensuring an equitable shift towards sustainable practices.

VIII. Responsible resource management: Development and deployment of the United Nations Resource Management System (Agenda Item 6)

Documentation: Optimizing Resource Management for Critical Raw Materials: A Case Study of the Application of the United Nations Resource Management System with Cornwall Regional Government, UK
(ECE/ENERGY/GE.3/2024/6)

22. The discussions provided an in-depth exploration of the comprehensive framework designed to support sustainable resource management and the attainment of the SDGs. The session elucidated the key components of UNRMS, including its principles, requirements,

indicators, and tools. Additionally, the need for complementary documents and modules to address operational aspects was discussed, along with the innovative applications of blockchain and Artificial Intelligence (AI) within the UNRMS framework. The SDGs Delivery Working Group is in parallel testing in practice the use of open source code utilities for UNRMS blockchain/AI resource flow and value chain monitoring and redesign for the circular economic transition. This involves applying the system design developed by the United Nations Centre for Trade Facilitation and Electronic Business UN/CEFACT and the UN Transparency Protocol (UNTP) development teams, in which members of the SDGs Delivery Working Group are also represented, in particular for key blockchain functions such as product passport, traceability of product and supply chain events, integrating supply chain parties into smart contracts and verification of evidence within a transparent interoperability framework.

23. The session featured a presentation on the Critical Minerals Markets Information System Concept, delivered by the Senior Adviser on Strategy from the Cabinet Office, United Kingdom. The presentation elaborated on the trial project's objective to enhance critical minerals market information through various innovative methods. The Expert Group was presented with the details of the proposed liaison with the International Organization for Standardization (ISO) on the new standard ISO Project Committee 348 for Sustainable Raw Materials.

24. The Expert Group discussed the importance of traceability and audit sharing of critical raw materials. A representative of the Economic Cooperation and Trade Division of ECE delivered a presentation, offering insights into the initiatives and progress made in this domain, with a focus on the work and outputs of UN/CEFACT.

25. The Expert Group additionally discussed the deployment of UNRMS, focusing on developing case studies and pilot projects.

26. The Expert Group noted the comprehensive nature of UNRMS and its alignment with the SDGs. Integrating technologies such as blockchain and AI was recognized as a significant step towards modernizing resource management practices.

27. The Expert Group noted the proposal for a trial Critical Minerals Markets Information System (CriMMIs) by the United Kingdom and acknowledged its potential to enhance market transparency and stability for critical minerals.

28. The Expert Group noted the development of the new ISO standard on Sustainable Raw Materials. The Expert Group recommended liaison with ISO to maintain the relevance and effectiveness of UNRMS.

29. The Expert Group noted the strategic importance of deploying UNRMS to enhance the sustainable management of critical raw materials (CRMs). The case study on the application of UNRMS to CRMs in the United Kingdom (ECE/ENERGY/GE.3/2024/6) provided valuable insights into the practical benefits and challenges of implementing UNRMS at a sub-national level. The Expert Group recommended that the case study be uploaded to the ECE website and widely disseminated. The Expert Group recommended the development of additional case studies and pilot projects to explore the capabilities of UNRMS further.

30. The Expert Group noted the work of the United Nations Centre for Trade Facilitation and Electronic Business (UN/CEFACT) on traceability and audit sharing was recognized as a key component in achieving these goals. The Expert Group recommended active collaboration with these efforts to enhance the traceability and auditability of resource management processes.

IX. Decision support: Development and deployment of the United Nations Framework Classification for Resources (Agenda Item 7)

Documentation: Bridging Document between the Committee for Mineral Reserves International Reporting Standards Template and the United Nations Framework Classification for Resources (ECE/ENERGY/GE.3/2024/5)

Development of the draft Supplemental Specifications for the Application of the United Nations Framework Classification for Resources to Groundwater Resources – Inclusion of the Public Consultation Feedback (ECE/ENERGY/GE.3/2024/7)

Supplementary Specifications for the application of the United Nations Framework Classification for Resources (Update 2019) to Injection Projects for the Purpose of Geological Storage (ECE/ENERGY/GE.3/2024/9)

Informed Dialogue and Decisions for Sustainable Development – Adoption of the United Nations Framework Classification for Resources (ECE/ENERGY/GE.3/2024/10)

Task Force report and recommendations on the use of the G axis of the United Nations Framework Classification for Resources (ECE/ENERGY/GE.3/2024/11)

Classifying the production of lithium, caesium and tantalum from the Tanco Mine, Manitoba, Canada, according to the United Nations Framework Classification for Resources – A Case Study (ECE/ENERGY/GE.3/2024/12)

31. The Expert Group received an update from the Co-Chair of the Technical Advisory Group on the advancements and challenges in implementing UNFC. He elaborated on the activities of the Technical Advisory Group and the Working Groups of the Expert Group, as well as the opportunities, and implementation roadmap for UNFC, underscoring the important role of UNFC in attaining the SDGs. The ensuing discussions highlighted the progress of work on UNFC and UNRMS since the fourteenth session of the Expert Group in 2023, emphasizing the rigorous testing, review, and periodic updating that ensures UNFC's relevance and applicability.

32. The Expert Group noted with appreciation the work of the Technical Advisory Group to coordinate and support the activities of the Expert Group's sectoral Working Groups.

(a) Accelerated adoption of the United Nations Framework Classification for Resources

(i) Accelerating decision support - Breaking adoption barriers

33. The Expert Group was provided with a comprehensive presentation by the Chair of the UNFC Adoption Group on the efforts to overcome obstacles hindering the implementation and use of UNFC and UNRMS. The session delved into the strategies to increase awareness, acceptance, and uptake of UNFC among diverse stakeholders, including governments, industry, investors, and international organizations. Discussions revolved around identifying common adoption barriers, formulating actionable strategies to surmount them, and considering the potential extension of the UNFC Adoption Group's mandate. The Expert Group explored commercial aspects and financial reporting, encompassing the activities of financial regulators and other stakeholders. During the discussion on competency in resource management, a panel of experts presented various aspects of UNFC competency requirements.

34. The Social and Environmental Considerations Working Group Chair presented the Group's activities and findings related to social and environmental considerations. The Chair of the G axis Task Force presented a comprehensive update on the work of the Task Force, clarifying the use of the G-axis criteria across various resource sectors.

35. Presentations and discussions highlighted work related to women, gender, diversity, and inclusion in resource management. One presentation highlighted the challenges and importance of protecting human rights in resource management practices, particularly those of Indigenous Peoples.

36. Several presentations and panel discussions highlighted the work of the Resource Management Young Member Group and the impact of its activities. The Expert Group was informed about the development of the UNECE publication “Critical Minerals for the Sustainable Energy Transition: A Guidebook to Support Intergenerational Action in Resource Management” and its launch of the Guidebook at the fifteenth session. The Guidebook was developed by the Resource Management Young Member Group.

37. The Expert Group appreciated the UNFC Adoption Group's efforts to identify and address the challenges to widespread implementation and use of UNFC and UNRMS. The document “Informed Dialogue and Decisions for Sustainable Development – Adoption of the United Nations Framework Classification for Resources” (ECE/ENERGY/GE.3/2024/10) highlights the significant opportunity that accelerated UNFC adoption offers in facilitating informed dialogue and decisions in sustainable resource management. The Expert Group recognised the value in further developing UNFC as a management platform that provides information to support dialogue and decision-making for sustainable resource management in alignment with the UNRMS principles.

38. The Expert Group noted with appreciation the eight opportunities for acceleration identified by the UNFC Adoption Group. These recommendations cover communicating the purpose of UNFC, adding metrics that matter, building alliances with standard-setting organisations, supporting strategic use cases and adoption champions, providing a global UNFC adoption support capacity, updating and/or completing the UNFC specifications and enabling digitalization. The document further proposes how each of the recommendations might be implemented, and by whom and when. Key stakeholder groups identified and benefiting from accelerated UNFC adoption for decision support are: Member State entities tasked with resource governance and management, International Centres of Excellence on Sustainable Resource Management, respective industries, and capital allocators, as well as the public at large. The Expert Group noted that accelerated uptake of UNFC and UNRMS is instrumental in supporting attainment of the SDGs and the Paris Agreement and requested the Bureau to explore implementing the recommendations. The Expert Group requested the Bureau to report back on progress on acceleration to the Expert Group at its sixteenth session.

(ii) Commercial aspects and financial reporting

39. The Expert Group noted the work of the Commercial Applications Working Group on the commercial aspects and financial reporting. The Expert Group recommended continued collaboration with financial regulators to ensure that the frameworks of UNFC and UNRMS are effectively integrated into financial reporting practices. The Expert Group recommended exploring additional guidance documents to support the application of these frameworks in commercial and financial contexts, enhancing the transparency and reliability of reporting in the sector. The Expert Group requested the Bureau to consider integrating the Commercial Applications Working Group activities with the sustainability-related commercial activities required to implement the recommendations of the UNFC Adoption Group.

(iii) Competency in resource management

40. The Expert Group noted the Competency Working Group's initiatives to refine global competency models and develop role-specific use cases. The Expert Group recommended further collaboration to align competencies with resource management functions and continued development of competency frameworks to support sustainable resource

management. The Expert Group requested the Competency Working Group to develop a model on how to implement the competency in practice.

(iv) Social and environmental considerations

41. The Expert Group noted the work of the Social and Environmental Considerations Working Group, emphasizing the integration of UNFC and UNRMS within Environmental, Social, and Governance (ESG) frameworks. The Expert Group recommended developing additional guidelines to assist stakeholders in implementing these frameworks effectively, ensuring that social and environmental considerations remain central to resource management decisions. The Expert Group recommended developing and disseminating case studies and best practices on social and environmental considerations to enhance understanding and adoption of UNFC and UNRMS.

(v) Understanding the G axis

42. The Expert Group noted the G axis Task Force's report, which elucidates the application of G-axis criteria across resource sectors. The Expert Group recommended the Task Force develops guidance on the uses of the G axis as proposed in the report, thereby supporting informed decision-making in resource management and contributing to the sustainable attainment of the SDGs. It also recommended that relevant Working Groups consider whether additional resource-specific guidance is required on how to estimate quantities and assign appropriate G-axis Categories. The Expert Group further requested the Bureau, in cooperation with the Secretariat, to address the related issues raised in the report, namely: develop a brief online summary which lists all relevant UNFC documents for different types of users, update the guidance note on the definition of a project, develop guidance on aggregation, document what provides direct versus indirect evidence for different resources.

43. As an outcome of the work and findings of the G axis Task Force, the Expert Group recommended that the Joint UNFC and CRIRSCO Task Force, having completed the Bridging Document between the CRIRSCO Template and UNFC, focus its future work on the challenge of identifying probabilistic approaches to the classification of mineral resources and their suitability for future inclusion as methods to apply to the G axis. The Expert Group requested that a report on progress made be presented at the sixteenth session of the Expert Group.

(vi) Women and the protection of human rights in resource management

44. The Expert Group noted the progress made by the Women in Resource Management Working Group to promote gender diversity and inclusion. It acknowledged the challenges faced by women, particularly in protecting human rights within resource management. The Expert Group noted the fundamental role of human rights as an integral part of sustainable resource management, emphasizing that protecting these rights is essential for the ethical and equitable use of resources. The Expert Group further noted the importance of safeguarding the rights of indigenous populations. The Expert Group recommended continuing efforts to address these challenges and develop a guideline document on policies that support equality and the protection of human rights in all aspects of resource management.

(vii) Youth

45. The Expert Group noted the Resource Management Young Member Group's significant role in engaging youth in sustainable resource management, as well as the role of youth in securing a just energy transition. The publication "Critical Minerals for the Sustainable Energy Transition: A Guidebook to Support Intergenerational Action", developed by the Resource Management Young Member Group, is a leading initiative to educate and involve the younger generation and key stakeholders in understanding and managing resources sustainably. The Expert Group recommended the Guidebook be uploaded to the ECE website and widely disseminated, including disseminating it to the UN regional economic commissions and other relevant UN bodies and mechanisms. The Expert Group recommended further promotion of the Group's activities to foster intergenerational

collaboration and ensure that the perspectives of young professionals are integrated into resource management strategies.

(b) Applications

46. The Expert Group received a comprehensive briefing on the application of UNFC across various resource sectors. The Co-chair of the Minerals Working Group presented updates on the Bridging Document between the CRIRSCO Template and UNFC (ECE/ENERGY/GE.3/2024/5). A lithium case study from Manitoba, Canada, was presented (ECE/ENERGY/GE.3/2024/12). The Petroleum Working Group Chair presented a joint UNFC and Petroleum Resources Management System (PRMS) financial reporting proposal. The Renewable Energy Working Group Co-chair shared updates on the application of UNFC to renewables and highlighted important progress to apply UNFC to geothermal resources globally. The Chair of the Injection Projects Working Group presented the updated Specifications document for UNFC application to injection projects (ECE/ENERGY/GE.3/2024/9), as well as proposed modifications received during the meeting. The Chair of the Groundwater Resources Working Group presented a roadmap to address the comments received the Public Consultation on the Draft Supplemental Specifications for the Application of UNFC to Groundwater Resources³ (ECE/ENERGY/GE.3/2024/7). Finally, updates on hydrogen and other potential applications were discussed, including cooperation with the ECE Group of Experts on Gas and the Group of Experts on Cleaner Electricity Systems to develop international hydrogen standards.

(i) Minerals

47. The Expert Group noted the Minerals Working Group's successful application of UNFC and UNRMS to mineral resources. The Expert Group approved the Bridging Document between the CRIRSCO Template and UNFC (ECE/ENERGY/GE.3/2024/5), which has been updated to promote a unified approach to reporting mineral reserves. The Expert Group noted with appreciation the Guidance Note to support application of the Bridging Document (EGRM-15/2024/INF.1).

48. The Expert Group noted the case study on lithium, caesium, and tantalum resources in Manitoba, Canada (ECE/ENERGY/GE.3/2024/12), which exemplifies the practical application of UNFC. The Expert Group recommended the case study be uploaded to the ECE website and widely disseminated.

(ii) Petroleum

49. The Expert Group noted the work of the Petroleum Working Group. The proposal for a joint UNFC and PRMS financial reporting template marks a significant step towards harmonizing resource classification and financial transparency. The Expert Group recommended the development of this template in association with the Commercial Applications Working Group to enhance consistency in reporting and decision-making processes across the petroleum sector.

(iii) Renewable energy resources

50. The Expert Group noted the progress in applying UNFC and UNRMS to renewable energy resources, acknowledging the Renewable Energy Working Group's role in this advancement. The potential for enhanced cooperation with the ECE Group of Experts on Renewable Energy was recognized as a means to further support and optimize the application of these frameworks. The Expert Group recommended fostering closer collaboration to harmonize efforts, share best practices, and develop comprehensive guidelines for renewable energy classification and management, thereby facilitating a sustainable energy transition.

³ <https://unece.org/draft-unfc-supplemental-specifications-groundwater-resources>

(iv) Nuclear fuel resources

51. The Expert Group noted the work of the Nuclear Fuel Resources Working Group in the integration of UNFC and UNRMS into nuclear fuel resource management. The Expert Group recommended further exploration of these applications through case studies and collaboration with relevant stakeholders to ensure the frameworks' effectiveness and adaptability to the nuclear sector's unique requirements.

(v) Injection Projects

52. The Expert Group noted the Injection Projects Working Group's update on the application of UNFC and UNRMS to injection projects, in particular the updated Specifications for the Application of UNFC to Injection Projects for the Purpose of Geological Storage (ECE/ENERGY/GE.3/2024/9). This document is instrumental in guiding the classification and management of injection projects, ensuring they align with sustainable practices and contribute to geological storage solutions. The Expert Group approved this document, subject to the modifications received during the meeting being included, recognizing its significance in advancing responsible resource management and supporting the broader goals of environmental stewardship and transition towards a sustainable energy system based on renewable energy sources. The Expert Group encouraged the Injection Projects Working Group to develop a Bridging Document between ECE/ENERGY/GE.3/2024/9 and the SPE Storage Resource Management System (SRMS). The Expert Group recommended the secretariat to explore liaison to ISO Technical Committee 265.

(vi) Anthropogenic resources

53. The Expert Group noted the work of the Anthropogenic Resources Working Group in applying UNFC and UNRMS to anthropogenic resources, a key step in promoting sustainable resource management. The Expert Group recommended developing case studies and encouraged further research to expand the application of UNFC and UNRMS, ensuring comprehensive coverage of all anthropogenic resource types.

(vii) Groundwater resources

54. The Expert Group noted the Groundwater Resources Working Group's efforts in advancing the application of UNFC and UNRMS to groundwater resources. The Expert Group acknowledged the document ECE/ENERGY/GE.3/2024/7, which includes the feedback from the Public Consultation on the Draft Supplemental Specifications for the Application of UNFC to Groundwater Resources and the road map to work collectively with all interested stakeholders in addressing the issues raised.

55. The Expert Group requested the Working Group to demonstrate the added value of applying UNFC to groundwater and alignment with existing UN frameworks such as those of the United Nations Educational, Scientific and Cultural Organization (UNESCO) Intergovernmental Hydrological Programme (IHP) and the ECE Water Convention through consultations within the UN Water Expert Group on Groundwater. The Expert Group on Resource Management requested the Groundwater Resources Working Group to share the results of this analysis and organize additional stakeholder and member State consultations, before undertaking further work on the Specifications.

56. The Expert Group further noted the importance to ensure that any revision of the Specifications will support sustainable groundwater management and meet the needs expressed during the public consultation, by associating the hydrogeological community. The Expert Group recognized that the development of case studies would be instrumental to demonstrate the added value of the Specifications and foster a deeper understanding of their impact on groundwater resources management.

(viii) Hydrogen and other potential applications

57. The Expert Group noted the potential of UNFC and UNRMS in classifying and managing hydrogen projects, recognizing the need to contribute to developing international standards and guidelines. The collaboration with the ECE Group of Experts on Gas and the

ECE Group of Experts on Renewable Energy in the framework of the Hydrogen Task Force is crucial for developing these standards.

X. Building capacity: International Centres of Excellence on Sustainable Resource Management (Agenda Item 8)

Documentation: International Centres of Excellence on Sustainable Resource Management - Criteria for Recognition and Terms of Reference (ECE/ENERGY/GE.3/2024/4)

58. Presentations were provided by representatives of several International Centres of Excellence on Sustainable Resource Management (ICE-SRM), including those from Russia, UK, EU, Kazakhstan, Mexico, and Africa. These Centres are pivotal in the global deployment of UNFC and UNRMS, offering policy support, technical advice, research, education, and other critical activities for sustainable resource management. Recognizing the importance of these Centres, the Committee on Sustainable Energy, at its twenty-eighth session in 2019, endorsed the proposal to establish a Centre on Sustainable Resource Management (CSRMS) to coordinate the network. The Expert Group discussed the revised Criteria for Recognition of an ICE-SRM and their Terms of Reference (ECE/ENERGY/GE.3/2024/4), as well as other governance-related issues. Additionally, the development of a draft framework Memorandum of Understanding between ECE and the ICE-SRMs was discussed.

59. The Expert Group noted that establishing International Centres of Excellence on Sustainable Resource Management (ICE-SRMs) is pivotal for the global dissemination and deployment of UNFC and UNRMS. These Centres are envisioned to offer comprehensive support, including policy guidance, technical advice, and educational services, essential for stakeholders in sustainable resource management. The Expert Group approved the revised criteria for ICE-SRMs recognition and their Terms of Reference (ECE/ENERGY/GE.3/2024/4). These are critical steps towards formalizing the ICE-SRMs roles and responsibilities. The Expert Group noted the importance of the Terms of Reference and their role in ensuring that ICE-SRMs operate within a clear and structured framework to effectively coordinate global efforts and resources for sustainable resource management initiatives. The Expert Group requested that the revised criteria for ICE-SRMs recognition and their Terms of Reference be submitted to the thirty-third session of the Committee on Sustainable Energy (Geneva, 18-20 September 2024) for review and approval.

60. The Expert Group noted the importance of the ICE-SRMs in disseminating UNFC and UNRMS, and their comparable and coherent use that would still sufficiently be tailored to users' needs. The Expert Group noted with appreciation the ICE-SRMs established in the Russian Federation, Kazakhstan for Central Asia, United Kingdom, and Mexico for Latin America and the Caribbean. The Expert Group further noted the progress and/or interest to establish an ICE-SRM in Slovenia for EU countries, in Africa, India and in East and South-East Asia.

61. The Expert Group also acknowledged the significant progress made by the African Minerals Development Centre (AMDC) in developing and implementing the African Minerals and Energy Resources Classification and Management System (AMREC) and the Pan African Resource Reporting Code (PARC). These initiatives are based on UNFC and UNRMS, further reinforcing the global applicability and adaptability of these frameworks. Additionally, the Expert Group recognized the ongoing efforts to develop and refine a number of AMREC-PARC case studies, which serve to validate and enhance the robustness of the frameworks in diverse technological and socio-economic contexts.

62. The Expert Group noted the lack of resources (human and financial) to implement and adopt UNFC and UNRMS at the scale needed. The Expert Group requested the Bureau and the Secretariat to explore opportunities to secure additional extrabudgetary resources, particularly in light of the current liquidity constraints at the UN, as well as for facilitating the Network of ICE-SRMs and potentially offering the views of the Expert Group and/or ECE as observers in the ICE-SRMs that are part of the Network and to report on progress to the sixteenth session of the Expert Group.

XI. Enhancing expertise, adoption and implementation: Mandate, governance and work plans for 2022-2023 and 2024-2025 and the evaluation of activities (Agenda Item 9)

- Documentation:* Work Plan for the Expert Group on Resource Management for 2022-2023 (ECE/ENERGY/GE.3/2021/3)
- Work Plan of the Expert Group on Resource Management for 2024-2025 (ECE/ENERGY/2023/7)
- Expert Group on Resource Management Document Review and Approval Process (ECE/ENERGY/GE.3/2024/3)
- Revised Mandate and Terms of Reference of the Expert Group on Resource Management (ECE/ENERGY/GE.3/2024/8)

63. The Expert Group discussed the implementation of its work plan for 2022-2023 and deliberated on its work plan for 2024-2025. The Expert Group considered requesting an extension to its mandate since the current five-year mandate will expire at the end of 2024. The Expert Group also discussed proposing changes to its Terms of Reference to align them with the current work plan for 2024-2025. The Expert Group's Terms of Reference have not been updated since 2018. The Expert Group explored alternative options to implement and disseminate UNFC and UNRMS within the ECE region and beyond. The Expert Group discussed how best to align its activities with the agendas and priorities of the Committee on Sustainable Energy and the UN Working Group on Transforming the Extractive Industries for Sustainable Development.

64. The Expert Group was briefed on the evaluation of its work currently being undertaken. The evaluation includes both the regular budget and extrabudgetary activities on sustainable resource management. Expert Group members were encouraged to respond to the Survey circulated since it collects perspectives on UNECE's priority activities going forward.

65. The Expert Group noted with appreciation the implementation of the work plan for 2022-2023 (ECE/ENERGY/GE.3/2021/3), which has significantly contributed to the development and adoption of UNFC and UNRMS. The Expert Group noted the progress to implement the work plan for 2024-2025 (ECE/ENERGY/2023/7). This work plan focuses on efforts to enhance expertise and foster the adoption and implementation of these frameworks, which are vital for sustainable resource management.

66. The Expert Group noted that its five-year mandate will expire at the end of 2024. The Expert Group recommended requesting an extension of its mandate for five years beyond 2024 to continue its critical work on UNFC and UNRMS. Noting that its Terms of Reference were last updated in 2018, the Expert Group recommended to revise them to reflect its current work plan (ECE/ENERGY/GE.3/2024/8). The Expert Group requested that the mandate extension and revised Terms of Reference be submitted to the Committee on Sustainable Energy at its thirty-third session for approval.

67. The Expert Group noted the challenges of further developing, maintaining and disseminating UNFC and UNRMS, both of which are recommended by ECOSOC for global application by UN Member States. However, the Expert Group has a regional constituency and all non-ECE member States participate in the capacity of observers. The Expert Group therefore recommended to the Committee on Sustainable Energy to consider options for the Expert Group to address this inconsistency and allow all interested UN Member States to be able to participate in decision-making related to UNFC and UNRMS on an equal basis.

68. The Expert Group recommended the introduction of a comprehensive document review and approval process, recognizing its potential to significantly enhance the quality, timeliness, and alignment of the documents related to UNFC and UNRMS, as outlined in ECE/ENERGY/GE.3/2024/3.

69. The Expert Group noted the draft evaluation recommendations to improve the relevance, effectiveness, efficiency, impact, and sustainability of its activities.

XII. Empowering Sustainability: Global Initiative for United Nations Resource Systems (Agenda Item 10)

(a) Case Studies

70. The Expert Group discussed global initiatives to implement UNFC and UNRMS for sustainable resource management. Case studies were reviewed to extract lessons and recommendations for broader and consistent application of UNFC and UNRMS.

71. The Expert Group noted that the case studies presented offer valuable insights into the practical application of UNFC and UNRMS across various contexts, underscoring their versatility and impact. The Expert Group recommended the continued collection and analysis of case studies to guide and encourage broader adoption of these frameworks.

72. The Expert Group noted the challenges and opportunities in sustainable resource management in Ukraine and also noted the importance of collaboration and capacity-building initiatives to address these issues effectively.

(b) Regular and extrabudgetary projects

73. Updates on regular and extrabudgetary projects supporting implementation and dissemination of UNFC and UNRMS, including those funded by the European Commission and the United Kingdom, were shared. The European Commission-funded projects are the Phase I and Phase II “Supporting UNECE member States in the development and implementation of the UNFC and UNRMS” projects. The Phase I project ends on 15 July 2024 and the Phase II project on 31 December 2027. The United Kingdom-funded project focuses on Implementing UNRMS for Circular Materials and Sustainable Resource Management. This 36-month project started in March 2024. The session also covered progress on projects funded by the United Nations Development Account (UNDA) and support to work on UNFC and UNRMS provided by the Regular Programme of Technical Cooperation (RPTC).

74. Challenges associated with resource mobilization for the work of the Expert Group on Resource Management and partnership development were discussed.

75. The Expert Group noted the progress in implementing regular and extrabudgetary projects, acknowledging their role in advancing UNFC and UNRMS. Notable are the European Commission-funded projects (Phase I and II) supporting UNECE member States and the United Kingdom-funded project for UNRMS and circular materials. The Expert Group noted the UN Development Account (UNDA) projects on post-COVID-19 recovery and critical raw materials production for a low-carbon transition. These projects are pivotal for technical assistance, capacity-building, and stakeholder knowledge sharing.

XIII. Amplifying the message: Communications, promotion and outreach (Agenda Item 11)

76. The Expert Group delved into the activities of the Communications Working Group, focusing on its ongoing and proposed collaborations with various stakeholders. The group explored potential synergies and complementarities of efforts with international organizations. The Expert Group reviewed and discussed the planned activities and upcoming events for 2024 and 2025 aimed at promoting and educating on the UNFC and UNRMS frameworks. The objective is to enhance outreach and awareness of these frameworks to a broader audience, thereby fostering their widespread adoption and implementation.

77. The Expert Group noted the activities of the Communications Working Group, which highlighted the collaborative efforts with diverse entities to promote UNFC and UNRMS. The Expert Group noted the enhanced cooperation with international organizations.

XIV. Election of officers (Agenda Item 12)

78. The Expert Group elected the following experts to the Bureau as Vice-Chairs with effect from the close of the fifteenth session for two years until the close of the seventeenth session: Ms. Branka Knežević (Bosnia and Herzegovina), Mr. Victor Babashev (Kazakhstan) and Mr. David Govoni (European Federation of Geologists (EFG)).

79. The Bureau comprises Ms. Karen Hanghøj (United Kingdom) as Chair and Ms. Branka Knežević (Bosnia and Herzegovina), Mr. Victor Babashev (Kazakhstan), Mr. Stig-Morten Knutsen (Norway), Mr. Andrzej Głuszyński (Poland), Ms. Teresa Ponce de Leão (Portugal), Ms. Erika Ingvald (Sweden), Ms. Múcella Ersoy (Türkiye), Ms. Sarah Forbes (United States of America), Mr. David MacDonald (United States of America), Mr. Andrew Cross (Australia), Mr. Hussein Allaboun (Jordan), Mr. Ulises Neri (Mexico), Mr. Milan Grohol (EC D.G. GROW), Ms. Marit Kitaw (African Union Commission), Mr. Young Joo Lee (Coordinating Committee for Geoscience Programmes in East and Southeast Asia), Mr. David Govoni (EFG), Ms. Julie Hollis (EuroGeoSurveys), Mr. Henri Paillere (International Atomic Energy Agency), Ms. Gioia Falcone (International Geothermal Association) and Mr. Luis Lopez (Latin American Mining Organization) as Vice-Chairs. Mr. Aleksandr Shpilman, Co-Chair of the Technical Advisory Group, is an ex-officio member of the Bureau.

80. The Expert Group extended its thanks and appreciation to the outgoing members of the Bureau: Mr. Glen Burridge (EFG) and Mr. Satinder Purewal (former Co-Chair of the Technical Advisory Group, and ex-officio Vice-Chair of the Bureau).

XV. Other business (Agenda Item 13)

81. The Expert Group noted that energy and resource resiliency, including just transition, is a priority for the Committee on Sustainable Energy. This cross-cutting issue requires a holistic and integrated approach. Therefore, future sessions of the Expert Group will integrate more with the other Groups of Experts reporting to the Committee to jointly work on cross-cutting issues, share best practices, identify common challenges and opportunities, and leverage synergies for sustainable resource management. The objective is to start this approach effective the sixteenth session in 2025.

82. Following discussion and careful review and in light of the expanded scope of application and implementation of UNFC and the development of UNRMS, the Expert Group agreed that its sixteenth session needs to be held over five days, including an educational and training session on UNFC and UNRMS, but with an option to reduce the total number of days commensurate with the required agenda items without impacting the time available for the discussions or the quality of the agenda. The sixteenth session is scheduled to be held in Geneva, 24-28 March 2025.

XVI. Adoption of conclusions and recommendations (Agenda Item 14)

83. The Expert Group adopted the conclusions and recommendations.

XVII. Adoption of the report and close of the meeting (Agenda Item 15)

84. The meeting report was adopted subject to any necessary editing and formatting.
