



Economic Commission for Europe**Committee on Sustainable Energy****Twenty-eighth session**

Geneva, 25-27 September 2019

Item 5(c) of the provisional agenda

Sustainable resource management:**Groups of Experts on Cleaner Electricity Systems and Gas and Expert Group on Resource Management:
Mandates and work plans.****Work Plan of the Expert Group on Resource Management
for 2020-2021****Prepared by the Expert Group on Resource Management**

1. The United Nations Economic Commission for Europe (ECE) Executive Committee, in addressing matters related to the Committee on Sustainable Energy (ECE/EX/2018/L.10), has mandated the Expert Group on Resource Management to carry out concrete, results-oriented activities with the objective to develop, promote and support the implementation of a global system which can be used as a tool for the sustainable management of natural resources to support attainment of the 2030 Agenda for Sustainable Development (EXCOM/CONCLU/102 of the 102nd meeting of EXCOM¹).
2. According to its Terms of Reference, the Expert Group concentrates on the development and deployment of a United Nations Resource Management System (UNRMS) grounded in the United Nations Framework Classification for Resources (UNFC) comprising principles, specifications, guidelines, application protocols (procedures and checklists) and best practices to aid sustainable management of energy, raw materials and other resources.
3. The mandate for the Expert Group is approved until December 2024².

Concrete activities

4. The Expert Group has noted the powerful and positive benefits of diversity and inclusion in resource management. The Expert Group will, to the extent possible and subject to the availability of extrabudgetary resources, ensure that diversity and inclusion in resource management are reflected in its membership and during implementation of this work plan and any capacity-building or training activities.

¹ http://www.unece.org/fileadmin/DAM/commission/EXCOM/Agenda/2019/EXCOM_103_1_Feb_2019/EXCOM-Conclu-102.pdf.

² The Expert Group at its tenth session agreed to recommend to the Committee on Sustainable Energy at its twenty-eighth session a renewal of its five-year mandate to December 2024.

A. UNFC and UNRMS Principles and Definitions

Description: The Expert Group will develop, maintain and promote a comprehensive UNRMS that is an extension of UNFC. The work will involve improving and further developing principles, specifications, guidelines, application protocols, best practices and case studies to support sustainable management of energy and raw materials within the UNFC and UNRMS framework (including, but not restricted to minerals, petroleum, renewable energy, nuclear fuel resources, injection projects, anthropogenic resources and groundwater resources) in alignment with the Sustainable Development Goals (SDGs) and climate change mitigation. The Expert Group will explore and develop additional applications for UNFC and UNRMS to other natural resources as required, in particular, to groundwater resources and address the challenges of the food-energy-water-land nexus. The Expert Group will develop UNFC and UNRMS principles to support policymaking, national resource management planning and execution, business process innovation, capital allocation, financial reporting and sustainable development implementation, with consideration of environmental and social factors as well as local needs and priorities in sustainable resource management.

Work to be undertaken: The Expert Group will design and develop UNRMS principles and definitions that apply to all resources and assist countries in aligning management of their resource with the 2030 Agenda for Sustainable Development.

Deliverables:

- (a) UNFC-based UNRMS principles and definitions that apply to all resources;
- (b) System structure and guidance for application of UNFC and UNRMS to specific resource types and geographical contexts.

Timeline:

- (a) Plan and timeline for development of UNFC and UNRMS principles: April 2020;
- (b) First draft of UNFC-based UNRMS: September 2020;
- (c) Final draft of UNFC-based UNRMS: April 2021.

B. UNFC and UNRMS tool kit including specifications and guidelines for application

Description: The Expert Group will develop, maintain and update the specifications, guidelines, application protocols, best practices and case studies for the application of UNFC and UNRMS to specific resource types. UNFC and UNRMS principles, specification and guidelines are required to ensure effective use at a project level. The Expert Group will maintain a Technical Advisory Group coordinating various Sectoral Working Groups to develop the UNFC and UNRMS tool kit that will apply to multiple resource sectors within specific national and regional contexts.

Work to be undertaken:

- (a) The Technical Advisory Group will coordinate the integrated development of UNFC and UNRMS principles, specifications, guidelines, best practices and case studies for all resources to aid policy formulation, national resource management, company business process innovation and financial reporting.

Deliverables:

- (a) Overall coordination of integrated development and updating of UNFC and UNRMS principles, specifications, guidelines, best practices and case studies;
- (b) Best practice documentation and case studies on the opportunities for and challenges in using UNFC and UNRMS in various sectors.

Timeline:

- (a) Annual report to the eleventh session of the Expert Group, 2020;
- (b) Annual report to the twelfth session of the Expert Group, 2021;
- (c) Updated versions of UNFC and UNRMS documentation: April 2020 to ongoing;
- (d) Best practice document on the opportunities for and challenges of using UNFC and UNRMS: April 2020;
- (e) Case studies on the application of UNFC and UNRMS for integrated resource management: April 2021.

C. UNFC and UNRMS specifications and guidelines for Mineral Resources

Description: The Expert Group, through its Minerals Working Group, will develop additional documentation that supports the use of UNFC and UNRMS for sustainable management of mineral resources, including coal mine methane in collaboration with the Group of Experts on Coal Mine Methane.

Work to be undertaken: Development and maintenance of specifications, guidelines, application protocols, best practices and case studies for application of UNFC and UNRMS to mineral resources. The Working Group will work under the guidance of the Technical Advisory Group and will report to the Bureau of the Expert Group between annual sessions of the Expert Group.

Deliverables:

- (a) Develop, maintain and support the implementation of specifications and guidelines for application to mineral resources;
- (b) Develop best practices and case studies for application to mineral resources.

Timeline:

- (a) Specifications and guidelines for application to mineral resources: April 2020 to ongoing;
- (b) Best practices and case studies for application to mineral resources: April 2020 to ongoing.

D. UNFC and UNRMS specifications and guidelines for Petroleum Resources

Description: The Expert Group, through its Petroleum Working Group, will develop and update documentation that allows application of UNFC and UMRMS to petroleum resources, including coal bed methane.

Work to be undertaken: Development and maintenance of specifications, guidelines, application protocols, best practices and case studies for application of UNFC and UNRMS to petroleum resources. The Working Group will work under the guidance of the Technical Advisory Group and will report to the Bureau of the Expert Group between annual sessions of the Expert Group.

Deliverables:

- (a) Develop, maintain and support the implementation of specifications and guidelines for application to petroleum resources;
- (b) Develop best practices and case studies for application to petroleum resources.

Timeline:

- (a) Specifications and guidelines for application to petroleum resources: April 2020 to ongoing;
- (b) Best practices and case studies for application to petroleum resources: April 2020 to ongoing.

E. UNFC and UNRMS specifications and guidelines for Renewable Energy Resources

Description: The Group of Experts, through its Renewable Energy Resources Working Group and the Geothermal, Bioenergy, Solar energy, Wind Energy, Hydro Energy and Marine Energy Sub-groups, will continue to develop documentation that will allow UNFC and UNRMS to be applied to renewable energy resources.

Work to be undertaken:

- (a) Develop and maintain generic specifications and guidelines for renewable energy;
- (b) Develop and maintain specifications and guidelines for the application of UNFC and UNRMS to geothermal energy;
- (c) Develop and maintain specifications and guidelines for the application of UNFC and UNRMS to bioenergy;
- (d) Develop and maintain specifications and guidelines for the application of UNFC and UNRMS to solar energy;
- (e) Develop and maintain specifications and guidelines for the application of UNFC and UNRMS to wind energy;
- (f) Develop and maintain specifications and guidelines for the application of UNFC and UNRMS to hydro energy;
- (g) Develop and maintain specifications and guidelines for the application of UNFC and UNRMS to marine energy;
- (h) Develop case studies and best practices for the application of UNFC and UNRMS to renewable energy.

5. The Working Group and its Sub-groups will work under the guidance of the Technical Advisory Group and will report to the Bureau of the Expert Group between annual sessions of the Expert Group.

Deliverables:

- (a) Documentation that allows UNFC and UNRMS to be applied to renewable energy resources, including updated generic specifications, specifications and guidelines for bioenergy, solar, wind energy, hydro energy and marine energy. All documentation to be subject to review by the Expert Group and public consultation;
- (b) A series of case studies and best practices on the application of UNFC and UNRMS to geothermal energy, bioenergy, solar energy, wind energy, hydro energy, and marine energy.

Timeline:

- (a) Updated generic specifications and guidelines for renewable energy: April 2020 to ongoing;
- (b) Geothermal energy specifications and guidelines: April 2020 to ongoing;
- (c) Bioenergy specifications and guidelines: April 2020 to ongoing;
- (d) Solar energy specifications and guidelines: April 2020 to ongoing;
- (e) Wind energy specifications and guidelines: April 2020 to ongoing;

- (f) Hydro energy specifications and guidelines: April 2020 to ongoing.
- (g) Marine energy specifications and guidelines: April 2020 to ongoing.
- (h) Guidelines and case studies for the application of UNFC and UNRMS to renewable energy: April 2020 to ongoing.

F. UNFC and UNRMS specifications and guidelines for Injection Projects

Description: The Expert Group, through its Injection Projects Working Group, will develop additional documentation to support the use of the Specifications for the Application of UNFC and UNRMS to Injection Projects for Geological Storage (for example, storage of carbon dioxide, natural gas storage or other fluid waste disposal projects).

Work to be undertaken: Provide detailed specifications, guidelines and case studies for application of UNFC and UNRMS to Injection Projects for Geological Storage. The Working Group will work under the guidance of the Technical Advisory Group and will report to the Bureau of the Expert Group between annual sessions of the Expert Group.

Deliverables:

- (a) Develop, maintain and support the implementation of specifications and guidelines for application to injection projects;
- (b) Case studies and best practices for the use of UNFC and UNRMS to carbon capture and storage projects.

Timeline:

- (a) Specifications and guidelines and case studies on injection projects: April 2020 to ongoing;
- (b) Case studies and best practices on the application of UNFC and UNRMS to carbon capture and storage projects: April 2020 to ongoing.

G. UNFC and UNRMS specifications and guidelines for Nuclear Fuel Resources

Description: The Expert Group, through its Nuclear Fuel Resources Working Group, will develop additional documentation that supports the use of UNFC and UNRMS for sustainable management of nuclear fuel resources.

Work to be undertaken: The Nuclear Fuel Resources Working Group will produce documentation on the application of UNFC and UNRMS for nuclear fuel resources projects. Particular attention will also be given to the requirements of uranium resource management coupled to hybrid energy systems such as small modular reactors and renewable energy. The Working Group will work under the guidance of the Technical Advisory Group, consult other Working Groups as appropriate, and will report to the Bureau of the Expert Group between annual sessions of the Expert Group.

Deliverables:

- (a) Develop, maintain and support the implementation of specifications and guidelines for application to nuclear fuel resources;
- (b) Develop best practices and case studies for application to nuclear fuel resources in hybrid energy systems;
- (c) Develop guidelines for investment and financing instruments for entry-level projects.

Timeline:

- (a) Specifications and updated guidelines for application to nuclear fuel resources: April 2020 to ongoing;

- (b) Best practices and case studies for application to nuclear fuel resources: April 2020 to ongoing;
- (c) Guidelines for investment and financing for entry-level projects: April 2021.

H. UNFC and UNRMS specifications and guidelines for Anthropogenic Resources

Description: The Expert Group, through its Anthropogenic Resources Working Group, will develop documentation that will allow UNFC and UNRMS to manage the recovery of secondary resources from anthropogenic resources. Anthropogenic resources, which are primarily mining residues, commodity processing residues and other wastes, have assumed importance in the current scenarios related to the Sustainable Development Goals in which the strategy to reduce, reuse and recycle residues is being emphasized. The Working Group will work under the guidance of the Technical Advisory Group and will report to the Bureau of the Expert Group between annual sessions of the Expert Group.

Work to be undertaken: Provide specifications, detailed guidelines and case studies for application of UNFC and UNRMS to anthropogenic resources.

Deliverables:

- (a) Specifications and guidelines for application of UNFC and UNRMS to anthropogenic resources;
- (b) Best practices and case studies for application to anthropogenic resources.

Timeline:

- (a) Specifications and guidelines for application to anthropogenic resources: April 2020 to ongoing;
- (b) Best practices and case studies for application to anthropogenic resources: April 2020 to ongoing.

I. UNFC and UNRMS specifications and guidelines for commercial applications and financial reporting

Description: UNFC and UNRMS have been designed to meet, to the extent possible, the needs of all applications on commercial applications and financial reporting standards, particularly those promulgated by the International Accounting Standards Board (IASB).

Work to be undertaken: The Commercial Working Group will produce documentation on the application of UNFC and UNRMS for commercial applications, valuation and financial reporting. The Working Group will work under the guidance of the Technical Advisory Group and will report to the Bureau of the Expert Group between annual sessions of the Expert Group.

Deliverables:

- (a) Annual status report submitted to the Expert Group on any changes or developments in the financial reporting sector globally with implications or potential implications for UNFC and UNRMS and the work of the Expert Group;
- (b) Specifications and guidelines for application of UNFC and UNRMS to commercial applications, valuation and financial reporting;
- (c) Best practices and case studies for application to commercial applications, valuation and financial reporting.

Timeline:

- (a) Specifications and guidelines for commercial applications, valuation and financial reporting: April 2020 to ongoing;

(b) Best practices and case studies for application to commercial applications, valuation and financial reporting: April 2020 to ongoing.

J. UNFC and UNRMS specifications and guidelines for Groundwater Resources

Description: The Expert Group, through its Groundwater Resources Working Group, will develop documentation that will allow UNFC and UNRMS to manage groundwater resources. The Working Group will work under the guidance of the Technical Advisory Group and will report to the Bureau of the Expert Group between annual sessions of the Expert Group.

Work to be undertaken: Provide specifications, detailed guidelines and case studies for application of UNFC and UNRMS to groundwater resources.

Deliverables:

(a) Specifications and guidelines for application of UNFC and UNRMS to groundwater resources;

(b) Best practices and case studies for application to groundwater resources.

Timeline:

(a) Specifications and guidelines for application to groundwater resources: April 2020 to ongoing;

(b) Best practices and case studies for application to groundwater resources: April 2020 to ongoing.

K. UNFC and UNRMS specifications and guidelines for Social and Environmental Considerations

Description: The Expert Group through its Social and Environmental Considerations Working Group will develop and maintain specifications and guidelines on environmental and social considerations in UNFC and UNRMS. The Working Group will work under the guidance of the Technical Advisory Group and will report to the Bureau of the Expert Group between annual sessions of the Expert Group.

Work to be undertaken: Develop detailed specifications, guidelines and best practices on social and environmental considerations in sustainable resource management in complete alignment to Sustainable Development Goals. The work will be conducted in cooperation with as wide a range of UNFC and UNRMS Working Groups and stakeholders as possible.

Deliverables:

(a) Detailed specifications, guidelines and best practices on assessing the social and environmental aspects for the management of resources according to UNFC and UNRMS, in particular, to ensure alignment with the Sustainable Development Goals.

Timeline:

(a) Detailed social and environmental guidelines and specifications in resource management: April 2020 to ongoing;

(b) Best practice documents on technical, policy and legal aspects related to accommodating social and environmental considerations for the management of resources in various sectors: April 2020 to ongoing.

L. UNFC and UNRMS guidelines for Competent Persons in Resource Management

Description: The Expert Group through its Competent Persons Task Force will develop guidelines to support the transparency and accountability of the UNFC and UNRMS for the classification and management of natural resources. The Working Group will work under the guidance of the Technical Advisory Group and will report to the Bureau of the Expert Group between annual sessions of the Expert Group.

Work to be undertaken: Develop detailed guidelines to support transparency, reliability and consistency of UNFC and UNRMS for classification and management of all resources. The work will be conducted in cooperation with as wide a range of UNFC and UNRMS Working Groups and stakeholders as possible.

Deliverables:

- (a) Detailed guidelines on for UNFC and UNRMS Competent Person requirements for resource reporting;
- (b) Report on alignment between UNFC and UNRMS Competent Person requirements and options for resources reporting and existing competency frameworks prescribed by relevant reporting standards.

Timeline:

- (a) Detailed Competent Person guidelines for resource reporting: April 2020 to ongoing;
- (b) Report on alignment between UNFC and UNRMS Competent Person requirements and existing competency frameworks: April 2020 to ongoing.

M. UNFC and UNRMS guidelines and best practices for the delivery of Sustainable Development Goals and support to the Food-Water-Energy Nexus

Description: The Expert Group, through its Sustainable Development Goals Working Group, will develop documents that will support the effective use of UNFC and UNRMS to help attain the relevant Sustainable Development Goals, especially in the context of integrated, multi-resource energy and raw material projects combining more than one clean energy source. The work will be conducted in cooperation with other relevant stakeholders and international organizations. The Working Group will work under the guidance of the Technical Advisory Group, consult other Working Groups as appropriate, and will report to the Bureau of the Expert Group between annual sessions of the Expert Group.

Work to be undertaken: The Expert Group, will work to produce specifications, guidelines and other documents such as case studies and white papers that will assist in the use of UNFC and UNRMS as a useful tool to aid the attainment of the relevant Sustainable Development Goals, as well as the reduction of greenhouse gas (GHG) emissions arising from the development and production of energy and raw materials.

Deliverables:

- (a) Development of detailed specifications, guidelines, best practices and case studies, on the effective use of UNFC and UNRMS for sustainable development of energy and raw material projects and related services that can support the attainment of relevant Sustainable Development Goals and reduce GHGs;
- (b) Best practices and case studies to demonstrate the effectiveness of UNFC and UNRMS for the realization of specific goals in energy and material flows;
- (c) Develop guidelines for good governance, investment and financing for transformative projects in balanced, integrated management of food, energy and water resources.

Timeline:

- (a) Development of specifications and guidelines to support the sustainability of projects: April 2020 to ongoing;
- (b) Development of best practices and case studies: April 2020 to ongoing;
- (c) Guidelines for good governance, investment and financing for transformative projects: April 2021.

N. Support to Implementation of UNFC and UNRMS and Partnerships in Sustainable Resource Management through a Global Network of International Centres of Excellence

Description: UNFC and UNRMS support the sustainable development of diverse energy, raw material and services sectors in different geographical locations. UNFC and UNRMS users needed to be trained on an ongoing basis and made aware of any changes to the framework and its applications. Subject to the availability of extrabudgetary resources, the Expert Group will develop capacity-building programmes on UNFC and UNRMS through the potential establishment of International Centres of Excellence.

The Expert Group and the Bureau will provide technical support for the International Centres of Excellence, including regional and national advisory services and international peer review missions to ECE and other United Nations Member States. Initiatives such as “UNFC and UNRMS for Europe”, “UNFC and UNRMS for Africa”, “UNFC and UNRMS for Eurasia and Asia-Pacific”, and “UNFC and UNRMS for Latin America” will be supported through the International Centres of Excellence.

Work to be undertaken: The International Centres of Excellence will be provided technical support for the development of concept notes, detailed project design and in implementation as necessary.

- (a) Subject to the availability of extrabudgetary resources, provide technical support for the implementation of regional and national UNFC and UNRMS initiatives;
- (b) Subject to the availability of extrabudgetary funds, provide support to the implementation of International Centres of Excellence in Sustainable Resource Management.

Deliverables:

- (a) Subject to the availability of extrabudgetary resources, support national and regional initiatives for the implementation of UNFC and UNRMS: April 2020 to ongoing;
- (b) Report and update the Expert Group annually on the status of implementation support to International Centres of Excellence for Sustainable Resource Management: April 2020 to ongoing;
- (c) Report on extrabudgetary projects to support capacity-building activities undertaken delivered annually to the Expert Group: April 2020 to ongoing.

Timeline:

- (a) National and regional capacity building initiatives on UNFC and UNRMS: 2020 and 2021;
- (b) Annual reports on the status of support to implement International Centres of Excellence for Sustainable Resource Management: April 2020 and April 2021;
- (c) Annual reports on capacity-building activities presented to the Expert Group: April 2020 and April 2021.

O. Communications, Promotion and Outreach

Description: The Expert Group through its Communications Working Group will implement the agreed promotion and outreach strategy. The Working Group will support

communications, promotion and outreach in coordination with other Working Groups. It is noted that many of the activities of the Working Group will be subject to the availability of extrabudgetary resources. The Working Group will report to the Bureau of the Expert Group between annual sessions of the Expert Group.

Work to be undertaken:

- (a) Support the development of the vision and mission statements of the Expert Group;
- (b) Develop and implement a strategy to attract experts to voluntarily work in the various Working Groups of the Expert Group;
- (c) Develop, maintain and update standard presentations on UNFC and UNRMS;
- (d) Conduct webinars on UNFC and UNRMS;
- (e) Contribute to workshops, seminars and other outreach events on UNFC and UNRMS e.g. development of programmes and agendas. Participation in events would be subject to the availability of extrabudgetary resources;
- (f) Identify events at which papers on UNFC and UNRMS could be presented and contribute to the writing of the papers and presentations;
- (g) Support the development of news stories and other material for ECE's web pages on sustainable resource management;
- (h) Develop promotional materials such as brochures and leaflets.

Deliverables:

- (a) Annual report on the education and outreach activities;
- (b) Updated standard presentations on UNFC and UNRMS;
- (c) Regular webinars;
- (d) Identify events to promote UNFC and UNRMS and prepare or contribute to papers and presentations;
- (e) New stories and other material for ECE website and promotional material such as brochures and leaflets.

Timeline:

- (a) Annual reports of the Communications Working Group presented to the Expert Group: April 2020 and April 2021;
- (b) Updated standard presentations on UNFC and UNRMS posted to the ECE website: April 2020 and ongoing;
- (c) Webinars organized: April 2020 to ongoing;
- (d) Contributed to conferences, workshops and seminars: April 2020 to ongoing;
- (e) News stories and promotional materials on UNFC and UNRMS: April 2020 and ongoing.

P. Promoting gender participation in resource management

Description: During the 2000-2015 development cycle, the world made some progress towards gender equality and empowerment of women. However, more work remains hence gender equality is a focus of the 2030 Agenda for Sustainable Development.

This activity will explore how resource management can help attain SDG 5: Achieve gender equality and empower all women and girls. SDG 5 recognized that providing women and girls with, *inter alia*, equal access to education, decent work, and representation in economic decision-making processes will fuel sustainable economies and benefit societies.

Work to be undertaken:

Subject to the availability of extrabudgetary resources:

(a) Review a number of resource management projects and try to determine challenges and opportunities in enhancing performance from a gender perspective;

(b) Select sector- or country-specific cases that illustrate how the principles outlined in SDG5 could be applied in resource management.

Deliverables and timeline:

(a) Policy dialogue(s) on promoting gender participation in resource management: December 2021;

(b) A network of women engaged in resource management projects: December 2021;

(c) Recommendations on mainstreaming gender in resource management: December 2021.
