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Future work of the Committee on Sustainable Energy:

Programme of work for 2022 and recommendations on key components of the programme of work for 2023

Draft programme of work of the Sustainable energy subprogramme for 2022

Note by the secretariat

Introduction

- 1. The present document sets out the draft programme of work of the Sustainable energy subprogramme ("the subprogramme") for 2022. The Committee on Sustainable Energy ("the Committee") is invited to adopt it and recommend to the United Nations Economic Commission for Europe (ECE) Executive Committee for approval. Any subsequent additional, carried over or terminated deliverables will be reflected in UN Umoja system used by the Secretariat for planning, monitoring and reporting on the implementation of the programme.
- 2. The draft programme of work applies a results-based management (RBM) approach, a broad management approach which establishes logical relationship between the hierarchical results (deliverables results objectives impact) known as 'results chain', the resources (human and financial) known as 'inputs' and the external factors (strategic, governance, operational, financial) which can prevent from achieving the objective.
- 3. The objective, the strategy, the planned results and the deliverables in the draft programme of work correspond to those contained in the ECE proposed programme budget for 2022 (A/76/6 (Sect.20)). The work of the subprogramme is aligned with the Sustainable Development Goals (SDGs). In attaining its objective, the subprogramme builds on cross-sectoral collaboration with other subprogrammes in relevant ECE nexus areas where multiple SDGs converge. This type of collaboration enables the subprogramme to maximize existing synergies, increase the efficiency of its work and have a multiplying effect on the impact of its actions to support countries to implement SDGs. The deliverables of the subprogramme fall into the following main categories: (a) facilitation of the intergovernmental process and expert bodies; (b) generation and transfer of knowledge, including technical cooperation

¹ The ECE nexus areas are as follows: (1) Sustainable use of natural resources; (2) Sustainable and smart cities for all ages; (3) Sustainable mobility and smart connectivity; and (4) Measuring and monitoring SDGs.



projects, training events, seminars, workshops, and publications; (c) other substantive deliverables, and (d) communication deliverables.

4. The details of the proposed publications are provided in Annex I. The overall ECE legislative mandates and those specific for the subprogramme are listed in Annex II.

I. Objective

5. The objective, to which the subprogramme contributes, is to improve access to affordable and clean energy for all and to reduce greenhouse gas emissions and the carbon footprint of the energy sector in the region.

II. Strategy

- 6. The responsibility for the subprogramme is vested in the Sustainable Energy Division.
- 7. The strategy of the subprogramme is to support international policy dialogue and cooperation among Governments, energy industries and other stakeholders to foster sustainable energy development; develop and deploy ECE policy recommendations, norms, standards, guidelines and tools on energy-related issues; and provide capacity-building and assistance to member States, at their request, through training programmes, advisory services and technical cooperation projects. Through its work, the subprogramme will contribute to the four ECE nexus areas described in paragraph 3 above.
- 8. To contribute to the objective, the subprogramme will assist member States in integrating the objectives of SDGs 7 and 13 by reducing the environmental footprint of energy, accelerating deep transformation of the energy sector to meet future needs, ensuring the sustainable management of resources and assessing options to ensure energy for sustainable development. The subprogramme will promote policy dialogue and cooperation among member States, regional entities and other partners on sustainable energy issues, in particular energy efficiency, cleaner electricity systems, renewable energy, coal mine methane, resource management, natural gas and energy security through regional and country-specific initiatives aimed at improving cooperation. The initiatives include the establishment of international centres of excellence to disseminate ECE best practice guidance on methane management, the ECE Framework Guidelines for Energy Efficiency Standards in Buildings and the United Nations Framework Classification for Resources, and the conduct of dialogue among countries on pathways to sustainable energy. The subprogramme will provide technical assistance and guidance on energy, disseminate best practices and improve information-sharing. The subprogramme will promote collaboration among actors who are key to implementing national and regional policies. The promotion includes the engagement of stakeholders in developing normative instruments and the encouragement of private and public actors in the deployment and dissemination of the instruments.
- 9. The subprogramme plans to support Member States on issues related to COVID-19 through work on sustainable resource management to ensure the availability of critical materials and activities on high-performance buildings to improve indoor air quality and health. This work will include further development and implementation of the United Nations Framework Classification for Resources and the United Nations Resource Management System for application to raw materials through workshops, capacity-building and case studies, and the deployment and dissemination of the high-performance buildings initiative (training, capacity-building and extension of the initiative's networks).
- 10. The above-mentioned work is expected to result in:
- (a) More effective integration of sustainable energy across national policies and normative frameworks in support of the 2030 Agenda;
- (b) Enhanced dialogue and cooperation among all energy actors to boost transformational investment in the energy sector and, consequently, accelerate the

modernization of the energy system to meet countries' development and climate commitments.

- 11. The planned support on issues related to COVID-19 is expected to result in:
- (a) Greater availability of raw material resources needed for surveillance, response and recovery from current and future pandemics, including the raw materials needed to produce personal protection equipment, drugs, vaccines and essential services such as food, water and energy;
- (b) Improvement in the performance of buildings from a health perspective (e.g., temperatures, comfort, effective air intake and recycling filters), which will improve the protection and resilience of populations.

III. Planned results for 2022

12. The planned results for 2022 include results 1 and 2, which are updates of results presented in the preceding proposed programme plans and therefore show both the programme performance in 2020 and the proposed programme plan for 2022. Result 3 is a new planned result.

Result 1: achieving a step change in the efficiency with which natural resources are used²

Programme performance in 2020

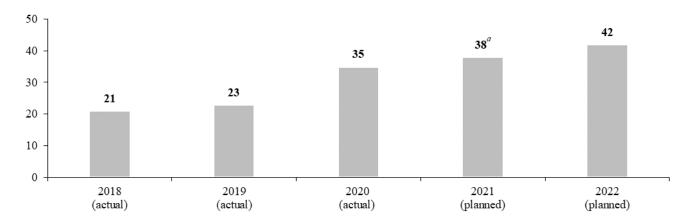
- The subprogramme updated the United Nations Framework Classification for Resources in 2020 and began to develop a derivative tool called the United Nations Resource Management System that allows for the dynamic management of resource endowments in line with the 2030 Agenda. The Management System is intended to be a comprehensive framework for the integrated and sustainable management of the natural resource base. The subprogramme also worked with United Nations Member States to develop case studies, conduct capacity-building workshops and deploy application of the Framework Classification nationally and regionally. The subprogramme has secured extrabudgetary funding for continuing development of the Framework Classification and the Management System and capacity-building activities over the coming years. The subprogramme continued the development of the Management System by preparing two advanced concept notes on it, presenting the objectives, fundamental principles, requirements, regional priorities and way forward for it. A comprehensive report discussing the background and vision of the Management System was published in 2020. The principles and guidelines of the Management System have been promoted as effective tools for the green recovery from COVID-19, especially in projects involving micro-, small and medium-sized enterprises.
- 14 The above-mentioned work contributed to increasing the number of countries applying the United Nations Framework Classification for Resources to 35, which exceeded the planned target of 33, reflected in the proposed programme budget for 2020.

Proposed programme plan for 2022

15. The subprogramme will continue the work related to the planned result, in line with its mandate. To contribute to further progress towards the objective, the subprogramme will extend the application and implementation of the United Nations Framework Classification for Resources and further develop the United Nations Resource Management System. The expected progress is presented in the performance measure below (see Figure I).

² As reflected in the proposed programme budget for 2020 (A/74/6 (Sect. 20)).





Note: a - To maintain accountability for initial programme plans, the 2021 target is carried forward from the programme budget for 2021 and reflects best estimates at that point in time before the COVID-19 pandemic. Programme performance for 2021 will be reported in the proposed programme budget for 2023.

Result 2: reduced carbon footprint and improved quality of life with high-performance buildings³

Programme performance in 2020

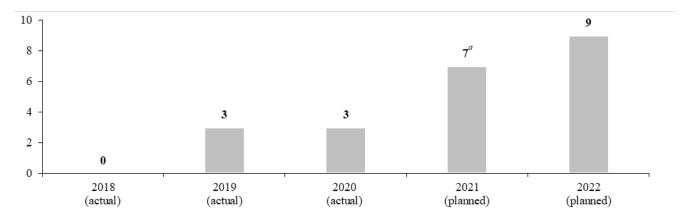
- 16. The subprogramme updated the Framework Guidelines on Energy Efficiency Standards in Buildings that underpin the ECE high-performance buildings initiative and extended the initiative to reflect broader quality of life indicators (energy services, health, water and climate). The subprogramme extended the outreach of its high-performance buildings initiative to additional communities in the United Kingdom of Great Britain and Northern Ireland and in Eastern Europe that are expected to join the network of centres of excellence on high-performance buildings in 2021 and 2022. Furthermore, the subprogramme advanced the research agenda on high-performance buildings and is advancing projects in Central Asia to produce case studies on the development of high-performance buildings.
- 17. The above-mentioned work contributed to negotiations and agreement with countries/contact with institutions and the establishment of three centres of excellence, which did not meet the planned target of five centres, reflected in the programme budget for 2021. The development of additional centres was affected directly by the COVID-19 pandemic. Both outreach by ECE and activities by the prospective centres were delayed because of limitations on travel and a refocus on COVID-19 management and response.

Proposed programme plan for 2022

18. The subprogramme will continue the work related to the planned result, in line with its mandate. To contribute to further progress towards the objective, the subprogramme will extend the network of centres of excellence, expand the research consortium and prepare case studies on the application of the Framework Guidelines on Energy Efficiency Standards in Buildings. The centres of excellence have succeeded in raising the capacity of building developers within their relevant footprints of activity to deliver high-performance buildings. The expected progress is presented in the performance measure below (see Figure II).

³ As reflected in the programme budget for 2021 (A/75/6/Add.1).





Note: a - To maintain accountability for initial programme plans, the 2021 target is carried forward from the programme budget for 2021 and reflects best estimates at that point in time before the COVID-19 pandemic. Programme performance for 2021 will be reported in the proposed programme budget for 2023.

Result 3: managing gases to implement the 2030 Agenda

Proposed programme plan for 2022

- 19. Gases will have an important role in the future energy mix, both as energy vectors (methane (CH₄) and hydrogen (H₂)) and as greenhouse gases (CO₂ and CH₄). The management of these gases will require new normative instruments. The subprogramme has supported Member States as they pursue options for carbon capture and storage, CH₄ management and an H₂ economy by helping to develop normative instruments such as recommendations or best practice guidance and by disseminating and deploying the instruments. In particular, it has developed best practice guidance for methane management in both operating and abandoned coal mines and for monitoring and reporting methane emissions in the oil and gas sectors.
- 20. The natural gas infrastructure could be used to mix CH_4 and H_2 , leading to progressive decarbonization. For this to work across borders, standards on acceptable mixing proportions are needed. In addition, the production of H_2 using carbon-free energy sources could be an important option for decarbonizing energy. The subprogramme has been working with national and organizational partners on the transformation to an H_2 economy.
- 21. Opportunities exist to capture CO_2 emissions and, eventually, atmospheric CO_2 and to use existing infrastructure to transport CO_2 into long-term storage. The subprogramme has developed and submitted policy recommendations on the deployment of carbon capture and storage as a means of minimizing CO_2 emissions.

Lessons learned and planned change

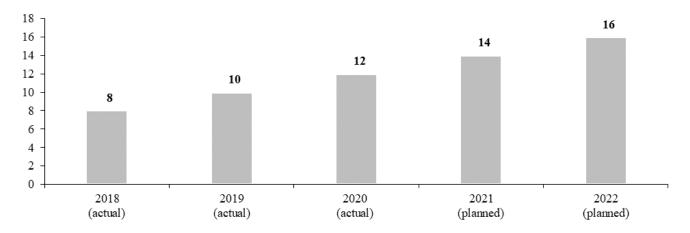
22. The lesson for the subprogramme was that, to achieve effective and impactful results, the subprogramme must engage not only with Governments, but also with the business community, civil society and academia. An example of this process has been the development of best practice guidance in managing coal mine methane with China, Poland and the Russian Federation, instituting international centres of excellence to disseminate and deploy the guidance. In applying the lesson, the subprogramme will engage in an inclusive, open and transparent process that creates a sense of ownership. This engagement is key to both the development and application of guidance for managing gases and their mixtures. The subprogramme's activities will involve Governments and the private sector. Engagements planned with academia will help to integrate leading and novel technologies into the development of normative instruments.

Expected progress towards the attainment of the objective, and performance measure

23. This work is expected to contribute to the objective, as demonstrated by the number of countries applying the guidance developed under the subprogramme (see Figure III).

Figure III

Performance measure: number of Member States applying Economic Commission for Europe guidance to manage gases (CH₄, H₂, and CO₂)



IV. External factors

- 24. The subprogramme is expected to achieve its objective on the assumption that:
- (a) Member States continue to support the work of ECE and give high priority to regional and subregional cooperation and integration, with a view to achieving sustainable development;
- (b) All relevant stakeholders at the national level have the political will to cooperate in implementing ECE legal instruments, norms and standards;
 - (c) Voluntary resources continue to be available.
- 25. With regard to the COVID-19 pandemic, the programme plan is based on the assumption that implementation of the proposed deliverables and activities for 2022 will be feasible. However, if the pandemic were to have an impact on the planned deliverables and activities, they would be adjusted during 2022 within the scope of the overall objectives, strategies and mandates. Any such adjustments would be reported as part of the programme performance information.

V. Deliverables to be implemented in 2022

26. The Table lists all deliverables, by category and subcategory, for 2022 that contributed and are expected to contribute to the attainment of the objective stated above.

Table Subprogramme 5: deliverables for 2022, by category and subcategory

Cat	egor	y and subcategory	2022 planned			
Α.	Fa	cilitation of the intergovernmental process and expert bodies				
	Pa	rliamentary documentation (number of documents)	45			
	1.	Documentation for the Committee on Sustainable Energy and related subsidiary bodies	45			
	Su	bstantive services for meetings (number of three-hour meetings)	38			
	2.	Meetings of the Committee on Sustainable Energy, its Bureau and related subsidiary bodies	38			
B.	Ge	eneration and transfer of knowledge				
	Fie	eld and technical cooperation projects (number of projects)	8			
	3.	Sustainable resource management	1			
		Project on the United Nations Resource Management System	1			
	4.	Reducing the environmental footprint of energy	1			
		Projects on methane management	1			
	5.	Accelerating deep transformation of the energy sector	3			
		Project on energy efficiency in buildings	1			
		Project on transboundary cooperation on renewable energy	1			
		Project on gas in transport	1			
	6.	Supporting member States in securing sustainable energy	3			
		Project on pathways to sustainable energy (phase 2)	1			
		Project on carbon neutrality	1			
		Project on global tracking framework	1			
	Sei	minars, workshops and training events (number of days)	10			
	7.	Workshops for experts and government officials on the application of the United Nations Framework Classification for Resources	2			
	8.	Capacity-building seminars on energy-efficiency measures, accelerators and standards	2			
	9.	International capacity-building seminars on renewable energy development and policy reforms for climate change mitigation	2			
	10.	. International Forum on Energy for Sustainable Development	4			
	Pu	blications (number of publications)	5			
	11.	Publications on the best practice guidelines, case studies and other publications related to sustainable energy	5			
D.	Co	ommunication deliverables				
	Outreach programmes, special events and information materials: booklets on sustainable					
	Energy and related topics, for regional access					
	External and media relations: press releases, keynote speeches and articles					
		gital platforms and multimedia content: update and maintenance of subprogramme's bsite providing access to information and documents for regional and global audiences				

Annex I

Details of proposed publications and information materials for 2022

Item no.	Publication title	Mandate	Print and/or electronic)	Trim size	Number of pages	Original language	Translated language(s) and Source of funding (RB or XB)
	Non-recurrent publications						
1	Attaining carbon neutrality in the ECE region	ECE/ENERGY/ 129	Electronic	A4	150	E	F, R (both RB)
2	Achieving carbon neutrality through hydrogen	ECE/ENERGY/ 129	Electronic	A4	150	E	F, R (both RB)
3	Carbon neutrality in the ECE region: Integrated life cycle assessment of electricity sources	ECE/ENERGY/ 129	Electronic	A4	150	E	F, R (both RB)
4	United Nations Resource Management System	ECE/ENERGY/ 129	Electronic	A4	150	E	A,C,F,R,S (all RB)
5	Renewable Energy Status Report in the ECE Region	ECE/ENERGY/ 129	Electronic	A4	120	E	F, R (both RB)

Annex II

Legislative mandates

A. Overall ECE legislative mandates

General Assembly resolutions

67/10	Cooperation between the United Nations and the Eurasian Economic Community
67/290	Format and organizational aspects of the high-level political forum on sustainable development
69/277	Political declaration on strengthening cooperation between the United Nations and regional and subregional organizations
69/313	Addis Ababa Action Agenda of the Third International Conference on Financing for Development (Addis Ababa Action Agenda)
70/1	Transforming our world: the 2030 Agenda for Sustainable Development
71/14	Cooperation between the United Nations and the Shanghai Cooperation Organization
71/16	Cooperation between the United Nations and the Economic Cooperation Organization
72/237	South-South Cooperation
72/279	Repositioning of the United Nations development system in the context of the quadrennial comprehensive policy review of operational activities for development of the United Nations system
73/10	Cooperation between the United Nations and the Central European Initiative
73/195	Global Compact for Safe, Orderly and Regular Migration
74/122	Implementation of the outcome of the World Summit for Social Development and of the twenty-fourth special session of the General Assembly
74/128	Follow-up to the Fourth World Conference on Women and full implementation of the Beijing Declaration and Platform for Action and the outcome of the twenty-third special session of the General Assembly
74/144	Implementation of the Convention on the Rights of Persons with Disabilities and the Optional Protocol thereto: accessibility
74/216	Implementation of Agenda 21, the Programme for the Further Implementation of Agenda 21 and the outcomes of the World Summit on Sustainable Development and of the United Nations Conference on Sustainable Development
74/231	Development cooperation with middle-income countries
74/235	Women in development
74/271	Progress towards an accountability system in the United Nations Secretariat

66/288	The future we want		
74/297	Progress in the implementation of General Assembly resolution 71/243 on the quadrennial comprehensive policy review of operational activities for development of the United Nations system		
74/306	Comprehensive and coordinated response to the coronavirus disease (COVID-19) pandemic		
75/8	Cooperation between the United Nations and the Organization for Democracy and Economic Development – GUAM		
75/9	Cooperation between the United Nations and the Commonwealth of Independent States		
75/12	Cooperation between the United Nations and the Black Sea Economic Cooperation Organization		
75/216	Disaster risk reduction		
75/221	Ensuring access to affordable, reliable, sustainable and modern energy for all		
75/233	Quadrennial comprehensive policy review of operational activities for development of the United Nations system		
Economic and Soc	cial Council resolutions		
	Further measures for the restructuring and revitalization of the United Nations in the		
1998/46	economic, social and related fields		
1998/46 2006/38	Workplan on reform of the Economic Commission for Europe and revised terms of reference of the Commission		
	Workplan on reform of the Economic Commission for Europe and		
2006/38 2013/1	Workplan on reform of the Economic Commission for Europe and revised terms of reference of the Commission Outcome of the review of the 2005 reform of the Economic Commission		
2006/38 2013/1	Workplan on reform of the Economic Commission for Europe and revised terms of reference of the Commission Outcome of the review of the 2005 reform of the Economic Commission for Europe		
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2006/38 2013/1 Economic Commi A (64) A (65)	Workplan on reform of the Economic Commission for Europe and revised terms of reference of the Commission Outcome of the review of the 2005 reform of the Economic Commission for Europe ssion for Europe decisions The work of the Economic Commission for Europe Outcome of the review of the 2005 reform of ECE Endorsement of the High-level statement on the post-2015 development		

B. Legislative mandates specific to the subprogramme

<u>69/225</u>	Promotion of new and renewable sources of energy
70/213	Science, technology and innovation for development
72/224	Ensuring access to affordable, reliable, sustainable and modern energy for all

1997/226	United Nations International Framework Classification for Energy Reserves/Resources: Solid Fuels and Mineral Commodities
2004/233	United Nations Framework Classification for Fossil Energy and Mineral Resources
2011/222	Best Practice Guidance for Effective Methane Drainage and Use in Coal Mines