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**Draft Conclusions and Recommendations**

**of the Committee on Sustainable Energy**

**at its 31st session**

1. High-level segment: Building resilient energy systems in the United Nations Economic Commission for Europe region: achieving greater energy security, affordability, and net-zero

*Documentation:* CSE-31/2022/INF.1 – Building Resilient Energy Systems: Technical Considerations and Actions for Achieving Greater Energy Security, Affordability and Net-zero in the ECE Region

ECE/ENERGY/2021/4 – Revised strategic review of the United Nations Economic Commission for Europe sustainable energy subprogramme

* 1. Taking into account: (i) the urgent need to address the increasing vulnerability of the energy systems in the United Nations Economic Commission for Europe (ECE) region due to the contemporary economic, geopolitical, energy, social, supply chain, climate, and environmental challenges the region is facing; (ii) the sovereign right of states to determine national energy policy, conditions for exploiting their natural resource endowments, their choice between different energy sources, the general structure of their energy supply, and the pace and ways of the energy system transformations; and (iii) that the efforts that are being currently undertaken on the global scale are insufficient to meet the objectives of the 2030 Agenda for Sustainable Development in general and of the 1.5°C target of the Paris Agreement in particular, and that current climate goals should not be compromised by a focus upon short-term energy challenges, and recognizing that the Committee on Sustainable Energy (the Committee) and its six subsidiary bodies are in a unique position to support the building of resilient energy systems in the ECE region, called on member States to continue, expand and increase international policy dialogue and cooperation on efforts to ensure resiliency of energy systems that ensure access to affordable, reliable, sustainable and modern energy for all (Sustainable Development Goal (SDG) 7) and that help reduce greenhouse gas (GHG) emissions and the carbon footprint of the energy sector in the region.
	2. High-level representatives from the following countries […] delivered statements about their current challenges, needs and priorities related to energy system resiliency, followed by interventions from […]. They noted significant challenges related to access to affordable, reliable and modern energy services. Representatives noted the critical need to consider achieving sustainability as the shared goal, and some highlighted the negative effects on air quality, water, health and climate change that increase because of the use of fossil fuels. They noted the need to consider long-term, social, economic and environmental priorities when making energy policy decisions and to identify and implement options that help achieve the set goals, as well as the key role of circular economy in the energy transition and climate neutrality.
	3. In response to the needs outlined by member States, expert members of the six subsidiary bodies of the Committee shared recommendations for the member States for their consideration. The Committee noted with appreciation the informal document “Building Resilient Energy Systems: Technical Considerations and Actions for Achieving Greater Energy Security, Affordability and Net-zero in the ECE Region” (CSE-31/2022/INF.1) prepared by the Bureaux of the six subsidiary bodies and the recommendations contained therein. Through a facilitated dialogue, the member States discussed potential actions the Committee could focus on to support a rapid increase in the resiliency of energy systems in the ECE region most effectively.
	4. To that end, acknowledged an improvement of energy systems resiliency through implementation of energy efficiency measures first, unpinning the importance of integrating efficiency strategies to bolster the durability and flexibility of energy systems and thus improving system’s ability to absorb shocks and recover, among other taking advantage of advancements in applicable digital solutions. Argued that at its core, energy efficiency is about reducing the demand for energy to perform the same task or achieve the same outcome. Thus, underscoring an expeditious beneficial impact of energy efficiency deployment on improving energy resiliency, proposed taking account of how improvements in energy efficiency across buildings, industry, transport, and other sectors can reduce the end-use energy demand as well as the need for redundancy to maintain resiliency.[[1]](#footnote-2)
	5. Noted that the strategic review of the ECE Sustainable energy subprogramme (ECE/ENERGY/2021/4) and many current Work Plans and activities of the subsidiary bodies of the Committee directly support increased resiliency of energy systems, while recognizing that ECE member States have different views regarding the use of energy resources and technologies.
	6. Noted that, in response to the current circumstances, additional activities may be proposed for consideration in the future Work Plans. In respect thereof, called upon the subsidiary bodies to formulate proposals that support efforts to building more resilient energy systems in the ECE region. Requested the Bureau, in cooperation with the secretariat, to examine how the Programme of Work of the Committee for 2024 might be modified to better support the corresponding efforts and provide strategic orientation to the subsidiary bodies of the Committee. In view of this, also called upon the member States to support the activities of the subsidiary bodies through extrabudgetary funding.
	7. Based on the discussion and noting the vulnerabilities of the existing energy systems in the ECE region, agreed to prioritize and implement special activities that coordinate and promote efforts related to energy resilience across the ECE region, providing an **ECE Platform on Resilient Energy Systems** for inclusive dialogue. The Committee requested the Bureau of the Committee, in cooperation with the secretariat, to develop a work plan and budget for the special activities to be organized under the Platform, and to post these to the website. The Committee [noted that establishment of the Platform itself has no regular budgetary implications but] recognized that some of the activities identified and coordinated by the Platform would require extrabudgetary resources. The activities under the Platform could involve, but not be limited to, the following new or expanded activities:
1. **Host a series of dialogues on Resilient Energy Systems** to facilitate an exchange among member States, academia, technical experts, industry, and others on relevant topics identified by the Bureau, including the current challenges to resiliency, technical options, financing resilient energy systems and clean energy projects, lessons learned and best practices. These dialogues are intended to increase the capacity of ECE member States to attain more secure, affordable, safe and environmentally-friendly energy systems.
2. **Increase awareness raising activities** that focus on full life cycle assessment and cost-benefit analysis of all technologies that enhance access to affordable, reliable, sustainable and modern energy for all.
3. **Support an expanded Pathways to Sustainable Energy initiative** to facilitate the selection and implementation of effective policies across the ECE region, including targeted, subregional and country-specific deep dives on technology choices, business models and policy solutions that can build energy system resiliency and achieve short- and long- term energy, economic and environmental goals. Requested that this initiative be launched with a focus on Central Asia, and then follow with other subregions as the interest arises, and subject to extrabudgetary resources.
4. **Expand efforts to reduce methane emissions,** increasing short-term energy supply with recovered methane and providing targeted support to member States in the ECE region to design and implement policies that increase energy supply in the short term by eliminating methane leaks, increase resiliency and support long-term methane mitigation goals, including of the Global Methane Pledge; co-host a Global Methane Forum in 2023 to support methane reductions, recovery and re-use as a clean energy source.
5. **Explore and increase understanding on energy-related climate financing** in the ECE region to identify policies and mechanisms that can increase financing for low- and zero-carbon technologies, the critical raw materials needed for low carbon transformations and green infrastructure projects in the ECE region and to enable the region to implement climate-friendly policies that also increase energy system resiliency.
6. **Support a dialogue with member States and relevant stakeholders, such as industry, academia, financial institutions, international organizations and NGOs, to substantially increase the uptake of renewable energy in the ECE region**. Renewable energy development, together with all low- and zero-carbon technologies, will be essential to deliver resilient energy systems while preserving the climate and the environment, and contributing to the attainment of the SDGs and the Paris Agreement.
7. Premised on a system level perspective, **give increased attention to energy conservation**, to improve resilience through cross-sectoral action on energy efficiency.
8. **Increase engagement with other organizations, conferences, coalitions and alliances, ministerials and initiatives** **working on similar or complementary objectives**, including but not limited to the Clean Energy Ministerial, International Energy Agency, Organisation for Economic Co-operation and Development (OECD), Organization for Security and Co-operation in Europe (OSCE), UN Development Programme, UN Framework Convention on Climate Change (UNFCCC) Conference of the Parties, World Business Council for Sustainable Development, World Economic Forum and World Energy Council to expand the reach of the Committee and leverage others’ investments, providing greater support to the design and deployment of resilient energy systems that provide access to affordable, reliable, sustainable, and modern energy for all and that help reduce GHG emissions and the carbon footprint of the energy sector in the region and support the shift to net zero GHG emissions.
	1. Called on member States to provide needed resources and leadership to accomplish those additional or expanded activities that address the critical need to build energy resiliency in the ECE region and that cannot be delivered with existing regular budget resources. Requested the Bureau report progress on all activities of the Platform on Resilient Energy Systems during the thirty-second session of the Committee.

 3. Delivering on sustainable energy: subprogramme accomplishments since the thirtieth session of the Committee on Sustainable Energy, including spotlights on renewables and digitalization

*Documentation:* ECE/ENERGY/2021/4 – Revised strategic review of the United Nations Economic Commission for Europe sustainable energy subprogramme

ECE/ENERGY/2021/17 – A Commitment Trifecta

CSE-30/2021/INF.5 – A Push to Pivot

[TBC] REN21 UNECE Renewable Energy Status Report 2022,

ECE/ENERGY/GE.6/2022/4-ECE/ENERGY/GE.5/2022/4 – Digitalization: Accelerating the Electricity System Transformation

ECE/ENERGY/GE.6/2022/5 – Addressing Behavioural Barriers to Energy Digitalization

ECE/ENERGY/GE.6/2021/4 – Energy Efficiency Standards in Buildings: Analysis of progress towards the performance objectives

* 1. Reviewed the progress of the Sustainable energy subprogramme since the thirtieth session, particularly related to the implementation of the “Revised strategic review of the United Nations Economic Commission for Europe sustainable energy subprogramme” (ECE/ENERGY/2021/4), endorsed at the thirtieth session, and support for the actions recommended in two documents noted at the thirtieth session, “A Commitment Trifecta” (ECE/ENERGY/2021/17) which called for near term country commitments to:
	(i) achieve superior energy performance in buildings; (ii) address growing concentrations of methane in the atmosphere, and (iii) modernize resource management, and “A Push to Pivot” (CSE-30/2021/INF.5), which outlined the following long-term initiatives to:
	(i) achieve carbon neutrality by 2030 [to achieve carbon neutrality by 2050 and to reduce emissions by 55% by 2030]; (ii) ensure a just transition to remove social obstacles to real transformative action; and (iii) enable a hydrogen ecosystem.
	2. Noted the continued relevance of the subprogramme activities, particularly related to the strategic priorities of the subprogramme, including sustainable resource management, methane management and reduction in the extractive industries, carbon neutrality, renewable energy, natural gas, investment guidelines, high-performance buildings, pathways to energy for sustainable development and the Pathways Programme. Further noted the increased importance of the more recent work to understand options to increase energy system resilience in the ECE region; enable a hydrogen ecosystem such as through information, a taxonomy and/or specifications for application of the United Nations Framework Classification for Resources (UNFC) to hydrogen projects and production technologies ; continue to promote best practices in methane management and reductions in the ECE region; conceiving standards and/or practices for just and inclusive transitions; improve energy efficiency; assess energy subsidies; examine market design; and digitalization.
	3. Noted with appreciation the activities and accomplishments of the Committee and its six subsidiary bodies particularly in view of the economic, geopolitical, energy, social, supply chain, climate, and environmental challenges the ECE region is facing. Called upon member States to provide resources to support projects and activities that deliver on the goals of the strategic review and address the new challenges.

 4. Achieving high performance in buildings

* 1. Recognizing that high-performance buildings offer critical outcomes in terms of multiple and extensive benefits related to energy and climate, resilience, health, water, resource conservation, mobility and technology access, noted with appreciation the accomplishments in the framework of the High-Performance Buildings Initiative (HPBI), as well as the plans of the International Centres of Excellence on High-Performance Buildings (ICE-HPBs) to improve coordination of their activities.
	2. The Committee requested the secretariat to continue its efforts developing the network of ICE-HPBs, to support and advance the principles of the Framework Guidelines for Energy Efficiency Standards in Buildings (ECE/ENERGY/GE.6/2020/4) aiming to ensure that new and existing buildings meet principles that reflect the frontier of knowledge of how buildings are conceived, built, operated, maintained, and eventually dismantled.
	3. The Committee requested that progress on HPBI be reported at the thirty-second session.

 5. Modernizing resource management

*Documentation:* ECE/ENERGY/GE.3/2022/6 – Draft United Nations Resource Management System: Principles and Requirements

ECE/ENERGY/2022/6 – Sustainable management of critical raw materials required for the low-carbon energy transition

ECE/ENERGY/2022/7 – Resources as a Service: A catalyst to accelerate the energy transition, safeguarding climate action targets within the circular economy

* 1. Noted with appreciation the accelerated implementation of UNFC, in particular in countries of the European Union with a focus on application of UNFC to mineral and anthropogenic resources. Further noted with appreciation the extrabudgetary project funded by the European Commission “Supporting UNECE member States in the development and implementation of UNFC and UNRMS” (2020-2024), implementation of which is in its third year, which has facilitated accelerated implementation of UNFC and encouraged member States to participate in the project. Noting the scale of the task to deploy UNFC and the United Nations Resource Management System (UNRMS) in the ECE region and beyond and build the required capacity for application at national level, requested the secretariat to continue its efforts to secure additional extrabudgetary resources.
	2. Noting the importance of the International Centres of Excellence on Sustainable Resource Management that are being established to provide policy support, technical advice and consultation, education, capacity-building and training on UNFC and UNRMS in the ECE region and beyond, as well as dissemination, requested an update at the thirty-second session on the Centres and any progress to establish a collaborative network of the Centres coordinated by the secretariat and in full compliance with the adopted ECE standards and guidelines.
	3. Noted with appreciation the continuing development of UNRMS based on principles and requirements included in the document Draft United Nations Resource Management System: Principles and requirements (ECE/ENERGY/GE.3/2022/6). Recommended the accelerated testing, and implementation of UNRMS principles and requirements and requested the secretariat to raise extrabudgetary funds and mobilize the expert communities required for various tasks, including the further completion of specific UNRMS modules and capacity-building. Requested the secretariat to publish UNRMS: Principles and Requirements as an official ECE publication as soon as possible.
	4. Noting that the sustainable management of natural resources – in line with circular economy patterns – is fundamental to attainment of the 2030 Agenda, attainment of climate targets, increased resiliency of energy systems and progress towards a more circular economy, called on ECE and non-ECE member States, international organizations, industry, and the regional commissions to implement the UNRMS principles and requirements as a matter of urgency.
	5. Noted with appreciation the draft document for discussion “Sustainable management of critical raw materials required for the low-carbon energy transition” (ECE/ENERGY/2022/6), which highlights the role of critical raw materials (CRMs) in low-carbon energy transitions, including large-scale deployment of renewable energy and energy storage and points out that the demand for CRMs is expected to increase exponentially in the near future, making sustainable production from primary and secondary (anthropogenic) resources crucial. Recognizing the need to produce CRMs sustainably, including a focus on social and environmental aspects, noted that the concepts presented in the document require further discussion and clarification at the Expert Group level. Noting further the importance of the availability of socially and environmentally referenced data, requested the Expert Group on Resource Management to discuss and develop the concepts provided in the draft document further and then, based on common understanding, develop guidelines, best practices, and an information framework for the management of CRMs.
	6. Noted with appreciation the draft document for discussion “Resource as a Service: A catalyst to accelerate the energy transition, safeguarding climate action targets within the circular economy” (ECE/ENERGY/2022/7) and its proposed approach of “Resources as a Service” to improve the efficiency of the production and use of the resources required for sustainable development. Noted that the concepts presented in the document require further discussion and clarification at the expert group level. Noting further that progress towards a more circular economy is crucial to meeting the increased demand for resources, including raw materials, requested the Expert Group on Resource Management to discuss and clarify the concept further and develop case studies on Resources as a Service.
	7. Noted with appreciation the establishment of the United Nations Working Group on Transforming the Extractive Industries for Sustainable Development Co-chaired by the Regional Commissions (on an annual rotation basis, with ECE Co-chairing in 2022), UNDP and UNEP. The Working Group is tasked with implementing the proposals included in the United Nations Policy Brief on “Transforming the Extractive Industries for Sustainable Development,” published in 2021, which recommends implementation of UNFC and UNRMS. Noting the importance of sustainable management of natural resources for the energy transformations and sustainable development, requested the Expert Group on Resource Management and other relevant groups of experts to fully engage in the activities of the Working Group and support the implementation of ECE’s five-point agenda on sustainable resource management that includes: (i) Social contract on natural resources; (ii) Sustainable investment guidelines; (iii) Sustainable resource management systems; (iv) Traceability and transparency of value chains; and
	(v) Strategic environmental assessments and environmental impact assessments.
	8. Noting that sustainable management of natural resources is fundamental to the attainment of the 2030 Agenda, attainment of the Paris Agreement and progress towards a more circular economy, decided to recommend to the Economic Commission for Europe (the Commission) to propose a draft decision to the Economic and Social Council (ECOSOC), inviting the application of the UNRMS principles and requirements worldwide.
	9. Noting the critical importance of sustainable resource management, including management of critical raw materials, and progress toward a more circular economy in realizing the 2030 Agenda for Sustainable Development and the Paris Agreement targets, Further noting that ECE member States are starting to prioritize the implementation of the United Nations Framework Classification for Resources and the United Nations Resource Management System for social, environmental and economic performance improvements in natural resource management, including through the International Centres of Excellence on Sustainable Resource Management, Recalling that the Regular Budget support for this activity, including staffing, has remained minimal and unchanged for the past many years,
		1. Decided to recommend to the Commission that it consider requesting ECOSOC consider asking the Secretary-General to strengthen the secretariat’s role in natural resource management;
		2. Decided to transmit to the Commission at its session in 2023 a draft decision on this issue for consideration and possible adoption.

6. Enabling a hydrogen ecosystem

*Documentation:* ECE/ENERGY/2022/8 – Comprehensive and science-based terminology, classification and taxonomy for hydrogen

* 1. Noted the importance of enabling a hydrogen ecosystem as part of building resilient energy systems that provide access to affordable, reliable, sustainable, and modern energy for all and that help reduce GHG emissions and the carbon footprint of the energy sector in the ECE region and support the transition to net-zero GHG emissions.
	2. Noted the importance of defining criteria for sustainable hydrogen that strike a balance between the emissions associated with its production and the sufficient flexibility needed to scale-up a nascent industry. Further noted that this is critical for strengthening the case for hydrogen as a reliable, renewable, affordable, and low carbon energy carrier.
	3. Noted with appreciation the document “Comprehensive and science-based terminology, classification and taxonomy for hydrogen” (ECE/ENERGY/2022/8) and the need to develop a classification for hydrogen that goes beyond colours. In this regard, agreed to support ongoing policy dialogue on hydrogen projects and, through it, foster cooperation within the ECE region and with the global resource community.
	4. Noting that the hydrogen activities are currently not centralized in the Sustainable energy subprogramme, requested that the Hydrogen Task Force report directly to the Committee and to the Committee’s Bureau between sessions. Further requested a Vice-Chair of the Committee Bureau, or a Chair or Vice-Chair of the Bureau of one of the Committee’s subsidiary bodies, lead the Task Force. Further requested the Task Force to: prepare a strategy and work plan for future activities of the Committee on hydrogen, including identifying which activities can be carried out using regular budget resources and which will require extrabudgetary resources; define the scope and terms of reference for the Task Force; and report to the Committee at the thirty-second session. Requested the Task Force to coordinate with other entities engaged in similar activities to avoid duplication.
	5. Requested the Expert Group on Resource Management, in close cooperation with the Hydrogen Task Force, the Group of Experts on Gas and other subsidiary bodies, to develop Specifications for the application of UNFC to hydrogen projects and production technologies, subject to extrabudgetary resources.
	6. Requested the Expert Group on Resource Management, in close cooperation with the Hydrogen Task Force, the Group of Experts on Gas, and other subsidiary bodies, to develop a pilot hydrogen production project applying UNRMS principles, subject to extrabudgetary resources.
	7. Requested the Hydrogen Task Force to work collaboratively with all six subsidiary bodies towards establishing a tradeable Guarantee of Origin for Hydrogen (GOH). This GOH would decouple physical from commercial flows and thereby accelerate hydrogen deployment. GOHs shall be compatible with the common standard of Guarantees of Origin, that allows an accurate comparison of emissions of different technologies and energy carriers, based on Life-Cycle Analysis (LCA). Further requested that progress on this be reported to the Committee at its thirty-second session.
	8. Noted the necessity to address an agreed-upon threshold for hydrogen purity while establishing a GOH standard. This is of critical importance for the broad adoption of hydrogen as an energy carrier, where there is no need to meet a chemical-grade quality that would lead to much higher production and transport costs and very limited supply. A common agreed purity value among industrial stakeholders is 98%; this is a cost-effective threshold that would allow the participation of all players, particularly those coming from industry, gas infrastructure repurposing, power-generation and hydrogen mobility.

7. Addressing methane management

*Documentation:* ECE/ENERGY/2022/4 – Final mandate and terms of reference of the Group of Experts on Coal Mine Methane and Just Transition

ECE/ENERGY/139 – Best Practice Guidance for Effective Management of Coal Mine Methane at National Level: Monitoring, Reporting, Verification and Mitigation

* 1. After discussion, the Committee:
1. Noted the short-term value of capturing and using recovered methane to increase energy supply and support energy system resilience in the short term and to increased capture and reductions of methane to achieve climate objectives in the long term. Noted the need for discussion between public authorities and industrial stakeholders while defining workable regulations that can help to map methane emissions across the energy supply value chain and drive effective emissions reductions.
2. Committed to work to overcome barriers to mitigation of methane emissions from extractive industries in the ECE region and requested the Group of Experts on Coal Mine Methane and Just Transition and the Group of Experts on Gas to continue to prioritize building capacity in member States to reduce methane emissions through the development and dissemination of best practices via in-person and online training courses and workshops.
3. Requested the secretariat to pursue opportunities for the Committee to partner and co-host events with other initiatives that prioritize methane monitoring, reporting, verification and mitigation, such as the Global Methane Pledge, Global Methane Initiative and the Oil and Gas Methane Partnership (OGMP) 2.0 Reporting Framework, to expand the Committee’s reach and foster the replication of methane monitoring, reporting, verification and mitigation activities that maximize climate benefits.
4. Endorsed the “Best Practice Guidance for Effective Management of Coal Mine Methane at National Level: Monitoring, Reporting, Verification and Mitigation” (ECE/ENERGY/139 and ECE Energy Series No. 71).
5. Noted the opportunities and challenges posed by the complementarity of top-down and bottom-up quantification methodologies.
6. Requested the secretariat and invited Member States to take appropriate measures to ensure broad dissemination and application of the Best Practice Guidance.
7. Decided to recommend to the Commission to propose a draft decision to ECOSOC, inviting the application of Best Practice Guidance for Effective Management of Coal Mine Methane at National Level: Monitoring, Reporting, Verification and Mitigation worldwide.
8. Observing with concern the growing production and use of coal worldwide and the resulting increase in the related methane emissions, called upon member States to direct more resources and efforts towards better understanding the sources and scale of the emissions, in particular those originating from open pit mines, as well as existing opportunities for their mitigation.
9. Noting with appreciation that the Group of Experts on Coal Mine Methane and Just Transition continues to advise member States on best practices and measures to effectively monitor and address methane-related dangers in underground coal mines, and that the International Centres of Excellence on Coal Mine Methane operating under the auspices of the Group of Experts are involved in work that promotes the economically sustainable reduction of methane emissions to the atmosphere and thereby reduce the likelihood of methane-related mining accidents, requested the Group of Experts to tighten its cooperation with the International Labour Organization (ILO) to explore opportunities for further enhancement of the awareness and capacity for implementation of the recognized practices and measures that increase mining safety in member States.
10. Noting with appreciation numerous international efforts to address the problem of methane emissions through coordinated target-setting mitigation initiatives, encouraged member States to consider undertaking regulatory action to harmonize methane emissions monitoring and reporting standards in the ECE region, and requested the secretariat to explore opportunities to engage member States in work to develop the relevant normative framework.
11. Recognizing the climate-driven urgency of limiting methane emissions from coal mines, acknowledging the technical limitations to effective use or destruction of ventilation air methane (VAM) from underground coal mines, and taking into account the energy security concerns of coal-dependent economies, called upon member States to speed up the process of decarbonization of their energy industries, including through provision of regulatory incentives and financial mechanisms fostering deployment of VAM installations, and enactment of rational legislation imposing a tax on methane emissions from coal mines that are avoidable at a justifiable cost.
12. Noted with appreciation that the Group of Experts on Coal Mine Methane and Just Transition has been acting upon its new mandate and engaging with member States on a demand driven basis on matters related to mine closure and transformation of the coal sector.
13. Noted with appreciation the engagement of the Group of Experts on Coal Mine Methane and Just Transition in the Thirteenth Clean Energy Ministerial (21-23 September 2022, Pittsburgh, United States) with the aim to present and promote the Group’s vision of just transition and the ensuing work that will benefit coal dependent regions and communities in the ECE region.

 8. Understanding subsidies and carbon pricing

* 1. The Committee noted the importance of market mechanisms in supporting the building of resilient energy systems and recognized that it would be necessary to understand which types of regulatory and economic instruments, including subsidies, taxes, duties and carbon pricing, would be most efficient for a sustainable energy transition. Further noted that it would be helpful to understand best practices regarding the reform of subsidies, taxes and duties and the design and implementation of effective GHG pricing mechanisms in the ECE region. Additionally noted the need to create more transparency on subsidies, taxes, duties and GHG prices in the region and to understand their consequences; the need to explore comprehensively subsidies, taxes, duties and carbon pricing on end-use consumers, fossil energy, and to support renewables; and to assess what such a reform would mean for the goal of limiting temperature increases to 1.5°C.
	2. Reiterated the need to continue to explore how best to address efficient use of resources and in this regard the impact of subsidies, taxes, duties and carbon pricing options and called on member States to provide extrabudgetary resources to carry out research to identify and compile case studies and develop best practices for the ECE region. Further noted the need to increase awareness of similar efforts underway to avoid duplication of efforts. The Committee further requested that a briefing be provided to the thirty-second session on progress made.

 9. Technical assistance, regional outreach and collaboration activities

1. Regional advisory services and collaboration activities

*Documentation*: ECE/ENERGY/2022/5 – Report on regional advisory services in sustainable energy

1. Extrabudgetary and United Nations Development Account projects.
	1. The Committee received an update of regional advisory services since its last session. The report included information on adjusting regional advisory services, including capacity-building and technical assistance activities, to multiple challenges caused by the COVID-19 pandemic and by the consequences of the ongoing geopolitical crises in the ECE region. Field projects under implementation, including those that were developed as a rapid response to these challenges, and ongoing fundraising activities were reported.
	2. Following a presentation of the study “Energy Transition and the Post-COVID-19 Socioeconomic Recovery: Role of Women and Impact on Them”, noted the opportunities and challenges facing women’s participation in the economy – specifically in the energy sector – and the benefits of promoting the participation of women in facilitating a successful transition to a sustainable energy system and green economy post-COVID-19.
	3. The Committee took note of document ECE/ENERGY/2022/5, stressed the importance of regional advisory services and capacity-building activities, particularly under the current circumstances, and requested a report on regional advisory services at its thirty-second session.

 10. Preparing for the 70th session of the Economic Commission for Europe

* 1. The Committee reflected on sustainable energy subprogramme activities carried out since the thirtieth session, in an effort to further operationalize the decisions taken at the sixty-ninth session of the Commission (Geneva, 20-21 April 2021) (E/ECE/1494).
	2. Discussed ways that the Committee can contribute to the cross-cutting theme of the 70th session of the Commission, “Digital and green transformations for sustainable development in the UNECE region,” (18-19 April 2023), and identify potential new activities the Committee can undertake to support the high-level theme. Noted that digital and green transformations related to energy are critically necessary steps for achieving sustainable development and circular economy in the ECE region and welcomed the Commission’s selection of this important topic.
	3. The Committee noted the key areas where it has been actively supporting this subject area, including on
		1. *The Task Force on Digitalization in Energy* enables constructive technical and policy dialogue on digitalization to help bridge the gap between academic research, industrial innovations, and policy needs and achieve higher levels of efficiency in the energy system; and coordinates research and activities related to digitalization in energy across the subsidiary bodies of the Committee;
		2. *Sustainable Resource Management*, through its five-point action plan on natural resources to address all these aspects comprehensively: (1) Social contract; (2) Sustainable finance framework; (3) Sustainable management using the UNFC and the UNRMS; (4) Transparency and traceability and (5) Strategic environmental assessment.
		3. *Circular economy,* by including Anthropogenic Resource Specifications, vital to promoting circularity in resource use, in UNFC and circularity of resource use as a fundamental principle of UNRMS and through its work on methane management in the coal, oil and gas sectors.
		4. *High-Performance Buildings Initiative* whichaims to transform the built environment in terms of how buildings are conceived, built, operated, maintained, and eventually dismantled, and how the built environment delivers quality of life.

**Key messages and policy recommendations for the Economic Commission for Europe**

* 1. Noted the shifting priorities of governments in the ECE region because of current geopolitical issues and recommended that, the Committee invites the Commission to consider exploring at the 70th session of the Commission how the current energy and climate challenges affect digital, green and circular transformations for sustainable development in the ECE region and what strategic energy and environmental solutions can achieve both short- and long-term development goals,
	2. Recommended that the Commission consider draft decisions on proposed Committee efforts to: prioritize and implement special activities that build resiliency of ECE energy systems; increase understanding of climate finance; further greater adoption of methane mitigation best practices and UNRMS principles and requirements worldwide to accelerate attainment of the 2030 Agenda and the Paris Agreement. The draft decisions are as follows:
		1. **Building resilient energy systems**

The Economic Commission for Europe,

Noting the urgent need to address the increasing vulnerability of the energy systems in the ECE region; noting the sovereign right of states to determine national energy policy, conditions for exploiting their energy resources, their choice between different energy sources, and the general structure of their energy supply, and the pace and ways of the energy transformations; and further noting that the efforts that are being currently undertaken on the global scale are insufficient to meet the objectives of the 2030 Agenda for Sustainable Development in general and of the 1.5°C target of the Paris Agreement in particular, and that current climate goals should not be compromised by a focus upon short-term energy challenges,

Recognizes that the Committee and its six subsidiary bodies are in a unique position to support the building of resilient energy systems in the ECE region, welcomes the prioritization and implementation of special resiliency-related activities by the Committee and takes note of the **ECE Platform on Resilient Energy Systems** to coordinate and promote efforts related to energy resilience across the ECE region, providing for inclusive dialogue. Further notes that the Committee added building resilient energy systems to the programme of work beginning in 2024 as a new focus area with no regular budgetary implications but recognizes the urgent need to mobilize extrabudgetary resources to support this critical area of work.

* + 1. **Decision to study finance for energy-related climate change activities in the ECE region, particularly related to critical raw materials**

 The Economic Commission for Europe,

Noting that, to deliver on climate change and sustainable development, the ECE region must optimize the management of endowments of natural resources, including CRMs, that a significant increase in sustainability-focused investments for CRM sourcing and development is crucial to ensuring the security of supply, and that there is currently a lack of financing available for CRM-related projects in the ECE region,

Requests that the Committee study how best to address the current barriers to climate finance in the ECE region, such as a lack of socially, environmentally and economically referenced standardized and harmonized data on projects, and develop, within existing resources, products that address these barriers.

* + 1. **Best Practice Guidance for Effective Management of Coal Mine Methane at National Level: Monitoring, Reporting, Verification and Mitigation**

The Economic Commission for Europe,

* Recalling its decision 4 of E/ECE/1462 Annual Report (1 April 2009 to 31 March 2011),
* Noting the short-term value of capturing and using recovered methane to increase energy supply and support energy system resilience in the short term and to increased capture and reductions of methane to achieve climate objectives in the long term,
* Endorses the “Best Practice Guidance for Effective Management of Coal Mine Methane at National Level: Monitoring, Reporting, Verification and Mitigation” (ECE/ENERGY/139), developed under the Committee’s Expert Group on Coal Mine Methane and Just Transition,
* Recommends that the Guidance be disseminated widely, inviting States Members of the United Nations, international organizations and the regional commissions to consider the possibility of taking appropriate measures to ensure the application of “Best Practice Guidance for Effective Management of Coal Mine Methane at National Level: Monitoring, Reporting, Verification and Mitigation” worldwide;
* Decides to propose to ECOSOC to consider inviting Member States of the United Nations, international organizations and the regional commissions to apply the Best Practice Guidance for Effective Management of Coal Mine Methane at National Level and to transmit to the Council at its next session a draft decision on the issue for consideration and possible adoption.

**Draft ECOSOC Decision on the Best Practice Guidance for Effective Management of Coal Mine Methane at National Level: Monitoring, Reporting, Verification and Mitigation**

* Noting that at its seventieth session (18-19 April 2023), the Economic Commission for Europe endorsed the “Best Practices Guidance for Effective Management of Coal Mine Methane at National Level: Monitoring, Reporting, Verification and Mitigation” (ECE/ENERGY/139), of December 2021, recommended that the “Best Practices Guidance for Effective Management of Coal Mine Methane at National Level: Monitoring, Reporting, Verification and Mitigation” be disseminated widely, and
* Invited States Members of the United Nations, international organizations and the regional commissions to consider the possibility of taking appropriate measures to ensure the application of “Best Practices Guidance for Effective Management of Coal Mine Methane at National Level: Monitoring, Reporting, Verification and Mitigation” in countries worldwide, and proposed to the Economic and Social Council that it recommend the application of the “Best Practices Guidance for Effective Management of Coal Mine Methane at National Level: Monitoring, Reporting, Verification and Mitigation” worldwide, and noting that this proposal does not have financial implications,
* Decides to invite States Members of the United Nations, international organizations and the regional commissions to consider the possibility of taking appropriate measures to ensure the application of the “Best Practices Guidance for Effective Management of Coal Mine Methane at National Level: Monitoring, Reporting, Verification and Mitigation” worldwide.
	+ 1. **United Nations Resource Management System Principles and Requirements**

The Economic Commission for Europe,

Recalling its decision E (69) paragraph 2 of E/ECE/1494 Annual Report (9 April 2019 to 20 April 2021),

Noting that sustainable management of natural resources is fundamental to attainment of the 2030 Agenda, attainment of the Paris Agreement and progress towards a more circular economy,

Endorses the United Nations Resource Management System (UNRMS) Principles and Requirements (ECE/ENERGY/GE.3/2022/6) developed by the Committee’s Expert Group on Resource Management,

Recommends that the UNRMS Principles and Requirements be disseminated widely, inviting States Members of the United Nations, international organizations and the regional commissions to consider the possibility of taking appropriate measures to ensure the application of the UNRMS Principles and Requirements worldwide,

Decides to propose to ECOSOC to consider inviting Member States of the United Nations, international organizations and the regional commissions to apply the UNRMS Principles and Requirements and to transmit to the Council at its next session a draft decision on the issue for consideration and possible adoption.

**Draft ECOSOC Decision on the UNRMS Principles and Requirements**

Noting that at its seventieth session (18-19 April 2023), the Economic Commission for Europe endorsed the UNRMS Principles and Requirements of 14 April 2022 as contained in document ECE/ENERGY/GE.3/2022/6, recommended that the UNRMS Principles and Requirements be disseminated widely,

Invited States Members of the United Nations, international organizations and the regional commissions to consider the possibility of taking appropriate measures to ensure the application of the UNRMS Principles and Requirements in countries worldwide, and proposed to the Economic and Social Council that it recommend the application of the UNRMS Principles and Requirements worldwide, and noting that this proposal does not have financial implications,

Decides to invite States Members of the United Nations, international organizations and the regional commissions to consider the possibility of taking appropriate measures to ensure the application of the UNRMS Principles and Requirements worldwide.

* + 1. **Decision to request additional resources to support activities under Modernizing Resource Management Systems**

The Economic Commission for Europe,

Noting at its 70th session, the critical importance of sustainable resource management, including management of critical raw materials (CRMs) and the development of sustainable value chains of CRMs, and progress toward a more circular economy in realizing the 2030 Agenda for Sustainable Development and the Paris Agreement targets,

Further noting that ECE member States are starting to prioritize the implementation of UNFC and UNRMS for social, environmental and economic performance improvements in natural resource management, including through the International Centres of Excellence on Sustainable Resource Management,

Recalling that the Regular Budget support for this activity, including staffing, has remained minimal and unchanged for the past many years,

1. Decides to propose that the Economic and Social Council consider requesting that the Secretary-General strengthen the Secretariat’s role in natural resource management;
2. Decides to transmit to the Economic and Social Council at its session of 2023 a draft resolution on this issue for consideration and possible adoption.

**Draft ECOSOC resolution on the implementation of** **decision to request additional resources to support activities under Modernizing Resource Management Systems**

The Economic and Social Council,

Noting the adoption by the 70th session Economic Commission for Europe (Geneva, 20-21 April 2023) of decision … on the implementation of the decision to request additional resources to support activities under Modernizing Resource Management Systems,

Endorses the decision of the Economic Commission for Europe to request additional resources from the Secretary-General to support activities under Modernizing Resource Management Systems.

 11. Looking ahead: Future work of the Committee on Sustainable Energy

1. Review of subprogramme performance and planning

Documentation: ECE/ENERGY/2022/1 – Draft programme of work of the sustainable energy subprogramme for 2023

ECE/ENERGY/31/2022/INF.1 – Outline of key components of the programme of work of the sustainable energy subprogramme for 2024

* 1. Adopted the draft programme of work of the Sustainable energy subprogramme for 2023 (ECE/ENERGY/2022/1) and recommended submission to the ECE Executive Committee for subsequent approval. Requested a draft programme of work of the Sustainable energy subprogramme for 2024 for adoption at its next session.
	2. Noted and agreed to the proposed modifications to the programme of work for the sustainable energy subprogramme for 2024 (ECE/ENERGY/31/2022/INF.1) and requested the secretariat to reflect the modifications in the proposed programme plan of the Sustainable energy subprogramme for 2024.
	3. In line with ECE Evaluation policy, one of the three subprogramme-level internal evaluations to be conducted in 2024 will focus on subprogramme 5, Sustainable energy. After consultation, the Committee agreed to the proposed theme: Sustainable resource management (regular budget activities on UNFC and UNRMS).
1. Approval of documents

*Documentation:* ECE/ENERGY/2022/2 – Provisional calendar of meetings of the sustainable energy subprogramme for 2023

ECE/ENERGY/2022/3 – Revised publication plan for 2022 and draft publication plans for 2023 and 2024

ECE/ENERGY/GE.8/2022/2 – Report of the Ninth Session of the Group of Experts on Gas

ECE/ENERGY/GE.4/2022/2 – Report of the 17th session of the Group of Experts on Coal Mine methane and Just Transition

ECE/ENERGY/2022/4 – Final mandate and terms of reference of the Group of Experts on Coal Mine Methane and Just Transition

* 1. Endorsed the provisional calendar of meetings for 2022 (ECE/ENERGY/2022/2) and the revised publication plan for 2022 and draft publication plans for 2023 and 2024 (ECE/ENERGY/2022/3).
	2. Took note of the reports of the ninth session of the Group of Experts on Gas (ECE/ENERGY/GE.8/2022/2) and of the seventeenth session of the Group of Experts on Coal Mine Methane and Just Transition (ECE/ENERGY/GE.4/2022/2).
	3. Approved the extension of the mandates of the Task Force on Industrial Energy Efficiency and the Task Force on Digitalization in Energy to 2023-2024.
	4. Took note of the clarifications made by the Group of Experts on Coal Mine Methane and Just Transition to its mandate and terms of reference, as per the Committee request, and recognized that process to be completed (ECE/ENERGY/2022/4).

 12. Election of officers

* 1. The Committee elected […] as Chair and […] as Vice-Chairs to serve from the end of the thirty-first session until the end of the thirty-third session of the Committee.
	2. The Chairs of the Committee’s subsidiary bodies are Vice-Chairs of the Committee ex officio (currently […]).
	3. The Committee underscored the desirability, for the sake of ensuring continuity of the Bureau, that not all officers be elected at the same time.

 13. Any other business

* 1. Requested the secretariat to proceed with preparations for the thirty-second session of the Committee on Sustainable Energy on 13-15 September 2023 in Geneva, including a draft agenda, draft report, and all supporting documents necessary for the implementation of the programme of work for the ECE Sustainable energy subprogramme for 2023-2024 and the work plans of its six subsidiary bodies. Requested the secretariat to explore options to co-host the Global Methane Forum with the Global Methane Initiative as part of the ECE Sustainable Energy Week 2023 (11-15 September 2023).
	2. Thanked all non-government stakeholders for their continued contributions to the work of the Sustainable energy subprogramme and renewed its wish to involve these stakeholders in its activities and meetings.

 14. Adoption of the report and close of the meeting

*Documentation:* ECE/ENERGY/143 – Report of the Committee on Sustainable Energy on its thirty-first session

* 1. Adopted the report of its thirty-first session (ECE/ENERGY/143) subject to any necessary editing and formatting.

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1. Redundancy can be defined as spare capacity within a system, such as duplicate components, assets, or functions, that increases the reliability of a system to avoid disruption. In the energy sector, redundancy can include local backup power generators or storage systems, idle capacity in transmission and distribution networks, or idle generating assets. [↑](#footnote-ref-2)