




---

**Economic Commission for Europe**
**Committee on Sustainable Energy**
**Thirty-first session**

Geneva, 21-23 September 2022

**Report of the Committee on Sustainable Energy on its thirty-first session**
**Contents**

<i>Chapter</i>	<i>Page</i>
I. Introduction and attendance.....	3
II. Opening and adoption of the agenda (agenda item 1).....	4
III. High-level segment: Building resilient energy systems in the ECE region: achieving greater ..... energy security, affordability, and net-zero (agenda item 2).....	5
IV. Delivering on sustainable energy: subprogramme accomplishments since the thirtieth session of the Committee on Sustainable Energy (agenda item 3).....	8
V. Achieving high performance in buildings (agenda item 4).....	9
VI. Modernizing resource management (agenda item 5).....	9
VII. Enabling a hydrogen ecosystem (agenda item 6).....	11
VIII. Addressing methane management (agenda item 7).....	13
IX. Understanding subsidies and carbon pricing (agenda item 8).....	14
X. Technical assistance, regional outreach and collaboration activities (agenda item 9).....	15
A. Regional advisory services and collaboration activities.....	15
B. Extrabudgetary and United Nations Development Account projects.....	15
XI. Preparing for the 70th session of the Economic Commission for Europe (agenda item 10).....	15
A. Key messages and policy recommendations for the Economic Commission for Europe.....	16
1. Building resilient energy systems.....	16
2. Decision to study finance for energy-related climate change activities in the ECE region, particularly related to critical raw materials.....	17
3. Best Practice Guidance for Effective Management of Coal Mine Methane at National Level: Monitoring, Reporting, Verification and Mitigation.....	17
4. United Nations Resource Management System Principles and Requirements.....	18
5. Decision to request additional resources to support activities under the Sustainable energy subprogramme.....	19
XII. Looking ahead: Future work of the Committee on Sustainable Energy (agenda item 11).....	19
A. Review of subprogramme performance and planning.....	19

B.	Approval of documents.....	20
XIII.	Election of officers (agenda item 12).....	21
XIV.	Any other business (agenda item 13).....	21
XV.	Adoption of the report and close of the meeting (agenda item 14).....	21

## I. Introduction and attendance

1. The work of the United Nations Economic Commission for Europe (ECE) on sustainable energy is designed to improve access to affordable and clean energy for all and help reduce greenhouse gas (GHG) emissions and the carbon footprint of the energy sector in the region. It promotes policy dialogue and cooperation among governments, energy industries and other stakeholders. The current focus of the Committee on Sustainable Energy (the Committee) is on energy efficiency, renewable energy, cleaner electricity systems, coal mine methane, gas, hydrogen, and sustainable resource management through the work of its six subsidiary bodies.
2. At its thirty-first session, the Committee exchanged views on how to build resilient energy systems in the ECE region while supporting implementation of the 2030 Agenda for Sustainable Development (2030 Agenda) and the Paris Agreement through high-performance buildings, sustainable resource management, hydrogen, methane management, energy subsidies and carbon pricing options, renewable energy, carbon neutrality, and the transformation of electricity systems. The session was held in Geneva on 21-23 September 2022. Due to continued impediments associated with Covid-19, the session was conducted in a hybrid format.
3. More than 370 participants from the following ECE member States participated: Albania, Austria, Azerbaijan, Belarus, Belgium, Bosnia and Herzegovina, Bulgaria, Canada, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Georgia, Germany, Greece, Ireland, Israel, Italy, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Luxembourg, Malta, Montenegro, Netherlands, North Macedonia, Norway, Poland, Portugal, Republic of Moldova, Romania, Russian Federation, Serbia, Slovakia, Spain, Sweden, Switzerland, Ukraine, United Kingdom, United States and Uzbekistan. Representatives of the European Union also participated. Experts from Argentina, Brazil, Cameroon, the People's Republic of China, Colombia, Ghana, India and Iran (Islamic Republic of) participated under Article 11 of the Commission's Terms of Reference.
4. The following United Nations regional commissions, specialized agencies, funds and programmes were in attendance: International Atomic Energy Agency (IAEA), International Labour Office (ILO), United Nations Development Programme (UNDP), United Nations Economic and Social Commission for Asia and the Pacific (ESCAP), United Nations Economic and Social Commission for Western Asia (ESCWA), United Nations Economic Commission for Latin America and the Caribbean (ECLAC), United Nations Environment Programme (UNEP), United Nations Industrial Development Organization (UNIDO) and the World Meteorological Organization (WMO).
5. The following intergovernmental and non-governmental organizations and academic institutions were in attendance: Ariel Foundation International, Asian Development Bank, Asia-Pacific Urban Designers (APUD), Assocarboni General Association of Coal Operators, Association for Research on Environmental Management and Sustainable Development and Welfare, Association of Donbass Mining Towns, AGH University of Science & Technology, Al-Balqa' Applied University, Faculty of Engineering Technology, Baku Higher Oil School, Carnegie Mellon University (FAIA LEEDAP), Center for Sustainable Livelihood and Development (CENSLiD), Centre for Renewable Energy and Action on Climate Change, Central Mining Institute, Clean Air Task Force, Climate, Health Information Learning & Development (CHIL&D), "Climate Initiative" NKO Association, Croatian Innovators Network, Dalhousie University Basin and Reservoir Lab, Duisburg Essen University, Economic Cooperation Organization, EnEffect, Energy Efficiency Center – EECG, Energy Efficiency Foundation (EEF), ENERPO Research Centre, Environmental Defense Fund, Erasmus Mundus Association (EMA), EUCLID, European Bank for Reconstruction and Development (EBRD), EUROSOLAR Turkey, Freie Universität Berlin, Gas Exporting Countries Forum, Global Witness, Green Climate Fund, GreenTech Foundation Bangladesh, Habitat for Humanity International, IASS Potsdam, IIT Kharagpur, Imperial College London, Institute for Economics and Forecasting, Ukrainian National Academy of Science (UNAS), Institute for Energy Efficiency in Production/ EEP University of Stuttgart, Institute of Geography of Azerbaijan National Academy of Sciences, Institute Soils Science and Agrochemistry of the National Academy of Science, Institution of Chemical Engineers (ICHEME),

International Centre for Sustainable Carbon, International Energy Agency (IEA), International Institute for Applied Systems Analysis (IIASA), International Petroleum Industry Environmental Conservation (IPIECA), International Renewable Energy Agency, International Support Network for African Development (ISNAD-Africa), Internet Society International (ISOC), iuventum e.V., Iran National Inventions and Innovation Team, Jawaharlal Nehru University, Latvian Member Committee, Lawrence Berkeley National Laboratory, Loughborough University, Marketing Research Foundation, National Institute of Industrial Engineering, NGO Angel, Nizhny Novgorod State Technical University, Northern University Bangladesh, Paul Scherrer Institut, Penn State University (Global Building Network), Public Association of Independent Subsoil Experts of Kazakhstan, Queen Mary University of London, Royal Society of Chemistry, Russian Academy of Science, Scientific-Technical Center with Constructional Bureau and Experimental Production of Academy of Sciences, SI "Institute of Environmental Geochemistry" NAS of Ukraine, Tashkent State Technical University, Technical and Vocational University (TVU), Technical University of Munich Center for Energy Markets, The Islamia University of Bahawalpur, UNEP/GRID-Geneva, Unicolmayor, Universidad de Málaga, Universitas Pendidikan Nasional, University of Auckland, University of Exeter, University of Geneva, University of Jordan, University of London, University of Melbourne, University of Notre Dame, University of Oviedo, University of Sheffield, University of Strathclyde, University of the Philippines, University of Tirana, Vision my Art, Women in Mining, World Bank Group, World Coal Association, World Energy Council (WEC), World Energy & Meteorology Council, World Experience for Georgia Think Tank World Nuclear Association, World Petroleum Council, World Resources Institute, YOUNGO.

6. Independent experts and representatives of the private sector also attended at the invitation of the secretariat.

## **II. Opening and adoption of the agenda (agenda item 1)**

*Documentation:* ECE/ENERGY/142 – Annotated provisional agenda for the thirty-first session

7. The Chair of the Committee, Mr. Jürgen Keinhorst, opened the meeting and presented the provisional agenda, which was adopted without change.

8. In his remarks, the Chair stated that the war in Ukraine is a tragedy for millions in Ukraine but also in the neighbouring areas and for many abroad. The Chair also noted that the situation makes it even more challenging to achieve the sustainable development and climate goals. He advised that the Committee session would address the effects of the aggression in Ukraine on energy markets, including shortages and increased prices, with a focus on determining how best to achieve the long-term goals in energy and climate – including access to affordable and sustainable energy. The Chair further advised that the session would provide information about the work of the Committee and its subsidiary bodies. He acknowledged that the Committee and its expert groups had been very effective in the past year, especially in light of the COVID-19 restrictions and other challenges. The Chair encouraged member States to provide guidance as to how the Committee can best support them in the field of energy.

9. In her opening remarks, the Executive Secretary of ECE referred to ECE's mission to promote regional economic integration and acknowledged that the region is one of the largest producers and consumers of energy, making it key when it comes to energy and delivering a sustainable energy future for the world. The Executive Secretary observed that the ECE region is at a critical turning point as it has become the focus of geopolitical conflicts and extreme climate events - heatwaves, forest fires and floods. She called upon the participants to think about the energy, food and climate crises and how ECE and the Committee can be an instrument of change that can bring the region back from the verge of multiple disasters. The Executive Secretary underlined that energy is critical to supporting peace, cooperation, sustainability, and quality of life in the region and beyond and noted that experts have found clear pathways for policymakers to attain a carbon-neutral energy system using energy efficiency improvements, digital solutions, renewable energy deployment, high-efficiency

fossil fuel technologies with carbon capture, use, and storage (CCUS), nuclear power (including advanced nuclear power), hydrogen and integrated and sustainable management of natural resources. She further noted that private and public sector cooperation including collaboration with the financial sector is essential. She acknowledged that the Committee has been at the forefront of dialogue and action and has a strong contribution to make to further support ECE member States on the energy transition. In closing, she urged the Committee to rise to new challenges and develop more breakthrough solutions to accelerate urgent action on climate and build the needed resiliency of the region's energy systems.

10. The Chair informed the Committee the items of the agenda that he would chair and the items that would be chaired by the Vice Chairs of the Committee.

### **III. High-level segment: Building resilient energy systems in the United Nations Economic Commission for Europe region: achieving greater energy security, affordability, and net-zero (agenda item 2)**

*Documentation:* CSE-31/2022/INF.2 – Building Resilient Energy Systems in the United Nations Economic Commission for Europe Region: Achieving Greater Energy Security, Affordability, and Net-zero

CSE-31/2022/INF.14 – Proposed UNECE Platform on Resilient Energy Systems

CSE-31/2022/INF.15 – Proposed Definition of Resilient Energy Systems

11. Taking into account: (i) the urgent need to address the increasing vulnerability of the energy systems in the 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 need to be scaled-up to meet the objectives of the 2030 Agenda in general and of the 2°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 GHG emissions and the carbon footprint of the energy sector in the region.

12. The Committee heard presentations on the main challenges of energy security, economic recovery/affordability, and environmental sustainability that the ECE region is currently facing in a volatile, uncertain, complex, and ambiguous world and the importance of addressing them quickly, strategically and with a vision for the long-term.

13. The Committee was presented with a number of options and technical solutions the Bureaux of the six subsidiary bodies recommended member States could consider to build resilient energy systems in the region. 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.

14. Representatives from the following countries delivered statements about their current challenges, needs and priorities related to energy system resiliency: Azerbaijan, Czech Republic, Georgia, Germany, Kazakhstan, Norway, Poland, Portugal, Russian Federation, Ukraine, United Kingdom, and the United States. The representative of the European Union

also delivered a statement. The speakers noted a range of issues, including significant challenges related to access to affordable, reliable, sustainable and modern energy services. A number highlighted the impact of the conflict in Ukraine on their energy systems. Some also 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. 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 delivering on the energy transition and climate neutrality was also raised.

15. In response to the needs outlined by member States, expert members of the six subsidiary bodies of the Committee shared recommendations for member States for their consideration. Through a facilitated dialogue, 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.

16. To that end, the Committee acknowledged an improvement of energy systems resiliency through implementation of energy efficiency measures first, underpinning 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 and 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.<sup>1</sup>

17. 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.

18. 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 member States to support the activities of the subsidiary bodies through extrabudgetary funding.

19. 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 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:

(a) **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

---

<sup>1</sup> 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.

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;

(b) **Increase awareness raising activities** that focus on full life cycle assessment and cost-benefit analysis of technologies, as well as non-technical measures, both on the energy demand and supply side, that enhance access to affordable, reliable, sustainable and modern energy for all;

(c) **Support an expanded Pathways to Sustainable Energy initiative** to facilitate the selection and implementation of effective policies across the 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;

(d) **Expand efforts to reduce methane emissions**, increasing short-term energy supply with recovered methane and providing targeted support to member States in the 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 efforts, including of the Global Methane Pledge; invited member States to participate in the Global Methane Forum to be held as part of the ECE Sustainable Energy Week 2023 (11-15 September 2023) and the secretariat to partner with the Global Methane Initiative (GMI) to present ECE's perspectives at the Forum;

(e) **Explore and increase understanding on energy-related climate financing** in the ECE region to identify policies and mechanisms that can increase financing for sustainable energy technologies, the critical raw materials needed for the transition to net-zero economies in the region and to enable the region to implement climate-friendly policies that also increase energy system resiliency;

(f) **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 energy efficiency and energy services, 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;

(g) Premised on a system level perspective, **give increased attention to energy conservation**, to improve resilience through cross-sectoral action on energy efficiency;

(h) **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, IEA, Organisation for Economic Co-operation and Development (OECD), Organization for Security and Co-operation in Europe (OSCE), UNDP, UN Framework Convention on Climate Change (UNFCCC) Conference of the Parties, World Business Council for Sustainable Development, World Economic Forum and WEC 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 overall energy sector, including both energy supply and demand, in the region and support the shift to net zero GHG emissions.

20. 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 during the thirty-second session of the Committee.

#### **IV. Delivering on sustainable energy: subprogramme accomplishments since the thirtieth session of the Committee on Sustainable Energy (agenda item 3)**

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

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

21. 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; (ii) ensure a just transition to remove social obstacles to real transformative action; and (iii) enable a hydrogen ecosystem.

22. 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.

23. 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.

24. Noted with appreciation the issuing of the REN21 ECE Renewable Energy Status Report 2022, which was prepared jointly by REN21 and the ECE secretariat. The report provides a comprehensive overview of the current status of renewable energy and energy efficiency trends in Albania, Armenia, Azerbaijan, Belarus, Bosnia and Herzegovina, Georgia, Kazakhstan, Kosovo, Kyrgyzstan, Republic of Moldova, Montenegro, North Macedonia, the Russian Federation, Serbia, Tajikistan, Turkmenistan, Ukraine, and Uzbekistan.



## V. Achieving high performance in buildings (agenda item 4)

25. This segment featured presentations on relevant activities implemented by ECE in the member States and a discussion on ongoing and future regional cooperation in the area of high-performance buildings.

26. 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.

27. The Committee requested the secretariat to continue its efforts to develop 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.

28. The Committee requested that progress on HPBI be reported at the thirty-second session.

## VI. Modernizing resource management (agenda item 5)

*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 – Draft for discussion

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

29. An expert panel discussed cooperation to identify opportunities and challenges in modernizing natural resource management in response to climate action and broader sustainable development needs. The panel noted that the ECE region must urgently optimize the management of endowments of natural resources, including renewables and critical raw materials (CRMs), to deliver on climate change and sustainable development. Resiliency in resource supply requires careful attention to a number of important environmental, social and economic considerations. The United Nations Policy Brief on “Transforming Extractive Industries for Sustainable Development” (2021) calls for multifaceted action on producing and responsibly consuming resources. A United Nations Working Group on Transforming the Extractive Industries for Sustainable Development was established to unite all stakeholders on a common platform to operationalize the recommendations contained in the Policy Brief. Speakers stressed that the application of the UNFC and the United Nations Resource Management System (UNRMS) is essential to move to a modern natural resource management model.

30. The panel discussed and observed that the production of CRMs, required for renewable energy and energy storage, needs to be assured sustainably, emphasizing the social contract on natural resources and environmental assessments. Renewable energy needs to be integrated harmoniously with the available natural resource base of the ECE region. A UNRMS-based CRMs information dashboard will be needed to provide socially, environmentally and economically referenced data on CRMs. As resource demand increases, progress towards a more circular economy by increasing resource efficiency and reducing waste is essential. The Resources as a Service (RaaS) approach offers a means of transitioning to a feasible, acceptable, and resilient practice of responsible resource management.

31. The Committee was updated on the UN Working Group on Transforming the Extractive Industries for Sustainable Development, with a focus on its priorities and outputs to date.

32. 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 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.

33. 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.

34. 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, subject to further consideration and unanimous adoption of the recommendation by the Expert Group on Resource Management.

35. 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.

36. 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.

37. 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 noted 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.

38. 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.

39. 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, subject to further consideration and unanimous adoption of the recommendation by the Expert Group on Resource Management.

40. 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 and the Paris Agreement targets. Further noting that ECE member States are starting to prioritize the implementation of the UNFC and the 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,

(a) Decided to recommend to the Commission that it consider requesting ECOSOC consider asking the Secretary-General to strengthen the secretariat’s role in supporting member States in building resilient energy systems and modernizing resource management systems, as well as outreach efforts;

(b) Decided to transmit to the Commission at its session in 2023 a draft decision on this issue for consideration and possible adoption.

41. The secretariat informed the Committee that an additional Regular Budget P4 post would cost approximately USD 250,000 per annum.

## VII. Enabling a hydrogen ecosystem (agenda item 6)

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

CSE-31/2022/INF.13 – Hydrogen Task Force – Draft Terms of Reference

42. An expert panel explored the approaches currently used to quantify the sustainability of hydrogen and provided recommendations, including but not limited to: the development of a comprehensive classification for hydrogen, continued policy dialogue, the fostering of cooperation and development in the ECE region and/or the establishment of an ad hoc task force or sub-group that would prepare the Specifications for the application of UNFC to hydrogen projects.

43. 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, that help reduce GHG emissions and the carbon footprint of the energy sector in the ECE region and that support the transition to net-zero GHG emissions.

44. 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.

45. 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 and addresses the full life cycle of hydrogen production and transport. 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.

46. Noting that hydrogen activities are currently not centralized in the sustainable energy subprogramme and are based on informal collaboration amongst a number of the groups of experts, requested the Group of Experts on Gas to lead the work of the subprogramme related to hydrogen and to do so in close collaboration with the other groups of experts. Requested the Group of Experts on Gas, in collaboration with the other groups of experts, to develop a time plan and a Terms of Reference for this work and to do so by the thirty-second session of the Committee or earlier if possible.

47. Requested that the Expert Group on Resource Management:

(a) Investigate existing classifications and specifications for hydrogen and develop, where appropriate, specifications for the application of UNFC and the UNRMS to hydrogen projects and production technologies;

(b) Develop pilot hydrogen resource management projects and case studies applying UNRMS principles.

48. The Committee requested the Group of Experts on Gas, in close collaboration with the other groups of experts and based on the previous investigation to ensure duplication of work is avoided, continue to develop a scientifically-based terminology for hydrogen that reflects the volume of GHG emissions throughout the life cycle.

49. Requested all the groups of experts to explore opportunities to move towards a Guarantee of Origin for Hydrogen (GOH) subject to the availability of resources. 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.

50. 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. An informally agreed upon 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.

51. The Committee noted with appreciation the progress in implementing the extrabudgetary project “Sustainable hydrogen production in the UNECE region and its role in the development of a hydrogen ecosystem and export potential”, funded by the Russian Federation. This is the first time that work on hydrogen at this scale has been carried out in the subregion. The project evaluated national capacities of nine countries (Azerbaijan, Armenia, Belarus, Kazakhstan, Kyrgyzstan, Republic of Moldova, Tajikistan, Turkmenistan, and Uzbekistan) to develop hydrogen ecosystems, including in the regions with resource and technology constraints. The project analysed the role of hydrogen in the countries' long-term energy strategies, their resource potentials, local conditions for the production, use, and possible export of low-carbon hydrogen. An important part of the project was the creation of a subregional hydrogen community that has been actively involved in improving the quality

of the outcomes. Requested that an update on the project be presented to the thirty-second session of the Committee.

## VIII. Addressing methane management (agenda item 7)

*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

52. Through a moderated panel session, the Committee addressed the problem of methane emissions from the energy-related extractive industries. It was presented with a case study from the United States that provided details on the country's domestic and international efforts to effectively monitor and mitigate such emissions. The objectives and up-to-date achievements of the U.S.-led Global Methane Pledge were presented, and the Committee was informed that the ECE secretariat has recently joined that initiative as an official supporter.

53. The Committee listened to the debate on methane emissions monitoring practices and technologies, with special focus on the methods of remote sensing. It observed that such methods create new opportunities for emissions quantification independent from the emitter and recognized that they require a good understanding and corroboration to ensure accurate interpretation and appropriate use of the obtained results.

54. The Committee discussed the costs that coal phase down imposes on mine operators, their personnel, and the communities and regions the well-being of which is closely interlinked with the industry. It highlighted the need for aligning methane mitigation efforts with just transition goals and processes, particularly in the coal sector. There was also a presentation on the effect of mine closure and the potential impacts on women and girls of poorly planned closures and transitions.

55. After discussion, the Committee:

(a) Noted the short-term value of capturing and using recovered methane to increase energy supply and support energy system resilience 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 reductions;

(b) 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;

(c) 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, GMI 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;

(d) 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);

(e) Noted the opportunities and challenges posed by the complementarity of top-down and bottom-up quantification methodologies;

(f) Requested the secretariat and invited Member States to take appropriate measures to ensure broad dissemination and application of 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);

(g) Decided to recommend to the Commission to propose a draft decision to ECOSOC, inviting the application of 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) worldwide;

(h) Recognizing 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;

(i) 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;

(j) 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;

(k) 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;

(l) 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;

(m) 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, Pennsylvania, 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.

## **IX. Understanding subsidies and carbon pricing (agenda item 8)**

56. As a follow up to the request of the Commission at its sixty-ninth session (20-21 April 2021) for the Committee to continue studying how best to address efficient use of energy resources and, in this regard, the impact of subsidies as well as carbon pricing options, the Committee was updated on the status of energy subsidies, taxes, duties and carbon pricing, including those that support end-use consumers, fossil fuels, and carbon (or other GHG) pricing mechanisms in the ECE region. The Committee also received a presentation on a UNDP tool kit policymakers can use to reform energy subsidies.

57. The Committee noted the importance of market mechanisms in supporting the building of resilient energy systems. Further noted that it would be helpful to partner with

other organizations and ECE sectoral committees to better understand best practices and consequences regarding the reform of subsidies, and the design and implementation of effective GHG pricing mechanisms in the ECE region and to assess what such a reform would mean for the goal of limiting temperature increases to 2°C.

58. Reiterated the need to continue to explore how best to address the efficient use of resources and, in this regard, the impact of subsidies, and carbon pricing options. 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 and stressed the need to address equally the impact of subsidies and their role for fossil fuels and renewables, as well as across the whole ECE region.

## **X. Technical assistance, regional outreach and collaboration activities (agenda item 9)**

### **A. Regional advisory services and collaboration activities**

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

### **B. Extrabudgetary and United Nations Development Account projects**

59. The Committee received an update of regional advisory services and on cooperation with other international organizations 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.

60. The Committee also received an update of extrabudgetary projects and projects under the United Nations Development Account as well as other stakeholders since its last session.

61. 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.

62. 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.

## **XI. Preparing for the 70th session of the Economic Commission for Europe (agenda item 10)**

63. The Committee reflected on Sustainable energy subprogramme activities carried out since the thirtieth session to further operationalize the decisions taken at the sixty-ninth session of the Commission (Geneva, 20-21 April 2021) (E/ECE/1494).

64. Discussed ways 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 and welcomed the Commission's selection of this important topic.

65. The Committee noted key areas where it has been actively supporting this subject area, including on:

(a) *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;

(b) *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;

(c) *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;

(d) *High-Performance Buildings Initiative* which aims 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;

(e) *Low- and Zero-carbon technology, including abatement technology, interplay for carbon neutral energy systems* with a focus on demand-side fuel switching in critical sectors such as buildings, transport and energy intensive industries to facilitate the transition to a net zero economy and a resilient energy system.

## **A. Key messages and policy recommendations for the Economic Commission for Europe**

66. 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 70<sup>th</sup> 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 short- and long-term development goals.

67. 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; and request additional resources. The draft decisions are as follows:

### **1. Building resilient energy systems**

68. 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 need to be scaled-up to meet the objectives of the 2030 Agenda for Sustainable Development in general and of the 2°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.

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

69. 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 sourcing and development of CRMs 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.

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

70. 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 Group of Experts 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 States Members 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**

The Economic and Social Council:

- Noting that at its seventieth session (18-19 April 2023), the Economic Commission for Europe endorsed the “Best Practice 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 Practice 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 Practice 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 Practice Guidance for Effective Management of Coal Mine Methane at National Level: Monitoring, Reporting, Verification and Mitigation” worldwide.

#### 4. United Nations Resource Management System Principles and Requirements

71. 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, subject to the procedure outlined in the report of the Committee on Sustainable Energy at its thirty-first session (ECE/ENERGY/143, paragraph 34), 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 States Member 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**

The Economic and Social Council,

- 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.

## 5. Decision to request additional resources to support activities under the Sustainable energy subprogramme

72. The Economic Commission for Europe:

- Considering a number of ECOSOC Decisions concerning the sustainable energy subprogramme (United Nations International Framework Classification for Energy Reserves/Resources: Solid Fuels and Mineral Commodities (1997/226), United Nations Framework Classification for Fossil Energy and Mineral Resources (2004/233), Best Practice Guidance for Effective Methane Drainage and Use in Coal Mines (2011/222), Best Practice Guidance for Effective Methane Recovery and Use from Abandoned Coal Mines (2021/249), Updated United Nations Framework Classification for Resources (2021/250))
- Noting at its 70th session, the critical importance of building resilient energy systems in the ECE region, including sustainable resource 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 building resilient energy systems and implementation of sustainable resource management tools, including 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 and the International Centres of Excellence on Coal Mine Methane and supporting proper management of coal mine methane and abandoned mine methane
- Recalling that the Regular Budget support for the subprogramme, including staffing, has remained minimal and unchanged for the past many years:

(a) Decides to propose that the Economic and Social Council consider requesting that the Secretary-General strengthen the Secretariat's role in supporting member States building resilient energy systems and modernizing resource management systems;

(b) 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 the Sustainable energy subprogramme**

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 the Sustainable energy subprogramme, in particular, building resilient energy systems and modernizing resource management systems, as well as outreach efforts
- Endorses the decision of the Economic Commission for Europe to request additional resources from the Secretary-General to support activities under the Sustainable energy subprogramme, in particular, building resilient energy systems and modernizing resource management systems, as well as outreach efforts.

## **XII. Looking ahead: Future work of the Committee on Sustainable Energy (agenda item 11)**

### **A. 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

73. The secretariat presented the draft programme of work of the Sustainable energy subprogramme for 2023 (ECE/ENERGY/2022/1). This document is consistent with the ECE proposed programme budget for 2023 (A/77/6 (Sect.20)) which was reviewed by the ECE Executive Committee in December 2021 and submitted for consideration by the 77th session of the United Nations General Assembly. The programme of work document reflects the annual budget format presented in 2020 in line with General Assembly resolution 72/266, with enrichments reflecting General Assembly resolutions 74/251, 75/243 and 76/245.

74. 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 consideration and possible adoption at its next session.

75. The Committee was invited to consider the “Outline of key components of the programme of work of the Sustainable energy subprogramme for 2024” (ECE/ENERGY/31/2022/INF.1) and provide recommendations on these components.

76. 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.

77. 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).

## B. 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 Group of Experts on Gas on its ninth Session

ECE/ENERGY/GE.4/2022/2 – Report of the Group of Experts on Coal Mine Methane and Just Transition on its seventeenth session

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

78. The Committee was requested to note or approve a range of documents to support the implementation of mandated areas of work and to recommend their submission to EXCOM for subsequent approval if required.

79. The Committee was invited to agree to the provisional calendar of meetings for 2023 and to document ECE/ENERGY/2022/3, which contains changes to the already approved 2022 and 2023 publication plans and the draft publication plan for 2024.

80. The Committee was invited to extend the mandates of the Task Force on Industrial Energy Efficiency and the Task Force on Digitalization in Energy to 2023-2024.

81. 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). Should “UNRMS: Principles and Requirements” not be recommended for publication by the Expert Group on Resource Management, agreed that this publication could be replaced by a publication entitled UNFC Case Studies – Focus on raw materials.

82. 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).

83. 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.

84. 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).

### **XIII. Election of officers (agenda item 12)**

85. The Committee elected Mr. Juergen Keinhorst (Germany) as Chair and Mr. Emir Farhadzada (Azerbaijan), Mr. Admir Softic (Bosnia and Herzegovina), Mr. Romeo Mikautadze (Georgia), Mr. Chokan Laumulin (Kazakhstan), Mr. Pawel Pikus (Poland), Mr. Jean-Christophe Füeg (Switzerland), Mr. Farhod Bilolzoda (Tajikistan), Mr. Yaroslav Demchenkov (Ukraine), and Ms. Emily Grubert (United States) as Vice-Chairs to serve from the end of the thirty-first session until the end of the thirty-third session of the Committee.

86. The Chairs of the Committee's subsidiary bodies are Vice-Chairs of the Committee *ex officio*, currently The Chairs of the Committee's subsidiary bodies are Vice-Chairs of the Committee *ex officio*, currently, Mr. Stefan M. Buettner, Group of Experts on Energy Efficiency, Mr. Jim Robb, Group of Experts on Cleaner Electricity Systems, Mr. Raymond Pilcher, Group of Experts on Coal Mine Methane and Just Transition, Mr. Francisco de la Flor, Group of Experts on Gas, Mr. Kostiantyn Gura, Group of Experts on Renewable Energy, and Mr. David MacDonald, Expert Group on Resource Management.

87. The Committee underscored the desirability, for the sake of ensuring continuity of the Bureau, that not all officers be elected at the same time.

### **XIV. Any other business (agenda item 13)**

88. 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. Invited member States to participate in the Global Methane Forum to be held as part of the ECE Sustainable Energy Week 2023 (11-15 September 2023) and the secretariat to partner with the GMI to present ECE's perspective at the Forum.

89. 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.

### **XV. Adoption of the report and close of the meeting (agenda item 14)**

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

90. The Chair summarized the decisions, conclusions and recommendations taken by the Committee.

91. The Committee was invited to adopt its report based on a draft prepared by the secretariat.

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