



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

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Item 8 (a) of the provisional agenda

Technical assistance, regional outreach and collaboration activities:**Regional advisory services and collaboration activities****Report on regional advisory services in sustainable energy****Note by the secretariat****I. Introduction**

1. The regional advisory services in sustainable energy are provided in accordance with the Guidelines of the Regular Programme for Technical Cooperation (RPTC). The programme objective, in the context of the United Nations Economic Commission for Europe (ECE) region, is to support, through the transfer of knowledge and expertise, countries with economies in transition in their efforts to develop the capacity to achieve internationally agreed development goals and the outcomes of United Nations conferences and summits. There are 17 ECE member States¹ eligible to receive regional advisory services. In this context, technical cooperation is a core component of ECE's support to member States for the achievement of the 2030 Agenda for Sustainable Development. The regional advisory services complement and reinforce the regular and extrabudgetary programmes.

2. A description of operational activities under the regional advisory services is provided in the document "Report on regional advisory services in sustainable energy" (ECE/ENERGY/2018/9) presented to the Committee on Sustainable Energy at its twenty-seventh session in September 2017.

3. The regional advisory services are in line with the Draft programme of work of the sustainable energy subprogramme for 2023 (ECE/ENERGY/2022/1)² and support the work of the subsidiary bodies of the Committee on Sustainable Energy. The Regional Adviser works in close cooperation with colleagues in the Sustainable Energy Division, other ECE Divisions, other UN Regional Commissions, UN Resident Coordinator Offices (RCOs) in eligible ECE member States, organizations of the UN system, and international and national

¹ Albania, Armenia, Azerbaijan, Belarus, Bosnia and Herzegovina, Georgia, Kazakhstan, Kyrgyzstan, Montenegro, Republic of Moldova, Republic of North Macedonia, Serbia, Tajikistan, Türkiye, Turkmenistan, Ukraine, and Uzbekistan.

² <https://unece.org/sed/documents/2022/07/working-documents/draft-programme-work-sustainable-energy-subprogramme-2023-0>



organizations in support of needs of countries eligible for technical cooperation activities based on demand expressed by these countries.

4. During the period under review (September 2022 - September 2023), technical assistance was provided to countries of South-Eastern Europe, Eastern Europe, the Caucasus and Central Asia. Specifically, the Regional Adviser managed the following projects:

(a) United Nations Development Account (UNDA) project “Strengthening energy policies of Countries with Special Needs to build back better from COVID-19,³” in which the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP) is the lead agency and ECE is an implementing entity (project duration is January 2022- June 2025);

(b) Extrabudgetary project funded by the Joint Sustainable Development Goals (SDG) Fund “Green Finance Facility to improve air quality and combat climate change in North Macedonia,⁴” in which the United Nations Development Programme (UNDP) Office in North Macedonia is the lead agency and ECE is one of the Participating UN Organizations (PUNO) (started in April 2022); the ECE portion of the project has the title “Improving national capacity on renewable energy (RE) and energy efficiency (EE) technologies for small and medium enterprises (SMEs) and households in North Macedonia” (project duration is July 2022 - December 2023);

(c) Extrabudgetary project funded by Joint SDG Fund “Strengthening Georgia’s food and energy resilience,⁵” in which the UNDP Office in Georgia was the lead agency and ECE was one of the PUNOs (completed in March 2023);

(d) Extrabudgetary project funded by the International Climate Initiative (IKI) Germany “Preparation Phase of the project “Improving the energy efficiency of the global building supply chain industry and its products to deliver high performance buildings” (started in April 2023);

(e) Energy efficiency part of the RPTC project “UN4Kharkiv: Integrated Rehabilitation of Settlements (Territories) in Ukraine with a pilot project in the City of Kharkiv,⁶” led by the ECE Housing and Land Management Unit (completed in December 2022).

5. The Regional Adviser also supported implementation of the following projects:

(a) Extrabudgetary project funded by Joint SDG Fund “Addressing the compounded food and energy crisis in Ukraine through innovative technologies and adaptive agricultural practices,⁷” in which the Food and Agriculture Organization of the United Nations (FAO) was the lead agency and ECE was one of the PUNOs (completed in March 2023);

(b) RPTC project “UNECE early development response: reconstruction of Ukraine – restoring connectivity and rebuilding infrastructure” (completed in December 2022).

6. The provision of regional advisory services in the period under review continues to be affected by the consequences of the ongoing geopolitical crises in the ECE region. Advisory missions to countries and in-person capacity-building workshops are now possible. Innovative ways to provide regional advisory services that proved effective and efficient in the last three years continue to be used and explored further. Capacity-building workshops were organized mostly in a hybrid format and proved to be an effective way for knowledge sharing. Engaging consultants for studies requested by eligible countries remains a priority.

³ <https://unece.org/strengthening-energy-policies-countries-special-needs-build-back-better-covid-19>

⁴ <https://unece.org/sustainable-energy/regional-advisory-services/improving-national-capacity-renewable-energy-and>

⁵ <https://unece.org/sustainable-energy/regional-advisory-services/strengthening-georgias-food-and-energy-resilience>

⁶ <https://unece.org/housing/un4kharkiv-rehabilitation>

⁷ <https://unece.org/food-energy-crisis-ukraine>

II. Key regional advisory services (September 2022 - September 2023)

7. Outreach and engaging partners have been a focus of efforts of the Regional Adviser in the period under review. Internally at ECE, the Environment Division, the Forests, Land and Housing Division, the Sustainable Transport Division, and the Economic Cooperation and Trade Division were the main partners for joint activities. Externally, it was possible to leverage limited RPTC funds by working actively with and attracting in-kind and/or financial contributions from the following: ESCAP, UNDP, United Nations Environment Programme (UNEP), UNEP Copenhagen Climate Centre (UNEP-CCC), FAO, International Labour Organization (ILO), International Organization for Migration (IOM), European Bank for Reconstruction and Development (EBRD), Passive House Institute (PHI), Institute for Energy Efficiency in Production (EEP), Green Building Alliance (GBA), Habitat for Humanity International, Governments of Albania, Armenia, Georgia, Germany, and Ukraine.

A. Capacity-building activities

8. In the period under review, capacity-building activities were organized both independently and in conjunction with field projects and studies. This section of the report presents information on independent workshops and capacity-building activities related to studies.

9. The Regional Adviser co-organized the workshop “Improving the Resilience of Energy Systems through Energy Efficiency and Renewable Energy: Demand-Side Perspective and Cross-Sectoral Approach”⁸ on 5 October 2022 in Geneva, Switzerland jointly with programme officers in the Sustainable Energy Division responsible for Group of Experts on Renewable Energy (GERE) and Group of Experts on Energy Efficiency (GEEE) in the framework of the Twelfth International Forum on Energy for Sustainable Development. The workshop was attended by 61 participants, of which 15 women, from 23 countries, including 9 RPTC programme countries. The interactive workshop focused on how energy users, in industry and other economic sectors, can improve their energy resilience. It provided examples of how to identify a set of feasible measures tailored to specific circumstances with particular emphasis on their economic viability. Practical experience shared by speakers provided examples on how energy system resilience can be pursued through energy efficiency and renewable energy, as well as how digital solutions can help.

10. The Regional Adviser co-organized the online workshop “Energy-efficient buildings and progress towards carbon neutrality in Ukrainian cities”⁹ on 18 November 2022 jointly with colleagues from ECE Housing and Land Management Unit in the framework of the RPTC project “UN4Kharkiv: Integrated Rehabilitation of Settlements (Territories) in Ukraine with a pilot project in the City of Kharkiv.” The workshop discussed the legal, institutional, financial and technical challenges that Ukrainian national and local authorities are facing in rebuilding cities and neighbourhoods in an energy-efficient and carbon-neutral manner; presented international practices of constructing and reconstructing energy-efficient and carbon-neutral buildings and neighbourhoods, including topics of design and construction materials as well as the legal and institutional frameworks; and formulated recommendations and showcased integral solutions for improving the energy efficiency of buildings and neighbourhoods to support Ukrainian cities in their reconstruction efforts as well as in the implementation of the Ukrainian National Recovery Plan.

11. The Regional Adviser co-organized the workshop on Mine Closure in Albania and Serbia¹⁰ on 9 December 2022 in Tirana, Albania jointly with the programme officer in the Sustainable Energy Division responsible for the Group of Experts on Coal Mine Methane and Just Transition (CMMJT). The workshop was held in a hybrid format. The workshop was attended by 39 participants, of which 12 women, from 7 countries, including 3 RPTC

⁸ <https://unece.org/sustainable-energy/events/improving-resilience-energy-systems-through-EE-and-RE>

⁹ <https://unece.org/info/Sustainable-Energy/Regional-Advisory-Services/events/372485>

¹⁰ <https://unece.org/info/Sustainable-Energy/Regional-Advisory-Services/events/373587>

programme countries. The workshop was conducted in the framework of the RPTC study to identify principle-based guidelines for designing and implementing a programme for an efficient, safe, and environmentally conscious mine closure in Albania and Serbia (see para. 10).

12. The Regional Adviser co-organized the workshop on Just Transition in Mining Communities and Potential for Development of Geothermal Energy¹¹ on 20 June 2023 in Tirana, Albania jointly with the programme officers in the Sustainable Energy Division responsible for CMMJT and Expert Group on Resource Management (EGRM). At the time of preparing this document, the workshop was under preparation. It is intended for Government officials, experts, and other stakeholders working on issues of just transition and renewable energy in Albania and neighbouring countries.

B. Field projects

13. The Regional Adviser is managing the UNDA project “Strengthening energy policies of Countries with Special Needs to build back better from COVID-19”, in which ESCAP is the lead agency and ECE is an implementing entity. The project aims to improve the capacity of policymakers by supporting them to develop SDG 7 roadmaps which enable the delivery of both the sustainable energy transition and the economic recovery from COVID-19. The National Stakeholder Consultation Workshops on the Development of an SDG 7 Roadmap were organized in Armenia¹² on 25 November 2022 in Yerevan, in Uzbekistan¹³ on 31 January 2023 in Tashkent, and in Kazakhstan¹⁴ on 2 February 2023 in Astana. The workshops’ objective was to engage stakeholders at the national level in each participating country. The workshops provided an explanation of the customized methodology used to develop the SDG 7 roadmaps and to identify the relevant national context and strategies relating to the SDG 7 targets, nationally determined contributions (NDCs) and COVID-19 recovery. In the current stage of the project, collection and analysis of national data needed for the modelling process with the use of the National Expert SDG Tool for Energy Planning (NEXSTEP) continue. Once this stage is complete it will be followed by a capacity building programme to train energy planners and policymakers on the use of NEXSTEP to develop national SDG 7 Roadmaps.

14. The Regional Adviser is managing the Joint SDG Fund project “Green Finance Facility to improve air quality and combat climate change in North Macedonia”, in which UNDP Office in North Macedonia is the lead agency and ECE is one of the PUNOs. The project is setting up and operationalizing Green Financing Facility (GFF), a new financial vehicle, that will provide access to affordable green financing for SMEs and marketable but underserved target groups of individuals/households for investments in renewable energy (RE) and energy efficiency (EE) solutions. The GFF-enabled accelerated adoption of RE and EE solutions will contribute to the reduction of greenhouse gas emissions and air pollution as well as strengthen the local ecosystem for RE and EE green finance. The ECE part of the project has the title “Improving national capacity on renewable energy (RE) and energy efficiency (EE) technologies for small and medium enterprises (SMEs) and households in North Macedonia” (the project has been extended until December 2023). ECE has revised and updated the Green Economy Financing Facility (GEFF) Technology Selector Tool (a database of high-performing household equipment and materials that meet performance standards set by EBRD for the GEFF in North Macedonia) for the purposes of this project. ECE is also in charge of designing and implementing trainings that will be tailored to support the consultancy companies in using the updated list of eligible technologies to design RE and EE projects and monitor and verify the projects’ performance (planned vs. actual). This activity had to be postponed in anticipation of recruiting consultancy companies. It is expected to be completed by the end of 2023.

¹¹ <https://unece.org/info/Sustainable-Energy/Regional-Advisory-Services/events/378777>

¹² <https://unece.org/info/Sustainable-Energy/Regional-Advisory-Services/events/373319>

¹³ <https://unece.org/info/Sustainable-Energy/Regional-Advisory-Services/events/375559>

¹⁴ <https://unece.org/info/Sustainable-Energy/Regional-Advisory-Services/events/375599>

15. The Regional Adviser managed the extrabudgetary project funded by the Joint SDG Fund “Strengthening Georgia’s food and energy resilience”, in which UNDP Office in Georgia was the lead agency and ECE was one of the PUNOs. The project was part of the Joint SDG Fund Development Emergency Modality – Response to the Global Crisis on Food, Energy, Finance. The overall objective of the joint project was strengthening Georgia’s resilience to food and energy crises and protection of the livelihoods of those most vulnerable to the impact of these crises. The objective of the ECE component of the project was enhanced capacity of small business to introduce energy efficiency measures in rural areas and improved knowledge of national stakeholders on energy efficient solutions for small businesses in rural areas. Two reports were prepared by ECE in the framework of the project: “Assessment of Energy Consumption by Agricultural and Food Sector Small Businesses in Rural Areas of Georgia” and “Case Studies with Targeted Assistance for Small Businesses in Selected Rural Areas to Introduce Energy Efficiency Measures.” The Regional Adviser and project officer participated in the closing event of the project “Policy Dialogue - Food and Energy Resilience in Georgia: Policy, Institutions and People” held in Tbilisi on 24 March 2023.

16. The Regional Adviser is managing the extrabudgetary project funded by IKI “Preparation Phase of the project “Improving the energy efficiency of the global building supply chain industry and its products to deliver high performance buildings.” ECE is leading the team of implementing partners that include UNDP country offices in seven beneficiary countries,¹⁵ UNEP, and ESCAP. UNEP-CCC, PHI, EEP, and GBA will be also among the implementing partners for the main phase of the IKI project. The main phase of the project aims to develop a strong foundation of proven best practice methods and focused technical capacity that beneficiary countries can build upon to improve building energy performance and reduce embodied carbon and energy to support their development and achievement of enhanced nationally determined contributions (NDC) targets. The preparation phase includes review of the baseline situation to inform on existing gaps and specific requirements for project implementation; mapping of key stakeholders and project partners, identification of their roles in the project, and engaging local stakeholders in the project’s activities; preparation of a complete project document; and conducting a validation workshop for the detailed national implementation plans with stakeholders. The preparation phase is expected to last until the end of November 2023.

17. The Regional Adviser managed the energy efficiency part of the RPTC project “UN4Kharkiv: Integrated Rehabilitation of Settlements (Territories) in Ukraine with a pilot project in the City of Kharkiv,” which was led by the ECE Housing and Land Management Unit. In the framework of the project, two reports were prepared: “Energy Efficiency for Buildings – Practical Considerations” and “Advanced Energy Efficient Technologies for Heating and Hot Water Supply.” Information about the online workshop “Energy-efficient buildings and progress towards carbon neutrality in Ukrainian cities” organized in the framework of the project is presented in paragraph 10.

18. The Regional Adviser supported the implementation of the extrabudgetary project funded by the Joint SDG Fund “Addressing the compounded food and energy crisis in Ukraine through innovative technologies and adaptive agricultural practices,” in which FAO was the lead agency and ECE was one of the PUNOs. The overall objective of the joint project was to equip the Government of Ukraine with an objective and comprehensive analysis of the biofuel production potential to solve the compound food-energy crisis in Ukraine. ECE was responsible for analysing the normative and institutional framework in support of increasing the renewable energy uptake with special attention to bioenergy, developing recommendations on needed normative and institutional changes, and organizing a multistakeholder dialogue on how to use the untapped renewable energy potential. “Multi-stakeholder Dialogue - Untapped Bioenergy Potential of Ukraine: Comprehensive View of Proper Use. Issues of Energy Security and Food Security” was organized in a hybrid format in Kyiv and online on 31 March 2023. The participants of the event identified main obstacles and possible solutions and agreed on priorities and concrete recommendations to make the necessary changes.

¹⁵ Armenia, Georgia, Kyrgyzstan, Republic of Moldova, Tajikistan, Ukraine, and Uzbekistan

19. The Regional Adviser supported the implementation of the sustainable energy part of the RPTC project “UNECE early development response: reconstruction of Ukraine – restoring connectivity and rebuilding infrastructure.” In the framework of the project, the following studies were developed: “Rebuilding Ukraine with a Resilient, Carbon-Neutral Energy System,” “Role of critical raw materials in rebuilding the low carbon energy infrastructure through the application of the United Nations Resource Management System (UNRMS) standards, guidelines, and best practices,” and “Socio-economic impacts of the transition of the Ukrainian energy sector.”

C. Other technical assistance activities

20. The Regional Adviser supported the preparation of the report “Assessment of the geothermal resources of Albania,” which was requested by the Government of Albania and managed by the programme officer in the Sustainable Energy Division responsible for the EGRM. The study provides analysis of energy calculations including heat losses; setting of the geothermal heating systems based on their viability, vertical heat exchanger capacity evaluation, and design; economic considerations related to the costs of installation, water production, and injection wells; and comparison with the coal heaters and air conditioners.

21. The Regional Adviser supported the preparation of the report “Guidelines for designing and implementing a programme for an efficient, safe, and environmentally conscious mine closure,” which was requested by the Governments of Albania and Serbia and managed by the programme officer in the Sustainable Energy Division responsible for CMMJT. The goal of the study is to provide a theoretical background for actions allowing to reclaim the mined land and mitigate hazards so that it becomes suitable for repurposing and sustainable development. The document provides guidance to both beneficiary countries to improve their national capacities to close coal mines in a manner that ensures that at the end of the process the site is safe for the environment and the population and that the reclaimed grounds are ready for further use unrelated to coal mining.

22. The Regional Adviser supported the preparation of the report “In-Depth Analysis of Coal Demand Dynamics in Tajikistan until 2050,” which was requested by the Government of Tajikistan and managed by the programme officer in the Sustainable Energy Division responsible for CMMJT. The study concludes that the focus of a new coal strategy in Tajikistan, if such document is to be developed, should not be on achieving record production levels, but rather on ensuring the equitable distribution of natural rents from coal exports, safe working conditions, minimizing environmental damage from operating, reclaiming and closing the coal mines, and proper management of methane emissions from coal mines during their operation and after they close.

23. The Regional Adviser supported the preparation of the report “Support for energy crops along roads and highways in Ukraine,” which was requested by the Government of Ukraine and managed by the programme officer in the Sustainable Energy Division responsible for GERE. The study concludes that the use of fast-growing trees in forest strips can help restore them, with the income from fuel feedstock as a source to compensate the costs of reclamation. Under certain conditions, the cultivation of fast-growing energy trees on roadside strips can be attractive to a private investor. Renovation plans for roadside strips could become a part of a bigger strategy for the post-war reconstruction of Ukraine, for example, as a part of road reconstruction component. Several potential pilot projects and respective sites for them have been identified.

24. The Regional Adviser managed the preparation of the report “Guide for the implementation of energy efficiency measures and the valorization of renewable energy sources for public sector buildings,” which was requested by the Government of the Republic of Moldova, in cooperation with programme officers in the Sustainable Energy Division responsible for GERE and GEEE. At the time of preparing this document, the report was under development.

25. At the time of preparation of this report, a request was received from the Government of Ukraine to develop a study on accessibility of geological data related to critical raw materials (CRMs). The Regional Adviser will manage the requested study to be funded by

RPTC in close cooperation with the programme officer in the Sustainable Energy Division responsible for EGRM.

26. In 2022, the Twelfth International Forum on Energy for Sustainable Development (IFESD-12)¹⁶ was organized in a hybrid (in person and online) format over the period of September-November 2022 jointly by the United Nations Regional Commissions in partnership with UNEP, UNDP, and a range of international organizations. Nine workshops, seminars, policy discussions, roundtables, conferences, and other events were organized in the framework of IFESD-12. The Thirteenth International Forum on Energy for Sustainable Development (IFESD-13) will be held in the framework of the Third Almaty Energy Forum on 6-8 November 2023 in Almaty, Kazakhstan.

27. In the period under review, the Regional Adviser conducted advisory missions to Armenia (23-25 November 2022 in conjunction with the National Stakeholder Consultation Workshop on the Development of an SDG7 Roadmap in Armenia), Georgia (23-24 March 2023 in conjunction with the Policy Dialogue - Food and Energy Resilience in Georgia: Policy, Institutions and People), Serbia (30 May - 1 June 2023 in conjunction with the Balkan+ Regional Knowledge Symposium on Energy Efficiency of Buildings), and Albania (19-21 June 2022 in conjunction with the Workshop on Just Transition in Mining Communities and Potential for Development of Geothermal Energy in Albania). All advisory missions to the countries are demand-driven and conducted after receiving a request from a respective national government or UN Resident Coordinator in the country.

D. Future regional outreach, partnerships, fundraising and other activities

28. The Regional Adviser continues to be engaged in maintaining and expanding partnerships within the UN system and with international organizations. The Regional Adviser has been working on several capacity-building activities with ESCAP and ESCWA. The Regional Adviser has been working with colleagues from the Sustainable Energy Division and other Divisions, in particular the Environment Division, the Forests, Land and Housing Division, the Economic Cooperation and Trade Division, and the Sustainable Transport Division on developing project proposals for extrabudgetary, UNDA, and RPTC projects and implementing current activities. The Regional Adviser actively participates in the work of the ECE Working Group on Technical Cooperation (WGTC). The Regional Adviser has been assigned by the Executive Secretary to serve as the coordinator of ECE technical cooperation activities in three countries: Belarus, Georgia, and Kyrgyzstan. This activity is conducted in close cooperation with UN Regional Coordinator Offices (RCO) in the countries and the ECE Project Management Unit (PMU). The work of the Regional Adviser will continue to be based on demand from member States and in support of the programme of work of the Sustainable energy subprogramme. Assistance to countries to achieve progress in the implementation of the 2030 Agenda for Sustainable Development, in particular the targets of SDG7, remains the focus of the Regional Adviser's activities at the country and regional level, subject to availability of resources.

¹⁶ <https://unece.org/info/Sustainable-Energy/events/371236>