





UNECE Renewable Energy Activities in the Region







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UNECE Group of Experts on Renewable Energy (GERE)

GERE started in 2014 as a subsidiary body to the UNECE Committee on Sustainable Energy with the aim to implement concrete activities to help significantly increase the uptake of renewable energy, through:

- Tracking progress in the uptake of RE in the UNECE region
- Facilitating the exchange of experiences, good practices and multi-stakeholder dialogues on how to increase the uptake of renewable energy
- Cross-cutting cooperation to strengthen integration of renewable energy in future sustainable energy systems







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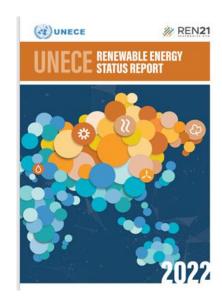
Key outputs:

REN21 UNECE Renewable Energy Status Report (2015 & 2017, September 2022)

- •Cooperation with dena (German Energy Agency) and REN21 within the RE-Uptake on Hard Talks, including a report on the status and perspectives of renewable energy in the UNECE region and organization of UNECE RE Hard Talks
- •UNECE RE Hard Talks: Georgia (2016), Ukraine (2016), Azerbaijan (2017), Kazakhstan (2018) Bosnia-Herzegovina (2018), Serbia (2019); Albania (July 2021); Georgia (October 2021); Serbia (November 2021), Moldova (June 2022) and Ukraine (2023)

Relevant past studies:

- >Towards sustainable renewable energy investment and deployment: Trade-offs and opportunities with water resources and the environment (2020)
- >Study on Renewable Energy Financing and Investment in Albania, Georgia, Kazakhstan and Serbia (RPTC, 2021)
- >Overview of Benefits and Challenges for Governments applying UNFC to Renewable Energy Projects and Resources (2021)
- Energy Transition and the Post-Covid-19 Socioeconomic Recovery: Role of Women and Impact on Them (Dec. 2022)









REN21 UNECE RENEWABLE ENERGY STATUS REPORT 2022

The Report provides a comprehensive overview of the current status of renewable energy and energy efficiency trends in the following 17 selected countries: Albania, Armenia, Azerbaijan, Belarus, Bosnia and Herzegovina, Georgia, Kazakhstan, Kyrgyzstan, Moldova, Montenegro, North Macedonia, Russian Federation, Serbia, Tajikistan, Turkmenistan, Ukraine and Uzbekistan.

Investment flow in renewable energy in 17 UNECE countries remains modest compared to global growth trends

2018 – investment flow across focus countries

USD 7.2 bn.

2.2% of the global total

2018 - investments flow in the European Union

USD 55 bn.

16.8% of the global total

2018 – global investments flow

USD 327 bn.

Renewable Energy and Cross-sectoral Activities



- Renewable Energy
- Renewable Energy and Energy Efficiency
- Renewable Energy and Sustainable Resource Management

Summary



Projects (XB - 3, UNDA - 1): 4

- Completed: 3
- In progress: 2

Total funding for UNECE (RPTC – SED only): ~USD 430,000

Studies (RPTC): 3 (completed)

Renewable Energy



Project: Addressing the compounded food and energy crisis in Ukraine through innovative technologies and adaptive agricultural practices (joint project with FAO and UNEP) – completed

UNECE Activities:

- Analysis of normative and legislative frameworks
- Challenges/barriers
- Status of bioenergy projects operational within available market conditions and legislation in place
- Opportunities for bioenergy investments through analysis of their efficiency and economic prospects
- Assessment of the role of bioenergy for ensuring energy resilience and increasing the renewable energy uptake in Ukraine

Renewable Energy



<u>Study:</u> <u>Support for energy crops along roads and highways in Ukraine</u> – completed (requested by the Government of Ukraine)

- Objective: To analyze potential for the development of energy crops along highways, taking into account the use of crop plantations as highway protection as well as for economic and environmental benefits
- Output: A study with the analysis based on economic evaluation, assessment of the legislative framework with a view of proposing a pilot project and possible modifications to the legislation and therefore creating a suitable environment for investments in energy crops along roads and highways at a larger scale in Ukraine.

Renewable Energy



 Capacity-building workshop on the use of renewable energy in transport – 21 November 2023 (joint with Sustainable Transport Division) (requested by the Government of Georgia)

Renewable Energy and Energy Efficiency



- 1. Project: Strengthening energy policies of Countries with Special Needs to build back better from COVID-19 on-going (joint UNDA project led by ESCAP)
- Beneficiary countries in the UNECE region: Armenia, Kazakhstan, and Uzbekistan
 - National stakeholder consultation workshops held in Yerevan, Astana, and Tashkent in November 2022 – February 2023
 - Collection of data for developing SDG7 Roadmaps is close to completion
 - SDG7 Roadmaps under development
 - Inter-regional seminar "Sharing lessons learned and best practices from the development of SDG 7 Roadmaps" on 8 November 2023 at the Almaty Energy Forum
 - Second National stakeholder consultation workshop for Kazakhstan held in Astana on 9 November 2023

Renewable Energy and Energy Efficiency



- 2. Project: Green Finance Facility to improve air quality and combat climate change in North Macedonia on-going (joint project with UNDP and IOM and with support of EBRD)
- Improving national capacity on renewable energy (RE) and energy efficiency (EE) technologies for small and medium enterprises (SMEs) and households in North Macedonia

Renewable Energy and Energy Efficiency



 Study: Guide for the implementation of energy efficiency measures and the valorization of renewable energy sources for public sector buildings – completed (requested by the Government of the Republic of Moldova)

Energy Efficiency and Renewable Energy



Project: Strengthening Georgia's food and energy resilience (joint project with UNDP, FAO, and ILO) –

completed

UNECE activities:

Assessment of energy consumption by small businesses in rural areas of Georgia

Outcome:

Enhanced capacity of small businesses to introduce energy efficiency measures in rural areas and improved knowledge of national stakeholders on energy efficient solutions for small businesses in rural areas

Development of recommendations to reduce energy costs and improve energy efficiency by small businesses in rural areas

Development of case study with targeted assistance for small businesses in a selected rural area to introduce energy efficiency measures

Sustainable Resource Management and Renewable Energy



- Study: <u>Assessment of the Geothermal Resources of</u>
 <u>Albania</u> completed: (requested by the Government of Albania)
 - The report indicates that utilizing geothermal resources in Albania is cost-effective and can aid in diversifying energy sources, enhancing living standards, and addressing environmental concerns. It also advises to adhere to the United Nations Framework Classification for Resources (UNFC) and the United Nations Resource Management System (UNRMS) guidelines to establish suitable geological models of geothermal aquifers and to perform comprehensive assessments to evaluate their potential for further development. The study highlights that conducting Environmental and Social Impact Assessment (ESIA) studies and consulting with stakeholders is crucial for the project's socio-economic feasibility.

Energy Efficiency



- 1. Project: Improving the energy efficiency of the global building supply chain industry and its products to deliver high performance buildings (preparation phase on-going)
- <u>Beneficiary countries:</u> Armenia, <u>Georgia</u>, Kyrgyzstan, Republic of Moldova, Tajikistan, Ukraine, and Uzbekistan
- Implementing partners for the preparation phase: UNDP country offices in the beneficiary countries, UNEP, and ESCAP. UNEP-CCC, PHI, EEP, and GBA also implementing partners for the main phase
- Regional Validation Workshop for the preparation phase, 22 November 2023, Tbilisi

Thank you!

Group of Experts on Renewable Energy UNECE Regional Advisory Services

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SUSTAINABLE ENERGY WEEK 2023

BUILDING RESILIENT ENERGY SYSTEMS

