

Energy connectivity for sustainable development – Enabling renewable energy resource sharing across borders

Timeline: 2023-2024, **Lead Entity:** UN ESCAP

Target countries: Afghanistan, Azerbaijan, Islamic Republic of Iran, Kazakhstan, Kyrgyzstan, Pakistan, Tajikistan, Türkiye, Turkmenistan, Uzbekistan.

Objective and brief description: The main objective is to accelerate progress on the establishment of multilateral power trading linked to the integration of renewable energy resources. The project will focus the potential for establishing multilateral power trade in the context of existing connectivity efforts, specifically the proposed Economic Cooperation Organization Regional Electricity Market (ECO-REM). The ultimate goal of this project is to deliver a set of targeted, actionable recommendations for policy and regulatory reforms that would enable the establishment of multilateral, multidirectional power trading among at least three countries in each subregion where there is existing cross-border electricity transmission infrastructure.

Project activities:

Activity	Timeline
Stakeholder workshop to identify gaps/challenges to developing multilateral power trade linked to renewable energy resources	January
Development of the policy brief summarizing key finding from energy connectivity workshop/ stakeholder consultations, and desk research, and providing recommendations for next steps	February - April
Roundtable discussion, including presentation of policy briefs, to inform the development of subregional road map	April
Stakeholder workshop in the targeted subregion to develop a road map for establishing multilateral power trade and developing renewable energy resources linked to cross-border trading of electricity	June
Development of a subregional road map to inform and guide development of multilateral power trading linked to the development and cross-border trade of renewable energy resources	April – October
Stakeholder workshops to disseminate road map and develop capacity to implement road map recommendations	COP 29 TBC

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Supporting increased energy security and resilience through energy transition

Timeline: 2024 - 2027, **Lead Entities:** UNECE, UNESCAP, UNECLAC

Target countries: Georgia, Kazakhstan, Uzbekistan, Costa Rica and Panama.

Objective and brief description: The objective of this project is to help member States increase their policy design capacity to enhance energy security and energy system resilience through energy connectivity. The project will enhance global collaboration and policy support for designing resilient energy systems by establishing a global stakeholder network, developing policy guidance, disseminating knowledge, and fostering multi-stakeholder partnerships. The project will also improve capacity-building and knowledge-sharing on how to leverage connectivity as a tool to help design and build resilient energy systems.

Project activities:

Activity	Timeline
Development of toolkit for a cost-benefit analysis of interconnected power systems that enhances energy systems resiliency and enables deep decarbonization.	Q1-Q3, 2024
Workshops to develop and implement national tools and policies to enable integrated power systems with high shares of renewable energy.	Q2 2024 – Q2 2025
Report on aligning cross-border power trade with the development and integration of renewable energy resources.	Q3-Q4, 2025
Cross-regional multi-stakeholder dialogues on energy transition towards connected and resilient energy systems with the aim to strengthen collaboration and interest to develop and establish multilateral power trading and/or power markets.	Q4 2024, Q4 2025, Q4 2026
Focused reports and policy briefs providing guidance on how to identify and develop cross-border or subregional interconnection and scaled renewable energy projects of common interest	Q3 2024 – Q4 2026

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Energy Connectivity in Central Asia

Timeline: 2024, **Lead Entities:** UNECE

Target countries: Countries of Central Asia

Objective and brief description: The objective is to improve resiliency of the energy systems in Central Asia through enhanced regional energy connectivity.

Enhancing regional energy connectivity and energy trade through cooperation is a critical factor to improve the resiliency of the energy system and the energy security in Central Asia and the Caucasus. An integrated and interconnected energy system, that encompasses electricity and gas grid, and is also compatible for transport and trade of low-carbon and green hydrogen, can help create a more reliable, affordable and sustainable energy supply and allow deep decarbonization as well as more effective integration of scaled renewable energy capacity into the energy system.

Central Asia is a diverse region rich in natural resources and with vast potential to develop large scale renewable energy projects. However, despite a positive trend and increasing renewable energy capacity, the region still heavily depends on fossil fuels. Coal and natural gas still dominate regional electricity generation mix and will continue meeting increasing regional energy demand in a foreseeable future. There is a need to scale and integrate additional renewable energy capacity into the current energy systems effectively to improve the overall resiliency of the energy systems.

Project activities:

Activity	Timeline
Development of scenarios for regionally interconnected energy system	January-June
Online workshop to gather data and enhance understanding of local conditions as well as barriers and opportunities for regional energy system integration	March
Regional workshop to discuss preliminary results of scenarios for regionally interconnected energy system in Central Asia	May-June
Develop a roadmap for a regionally interconnected energy system in Central Asia	July-August
Organize a seminar for representatives of governments, industry and academia to present and discuss recommendations and projects of common interest that can enhance energy connectivity and energy system resilience in Central Asia.	October-November

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