

TRAINING WORKSHOP

DEVELOPMENT OF RENEWABLE ENERGY SOURCES IN TURKMENISTAN: FEATURES OF INTEGRATION OF SOLAR AND WIND POWER PLANTS INTO TURKMENISTAN'S ELECTRIC POWER SYSTEM

19-20 November 2025

Ministry of Energy of Turkmenistan

Ashgabat, Turkmenistan

Programme

Time	Theme	Name and position
19 November 2025 – Day 1		
08:45-09:10	Registration	
Moderator: Enejan Kakaeva – Head of the Production and Technical Department of the Ministry of Energy of Turkmenistan		
09:10-09:25	Opening remarks	Representative of the Ministry of Energy of Turkmenistan (TBC) Paata Janelidze , Team Leader/Key Expert in Energy Engineering, SECCA
09:25-09:40	Ceremony of awarding the following green certificates to the State Energy Institute of Turkmenistan (GEIT): 1. Education and Capacity Building 2. Water Conservation and Management	Certificates are presented by Robert Brudzinski , Programme Manager, Delegation of the European Union to Kazakhstan Certificates are accepted by the Director of the Scientific and Production Center "Renewable Energy Sources" of the State Energy Institute of Turkmenistan
09:40-10:00	Ongoing SECCA activities in Turkmenistan in the field of Renewable Energy	Paata Janelidze , Team Leader/Key Expert in Energy Engineering, SECCA
10:00-10:30	Development of renewable energy technologies - opportunities within the Horizon Europe programme	Ilze Purina , Key Expert in Energy Sector Governance, SECCA
10:30-11:30	Global trends (with a focus on the EU) in renewable energy development - Statistics - Technologies	Zhaxylyk Tokayev , International Consultant on Renewable Energy, SECCA

	• <i>Integration of RES (flexibility, balancing, generation forecast)</i> • <i>Best practices (EU)</i> • <i>Lessons learned (including for countries rich with hydrocarbons)</i>	
11:30-12:00	Questions & Answers	
12:00 -13:00	Lunch	
13:00-14:00	Overview of Kazakhstan’s electric power system • <i>Energy balance</i> • <i>National power grid</i> • <i>Electricity markets</i> • <i>Tariff setting</i> • <i>Main challenges</i> • <i>Scenarios up to 2035</i>	Zhaxylyk Tokayev , International Consultant on Renewable Energy, SECCA
14:00-15:00	State policy and Regulation in the field of RE in Kazakhstan • <i>Legal framework</i> • <i>Institutional arrangements</i> • <i>Support schemes for RE</i> • <i>National targets and international commitments (carbon neutrality by 2060, Paris Agreement)</i> • <i>Benefits and preferences for investors in RE</i> • <i>Impact of regulation on the investment attractiveness of the market</i>	Zhaxylyk Tokayev , International Consultant on Renewable Energy, SECCA
15:00-16:30	Questions & Answers	
16:30-17:30	Roundtable discussion on prospects of renewable energy development in Turkmenistan	
20 November 2025 – Day 2		
Moderator: Enejan Kakaeva – Head of the Production and Technical Department of the Ministry of Energy of Turkmenistan		
09:30-10:30	Instruments for the development of renewable energy in Kazakhstan • <i>RE auctions: mechanism, steps and results</i> • <i>Direct contracts (PPA, CPPA) and their application</i> • <i>Intergovernmental projects and international agreements</i> • <i>Connection to the grid and the role of KEGOC (KZ power grid operator)</i> • <i>The role of distribution grid companies</i> • <i>Risks and guarantees for investors</i>	Zhaxylyk Tokayev , International Consultant on Renewable Energy, SECCA
10:30-11:30	Climate finance opportunities for solar and wind power plants	Paata Janelidze , Expert Team Leader/Key Expert in Energy Engineering, SECCA
11:30-12:00	Questions & Answers	

12:00 -13:00	Lunch	
13:00-14:00	Development of small-scale RE projects • <i>Definition and role of small RES projects</i> • <i>Regulatory conditions and simplified connection procedures</i> • <i>Financial support and subsidies for pilot projects</i> • <i>Net-metering and smart-metering as support tools</i> • <i>Examples of pilot and demonstration projects (schools, hospitals, households)</i> • <i>Prospects and challenges of scaling small generation</i>	Zhaxylyk Tokayev, International Consultant on Renewable Energy, SECCA
14:00-15:00	International experience in Renewable Energy Development: Tools and Mechanisms • <i>Feed-in Tariffs: Experience and Lessons Learned</i> • <i>Auction Mechanisms: Reducing Electricity Prices and Increasing Competition</i> • <i>Direct and Corporate Contracts (PPA, CPPA)</i> • <i>Small-Scale and Distributed Renewable Energy: Net Metering, Decentralization, Subsidies</i> • <i>Innovative Models: Renewable Energy + Storage, Hybrid Power Plants, Hydrogen</i> • <i>Discussion of Various Renewable Energy Development Options and their Applicability in countries rich with hydrocarbons (similar to Turkmenistan)</i>	Zhaxylyk Tokayev, International Consultant on Renewable Energy, SECCA
15:00-15:30	Questions & Answers	
15:30-16:50	Roundtable discussion on challenges for renewable energy development in Turkmenistan	
16:50-17:00	Summarising the results of the Training Workshop	