

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	Erkin Gurbanov , Chief Engineer of the Ministry of Energy of Turkmenistan 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 Paata Janelidze , Team Leader/Key Expert in Energy Engineering, SECCA 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 <ul style="list-style-type: none"> Statistics Technologies 	Zhaxylyk Tokayev , International Consultant on Renewable Energy, SECCA

	<ul style="list-style-type: none">• <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 <ul style="list-style-type: none">• <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 <ul style="list-style-type: none">• <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 <ul style="list-style-type: none">• <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 , 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 <ul style="list-style-type: none"> • <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 <ul style="list-style-type: none"> • <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	