REGIONAL TRAINING ON MODEL-BASED INTEGRATED ENERGY AND CLIMATE ANALYSES

24-27 September 2024
Almaty, Republic of Kazakhstan

Background

The European Union (EU) launched its project "Sustainable Energy Connectivity in Central Asia (SECCA)" in 2022. Throughout the implementation of SECCA, the capacities of the Central Asian Countries to develop national energy sector models were assessed and capacity-building plans were developed. The first steps towards the implementation of these plans include (i) the set-up of a regional group on modelling (consisting of two young professionals from each Beneficiary Country) to initiate country "modelling units" and create a long-term virtuous bridge between the Project activities and local decision makers and improve local systems thinking and knowledge (data) based decision making in the energy and climate sectors; and (ii) the delivery of three Regional trainings.

"Models" help capturing and interpreting the complexity of the real world in an understandable form, they help analysing and organising large amount of data and information in a structured manner and allow exploring different hypotheses under the same consistent framework. A "systemic" view is needed to ensure sustainable, resilient, accessible, and just energy system development.

The present first training covers the "fundamentals" of energy and climate strategic planning and modelling analyses. It aims to provide a common understanding of the energy and climate issues and of some good practices.

The second training is planned for October/November 2024 and will be devoted to the selection/collection/elaboration/utilisation of energy (and non-energy) statistics and data for quantitative analyses in the integrated energy and climate area.

The third training is planned for November/December 2024 and will be devoted to more technical practices for quantitative modelling analysis and their links with the preparation of strategic documents and integrated plans (namely, application of quantitative analyses for supporting decision-making).

By convening these regional trainings, the SECCA project intends to:

- Create a long-lasting virtuous bridge between the SECCA project activities and the local decision-makers;
- Improve the local system-thinking and the knowledge-based data-driven decision making in the energy and climate sectors;
- Enhance the technical and policy dialogue among the different stakeholders within each country, and among the CA countries, in the energy and climate fields;
- Generate practical impacts (capacity building) that go beyond the duration of the SECCA project.

The trainings aim to transfer the basic concepts, and the theoretical and practical approaches, related to analysing and modelling complex energy systems at the national and regional level.

Agenda

Day 1 – Tuesday, 24 September

09:30 – 10:00	*Registration and coffee*
10:30 – 10:20	Welcome Remarks
	Welcome remarks - Representative of EU Delegation to Kazakhstan
	Welcome remarks - SECCA Team Leader, Paata Janelidze
	Welcome remarks - SECCA SNKE, Rocco De Miglio
10:20 – 10:30	Tour de table
10:30 – 13:00	SECCA Project and High-level introduction to energy and climate systems analyses
	Discussion and Q&A
13:00 – 14:00	*Lunch break*
14:00 – 17:00	The National Energy and Climate Plans (process and preparation)
	Discussion and Q&A
17:00 – 17:15	Conclusions of Day 1
19:30 – 21:00	*Dinner*

Day 2 – Wednesday, 25 September

10:00 – 13:00
- Ice-breaker activity
- The SECCA project - country modelling units

13:00 – 14:00 Lunch break

14:00 – 17:00
- Introduction to energy and climate systems analyses
- Introduction to energy and climate systems modelling
- Discussion, Q&A, and wrap-up

Day 3 – Thursday, 26 September

10:00 – 13:00
- The Reference Energy System
- Key inputs / outputs

13:00 – 14:00 Lunch break

14:00 – 17:00
- A model example: "Demo" model
- Discussion, Q&A, and wrap-up

Day 4 – Friday, 27 September

10:00 – 13:00
- Model-based analysis: demonstration
- Model-based analysis: demonstration

13:00 – 14:00 Lunch break

14:00 – 17:00
- Guided exercise and homework (presentation of the assignment)
- Discussion, Q&A, and wrap-up