

Closing Roundtable in the Republic of Kazakhstan

Sheraton Astana Hotel, Astana

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SECCA Activities in the Republic of Kazakhstan: Results achieved

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Sustainable Energy Connectivity in Central Asia (SECCA)



Sustainable Energy Connectivity in Central Asia (SECCA):
EU-funded regional cooperation project between the European Union and its partner countries in Central Asia in the field of sustainable energy

Implementation period:
15 March 2022 - 31 May 2026

Partner countries:
Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan





Overall Objective:

to promote a more sustainable energy mix in the Central Asia region in line with EU best practices

Sustainable Energy Mix in the Republic of Kazakhstan



A more sustainable energy mix in the Republic of Kazakhstan (RK) means:

- **Reducing dependence on coal**
- **Increasing the share of renewable energy sources (RES)**
 - Development of solar and wind energy
 - Diversification of energy sources
 - Reducing the carbon intensity of the economy
- **Improving Energy Efficiency (EE)**, which reduces overall demand, minimizes waste, and lowers greenhouse gas (GHG) emissions. EE strengthens energy security, reduces reliance on fossil fuels, and promotes the rational use of water and energy resources

*EE is so important in the world's journey to net zero, to keep global warming at 1.5 degrees Celsius, that it is nicknamed "**the first fuel**" by the International Energy Agency (IEA)*

- **Improving Energy Security**
- **Economic sustainability**
- **Environmental sustainability**
- **Fostering regional energy cooperation**

Benefits of a sustainable energy balance in RK:

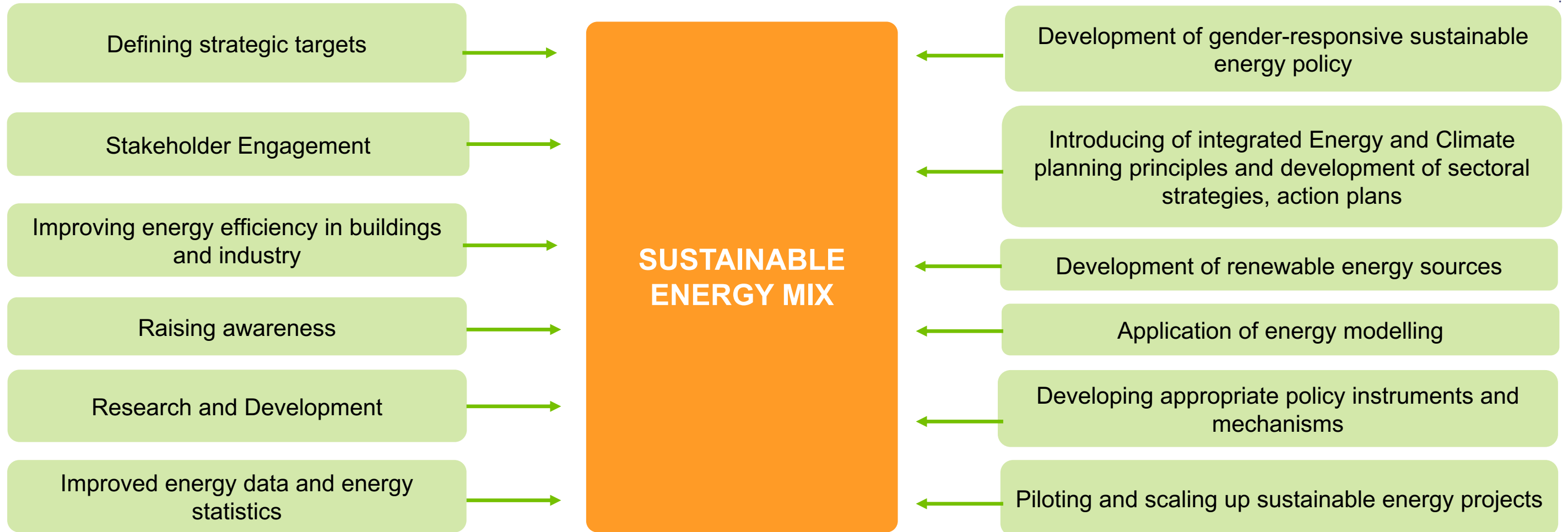
- **Improved Energy Security and Strengthened Energy Independence:** Reducing dependence on electricity imports and diversification
- **Environmental sustainability:** Reducing greenhouse gas emissions, combating climate change and glacier degradation, creating an image of a green economy
- **Economic growth and Attraction of Investment:** The development of the renewable energy sector attracts foreign investment, creates new jobs and stimulates technological modernization
- **Infrastructure Modernization:** Upgrading outdated power grids, reducing transmission losses, and implementing smart grids
- **Regional development:** Use of local resources (wind, solar) for autonomous energy supply of remote areas



- **Achieving the decarbonization goal:**
 - A sustainable energy balance for Kazakhstan, based on the active introduction of renewable energy sources, the modernization of coal-fired thermal power plants, and the development of low-carbon technologies, is a key tool for achieving **carbon neutrality by 2060**
- Key actions under the **Nationally Determined Contributions (NDCs) of the Republic of Kazakhstan, as revised in 2025**, include:
 - **Energy transition:** Reducing dependence on coal, introducing clean coal technologies, large-scale development of renewable energy sources, and increasing the share of nuclear energy
 - **Energy efficiency and modernization:** Improving energy efficiency in industry and the housing and utilities sector, introducing best available techniques (BAT)
 - **Transport:** Developing electric transport and modernizing infrastructure
 - **Governance:** Strengthening the monitoring, reporting, and verification (MRV) system for transparent accounting of emission reductions

SECCA approach to promote a more Sustainable Energy Mix in the Republic of Kazakhstan





TA provided by SECCA: General approach





- SECCA has provided Technical Assistance (TA) in promoting a more sustainable energy mix at Regional and National levels
- TA activities at the **Regional level** were implemented **after agreement** with the Beneficiary Countries
- TA activities at the **National level** were implemented **upon request** of the Beneficiary Countries
- Steps taken by SECCA to identify and implement TA activities:
 - **Areas for technical assistance** were **identified** on the basis of consultations with the national government partner (the Ministry of Energy of the Republic of Kazakhstan) and key stakeholders (the Ministry of Industry and Construction of the Republic of Kazakhstan, the Institute for the Development of Electric Power and Energy Saving)
 - In the absence of information on the most relevant EU developments in the identified area, experts from EU Member States (MS) and/or Contracting Parties to the Energy Community (EC PC) were invited as speakers to SECCA project events (regional and national conferences, technical seminars, round tables, etc.) and **presented EU practices and opportunities for Central Asian countries in these specific areas**
 - After the events, if the beneficiary country expressed interest, **technical terms of reference** were developed and contracts were concluded with non-key experts (NKEs)
 - **Proposed approaches/draft documents and results were presented and discussed** with a wide range of relevant national stakeholders to ensure a high degree of ownership and continuity of the activities initiated

TA provided by SECCA: Regional Activities



Regional Activities: Energy Modelling



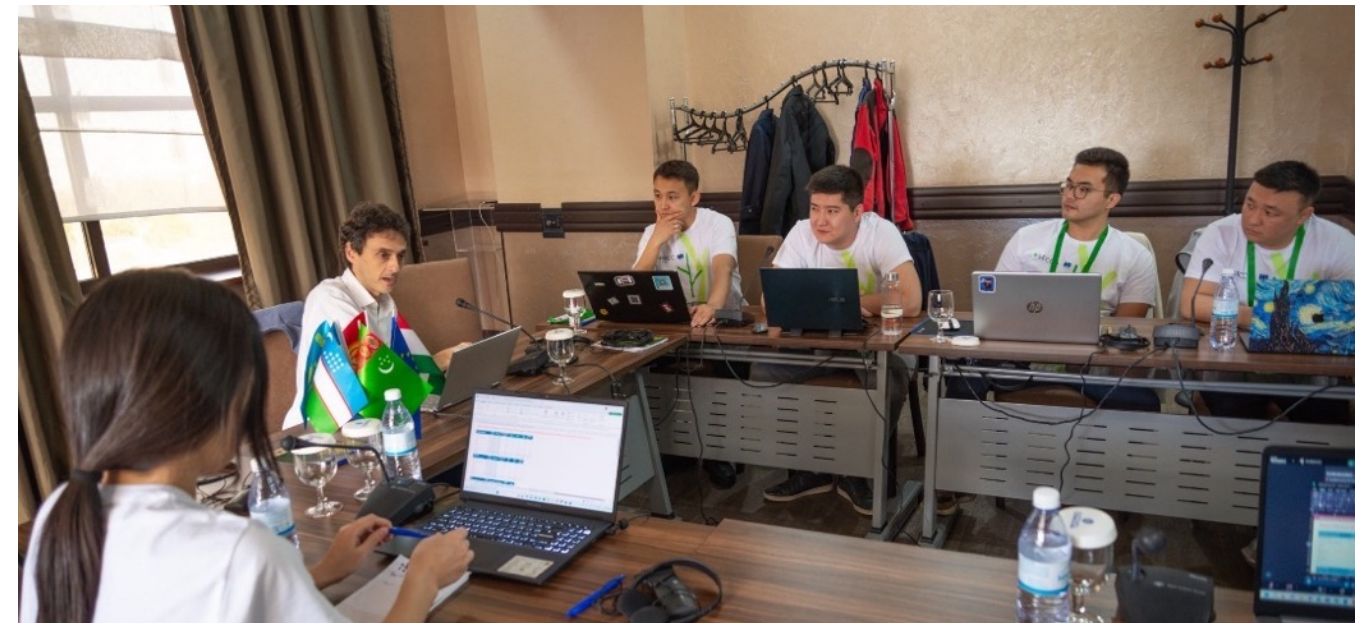


- **Integrated energy and climate planning** is one of the key instruments for promoting a sustainable energy balance
- **The role** of integrated energy and climate planning **has been highlighted** at many regional and national events (conferences, training sessions, etc.) **with the aim of explaining the overall concept to a wide range of stakeholders**
- In the EU, **quantitative analysis of energy and climate systems is based on energy modelling**, which provides a virtual, data-driven 'laboratory' for modelling, analysing and optimising complex energy systems
- Model-based integrated solutions for sustainable energy development and data-driven energy and climate decision-making **are not yet common practice in Central Asia**
- These new approaches for Central Asian countries, best practices, **examples and experiences of EU and EEA member states were discussed in detail** with the SECCA modelling project team and key stakeholders in each beneficiary country



- As part of the SECCA project, a **Regional Modelling Group** has been established, comprising two young specialists from each beneficiary country, including **Kazakhstan**
 - **Cooperation with relevant national stakeholders established**
 - A two-phase work plan for the Regional Group on Modelling developed and implemented
- Phase I** (September 2024 – February 2025): **Capacity development** of the Regional Group on Modelling through 3 training workshops
- On “fundamentals” of energy and climate strategic planning and modelling analyses and aimed to provide a common understanding of the energy and climate issues and of some good practices

- On selection/collection/elaboration/utilization of energy (and non-energy) statistics and data for quantitative analyses
- On technical practices for quantitative modelling analysis and their links with the preparation of strategic documents and integrated plans





- **Phase II** began in July 2025 and was **based on a more targeted, country-specific, applied approach**, while continuing to strengthen the capacity of Central Asian countries to develop national energy sector models, improve systems thinking at the local level, and promote knowledge- and data-driven decision-making in the energy and climate sectors
- Phase II included **one training workshop** and **extensive practical work** on the application of various modelling tools and methods
- **The results were presented at a final workshop** (Almaty, 4-5 February 2026)



Regional Activities: Energy statistics





In the RK, the SECCA project collaborated closely with:

- **Bureau of National Statistics of the Agency for Strategic Planning and Reforms of the Republic of Kazakhstan**

The SECCA project organized:

- **A training seminar** on energy statistics for the Bureau of National Statistics of Kazakhstan (Astana, July 3-7, 2023)
- **A regional seminar** on statistics in final energy consumption (Tashkent, July 11-13, 2023)
- **Specialists from the Bureau of National Statistics of Kazakhstan shared their experience** in energy statistics with colleagues from Kyrgyzstan and Uzbekistan

The SECCA project prepared:

- **Recommendations** for improving SDG7 reporting



Regional Activities: Energy labelling



In RK, SECCA worked closely with:

- **Ministry of Industry and Construction of the Republic of Kazakhstan**
- **Committee on Technical Regulation and Metrology, Ministry of Trade and Integration of the Republic of Kazakhstan**

SECCA organised:

- **Regional Conference on Energy Labelling** (Tashkent, 21-22 October 2025)

In close cooperation with the national stakeholders, SECCA prepared:

- **Country reports** on the current status of energy labelling
- **Recommendations** for the further development of energy labelling in CA countries



Regional Activities: Horizon Europe





The largest program of the EU in science and innovation

OBJECTIVES:

Support scientific and technological research, innovation and sustainable development in the EU and beyond



BUDGET AND IMPLEMENTATION PERIODS:

- € 95.5 billion for 2021-2027
- € 175 billion for 2028-2034



- Activities under the SECCA Horizon Europe (HE) component began in May 2024, at that time, **HE National Contact Points (NCPs) coordinators under the Horizon Europe Programme** were established in **Kazakhstan** and **Kyrgyzstan**
- In less than 2 years:
 - **NCPs coordinators** nominated in **Tajikistan, Turkmenistan, and Uzbekistan**
 - **NCPs for Cluster 5** nominated in **Kazakhstan, Kyrgyzstan, and Uzbekistan, and is being discussed in Turkmenistan**
- This clearly demonstrates **the will and commitment of the CA countries** to enhance Research and Innovation (R&I) cooperation with the EU under the HE program





- The SECCA project developed a **template for research organizations** to structure their key capabilities, research interests, and areas of expertise
- The template was **distributed to relevant research organizations in Kazakhstan, Kyrgyzstan, Turkmenistan and Uzbekistan**
- **Completed templates were received in Kazakhstan, Kyrgyzstan, Turkmenistan and Uzbekistan**
- A comprehensive **database of Central Asian research institutions** was created and uploaded to the **GREENET platform**, the official network of the EU Horizon Europe Cluster 5 NCPs, to assist partners in finding Horizon Europe Cluster 5 participants

In **Kazakhstan**, Kyrgyzstan, Turkmenistan, Uzbekistan:

- A **database of institutions** interested in participating in the Horizon Europe program has been developed
- An **overview of the profiles of research institutions** interested in participating in the Horizon Europe programme, including priority areas of cooperation, has been prepared
- A **communications strategy** has been developed
- **Key performance indicators (KPIs) for monitoring and evaluating progress** have been developed
- Draft **recommendations** for further expanding the participation of Central Asian countries in the Horizon Europe program have been prepared



- In RK, the SECCA project collaborated closely with:
 - **The Horizon Europe NCP Coordinator and the Horizon Europe Cluster 5 NCPs**
- The SECCA project organized:
 - **The Horizon Europe Regional Workshop in Central Asia: Promoting Advanced Research and Cooperation in Sustainable Energy (Almaty, 14 May 2024)**
 - **The Horizon Europe Cluster 5 Regional Information Day: Enhancing EU-Central Asian Scientific Cooperation in the Horizon Europe Programme (Almaty, 20 May 2025)**
 - **The Professional Development Workshop for Horizon Europe National Contact Points (Almaty, 21 May 2025)**



Regional Activities: Gender in Energy



- **Gender equality and social inclusion (GESI)** are the ones of the main focus areas of the SECCA project.
- The SECCA project conducted **five national GESI assessments** for Central Asian countries, focusing on the following issues:
 - The policy dimension of the gender and energy nexus
 - Access to electricity and clean cooking fuels
 - Girls in science, technology, engineering and mathematics (STEM) education
 - Women's employment in the energy sector
- The analysis showed that GESI is a challenge in CA, especially in the energy sector, in which fewer women are involved
- **The results of the national GESI assessments were presented at the Regional Conference "Gender and Energy in Central Asia"** (Almaty, October 17-18, 2024)
- To address the issue of GRSI, **STEM4Her** events were held in Central Asian countries, including **Kazakhstan**, as part of the Sustainable Energy Days 2025 campaign



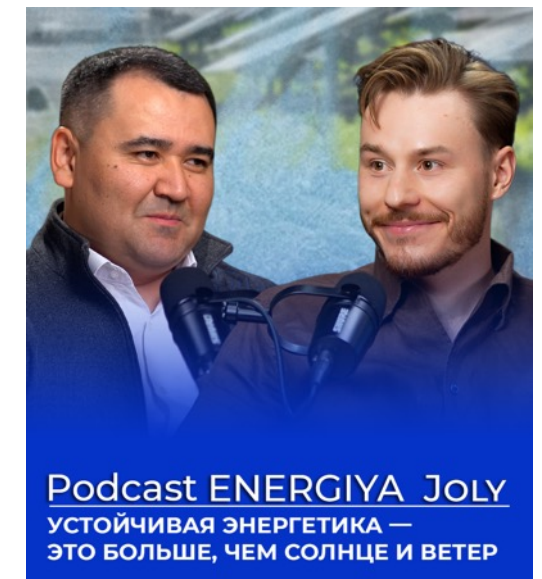


Podcast
promoting
sustainable
energy
“Energiya Joly”

Podcast ENERGIYA JOLY
ВЫЗОВЫ И ПЕРСПЕКТИВЫ
РАЗВИТИЯ ВИЭ В КАЗАХСТАНЕ



- Initiated: **October 2024**
- From October 2024 to March 2026, **22 video episodes** were released (including two in Kazakh).
- **Topics:**
 - Key achievements in sustainable energy and energy transition in the country and region
 - EU energy policy and international best practices
 - The intersection of gender and energy
- **Podcast guests:** primarily experts from Kazakhstan, but also from Kyrgyzstan, Tajikistan, Uzbekistan, and the EU
- Audience reach on <https://www.youtube.com/@EnergiyaJoly> (end of March 2026)
 - **8,620+** subscribers
 - **~440,000** views



Regional contests



Global Gateway  Финансирование Европейского Союза

Региональный конкурс среди журналистов Энергетический переход для лучшего будущего

Организатор: Проект Европейского Союза «Устойчивые энергетические связи в Центральной Азии (SECCA)»

КОНКУРС
Европейского Союза
“Reels4SustainableEnergy”

СОЗДАЙ видео Reels в Инстаграм
и ВЫИГРАЙ учебную поездку в Европу!

Срок: до 19 мая 2023 г.

 **SECCA**
УСТОЙЧИВЫЕ ЭНЕРГЕТИЧЕСКИЕ СВЯЗИ В ЦЕНТРАЛЬНОЙ АЗИИ

 Funded by the European Union



- Initiated: **March 2023**
- **Participants:** University students, young researchers, and specialists in engineering, energy, ecology, and climate studies from Central Asian countries
- **Topic:** Sustainable Energy

Results:

- **67** short videos (Reels) published on Instagram
- **6 winners** awarded (Astana, June 2, 2023)

Among the winners:

- **2nd place:** Aruzhan Yerzhanova, TsATEK Green Energy LLP (**Kazakhstan**)
- **3rd place:** Arman Makhambetov, KEGOC JSC (**Kazakhstan**), Mukhit Askaruly, Al-Farabi Kazakh National University (**Kazakhstan**), and Darkhan Zhaliyev, Intergaz Central Asia JSC (**Kazakhstan**)



- Initiated: **April 2025**
- **Participants:** journalists from print and online media, television and radio in Central Asia
- **Publication/broadcast period:** 15 April 2024 to 14 May 2025

Results:

- A total of **128 journalists** from all Central Asian **countries** took part in the competition
- **206 entries**
- **Three winners.** The award ceremony took place on 1 June 2025 during EuroFest2025 in Astana, Kazakhstan.

Among the winners:

- **Second place:** Amina Manayeva, **Kazakhstan**, correspondent for Channel One Eurasia, video report: "Will solar and wind energy help us?"



Regional Photo Exhibition

The EU – CA: Faces of Sustainable Energy Development Cooperation





- Initiated in **2025** as part of the third "EU-Central Asia: Sustainable Energy Days" campaign
- It features **38 inspiring portraits** of scientists, engineers, entrepreneurs, politicians, and educators from Central Asian countries. Each portrait tells the true story of their contribution to the energy transition, their dedication, and their inner strength
- One of the **goals** of the photo exhibition is to demonstrate that cooperation between the EU and Central Asia is not only about politics or technology, but above all about people and their contribution to a sustainable future
- Opening of the photo exhibition: **June 1 at EuroFest 2025 in Astana**
- Following its opening, the photo exhibition toured the region, becoming a central element of the "EU-Central Asia: Sustainable Energy Days" campaign



Regional Activities: Study Tours





Netherlands: "Renewable Energy – Modern Solutions"

In November 2022, the EU projects **WECOOP** and **SECCA** organized a week-long study tour to the Netherlands for the winners of the EU regional journalism competitions (2020 and 2022)

Participants:

- 8 journalists from Kazakhstan, Kyrgyzstan, and Uzbekistan
- **Tour focus**
 - EU renewable energy policy
 - Wind energy development
 - Bioenergy
 - Green hydrogen





Georgia: ‘Sustainable energy in practice: Georgia’s success and EU best practices’

- In November 2023, the SECCA project organized a study tour to Georgia
- **Participants:** 16 high-ranking government officials and energy experts from all five Central Asian countries
- **Tour focus:**
 - Georgia's energy sector reforms and harmonization with EU policies and Energy Community standards
 - Practical sustainable energy cases
 - Signing of a Memorandum of Understanding between the Green Energy Fund of Kyrgyzstan and the Georgian Energy Development Fund (the purpose of the Memorandum is to establish cooperation between the parties and exchange experiences and best practices).





Latvia: "Promotion of Energy Efficiency – Latvian experience"

- At the end of November 2023 SECCA organized a week study tour to Latvia
- Participants:
 - Students, young researchers, and specialists who won the EU competitions #Reels4SustainableEnergy and the best mural design on the topic of sustainable energy, as well as representatives of secondary schools recognized as the most energy-efficient among schools in the capitals of Central Asia
- Main topics for discussion:
 - Successful practices for improving energy efficiency in the public and private sectors in Latvia



TA provided by SECCA: National-level Activities in Kazakhstan: Policy, regulatory and institutional framework for the transition to a sustainable energy system



Strengthening the regulatory framework for promoting energy efficiency



- In Kazakhstan, the SECCA project worked closely with:
 - **The Ministry of Industry and Construction of the Republic of Kazakhstan**
- In close collaboration with national stakeholders, the SECCA project:
 - Amendments were made to the Rules for Conducting Energy Audits in Kazakhstan (November 2023)
 - The project participated in the development of the Concept for the Development of Energy Conservation and Energy Efficiency Improvement for 2023-2029 (March 2023)

- In Kazakhstan, the SECCA project worked closely with:
 - **The Ministry of Industry and Construction of the Republic of Kazakhstan**
 - **The Institute for Electric Power Development and Energy Saving**

- In close collaboration with national stakeholders, the SECCA project:
 - Prepared a **Roadmap** for the implementation of an updated energy audit quality control system in industry (February 2024)
 - Held a **Roundtable** (February 2, 2024) and a **Technical Seminar** (September 6, 2023) with the participation of Kazakhstan's national experts on energy efficiency and energy saving
 - Conducted a four-day **practical training on energy audits** of public buildings (December 8-11, 2025)



- In Kazakhstan, the SECCA project worked closely with:
 - **The Ministry of Industry and Construction of the Republic of Kazakhstan**
- In close collaboration with national stakeholders, the SECCA project:
 - Developed a **new 10-step approach** aimed at more effectively using data from the State Energy Registry and conducting an in-depth analysis of public sector facilities with the highest energy efficiency priority
 - Conducted **on-site energy audits** of two public schools in Astana – Schools No. 20 and No. 29





- In Kazakhstan, the SECCA project worked closely with:
 - **The Ministry of Industry and Construction of the Republic of Kazakhstan**
 - **The Institute for the Development of Electric Power and Energy Saving**

- **More than 350 representatives from:**

- Sectoral ministries and
- Local governments,
- Public school principals, and
- Business representatives

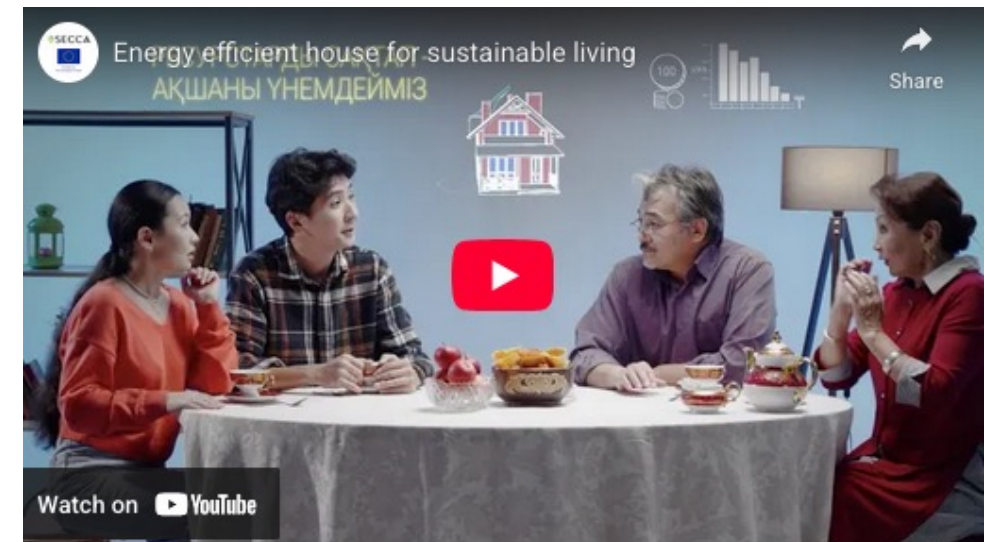
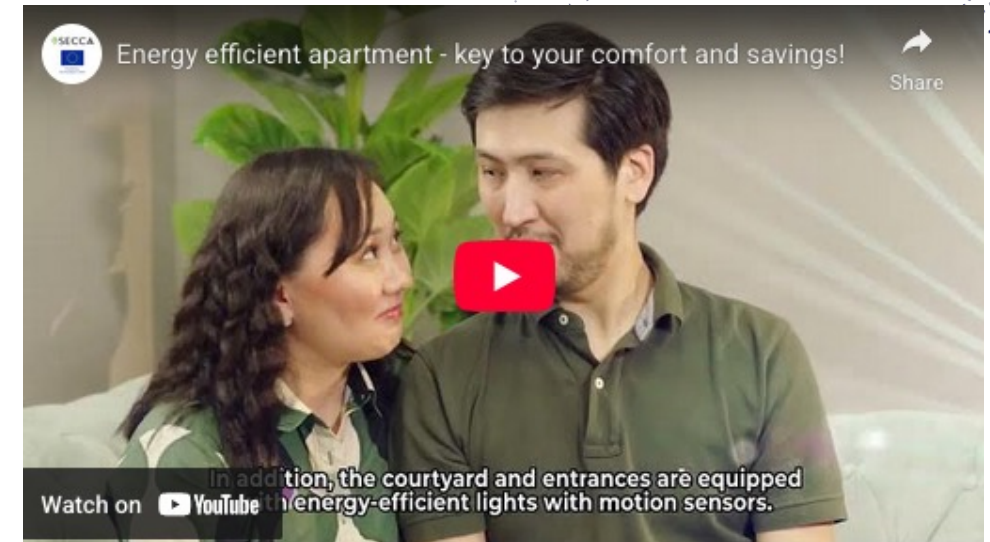
participated in **regional practical workshops** on energy efficiency (EE), which were held in the cities of **Aktau, Shymkent** and **Turkestan** from July 22 to 26, 2024



- **26 public schools in the Turkestan region** received energy efficiency certificates (February 11, 2025)
- **Over 200 representatives from**
 - Government agencies
 - Affiliated organizations and expert organizations
 participated in **technical seminars** on building energy labeling and calculating optimal cost levels, held in **Astana, Almaty,** and **online** from April 22-29, 2025



- In Kazakhstan, the SECCA project worked closely with:
 - **The Ministry of Industry and Construction of the Republic of Kazakhstan**
 - **The Institute for the Development of Electric Power and Energy Saving**
- In close collaboration with national stakeholders, the SECCA project:
 - Produced **two videos** on the use of **energy-efficient technologies in multi-apartment residential buildings and alternative energy sources in households** (in Kazakh and Russian)
 - The videos were **broadcast on television, on screens in public places, and on social media** (November 2024)



EU–Kazakhstan: Sustainable Energy Days



Events within the framework of SEDs 2023:

- With the support of the Ministry of Ecology and Natural Resources of the Republic of Kazakhstan and in close collaboration with the ECOJER Association, the **International Conference "Sustainable Energy in Kazakhstan: Prospects and Challenges"** was held (June 2023)
- With the support of the Astana City Akimat, an **awards ceremony** was held for **School-Lyceum No. 59**, recognized as the most energy-efficient school in Astana among 100 comprehensive schools in the capital (June 2023)
- Electric scooter flash mob under the slogan "**Reduce Carbon Emissions, Save the Planet!**" (June 2023)





- **Best Mural Design** Competition on the Theme "Sustainable Energy for a Better Future" (April-May 2023)
- Results:
 - 40 entries
 - 2 winners
- The awards ceremony for the best mural design competition was held in Astana in June 2023
 - First place: Zhuldyz Serikova
 - Second place: Medgat Musayev
- Mural unveiling on the facade of School-Lyceum No.59 (October 2023)





Activities within the framework of the SEDs 2024:

- Contribution to the High-Level Forum on Hydrogen Diplomacy in cooperation with H2Diplo/GIZ (**decarbonization session**) (May 2024)
- Participation in the **EuroFest 2024** festival with a separate SECCA project stand and interactive events/activities to engage with festival guests (June 2024)
- **Lectures and student debates** on sustainable energy at the Karaganda Industrial University (June 2024)
- Contribution to the **Interregional Forum of Environmental Initiatives "SAF AUA"** - in close cooperation with the ECOJER Association and with the support of the Ministry of Ecology and Natural Resources of the Republic of Kazakhstan, the Akimats of the Karaganda region and the city of Temirtau (June 2024)





Events within the framework of the 2025 Energy Efficiency Forum:

- **STEM4Her** – an off-site interactive event for high school students from Astana's most energy-efficient school-lyceum No. 59 (a tour of the Astana EXPO-2017 wind farm) (May 2025)
- Organization of a panel **session on climate innovations**
- Participation in the **EuroFest 2025** with a separate SECCA project stand and interactive events/activities to engage with festival guests (June 2025)
- Opening of the **photo exhibition** "European Union – Central Asia: Faces of Sustainable Energy Development Cooperation" (June 2025)



TA provided by SECCA:

National-level activities in Kazakhstan:

Promotion and facilitation of investment, capacity and awareness in Sustainable Energy



- In Kazakhstan, the SECCA project worked closely with:
 - **The Ministry of Energy of the Republic of Kazakhstan**
- In close collaboration with national stakeholders, the SECCA project:
 - Conducted an estimate assessment of the potential of biomass for energy, biogas, and biofuel production in Kazakhstan (October 2024)
 - Prepared recommendations for the development of a presumption system in Kazakhstan (August 2024)
 - Prepared recommendations for the development of small hydropower in Kazakhstan (August 2024)
 - Collected and analyzed information and data on geothermal energy development in Kazakhstan (Roundtable held on June 19, 2025)



- In Kazakhstan, the SECCA project worked closely with:
 - **Ministry of Ecology and Natural Resources of the Republic of Kazakhstan**
 - **Kazakhstan Association of Regional Environmental Initiatives "ECOJER"**
 - **Scientific and Educational Center "Green Academy"**
- In close collaboration with national stakeholders, the SECCA project:
 - Assisted in the implementation of:
 - II Policy Dialogue "Global Methane Commitment: Global Experience and Kazakhstan" (September 8, 2023) - The project prepared an Analysis of Past and Future Scenarios for Methane Emissions in Kazakhstan
 - Roundtable "COP 28: Results and Recommendations for Kazakhstan" (January 26-27, 2024) - proposals for the Implementation Plan for the Strategy for Achieving Carbon Neutrality in Kazakhstan by 2060
 - The SECCA project assessed the impact of EU methane regulation on Kazakhstan's exports
 - Roundtable on Methane Emission Regulation (February 26) (2026)



Latest news and events

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