

## International Conference

“Climate change - challenges and solutions for sustainable energy”  
Culture and sports complex, “Turkmenneft” Turkmenbashi Complex of Oil Refineries,  
Turkmenbashi city, 2 May 2024

# Practical application of EU best practices in promoting sustainable energy in Central Asia - SECCA project approach

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# General information on SECCA

## Sustainable Energy Connectivity in Central Asia (SECCA):

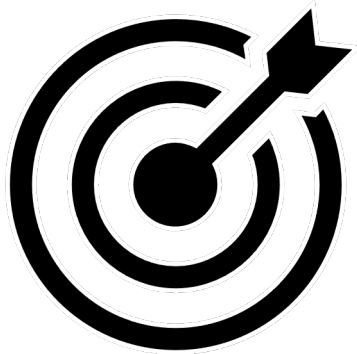
EU-funded regional cooperation project between the European Union and its partner countries in Central Asia in the field of sustainable energy

### Partner countries:

Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan



# Project objective



## **Overall Objective:**

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

# Expected Outputs: Component 1

## COMPONENT 1:

Policy, regulatory and institutional framework for the transition by each Central Asian country to a sustainable energy system

**Outcome 1:** Strengthened and more inclusive policy, regulatory and institutional framework for the transition to a sustainable energy system, within a regional context

**Output 1.1:** Strengthened public capacities for governance, strategy development, gender inclusive policy design and regulatory framework for EE and RE deployment

**Output 1.2:** Public awareness raised on EE and RE importance and technology

**Output 1.3:** Strengthened capacities for management of energy data, information and modelling

# Expected Outputs: Component 2

## COMPONENT 2:

Promotion and facilitation of investment, capacity and awareness in sustainable energy in the CA Region

**Outcome 2:** Increased investment, capacity and awareness in sustainable energy in the CA region

**Output 2.1:** Enhanced identification and accessibility of EE and RE investment projects, and the most appropriate technologies and innovative financing mechanisms taking into account equal opportunities, and fair and effective participation of women

# Main examples of EU best practices promoted by SECCA

- Integrated Energy and Climate planning
- Quality control of Energy Audits (EAs) and Energy Performance Certificates (EPCs) of buildings
- Sustainable Energy Days (SEDs)

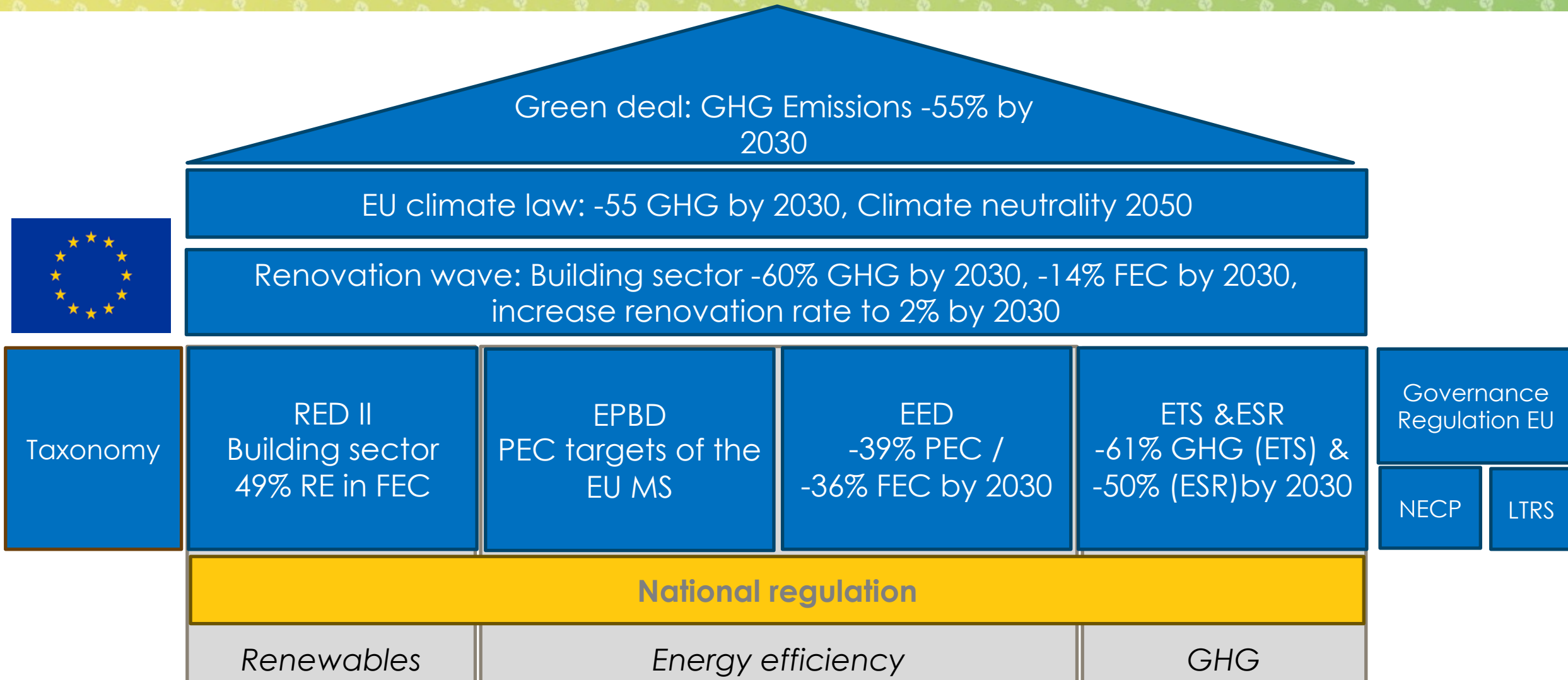


# INTEGRATED ENERGY AND CLIMATE PLANNING



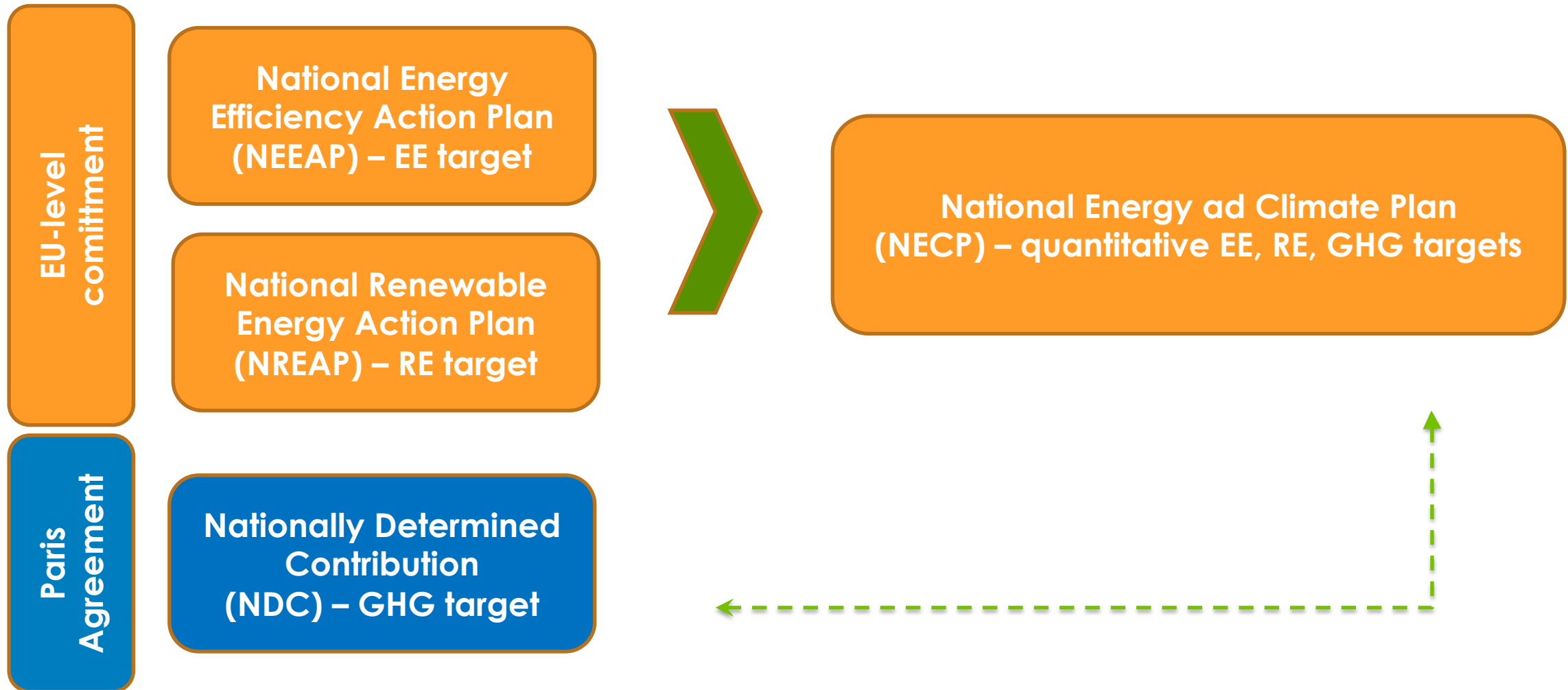
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# EU policy framework for integrated Energy and Climate planning





# Evolution of energy policy planning process in EU



# National Energy and Climate Plan

NECP for 2021 – 2030  
with the outlook to 2050



Five (5) dimensions:

- **Energy Security**
- **Energy Efficiency** as a primary fuel
- **Decarbonization** and **Renewable Energy** development
- **Market integration**
  - Cross-border connections
  - Harmonized Market rules
  - Addressing **energy poverty** and vulnerable customers
- **Research and Innovation** for new technologies

This approach requires **close coordination across all ministries**

# Content of NECP

## Narrative part

**Current situation** - overview of the national energy system and policy context of the national plan across the five dimensions

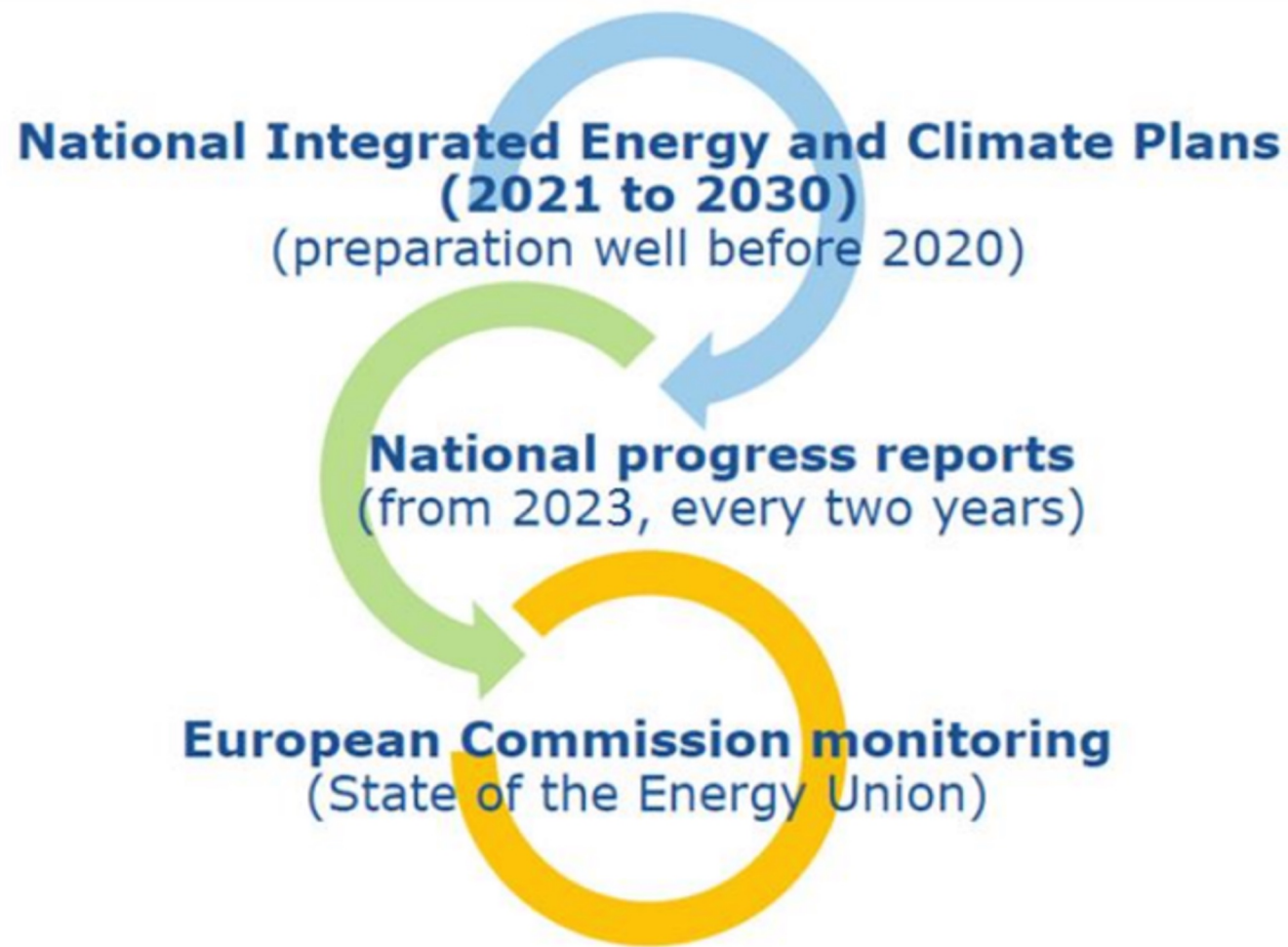
**Objectives, policies and measures** for the five dimensions

## Analytical basis

Integrated projections and indicators - **a separate section on projections as an analytical basis of the plan**, including reference and policy scenarios assessing the relevant impacts of the policies and measures proposed



# Continuous monitoring of implementation progress and results



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# SECCA project approach

- A **Regional Working Group on Energy Modelling** consisting of **2 representatives from each Beneficiary Country** will be established - **young professionals in Statistics and policies & Energy management**
- **Webinar for members of the Working Group** will be delivered
- **1<sup>st</sup> Regional Training for the Working Group on Energy Modelling and policy makers** - about the EU modelling practices, modelling tools, etc.
- **2<sup>nd</sup> Regional Training for the Working Group on Energy Modelling** - about the modelling-energy statistics
- **3<sup>rd</sup> Regional Training for the Working Group on Energy Modelling and policy makers** - about energy modelling and NECP
- Possibilities of designing, establishing and operating **an information sharing platform** will be explored



# QUALITY CONTROL OF ENERGY AUDITS AND ENERGY PERFORMANCE CERTIFICATES OF BUILDINGS

# Importance of good quality Energy audits (EAs)

- Energy audit is a procedure that aims **to document energy flows and losses** and then identifies ways **to reduce or eliminate those losses by proposing cost-effective measures**
- The **primary objective of an energy audit is to facilitate energy savings**
- Lowering energy consumption **decreases costs** and **mitigates the impact of climate change**
- However, the effectiveness of **this approach may be compromised** if the energy audit either **recommends unsuitable measures** or **generates inaccurate forecasts**
- **An energy audit is a tool that helps unlock cost-effective energy efficiency improvements - quality must be ensured to deliver significant benefits**

# Importance of good quality Energy performance certificates (EPCs)

- Buildings account for approximately **40% of final energy consumption** - prioritizing energy efficiency in buildings is the cornerstone to achieving sustainable energy goals and reducing environmental impact
- Investing in EE measures in buildings can yield **substantial energy savings**, while **supporting economic growth, sustainable development and creating jobs**
- **Energy performance certification** helps to:
  - **provide clarity and assurance to buyers and owners** about a building's energy performance, easing decision-making processes
  - **set and correct the course of building performance** in its life cycle
  - **understand better national building stock** and its performance
- EPC serves as a **roadmap to optimize building performance throughout its life cycle**, from design to operation



# Quality control of Energy Audits

- Assistance has been provided in the development of the **Strategic Roadmap for enhancing the quality control of mandatory energy audits of industry enterprises of Kazakhstan.**
- The following steps were taken:
  - Technical Workshop “Quality Control of Energy Audits for the Industry”
  - In collaboration with the Electric Power And Energy Saving Development Institute (EEDI) the draft of “Conceptualization of Quality Control for Mandatory Energy Audits and Implementation Roadmap in Kazakhstan” was prepared
  - The Round table discussion: Quality Control of Energy Audits (EA) for the Industry
  - Based on the feedback (comments and suggestions) from the Ministry of Industry and Construction (MoIC) and EEDI, the final version of the Roadmap was prepared

# Quality control of Energy Performance Certificates of Buildings

- The **Strategic Roadmap** was developed for advancing the **Energy Performance Certification (EPC)** system in **Kyrgyzstan**, aligning it with EU best practices and addressing local challenges in the building sector
- Main steps taken:
  - Technical workshop “Quality Control of EPC”
  - Preparation of a draft “Conceptualisation of Quality Control for EPC of Buildings and Implementation Roadmap in Kyrgyzstan”
  - Round table
  - Final road map agreed with and delivered to local stakeholders



# SUSTAINABLE ENERGY DAYS



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# Sustainable Energy Days

- Sustainable Energy Days (SEDs) is one of SECCA's annual flagship initiatives, dedicated to advocacy, raising awareness, and policy actions aimed at **promoting Sustainable Energy (SE) and EU support for SE within each CA country and across the CA region**
- While data on SE awareness is lacking among policymakers, stakeholders and the public, it can be reasonably assumed to be **relatively low** beyond more specialized circles
- SEDs focus on **dialogue with specialized stakeholders** and gradually expanding the reach to a **wider audiences**

# Organization of EU-CA country Sustainable Energy Days (1)

- **Kazakhstan** - Sustainable Energy Days (SEDs) conducted in Astana (1-2 June 2023)
  - International Conference
  - Award ceremony of the most EE school in Astana
  - Award ceremony of winners of Mural (has been painted on the façade of the most EE school. Opening ceremony held on 11 October 2023)
  - Flash mob for the students of the most EE school

# Organization of EU-CA country Sustainable Energy Days (2)



# Organization of EU-CA country Sustainable Energy Days (3)

- **Kyrgyzstan** - SEDs held in Bishkek (15-17, 27 May 2023)
  - International Conference
  - Bilateral technical meetings on EE, RE, RE/EE financing
  - Training Workshop for specialists of the National Statistical Committee (delivered by specialists of the Bureau of National Statistics of Kazakhstan)
  - Award ceremony of the most EE school in Bishkek
  - Flash mob for the students of the most EE school

# Organization of EU-CA country Sustainable Energy Days (4)





# Organization of EU-CA country Sustainable Energy Days (5)

- **Tajikistan** – SEDs, as part of the EU Green Diplomacy Week, held in Dushanbe (25-26 October 2023)
  - International Conference
  - Award ceremony of the most EE school in Dushanbe
  - Flash mob for the schoolchildren of the winning school

# Organization of EU-CA country Sustainable Energy Days (6)



# Organization of EU-CA country Sustainable Energy Days (7)

- **Turkmenistan** – SEDs, held in Mary (14-15 December 2023)
  - International Conference
  - Lectures for faculty members and students of the State Energy Institute of Turkmenistan
  - Ecological Action for schoolchildren
  - Award ceremony of the most EE school in Mary

# Organization of EU-CA country Sustainable Energy Days (8)



# Organization of EU-CA country Sustainable Energy Days (9)

- **Uzbekistan** – SEDs, held in Tashkent (26-27 June 2023)
  - International Conference
  - Bilateral technical meetings on EE, RE, RE/EE financing
  - Training Workshop for specialists of the State Statistics Agency (delivered by specialists of the Bureau of National Statistics of Kazakhstan)
  - Award ceremony of the most EE school in Tashkent (18 October 2023)

# Organization of EU-CA country Sustainable Energy Days (10)



# Organization of EU-CA country Sustainable Energy Days (10)

- SEDs 2024 in **Turkmenistan** (Ashgabat and Turkmenbashi, **29 April-3 May 2024**)
  - **Lectures to students** of higher educational institutions and **Round table discussions** in **Ashgabat** and **Turkemenbashi**
  - **Award ceremony for the most energy efficient school** in **Turkmenbashi** and environmental campaign for schoolchildren
  - **International conference** “Climate change - challenges and solutions for sustainable energy” in **Turkmenbashi**

# More information on SECCA website

## Latest News and Events

### Sustainable Energy Knowledge Hub - EE and RE implementation practices

[www.secca.eu](http://www.secca.eu)