

INTERNATIONAL CONFERENCE

SUSTAINABLE ENERGY – THE ENERGY OF THE FUTURE: INTERNATIONAL EXPERIENCE IN ADVANCING AND IMPLEMENTING INNOVATIVE ENERGY EFFICIENCY AND RENEWABLE ENERGY TECHNOLOGIES IN RESIDENTIAL AND PUBLIC BUILDINGS

02 September 2025 (hybrid format)
State Energy Institute of Turkmenistan, Mary

Background

The global building footprint is expanding rapidly, especially in developing countries where rising affluence is driving increased demand for comfort and convenience. Because buildings, along with their heating, cooling, and other energy-intensive systems, have long lifespans, the design and investment choices made today will shape energy consumption and greenhouse gas emissions for decades to come. Integrating innovative technologies of energy efficiency (EE) and renewable energy sources (RES) into the building sector offers significant benefits—from enhanced energy security and indoor comfort to greater cost efficiency and direct environmental benefits.

The European Union (EU) launched its project “Sustainable Energy Connectivity in Central Asia” (SECCA) in 2022, which promotes EU best practices in sustainable and green building solutions. The aim of the international conference is to foster dialogue and share lessons learned from EU Member States in implementing innovative approaches to sustainable construction.

The SECCA project also supports universities and research institutions in Central Asia in building the capacity needed to engage with *Horizon Europe*—the EU’s flagship research and innovation programme. *Horizon Europe* presents significant opportunities for collaborative research in green and sustainable development, particularly in areas such as energy-efficient and smart buildings. The programme facilitates the exchange of best practices, encourages the adoption of advanced solutions, and supports continued innovation in this field. This conference will serve as a platform to inform academia and other key stakeholders about the opportunities *Horizon Europe* offers for the development and deployment of cutting-edge EE and RES technologies.

Programme

Time	Theme	Name and Position
09:00-09:15	Registration	
09:15-09:30	Opening remarks	Aganiyaz Jumayev , Vice-Rector of SEIT Paata Janelidze , Team Leader/Key Expert in Energy Engineering, SECCA
Session 1: Advancing and Implementing Innovative Energy Efficiency and Renewable Energy Technologies in Residential and Public Buildings <i>Moderator: Aganiyaz Jumayev, Vice-Rector of SEIT</i>		
09:30-10:00	Integration of Innovative Renewable Energy Technologies in Buildings: Experience of the European Union and Potential in Central Asian Countries	Paata Janelidze , Team Leader/Key Expert in Energy Engineering, SECCA
10:00-10:30	Designing Sustainable Buildings Using BREEAM Certification – Strategies and Examples	Maija Dzirkale , International Consultant, Sustainable Building Certifier, SECCA
10:30-11:00	Improving Energy Efficiency in Public Buildings: Approaches and	Zhaxylyk Tokayev , National Coordinator in Kazakhstan, SECCA (online)

	Recommendations. ISO 50001 Experience at the National Level	
11:00-11:30	Life Cycle Energy Efficiency of Buildings and Energy Management	Agris Kamenders , International Consultant, SECCA (online)
11:30-12:00	Development of innovative energy efficiency and renewable energy technologies - opportunities within the Horizon Europe programme	Ilze Purina , Key Expert in Energy Sector Governance, SECCA
12:00-12:30	Green Energy in Turkmenistan – Prospects and Challenges	Vepa Saryyev , Senior Researcher, Scientific and Production Center “Renewable Energy Sources”, State Energy Institute of Turkmenistan, Ministry of Energy of Turkmenistan
12:30-13:00	Questions and Answers	
13:00-14:00	<i>Break</i>	
Session 2: Award Ceremony		
14:00-14:45	Awarding the winners of the competition among young scientists for ”<i>The most promising scientific work to promote energy efficiency</i>“ and the winners of the competition among students for “<i>The most promising scientific work on the development of renewable energy</i>“	
14:45-15:00	Closing remarks	Aganiyaz Jumayev , Vice-Rector of SEIT Paata Janelidze , Team Leader/Key Expert in Energy Engineering, SECCA