

Workshop: **Workshop on Energy Efficiency in Buildings – Fourth Meeting of the Joint Task Force on Energy Efficiency Standards in Buildings**
 (in the framework of the fifth session of the UNECE Group of Experts on Energy Efficiency (GEEE))

Organizers: United Nations Economic Commission for Europe (UNECE), Economic and Social Commission for Western Asia (ESCWA), Copenhagen Centre on Energy Efficiency, and Pennsylvania State University

Target group: Architects, building contractors and energy service companies, housing and energy efficiency policy makers at the municipal, regional, and national levels, representatives of academia conducting research and training in the field of energy efficiency of buildings, representatives of civil society and other experts in this area. The workshop is open to all participants.

Buildings are central to meeting the sustainability challenge. In the developed world, buildings consume over 70% of the electrical power generated and 40% of primary energy and are responsible for 40% of CO₂ emissions from combustion. Developing countries will need to accommodate 2.4 billion new urban residents by 2050, and 75-90% of buildings standing today are expected to remain in use in 2050. Renewable energy technology alone cannot meet those requirements, despite recent improvements. The energy performance of buildings must be managed, but the capability to meet this challenge is in place.

The UNECE Joint Task Force on Energy Efficiency Standards in Buildings has completed a study on mapping of energy efficiency standards in buildings and is in the process of finalizing a study on mapping of technologies to enhance energy efficiency in buildings in the UNECE region and developing a Compendium of best practices on standards and technologies for energy efficiency in buildings in the UNECE region. It has started a training programme on high-performance energy efficiency standards in buildings for building sector practitioners, policy makers, and trainers. The Framework Guidelines on Energy Efficiency Standards in Buildings endorsed by UNECE in 2017 has set in motion the process of setting up international centres of excellence and a consortium of educational and research institutions to promote and implement the High-Performance Buildings Initiative.

UNECE cooperates closely with a number of international and national institutions and organizations in achieving the goal of significant improvement of energy efficiency in buildings. These partners will present their work and achievements in this area.

ESCWA has completed a study on improving the energy sustainability of the building sector in the Arab region. The study reviewed the status of the buildings sector energy use in the region and provided recommendations on means to improve its energy sustainability. It was shown that most significant savings in buildings energy consumption can be achieved when a sustained retrofit programme is implemented in the existing buildings stock to improve their energy performance. The main challenges to such energy efficiency programmes in most Arab countries are low end-user's energy prices, the lack of readily available financing mechanisms, lax enforcement procedures, and a shortage of skilled specialists. One effective way to meet these challenges is by setting up comprehensive programmes and policies to implement, on a large scale, immediate, simple and proven energy efficiency actions that can be rapidly applied to very large segments of the building stock and households. These schemes would be based on a comprehensive approach addressing the technical, financial and logistical aspects. ESCWA will build capacity and advise its member states in setting up frameworks that can be easily and rapidly implemented to conduct such national programmes.

This session will provide participants with an overview of the status and objectives of the work of the Joint Task Force and, in an interactive segment, explore how the Framework Guidelines can be a transformative movement in the UNECE region and potentially other regions.

Time	Content	Speakers
14:00-14:05	Welcome / Introduction	Mr. Scott Foster , Director, Sustainable Energy Division, UNECE
14:05-14:15	Study on Mapping of Existing Energy Efficiency Standards and Technologies in Buildings in the UNECE region	Ms. Domenica Carriero , Associate Economic Affairs Officer, Housing and Land Management Unit, UNECE
14:15-14:25	Study on Mapping of Existing Technologies to Enhance Energy Efficiency in Buildings in the UNECE region	Ms. Kankana Dubey , UNECE Consultant Mr. Andrey Dodonov , UNECE Consultant

14:25-14:35	Outcomes of the Training Course on High-Performance Energy Efficiency Standards in Buildings and Further Steps Preliminary approach to Compendium of best practices on standards and technologies for energy efficiency in buildings in the UNECE region	Mr. Vitaly Bekker , UNECE Consultant
14:35-14:40	Presenting Online Database of Experts on Energy Efficiency in Buildings in UNECE region	Ms. Nadejda Khamrakulova , UNECE Consultant
14:40-14:50	Improving the energy sustainability of the building sector in the Arab region	Mr. Mongi Bida , First Economic Affairs Officer, Sustainable Development Policies Division, ESCWA
14:50-15:30	<p>Panel Discussion:</p> <ul style="list-style-type: none"> • How do the economics of high performance buildings compare to those of traditional buildings? • What are the greatest obstacles to doing buildings right in different countries? • How to best connect energy efficient technologies development and respective policies? 	<p>Moderator: Mr. Andres Jaadla, Chair, Estonian National Housing Association (EKYL)</p> <p>Panellists:</p> <p>Mr. Matija Vajdić, Project Manager, Interreg CENTRAL EUROPE Programme</p> <p>Dr. Romanas Savickas, Senior Advisor for Energy, Copenhagen Centre on Energy Efficiency</p> <p>Mr. George Abulashvili, Director of Energy Efficiency Centre, Georgia</p> <p>Mr. Romen Zakhidov, Head of the Department, Scientific-Technical Center of Uzbekenergo</p> <p>Ms. Svetlana Ristić, Head of Section of Housing Policy, Energy Efficiency and Public Utilities, Ministry of Construction, Transport and Infrastructure, Serbia</p> <p>Mr. Knut Höller, Managing Board Member, Housing Initiative for Eastern Europe (IWO)</p>
15:30-16:00	Coffee break	
16:00-16:10	<ul style="list-style-type: none"> • Introduction on the life-cycle approach of the Framework Guidelines, and Global Building Network and International Centres of Excellence on High Performance Buildings 	Mr. Scott Foster , Director, Sustainable Energy Division, UNECE
16:10-17:05	<p>Panel Discussion:</p> <ul style="list-style-type: none"> • Progressing the Science of Buildings and Teaching Tomorrow's Architects and Engineers • Engaging the Professional Communities • Transforming the Global Supply Chain for Buildings • How do the <i>Framework Guidelines</i> relate to either passive house or near-zero initiatives? 	<p>Moderator: Mr. Aleksandar Dukovski, Chair, UNECE Group of Experts on Energy Efficiency</p> <p>Video message: Dr. Peter Graham, Executive Director, Global Building Network</p> <p>Panellists:</p> <p>Mr. Kostiantyn Gura, State Agency on Energy Efficiency and Energy Saving of Ukraine</p> <p>Ms. Elena Reyes-Bernal, Researcher, Passive House Institute</p> <p>Mr. Helge Schramm, Sustainability & LCA Expert, Danfoss A/S</p> <p>Mr. Vahram Jalalyan, Manager, UNDP-GCF Project on De-Risking and Scaling Up Energy Efficiency Retrofits in Armenia</p> <p>Mr. Mark Radka, Chief, Energy and Climate Branch, Economy Division, UN Environment</p>
17:05-17:25	Q&A with audience	All participants
17:25-17:30	Wrap-Up / Conclusion	Mr. Scott Foster