

Workshop: Energy Efficiency in Buildings: Framework Guidelines

Organizers: UNECE

Target group: Open to all participants

Buildings are central to meeting the sustainability challenge as they are responsible for 40% of CO2 emissions through the energy services they require. By 2050 developing countries will need to accommodate 2.4 billion new urban residents, whereas in the developed world 75-90% of buildings standing today are expected to remain in use. Renewable energy alone cannot meet those requirements, despite recent improvements. The energy performance of buildings must be managed. The capability to meet this challenge exists. At costs equal or close to those of traditional buildings, it is possible with today's technology to transform buildings to align with the highest standards of health, comfort, well-being and sustainability, including improving energy productivity and reducing CO2 emissions. The energy required by buildings can be reduced to a level that can be supplied largely, perhaps exclusively, by non-carbon-based energy.

Standards are an effective instrument for addressing energy efficiency in buildings. The concepts set forth in the UNECE Framework Principles for Energy Efficiency Standards in Buildings go well beyond the incremental, components approach of existing building standards. Rather, they represent a principles-based performance guidance for building energy standards that is outcome-based, anchored in energy actually consumed, and designed to project a vision of holistically designed and operated, ultra-high performance buildings as part of an integrated sustainable energy system.

Guiding questions:

- What are the goals and objectives of the UNECE Framework Principles?
- What dimensions comprise the Framework Principles?
- What are the key barriers to deployment of the principles, and what are the means to overcome them?

Time	Content	Resource person
10'	Session Structure Goals and Objectives of the Framework Principles	Scott Foster, moderator Director, UNECE Sustainable Energy Division
15'	Framework Principles Role of University Consortium	Tom Richard, Penn State University
15'	Key Messages in Accelerating Energy Efficiency in Buildings	Ksenia Petrichenko, Copenhagen Centre on Energy Efficiency
15'	Regional Building Energy Efficiency Practices	Vitaly Bekker, UNDP Russian Federation
15'	UNECE Project and Joint Task Force on Energy Efficiency Standards in Buildings	Ivonne Higuero, Director, UNECE Forests, Land and Housing Division
20'	Interactive Discussion	Scott Foster