



## High-Performance Buildings

Follow-up to the 2021 session of the Economic Commission for Europe (Agenda Item 6)

30<sup>th</sup> Session of the Committee on Sustainable Energy

22 September 2021, 16.00–17.00 CEST (Geneva time)

**Objective:** To raise awareness on how to achieve high performance in buildings and the built environment and invite the UNECE member States to commit to action

**Context:** Buildings are complex systems embedded in energy, communication, water, and mobility networks. Improving their performance will: accelerate the sustainable energy transition by improving the efficiency with which buildings' energy services are provided, and; serve implementation of the 2030 Agenda for Sustainable Development by delivering health and quality of life, improving employment, affordability, social equity, resilience, and carbon intensities, addressing clean energy and climate, managing water and land resources, and providing mobility and technology access.

This session will explore avenues for practical implementation of the relevant objectives and targets:

- (a) Align building codes and their deployment with high performance targets; ensure new buildings are certified compliant; reduce the average energy requirement per square metre in the new building "fleet" and in existing buildings to best practice;
- (b) Reduce CO<sub>2</sub> emissions associated with meeting buildings' energy needs; increase the amount of carbon "stored" in buildings; improve indoor air quality and reduce pollution-linked health issues;
- (c) Improve the global supply chain for the construction business; reduce embedded carbon in buildings and building products and reduce waste; recover materials at the end of a building's life.

The session is expected to call on countries to commit to high-performance buildings in their plans.

### 16.00 Keynote address (15min)

Justin Schwartz, Dean of Engineering, Penn State University

### 16.15 Panel discussion

**Moderator:** Lindsey Dickes Falasca, Director, Building Innovation Hub, Institute for Market Transformation

**Panellists:** Ms. Vivian Loftness, Paul Mellon Chair in Architecture, University Professor, Carnegie Mellon University; Ms. Jenna Cramer, Executive Director, Green Building Alliance; Ms. Chris Cieslak, VP of Program Strategy and Impact, Green Building Alliance

Operationalizing decisions taken by UNECE Commission at its sixty-ninth session, particularly on:

- How to best support member States in improving the performance of buildings; and
- The kind of stakeholder engagement that has proved successful regarding dissemination, research and education efforts on this matter.