



UNECE engagement @COP28



Carbon sponge City - Why cities can help solve our climate problems

Jointly organized by the UNECE, the Finnish Ministry of Environment, and the Finnish Ministry of Agriculture and Forestry

1 DECEMBER 2023 | 13:00 – 14:00 | FINLAND PAVILION | BLUE ZONE | EXPO CITY | DUBAI

Background

The building and construction sector accounted for 36% of final energy use and 39% of energy and process-related carbon dioxide (CO₂) emissions in 2018. According to the Intergovernmental Panel on Climate Change, building materials including steel, cement and glass emitted over 2.2 Gigatonnes of Carbon dioxide equivalent, in 2018 alone. This is more than twice the amount that was reported for aviation during the same year. Between 1990 and 2019, global CO₂ emissions from buildings increased by 50%.

The rise in construction and building will not stop any time soon: urbanization is one of the global demographic “megatrends” and the share of the world population in urban areas is projected to increase from 55% today to 68% by 2050. Cities are hotspots of the global carbon cycle, with considerable fossil fuel-related CO₂ emissions from electricity consumption, transportation, residential and commercial buildings. In fact, global GHG emissions from buildings amount to the equivalent of 21% of global GHG emissions. Of this, 18% are embodied emissions from the production of cement and steel used in buildings.

Objective

The event invites participants to discuss with panelists how low carbon materials can help cities to reverse this trend and to eventually store more carbon than the embodied emissions of their built environment?

Key message

Cities of the future could become major carbon sponges while still being the economic powerhouses if they take advantage of highly energy efficient building materials with low carbon footprint, such as wood.

Think outside (the concrete and steel) box

Wood is a proven solution and will be key for the low carbon construction in the future and innovation in modern wood construction is evolving rapidly in the UNECE region and beyond.



From the UNECE to the world

Trees absorb carbon dioxide from the atmosphere which is stored during the entire lifespan of the wood, including when it is used for buildings. When sustainably sourced and managed, renewable forest and wood products offer unique possibilities to contribute to climate action and to build more sustainable and future-proof cities.

The UNECE region is the key supplier of sustainably grown wood for non-energy use is the world with more than 40% of forest area in the world. About 60% of the globally produced wood for material use originates from forests in UNECE member States.

The UNECE region is also home to the most innovative wood construction technologies and methods. Modular construction and prefabrication with wood or in a clever mix of materials evolves quickly and can easily adapt to almost any requirement. Wood as carbon negative and lightweight material for construction is easily transported from the UNECE region. Modern wood construction from the UNECE region can be found all over the world. The event seeks to build on knowledge and experiences gained in the UNECE region and spread it to the world.

Disruptive change

Faced with the urgency of reducing the carbon footprint of the building sector, constructing globally with more wood will require beyond incremental change and require systematic cross-sectoral thinking and strengthened knowledge and innovation, capacities and even legislative or financial incentives.

Use this unique opportunity to with discuss and network with experts from various backgrounds and make the city carbon sponge idea become a reality.

Target audience and setup of the event

The event is targets experts and representatives involved in city and urban planning who seek to significantly decrease the carbon footprint of the built environment in cities. Panelists are intentionally chosen from non-wood backgrounds and will showcase their experiences and briefly discuss how to best overcome possible challenges in decarbonizing the built environment in cities. Participants will be invited to engage in the discussion.

The panel discussion will last 45 minutes and will be followed by an informal networking of the audience with the panelists.

Registration & Contact

No registration is required - this event is accessible only for participants in possession of a ground pass for the blue zone of the COP.

Documentation:

The presentations of the event will be published on the following website:
(scan or click QR code):



Agenda

1 DECEMBER 2023 | 13:00 – 14:00 | FINLAND PAVILION | BLUE ZONE | EXPO CITY | DUBAI

13:00 – 13:15

Opening

Mr. Juhani Damski, Permanent Secretary, Finnish Ministry of the Environment

Ms. Liliana Annovazzi-Jakab, Chief, UNECE/FAO Forestry and Timber Section

13:15 – 13:45

Panel discussion

Moderator: **Mr. Teppo Säkkinen**, Policy Adviser on climate, energy and industries, Finland Chamber of Commerce

Mr. Pavel Bartov, General Manager of Archea DMCC, ARCHEA, Dubai office

“Impact of low carbon construction on architecture.”

Ms. Annette Stube, Executive Vice President, Sustainability, Stora Enso

“Much to celebrate and much yet to do to advance wood buildings in Europe and throughout the world.”

Mr. Kamal Farah, Director, Engineering Contracting Co. LLC

“Innovative upcycling of palm waste into a truly carbon negative construction material – Desertboard: structural panels from palms.” (title tbc.)

13:45 – 14:00

Closing of the panel & Informal networking opportunity

Further Information:

www.unece.org

Contact:

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Venue:

Finland Pavilion (blue zone, zone B6, building 74)



Full map of the COP28 (scan the QR code or click on the QR code):

