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Cross-sectoral activities

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Green building

A. Overview of the recent developments

1. Activities on green building are cross-cutting and continue under different sub-programmes. For instance, the Forestry and Timber Subprogramme promotes the use of wood in building as sustainable material, for its carbon substitution effects, health and environmental performance and low impact and waste of construction sites. Specific information and data on green wood buildings is reported annually in the *Forest Products Annual Market Review*.

2. On 21 March 2018, to celebrate the International Day of Forests which theme was *Forests and Sustainable Cities*, the UNECE/FAO Forestry and Timber Section and the Housing and Land Management unit teamed up to organize an event entitled 'The Sky is the Limit' to discuss success stories of high-rise green buildings using timber as main material or integrating trees and plants in their vertical structures.

3. The ECE Committee on Sustainable Energy and Committee on Housing and Land Management established the Joint Task Force on Energy Efficiency Standards in Building in 2015 and extended its mandate for 2018-2019. The Joint Task Force has completed a study on Mapping energy efficiency standards in buildings in the UNECE region and is in the process of developing a study on Mapping of existing technologies to enhance energy efficiency in buildings in the UNECE region. It works on improving capacity building of policy makers and building sector professionals to develop, enforce, and apply energy efficiency standards in buildings through targeted training. The first Training seminar on high-performance energy efficiency standards in buildings was held in Saint Petersburg on 5-7 September 2018.

4. On 10 July 2018, the Building Energy Exchange (BE-Ex) of New York City signed a Memorandum of Understanding with ECE to become a founding hub of this critical knowledge sharing network to bring high performance building best practice to scale. The goals of the network are directly aligned with the Paris Climate Agreement and will provide access to best practices and fully vetted solutions for communities pursuing those goals, including cities, states, and businesses. This action supports the 2017 ECE adoption of the Framework Guidelines for Energy Efficiency Standards in Buildings developed to promote the adoption of aggressive, performance-based codes for buildings.

B. Goals and challenges

5. The main goal of the work on green building at UNECE is to facilitate the transition of all member States to high performance, energy and material efficient as well as carbon neutral buildings. Challenges are represented by obsolete housing structures in most countries, high costs of making the transitions towards more energy efficient buildings and weak institutional capacities in countries to speed the transition.

6. For instance, the use of wood in buildings is limited in many UNECE countries by old standards and building legislation, which are privileging more inefficient and unsustainable materials.

7. In order to reduce carbon emissions in line with ECE member State Nationally Determined Contributions (NDCs), countries must not only attempt to replace thermal energy generation capacity with renewable energy but also reduce energy consumption via energy efficiency measures. In general, most country-led efforts have been aimed at decarbonizing electricity production, but an increased focus on energy efficiency is required to a holistic strategy of decarbonisation of energy production. The combined contributions of ECE Group of Experts on Renewable Energy (GERE) and Group of Experts on Energy Efficiency (GEEE) make progress toward the shared goal of reducing carbon emissions, but with separate and equally important efforts in a complementary manner.

C. Planned activities

8. The 2018 Session of the Committee on Forests and the Forest Industries (COFFI) entitled 'Building the Future with forests' will discuss and explore challenges and opportunities for green wood buildings in the UNECE and beyond and highlight priorities of action in this area.

9. The ECE Group of Experts on Renewable Energy (GERE) and the ECE Committee on Housing and Land Management are planning a joint side event for the 2018 COFFI session on the benefits of building housing sustainably with wood and the potential for reduced lifecycle carbon emissions. This event will be held Passive House Canada at the 76th session of the ECE Committee on Forests and Forest Industry (COFFI) held 5-9 November 2018. Overall, the event focuses on a transition towards a more sustainable society and a circular economy, based on the provision of forest products and sustainable forestry management practices. The event will also discuss the potential for sustainable bioenergy and good practices to provide for the energy requirements for wood-constructed buildings.

10. GERE and the Group of Experts on Energy Efficiency (GEEE) will be co-hosting a number of events at the upcoming 9th International Forum on Energy for Sustainable Development to be held on 12-15 November in Kiev, Ukraine. The event in Ukraine will also play host to the 5th annual sessions of both GERE and GEEE. At ECE Sustainable Energy Week on 24-28 September 2018, GERE and GEEE will play an important role in the event entitled "Deep Transformation of the Energy System through Electricity." Additionally, the two groups will jointly organize a workshop in Kiev entitled "Overcoming Barriers to Financing Energy Efficiency and Renewable Energy."