

## FORESTS AND SUSTAINABLE CITIES

Let's make our cities greener, healthier, happier places to live!

## THE SKY IS THE LIMIT

21 MARCH 2018 ROOM VIII, PALAIS DES NATIONS GENEVA, SWITZERLAND

UNECE

Food and Agriculture

Organization of the United Nations Vertical forests, farming, and high-rise wood constructions: the denser our cities become, the greater the need to address the lack of space available for nature and to consider innovative approaches to integrate greenery into our urban spaces – where the sky is the only limit.

Cities are home to over half of the global population, producing approximately 75 percent of the world's greenhouse gas emissions. By 2050, six billion people will live in cities. Hence, increasing levels of urbanisation across the globe place immense pressures on the environment and human well-being. Not only are more materials needed for the construction of buildings, but also the consumption of resources such as water and the production of waste will increase substantially.

The mass congregation of people and rising demand for resources make cities prime sources of CO2 pollution, congestion and waste. Moreover, as urban populations grow, more people find themselves in so-called "food deserts", areas with limited access to grocery stores, supermarkets and other sources of healthy and affordable food. The more people live in cities, the more food needs to be imported, travelling long distances to reach consumers.

Trees in cities serve as natural air conditioners, cooling the air by between two and eight degrees Celsius, whilst urban forests filter harmful pollutants from the air and act as a carbon sink to help mitigate climate change. Urban farms, on the other hand, will contribute to urban food security by providing fresh local produce, reducing food miles and reconnecting people to the food they eat.

Green areas in cities, be it forests, parks, building gardens/vertical gardens (gardens that are part of the high rise building) or urban farms, will become more important to tackle urban challenges. Forests also provide wood, which serves as an excellent renewable building material. As compared to concrete, steel, cement and glass, wood requires less energy in production and rather than emitting carbon, it stores it. Hence, using wood to construct a 125-meter skyscraper could reduce the building's carbon footprint by up to 75 percent. A 53m-high block of student flats in Vancouver currently holds the title of world's tallest wooden skyscraper. However, this 18-storey mass wood structure might soon be overtaken by the so-called "Toothpick", a 300-metre tall wooden skyscraper to be built in central London, or the 70-storey W350 tower, which is planned to be built in central Tokyo.

To celebrate this year's **International Day of Forests**, this event will gather eminent speakers presenting innovative ideas on urban farming, the integration of trees in buildings, wood construction and architecture, showing that technology and ingenuity have no limits.

## Programme

1:00 – 3:00 PM Wednesday, 21 March 2018 Room VIII, Palais des Nations

> 1:15 - 1:20 Video

66

1:00 - 1:15

Reception 1:20 - 1:40 Welcome & Opening Remarks Ms. Olga Algayerova, Executive Secretary, UNECE Ms. Carolyn Rodrigues-Birkett, Director of the FAO Liaison Office in Geneva

1:40 - 3:00 Presentations Moderator: Ms Paola Deda Chief, UNECE/FAO Forestry & Timber Section



"Architecture and Nature Vertical Forests" Arch. Maria Chiara Pastore, Stefano Boeri Architetti Arch. Stefano Boeri, Founding partner of Stefano Boeri Architetti (joining via Skype)



**"Vertical Farming" H. E. Ambassador Foo Kok Jwee**, Permanent Representative of Singapore to the UN in Geneva



**"Super Timber" Dr Michael Ramage**, Director of Centre for Natural Material Innovation, University of Cambridge



This event is jointly organised by the UNECE/FAO Forestry and Timber Section and the UNECE Housing and Land Management Unit, together with the FAO Liaison Office in Geneva.

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