Press Release

UN Environment, Yale University demonstrate how to make modern living sustainable with new eco-housing module

- The housing sector uses 40 per cent of the planet's total resources and represents more than a third of global greenhouse gas emissions.
- Constructed primarily from locally-sourced, bio-based renewable materials, the module is efficient, multi-functional and engineered to operate independently.

New York, 09 July 2018 – UN Environment and Yale University in collaboration with UN Habitat today unveiled a new eco-housing module, to spark public discussion and new ideas on how sustainable design can provide decent, affordable housing while limiting the overuse of natural resources and climate change.

The 22-square-meter "tiny house" is fully powered by renewable energy and designed to test the potential for minimizing the use of natural resources such as water.

The Ecological Living Module – unveiled during the United Nations High-level Political Forum on Sustainable Development – is constructed primarily from locally-sourced, bio-based renewable materials.

UN Environment's collaborator, the Yale Center for Ecosystems in Architecture, worked with Gray Organschi Architecture to design, fabricate and install the Ecological Living Module. The unit is efficient and multi-functional, accommodating up to four people, serving both domestic and commercial purposes.

"We clearly need more housing, but the key thing is that we also need smarter housing" said UN Environment Head, Erik Solheim. "The housing sector uses 40 per cent of the planet's total resources and represents more than a third of global greenhouse gas emissions. So making them more efficient will benefit everyone, and it'll mean lower bills too. Innovations like the Ecological Living Module are what we need more of."

"Adequate housing is at the heart of sustainable urbanisation" said UN-Habitat Executive Director, Ms. Maimunah Mohd Sharif. "The use of proper building materials, better planning and improved construction techniques can make energy use in buildings more efficient. If adopted widely, this practice can create jobs and prosperity with lower greenhouse gas emissions."

Engineered to operate independently, the module's built-in systems include solar energy generation using less than 1 percent of toxic semiconductor materials, on-site water collection, micro agricultural infrastructure, natural daylighting, plant-based air purification, passive cross-ventilation, and a range of flexible, adaptable components for living and working.

Around one billion people worldwide currently live in informal settlements, while millions more live in buildings that are not environmentally friendly. Rapid urbanization and economic growth challenge communities to sustainably expand capacity, heightening the need for innovation in building systems and infrastructure.

"Architecture must address the global housing challenge by integrating critically needed scientific and technical advances in energy, water, and material systems while remaining sensitive to the cultural and aesthetic aspirations of different regions," said Deborah Berke, Dean of the Yale School of Architecture.

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The first demonstration unit, located in the UN Plaza in New York City, from July 9-18, contains features relevant to the local climate and context of New York. Future iterations of the module – including one in Kenya, the home of UN Environment – will respond specifically to local climatic and cultural contexts.

NOTES TO EDITORS

Download the technical specifications to find out more about the module and the exhibition at:
https://we.tl/I4DQc3dR0r

About UN Environment:
UN Environment is the leading global voice on the environment. It provides leadership and encourages partnership in caring for the environment by inspiring, informing, and enabling nations and peoples to improve their quality of life without compromising that of future generations. UN Environment works with governments, the private sector, civil society and with other UN entities and international organizations across the world.

About Yale Center for Ecosystems in Architecture:
The Center for Ecosystems in Architecture (CEA), founded by Anna Dyson, is a multidisciplinary research venture led by the Yale Schools of Architecture, Forestry & Environmental Studies, to develop transformative systems for the Built Environment. Alongside our partners in the Architecture, Engineering, and Construction (AEC) Industry, CEA seeks to address the complexity of transitioning global construction patterns by bringing together deep expertise of current practices with radically new socio-economic and technical approaches. We prioritize the requirements of living ecosystems towards buildings and cities that support biodiversity with an integrated approach to clean energy, water, air and material life cycles

About UN-Habitat
UN-Habitat is the United Nations programme working towards a better urban future. Its mission is to promote socially and environmentally sustainable human settlements development and the achievement of adequate shelter for all.

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