Session Summary:

HOUSING

Monaco • 26-27 June 2019
INTRODUCTION

In response to the ecological transition, architects and urban planners are transforming the ways we live and the places in which we live, work, learn and play. Two out of three people are expected to be living in cities or other urban centers by 2050. What are some of the major challenges facing cities as they respond to the needs of increased urbanization? What are some of the innovative solutions emerging in sustainable housing and infrastructure?

ARCHITECTURAL DISRUPTION

Cities like Paris are promoting projects to reduce energy use, especially at the building level. That is just one of sundry efforts to change architecture in France and around the world, according to the presentation by Anouk Legendre, Architect & Co-founder, XTU Architects (France). In some parts of France, units are delivered partially-finished to give occupants a chance to do what they want. Builders are encouraged to use natural inputs. Balconies and terraces are added to offer room for planting. The roof is left open for urban gardens. In some buildings, gray water is recycled for in-house irrigation. The watering of plants can be controlled by smart phones by people on vacation. Bio-facades mean that buildings can be covered with vegetation.

THE TRANSITION FOR HOUSING AND SUSTAINABLE CITIES

Each city has its own characteristics, according to Stéphanie Jannin, Vice President, Montpellier Méditerranée Métropole (France). Tel Aviv and Beverly Hills have small resident populations relative to the influx of workers during the day, for instance. Beverly Hills has a stable population, while Montpellier’s numbers are growing. Beverly Hills is literally surrounded by the cities of Los Angeles and West Hollywood, while Montpellier’s neighbors are smaller towns and villages.

Montpellier, France, is faced with three major issues, Jannin said. They are: (1) population growth; (2) a drive to defend biodiversity and natural landscapes; and (3) the need to deal with climate change. The mayor called together cohorts from small towns in the region to develop a joint plan. They agreed, for example, to preserve at least two-thirds of the region’s agricultural land for the next 20 years.

Dr. Julian Gold, Former Mayor of Beverly Hills (US), provided the perspective of an elected official. In its 5.7 square miles, Beverly Hill houses 350,000 residents, just about the same number as in the 1940s. The density is akin to that of Cleveland, Ohio. During the day, thousands of commuters join the fray. The city is trying to implement a number of ‘smart city’ initiatives such as extending fiber optics to all residents.
People talk about a “builder dilemma,” according to Cédric Simonin, CEO, Trianon Résidences (France). For architects and builders, it would add the element of “social responsibility.” He admitted that “there cannot be an environmentally-friendly approach if there is no money.” The short-term concept of price must be separated from the long-term one of value. And needs should be separated from expectations. Needs are generally made explicit, while expectations are mostly not expressed. The expectations of residents were often not taken into consideration by builders in the 1960s, and “now we have places that look like ghettos,” he said. Expectations of people in the early 21st century include: (1) comfort (e.g. cheap energy); (2) health (e.g. “de-polluting” facades); and (3) security (a home as a long-term investment).

Building materials are important contributors to greenhouse gases, said Guillaume Carlier, CSR Director, Bouygues Bâtiment France & Europe. When renovations are made, all the old stuff is thrown out. The single-use approach seems wasteful. “Maybe one way to fight climate change is to use what we have,” he said.

Retrofitting the current housing stock for today’s standards can make a big contribution, said Benoist Vercherin, Innovation Lead, Climate KIC, France. “Financing is needed,” he said. “The technology is there.”

C40 is a network of cities around the world, including Tel Aviv, that are collaborating to combat climate change, noted Rinat Guy, Chief Innovation Officer, Municipality of Tel Aviv, Israel. In Tel Aviv, elected officials are encouraging each of the 9,000 municipal employees to be creative about finding solutions to the city’s problems.

**INNOVATION IN HOUSING AND SUSTAINABLE CITIES**

“Innovation is when ideas have sex,” said Guy, repeating an often-used phrase.

Startups made presentations about their efforts in this area:

- **Aglicare** – Building with change in mind.
- **F-Reg** - Anti-flood infrastructure.
- **Lum’In** – Public lighting systems based on solar power.
- **Evolution Energy** – Smart city solutions for energy management.
- **X-TreeE** – Design-platform for large-scale 3D, including 3D concrete