REIMAGINING TOMORROW'S CITIES

Megatrend: Rapid Urbanization
Sustainability Challenge(s): Industry, Innovation and Infrastructure (**SDG 9**) &
Sustainable Cities and Communities (**SDG 11**)

As the world's population grows, people will be drawn to cities in massive numbers. The speed of the population shift from rural to urban requires society as a whole to adapt to this megatrend of rapid urbanization. People are specifically drawn to 'mega' cities, with populations of more than 10 million people. From now until 2050, the urban population will increase from 55% to 68% of global population, adding another 2.5 billion people to cities around the world.[1] This megatrend will require more housing, more amenities, more services and a concentration of resources in cities. Most of all, the aforementioned will need to be used efficiently.

When adapting to a change, it is tempting to stick to old habits. An example: the construction industry may be tempted to stick to building with concrete or paving with asphalt. These practices may no longer suffice for any city, let alone a megacity. Rapid urbanization poses an opportunity that must be grasped in a sustainable manner to prevent these cities from becoming unliveable. Larger buildings can be efficiently heated, cooled, and supplied with electricity. If the building is constructed with concrete however, it may not exist long enough for these gains to outweigh the greenhouse gasses emitted when producing the cement[2]. Another example: shared vehicles can lower individuals' carbon footprints, but this gain is lost if the additionally laid roads these cars drive on are made of asphalt[3]. And perhaps both examples offer solutions that are not as adaptable as required in an ever-expanding urban area.

The infrastructure of tomorrow needs to be more resilient than the current standard. There are many examples of services or facilities that must be able to adapt to a growing number of users. Low-rise residential areas may have to convert into high-rises that house more people. More people in turn may require more digital services, a different approach to maintaining personal security and a radical overhaul of the healthcare system and waste management.

Dense city populations will drive new business models as consumers search for those that save them time and effort. Efficiently sharing services between residents can benefit the entire urban area, as it reduces the need for individual ownership. A variety of technologies can help in creating and sustaining this new way of living. This offers many opportunities.

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[1] Revision of World Urbanization Prospects, UN DESA, 2018. Link
[2] Making Concrete Change: Innovation in Low-carbon Cement and Concrete, Chatham House, 2018. Link
[3] Greenhouse Gas Emissions from Asphalt Pavement Construction: A Case Study in China, Feng Ma et al, 2016. Link

YOUR CHALLENGE:

Choose one specific topic and assess **what your company can do** (alone or in collaboration with other companies or organizations) to keep cities liveable, accessible, efficient and make them future and environmentally proof in light of the megatrend of rapid urbanization. You are encouraged to consider the secondary effects your plan may result in. Megacities will have a lot to offer to its residents but will also face many challenges. Your team is encouraged to explore these opportunities and work on a product, service or solution that your company could develop and that can contribute to wellbeing in the (mega) city of today and tomorrow. Build the business case and prove that it will work, with impact!