



URBAN ENVIRONMENT

FUTURE-PROOF CITIES

Building Resilience and Acting on Climate Change

Concept Note

It may be difficult to realize how climate change is already affecting our [lives](#). Yet it already has observable effects on the [environment](#) and in our cities: Heat waves, drought and insect outbreaks, heavy downpours and flooding as well as sea level rise pose growing challenges in several regions.

The latest report of the International Panel on Climate Change ([IPCC](#)) indicates that we need to act fast and decisively. In fact, scientists warn that we have little over a decade to [drastically reduce greenhouse gas emissions](#) to avoid catastrophic climate change. As scary as these predictions sound, they also are potentially useful to transfer knowledge and develop mitigation strategies.

Many cities around the world have already incorporated climate change into their planning, be it because they are within regions that have already exceeded 1.5°C and have been forced to adapt, or because they concentrate opportunities to address the problem on a systemic level and can more easily develop scalable solutions than other levels of government.

Los Angeles, which is predicted to see fewer, yet more intense rainstorms, has begun an ambitious rain capture program to reduce its reliance on water piped into the city from afar. Hangzhou (China) has implemented a bike-sharing scheme, which started out to provide public transport, but has ended up alleviating traffic congestion and drastically improving air quality. The [European Union](#) also provides various examples of climate adaptation strategies in European cities.

Every city needs to define its own pathways to mitigate their GHG emissions by reducing the demand for energy, developing greener energy supplies, and supporting more sustainable lifestyles favoring a circular economy which deters the “take, make, dispose” model.

Yet city action alone will probably not be sufficient. Limiting warming to 1.5°C requires rapid and far-reaching systems transitions in energy and industry, land use and ecosystems, urban and infrastructure, linked to the implementation of the UN Sustainable Development Goals. And these transitions need action within and across sectors, as well as multilevel governance.

The challenges ahead are significant as developing climate-resilient infrastructure and green spaces is no mean feat. The reason is while traditional infrastructure offers immediate economic



returns, green infrastructure pays off over the longer term. In this scenario, the onus for investment and action on green infrastructure is largely placed on the public sector, which is limited.

So, without the meaningful engagement from the private sector and global organizations there is partial potential for financing, research, and support of green infrastructure projects on a large and replicable scale. In this sense, cities need a coordinated, partnership-oriented governance over green infrastructure initiatives as well as citizens' involvement in policy development and decision-making. Everyone needs to be brought to the table because everyone has a role. The time to act is now.

Keywords: resilience; climate change; emissions; mitigation; lower greenhouse gas emissions; urban adaptation; water shortage; droughts; extreme weather, sea level rise, flooding, extreme heat

Outcomes

Participants will:

- Identify key challenges presented by the threats of climate change, and the opportunities of resilience policies.
- Gain an improved understanding of the opportunities that climate-smart city measures can bring to cities.
- Learn the role of all the urban actors involved in climate-proofing cities.
- See examples of successful sustainable strategies already implemented in urban areas.
- Explore how citizens can have a significant role in the future of urban planning and city design.

Guiding questions

Main questions

- Given the urgency of finding a solution for reducing greenhouse gas emissions, what are the next steps to be implemented by cities over the next 10 years?
- What are the pathways to net zero at the local level?
- How can mitigation strategies be effectively funded?
- What is the role of each stakeholder in the transition to more sustainable cities?
- How can different sectors collaborate to develop green infrastructure?
- What are the opportunities and challenges of a resilient future?