

The Role of Urban Research and Innovation in addressing the Climate Crisis

To achieve the Paris Agreement, all sectors of the economy need access to cost competitive clean energy solutions this decade. We need to scale up the deployment of existing clean energy technologies and accelerate clean energy innovation to deliver affordable solutions for the most difficult climate challenges.'

Joint Member Statement | Mission Innovation 2.0

The Need

While we recognise that the science on climate change is clear, many national commitments remain insufficient; at the COP 26 World Leaders Summit, UN Secretary-General Antonio Guterres highlighted “a deficit of credibility and a surplus of confusion over emissions reductions.”

The unprecedented speed and scale of action required to tackle climate change in our cities represents both a challenge and a tremendous opportunity. As massive demographic shifts, technological transformations, budgetary constraints, geopolitical tension and conflict, such as that in Ukraine and the COVID-19 pandemic reshape our local and national realities, the climate clock continues to tick in a race to net-zero and resilience that humanity must win to safeguard future generations.

Addressing the challenge and capitalising on this opportunity demands an innovative approach to thinking about urban planning and systems. Positioned at the frontlines of the climate crisis, our cities and local governments have established themselves as hubs for the cross-sector partnerships and integrated solutions that offer ambitious, yet feasible roadmaps for action implementation.

As urban leaders, we are mobilising research and innovation– not only in pursuit of climate neutral and resilient futures for our towns and cities, but to secure jobs, drive economic development, and preserve our precious cultural and social heritage.

Outcome-oriented partnerships across all levels of government, the business sector, academia and civil society will accelerate this mobilisation, to develop, test, and widely replicate ambitious net-zero and climate-resilient solutions appropriate for our cities. Engaging and supporting cities and local governments as trailblazers for innovative climate action are critical steps on the way to achieving systemic change that benefits all sectors of society.

The Ask

We, the undersigned, recognise that there are gaps in understanding and knowledge that are holding back critical urban climate action and that funding and support for innovative local solutions needs to be increased significantly given the scale of the challenge that local leaders face. We fully recognise the priorities set out in the **City Research and Innovation Agenda**¹ and warmly welcome the Urban Transitions Mission of Mission Innovation as a contribution to filling the identified research and innovation gaps.

We call on national government leaders to:

- Recognise the urgency of the climate challenge, co-create policy aligned with net-zero pathways with cities and local governments, and commit up to one-third of national research and innovation funding towards integrated urban climate and energy issues
- Fully integrate local and subnational climate action into Nationally Determined Contributions (NDCs) and national climate policy planning and implementation, bringing ambition in line with and beyond the Paris Agreement goals
- Establish the necessary regulatory and financial supporting frameworks to foster innovation at the local level recognizing cities and local governments as cradle of innovation, and the place where climate action has the most effective and direct impact on people

We call on private sector leaders to:

- Build partnerships with city leaders and local governments and share the critical data, tools and financial support needed to address urgent urban climate challenges
- Join forces to divest from fossil fuel technologies and approach and invest in options aligned with the net-zero pathway and fostering and inclusive and just transition

We call on academia and research leaders to:

- Structure and implement research programmes to fill the gaps identified in the City Research and Innovation Agenda
- Share findings of leading innovative research openly with leaders across local government, national government, business and civil society
- Build partnerships with city leaders to test and implement innovative approaches in urban spaces and to facilitate the development and uptake of both technological and social innovation
- Build capacity to integrate the net-zero urban approach and implement systemic transformations

¹ <https://www.globalcovenantofmayors.org/press/city-research-and-innovation-agenda/>

Call on fellow Mayors to:

- Deliver bold and ambitious climate action in line with the aims and objectives of the Paris Agreement and beyond, and to regularly review and update action plans and implementation activities
- Share their experiences to inspire others on their journey towards climate neutral and resilient cities and become solution providers at the global level
- Engage in partnership with all levels of government and sectors of society to plan and deliver innovation driven, integrated urban action focused on emissions reduction and maximizing co-benefits and resilience of their community
- Identify gaps and challenges in the net-zero pathway, to join forces and fill them with the help of other cities facing similar issues across both global North and Global South

With one voice, the world's cities and local governments are underscoring their role as an effective driving force in implementing the Paris Agreement. It is time to complement their urban transition ambition with the cross-sector resource, partnerships and knowledge crucial for securing innovative, thriving nations through accelerated and ambitious city climate action. The Mission Innovation's Urban Transitions Mission is the way to achieve this.

This Statement is endorsed by:

Mohamed Sefiani, Mayor of Chefchaouen (Morocco) & ICLEI Special Envoy for Africa to COP27

Mar-Len Abigail S. Binay, Mayor of Makati (Philippines)

Cam Guthrie, Mayor of Guelph (Canada)

Rafał Trzaskowski, Mayor of Warsaw (Poland)

Prof. Dr. Eckart Würzner, Mayor of Heidelberg (Germany)

“Cities are at the forefront of climate action. Mayors are the level of government closest to citizens and no matter where they are, they face similar questions. [...] Urban climate action is at the heart of the European Green Deal and is essential to achieving a global green deal.”

**Frans Timmermans European Commission Executive Vice President for the
European Green Deal**

“Cities are where the problem is. Cities are where the solution is, where creativity exists to address the challenges and where they have most impact... Cities, simply, are the key to saving the planet.”

**Mike Bloomberg UN Secretary-General's Special Envoy for Climate Ambition
and Solutions**

Background Information

The Mission

The Global Covenant of Mayors for Climate & Energy (GCoM) – representing over 11,700 cities and local governments across 142 countries – together with the European Commission and the Joint Programming Initiative (JPI) Urban Europe launched the Urban Transitions Mission at COP26 in November 2021 under the framework of [Mission Innovation \(MI\)](#). MI Missions bring together dynamic, delivery-focused and ambitious alliances between countries, corporations, investors and research institutes that set global stretch goals and provide momentum to make sure more innovation happens, more rapidly.

The Urban Transitions Mission focuses on the **gap between the climate and energy ambitions of cities and national governments. It aims at fostering financing technology innovation in cities**, filling the data, information and technology gaps in GCoM's [City Research and Innovation Agenda](#) – sourced directly from local policymakers, city leaders and practitioners. Building on **scientific knowledge and synergy between similar and complementary initiatives** it supports the net-zero urban transition at the global level.

An initial cohort of 50 pioneer cities will test and refine modular, integrated, and holistic net-zero urban roadmaps, with innovative solutions centred on renewable energy at their core. An additional 250 cities around the world will provide ambitious system-wide pathways for all cities globally to rapidly transition towards low-emission, resilient communities.

The Urban Transitions Mission will share net-zero urban guidance, knowledge and opportunities with GCoM signatories and other cities around the world. This will be achieved through targeted partnerships, a **Global Knowledge Exchange Centre**, an **Annual Innovation Summit** linked to the *Innovate4Cities* conference, and other wide-reaching events that will help cities of all sizes implement innovative approaches in technology, resilience, governance, policy, finance/investment and social aspects in an integrated, accessible and holistic way.

In alignment with its 2022-2024 Strategic Plan, the GCoM Board acknowledges the need for a simultaneously ambitious, holistic and long-term approach to successfully transform the global urban fabric – involving multiple actors in the co-creation and co-implementation of innovative solutions while also tackling systemic barriers to accelerate the speed of the urban net-zero transition without leaving communities behind.

The GCoM Board endorses the goals and approach adopted by the Urban Transitions Mission – aiming to strengthen partnerships, generate knowledge, and boost local and national government capacity to overcome critical barriers in the global urban transition to a net-zero future through accelerated research, development and deployment.