

# JOINT MISSION STATEMENT FOR THE MI CITIES MISSION 'Innovation-Driven Urban Transitions'

#### The Mission

Cities account for more than 65% of global energy consumption and more than half of the world's population is urban, therefore the climate and energy challenge is an urban one. The magnitude of the challenge requires delivery at scale, with concerted effort from national and local level leaders, yet the current fragmented landscape limits large-scale implementation and the rapid development of urban low-emission and climate-resilient solutions and environments.

The aim of the Mission is to mobilise and support a cohort of 50 pilot cities worldwide to deliver integrated demonstration testbeds for urban environments that demonstrate how all aspects of modern life in large urban areas – including housing, transport, energy and materials access, production and consumption, and industry – can integrate reliable and affordable clean energy solutions by 2030. The demonstrators will spur customisable roadmaps for innovation, investment, and implementation to inspire and enable national and local governments to accelerate the urban energy transition.

In the process, the Mission will:

- Support the integration of energy end-use and supply sectors with one another ('sector coupling');
- Accelerate the application of available and new technologies in an integrated way within the built environment, mobility and transport, industry and the energy sector;
- Direct and drive research and development on sector coupling based on jointly agreed needs;
- Identify and disseminate reliable and affordable solutions for accelerating the urban energy transition in various regional contexts;
- Help shift the system by increasing efficiency and by lowering technology and implementation costs

# Vision and approach

This Mission is part of MI's commitment to a decade of clean energy innovation to galvanise action. It builds on the mission members' acknowledgement of the **gap between the climate and energy ambitions of governments and their approach to financing technology innovation relevant to cities**. This gap acts as a barrier to fulfilling urban needs linked to housing, mobility, and energy access. It also hampers the implementation of integrated solutions at large scale and of new business and social models in sync with private initiatives.



In light of this, the Mission will work to identify system-wide intervention pathways for maximising the impact of investments, thus enabling national and local governments to confidently set and deliver on ambitious clean energy and climate targets. Such global action has the potential to lead to tipping points in the cost and scale of low-emission and climate-resilient energy solutions across sectors and across world regions. In addition, by boosting political momentum, the Mission will ensure that more innovation happens more rapidly over the next decade.

To achieve these ambitious goals, the Mission aims to close the gap between research, development, and deployment via three levers that form the building blocks of the large scale demonstrators:

- **Simplification:** pinpoint where existing technologies need better integration and implementation and spearhead new RD&D and investment priorities via one-stop-shop guidance and tools for public and private actors.
- **Scaling:** move from pilot level to large-scale implementation based on roadmaps that bridge the gap between ambition and implementation, build on city-specific challenges and take regional disparities into account.
- **Synergies:** drive partnerships with complementary initiatives and first-wave MI Missions and innovation communities, in particular MI Innovation Challenge 7 on affordable heating and cooling of buildings.

Building on the EU's Mission on 100 Climate-Neutral and Smart Cities, the Mission's co-leads and core coalition members agree to help with the development of customisable innovation, implementation, and investment roadmaps for a climate-neutral urban energy transition. To help build the roadmaps, co-leads and core members will **select 50 pilot cities that will mobilise RD&D investments to deliver a minimum of 50 integrated demonstration testbeds**. The overarching aim is to show that urban environments can be powered by 100% reliable and affordable energy solutions by 2030.

The lessons learnt from the 50+ demonstrators will help feed the **roadmaps to be reviewed and refined by 250 cities**. The roadmaps will also underpin the ambition to have dedicated lines of national R&I budgets allocated to areas relevant for urban energy transitions. The dissemination of these roadmaps will pave the way for the **tipping point to be reached when 500 roadmaps that turn integrated urban clean energy solutions into the default option are adopted by cities by 2030**. To ensure global coverage and awareness, a modular and customisable format of the roadmaps will be shared with 10 000+ cities.

To complement the cohort of pilot cities, the Mission will bring together a global innovation alliance that includes 10+ MI member governments, 10+ private-sector partners and 10+ youth organizations. The dissemination of findings and the sharing of best practices will be done via the GCOM network, the Global Knowledge Exchange Centre and an annual Innovation Summit.



### Members of the mission commit to:

# **Co-leads:**

- Strong public commitment to accelerate the urban energy transition
- Frame, organize, and drive the 'roadmap development' process
- Deliver significant RD&D investment in the cohort of pilot cities (jointly initiate and execute development of large scale demonstrators and translation to RD&D needs and activities)
- Provide significant additional financial resources for admin/ non-staff costs (e.g. events, publications)
- Develop framework for the road mapping exercise and the link to RD&D agenda iterations
- Contribute to the setup of a Global Knowledge Exchange Centre and the organisation of the Annual Innovation Summit

## **Core group members**

- Attend 'roadmap development'-meetings on a regular basis to disseminate programmes and initiatives they are driving or are being involved in
- Deliver modest public R&D investment to the fund activities (development of large scale demonstrators and/or support of cohort of pilot cities)
- Contribute to portfolio build-up with regard to data, tools, finance, policy, business model, value model, ... innovation
- Provide additional financial and in-kind contributions (e.g. provision of IT tools, labs, publications)
- Help provide content to the Global Knowledge Exchange Centre and the Annual Innovation Summit

# **Support Group members**

- Commitment to actively engage with their government and facilitate investments, national-local dialogues, dissemination on specific topics
- Contribution to development or refinement of deep demonstrators, portfolio build-up or delivery of small-scale engagement activities.

Members of the mission will advance this work by adhering to the following principles:

• **Cooperation:** members will engage and work on the interaction between national and local level where relevant for system-wide transitions, but also with other countries, the private sector and other initiatives nationally and internationally.



- **Transparency:** members will share data, expertise, best practices and analysis, as well iterative reflexive monitoring to help advance mission objectives and continuously improve them.
- **Participation:** members will actively participate in the mission and support mission objectives (e.g. shared resources), building on ongoing initiatives and commitments
- Accelerate action: members will focus on key barriers, needs, gaps and challenges that will be
  revealed when setting up organisation and developing a one-stop-shop approach to speed up
  innovation toward the mission goal and stimulate more action either individually or
  collaboratively.
- Build demand: with a focus on putting cities central, members will identify the 'demand-pull' efforts needed to disseminate, deploy, scale and customize solutions that emerge through the mission and partner with initiatives or actors that can deliver those activities. Cities focus centre

The Mission will report to the MI community annually on Mission progress.

This joint statement builds on the <u>Mission Innovation 2.0 Launch Statement</u> and does not constitute a legally binding commitment. This Joint Mission Statement will commence on November 9 (launch of the Cities Mission at COP) and will continue in effect for five years, with the option to be amended by Mission members. After this period, the Mission may be extended for a further five years to support the delivery of the mission goal by 2030, subject to a review of Mission achievements.

#### Members

The Mission will bring together a dynamic, ambitious, and delivery-focused alliance of governments, corporations, investors, and research institutes to accelerate innovation on urban energy transitions.

The following governments and organisations commit to advancing the Mission's objectives:

### **Co-leads**

- European Commission, Directorate-General for Research & Innovation
- Global Covenant of Mayors for Climate and Energy (GCoM)
- Joint Programming Initiative (JPI) Urban Europe

### Core group

- Austria, Federal Ministry for Climate Action, Environment, Energy, Mobility, Innovation and Technology
- India, Ministry of Science and Technology
- Chile, Ministry of Energy / Energy Sustainability Agency
- Sweden, Swedish Energy Agency / Ministry of the Environment and Energy
- Innovation Community on affordable heating and cooling of buildings



# **Support Group**

- Student Energy building on their global solutions portfolio
- IEA building on the TCP on Empowering Cities for a Net Zero Future
- WEF building on the NZCC initiative and related toolbox
- UNFCCC building on the joint work on the Global Innovation HUB
- EIT Climate KIC building on the insights from the Healthy Clean Cities-project
- UNEP / SE4All building on joint work on the UN Urban Energy Compacts
- IRENA building on recent work on sector coupling
- European Network of Living Labs ENoLL

We see all of these three groups as still open as the mission will further develop in the upcoming month.

The UK has been part of the Cities Mission Working group (providing links to IC 7), as well as Germany (via JPI Urban Europe).



MEMBERS	COMMITMENTS		DENIEUTC
	R&D	RESOURCES	BENEFITS
Core Mission member	<ul> <li>Commitment of significant R&amp;D investment in the cohort of pilot cities (jointly initiate and execute development of large scale demonstrators and translation to RD&amp;D needs and activities)</li> <li>Significant additional financial resources for admin/non-staff costs (e.g. events, publications)</li> <li>Develop framework for the roadmapping exercise and the link to RD&amp;D agenda iterations</li> <li>Contribution to building the Global Knowledge Centre</li> <li>Commitment of modest public R&amp;D investment to the fund activities (development of large scale</li> </ul>	<ul> <li>Human resources for Mission Secretariat, including Mission Director (1-2 FTEs)</li> <li>Human resources for Mission Secretariat (0.5-</li> </ul>	<ul> <li>Chair the Executive Committee (rotating)</li> <li>1x Senior representative in the Executive Committee (guaranteed/permanent)</li> <li>Lead the scoping and development of Mission activities</li> <li>Manage Mission's operational and governance structures</li> <li>Advocate on behalf of the mission at global, national and local levels</li> <li>Up to 1x Senior representative in the Executive Committee (selected based on seat availability)</li> </ul>
	<ul> <li>demonstrators and/or support of cohort of pilot cities)</li> <li>Contribution to portfolio build-up wrt data, tools, finance, policy, business model, value model, innovation</li> <li>Additional financial and in-kind contributions (e.g. provision of IT tools, labs, publications)</li> </ul>	1 FTE)	<ul> <li>Contribute to the development and coordination of Mission activities</li> <li>Lead or Participate in technical working groups</li> </ul>
Support Group member	<ul> <li>Commitment to actively engage with their government and facilitate investments, national-local dialogues, dissemination on specific topics</li> <li>Contribution to development or refinement of deep demonstrators, portfolio build-up or delivery of small-scale engagement activities.</li> </ul>	· N/A	Participation in <b>Support Group</b> meetings and events to share knowledge, skills and best practices.