European Mission on 100 Climate-Neutral and Smart Cities by 2030

Submitted By: European Commission



Organization Profile

Organization Name: European Commission

Organization Type: Supranational government

Website: https://research-and-innovation.ec.europa.eu/funding/funding-opportunities/funding-programmes-and-open-calls/horizon-europe/eu-missions-horizon-europe/climate-neutral-and-smart-cities_en

Practice Details

Country(ies): All 27 EU member states and nine non-EU countries that are associated to the Horizon Europe programme

City(ies): 112 cities across Europe

Start Year: 2021 **Ongoing:** Yes **End Year:** N/A

Main Adequate Housing Components:



Housing Thematic Areas:

- Housing & Climate Mitigation
- Housing, Land & Spatial Planning
- Housing Policy, Legislation & Governance
- Technology & Digital Solutions in Housing

Relevant SDGs:



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Problem & Context

In 2020 the European Green Deal set a framework for making Europe climate-neutral by 2050, with an intermediate goal of 55% emissions reductions by 2030. The EU building stock remains a major roadblock to this ambition, accounting for 40% of the EU's final energy consumption and 36% of EU energy-related emissions. Also, 35% of Europe's buildings are older than 50 years, 75% of buildings are significantly energy-inefficient, and 10% of urban households are overburdened by housing and energy costs. While technological solutions exist and are constantly improved, cities face financial, regulatory, social and cultural hurdles in their pursuit to promote an affordable, energy efficient and climate-neutral building stock. In addition, interviews with local administrations revealed a strong desire to address building stock in its sectoral dependencies (energy, mobility, waste management, circularity, blue-green infrastructure) and to learn from other cities, inside communities of practice.

Solution Developed

The European Mission on 100 Climate-Neutral and Smart Cities by 2030 ('Cities Mission') put forward the Climate City Contract (CCC) as a tool for local administrations to (1) mobilise local stakeholders, inhabitants and national governments, (2) co-design and implement with them a cross-sectoral action plan, and (3) devise a related investment strategy. The top three objectives linked to building stock in the CCCs put forward so far by 92 cities are housing and energy efficiency, circularity in construction, and solutions for historical city centres.

The CCCs aim to transform building stock from a major roadblock to a driving force for climate-neutral and fair cities. They allow local administrations to address systemic challenges in the built environment through stakeholder mobilisation, peer learning, regulatory sandboxes and innovative approaches to funding and finance. Operating at continental scale, across cities with varied typologies and baselines but similar ambitions, the Cities Mission implements a wide range of solutions linked to energy efficiency and renewables, digitalisation, urban planning, social housing, local value chains and financial vehicles.

Implementation

The Cities Mission Platform is implemented by the NetZeroCities consortium (netzerocities.eu, led by EIT Climate-KIC) with 34 associations and city networks (such as Eurocities, ICLEI, Resilient Cities Network, Viable Cities, Open & Agile Smart Cities, Energy Cities), research bodies, companies and think-tanks. The Mission Platform oversees a Pilot Cities Programme and a Twinning Learning Programme that involve over 250 cities. A City Expert Support Facility delivers tailored support to Pilot and Twin Cities, leveraging the expertise of NetZeroCities partners and external professionals to meet cities' unique needs. The Mission Platform also operates a Climate City Capital Hub that offers technical assistance and capital facilitation.

The Cities Mission began implementation in 2021 by launching the Mission Platform and opening a call for expression of interest for cities. The mission is funded with a yearly budget of EUR 120 million per year from the EU's Horizon Europe framework programme, with funding set to continue through 2030. Synergies are in place with other EU-funded programmes while national mission platforms (such as citiES 2030 in Spain, Clima-Net in Greece and Cyprus, Viable Cities in Sweden, M100 in Romania and Cidades pelo Clima in Portugal) also direct substantial funding to their mission cities. Moreover, the European Investment Bank delivers dedicated advisory services to mission cities and a ring-fenced lending envelope of EUR 2 billion for their use.

Enablers & Obstacles

At EU level, the ownership of the Cities Mission is spread across 12 services of the European Commission that drive climate and housing related policy. The implementation of the mission also gathers support from the European Parliament and the European Committee of the Regions.

At country level, national mission platforms were set up that collaborate via the transnational CapaCITIES network. They bring together mission cities and relevant ministries, agencies and financial organisations, thus allowing to address regulatory, financial and governance barriers.

At city level, the Climate City Contracts set up local alliances between the local administration (as convener and orchestrator) and the private sector, industry, investors, research, philanthropy and civil society. Inhabitants are also engaged, as users, owners and investors.

Obstacles encountered during implementation are solved at these intersecting levels, with best practices quickly spreading across mission cities.

Results & Impact

Starting from local needs, each mission city acts as a hub of experimentation and innovation that provides inspiration to other cities. Some examples and their impacts are listed below.

- HELSINKI: free advisory services to housing companies and citizens, spurring renovations and a significant market
- MILAN: holistic urban regeneration projects targeting building renovations, green spaces and energy systems
- VELENJE: renovation of multi-dwelling building that can leverage the community governance level
- WROCLAW: social innovation actions such as the Wroclaw Participatory Budget and microgrants
- VILNIUS: renovation of at least 300 multi-apartment buildings per year
- ISTANBUL: coupled anti-seismic and energy renovation in buildings

- LJUBLJANA: "Save the Homes" initiative with one-stop-shop renovation service for homeowners
- OSLO: sustainable procurement for electric construction
- PADOVA: update in Building Regulations to facilitate installation of photovoltaic systems in historical buildings
- ESPOO: Clean Heat programme, with buildings powered by waste heat captured from a large data centre
- MADRID: Entrepatios Las Carolinas, a nearly-zero energy 17-home residential cohousing with common spaces
- ANTWERP: the EcoHouse offers building audits and renovation solutions
- MALMO: uses green bonds to raise capital for investments in green and energy efficient buildings
- ZAGREB: action plan in place for an inclusive after-earthquake renovation of the Blok 19 area

Replication & Scale Up

Climate City Contracts and associated housing practices are replicated and scaled up via a Twinning Learning Programme and a User Portal with Communities of Practice that are open to cities located in EU member states or the 23 countries worldwide that are associated to the EU's Horizon Europe framework programme. The Cities Mission is constantly expanding its peer learning offer with study visits, discussion groups and online planning labs. A global Urban Transitions Mission, co-led by the European Commission and the Global Covenant of Mayors, supports knowledge exchange across world regions.

City-to-city learning needs to be supported through networking opportunities, communities of practice, joint piloting/'learning-by-doing' funding and site visits that allow to connect both political and technical local levels.

Policy Uptake

This housing practice has been fully adopted into formal policy frameworks and legislation, and is being implemented at scale with institutional support.

The Cities Mission is an initiative of the European Commission, with political and budgetary backing at EU level. Following the selection of 112 cities across Europe to the mission and the onboarding of a large cohort of twinning cities, political and financial support at national and regional level followed and continues to expand.

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Lessons & Takeaways

Regulation and finance are crucial for successful implementation. A solid base needs to be set up as early on as possible, in close consultation with the local level, to allow cities to bridge the gap between ambition and action.