

Disclaimer: This document does not present a draft of the Green Deal call to be part of the Horizon 2020 work programme update, nor any future position of the European Commission. It aims to support the development of the call and its content is subject to change.

Title: Towards Climate-Neutral and Socially Innovative Cities

Specific Challenge:

The strategic long-term vision¹ published by the Commission for a prosperous, modern, competitive and climate neutral economy calls for a drastic reduction of greenhouse gas emissions by 2050.

The European Commission's Green Deal, a new growth strategy that aims to preserve the planet for future generations, can be the compass to emerge from the present COVID-19 crisis and an opportunity to bounce forward accelerating our progresses in meeting the climate change objectives.

The European Green Deal² sets an ambitious target reduction of 50%-55% by 2030. Through its roadmap for action it outlines a long-term vision for the environment, involving all sectors of the economy, geared towards reaching the goal of climate neutrality. While cities occupy only 2% of the planet's landmass, they consume over 65% of the world's energy and account for more than 70% of global man-made CO₂ emissions. Currently 75% of European citizens live in cities and this percentage is expected to raise to 80% by 2050. Cities³ must play therefore a crucial role in helping Europe reach the targets of the Green Deal. The Commission will support their systemic transformation towards climate neutrality leveraging, in particular, technological, non-technological and social innovation and new AI-based solutions.

The challenge resides with achieving significant progress towards climate neutrality at a large (European) scale by fostering climate-neutrality and social innovation in cities. This means capitalising on existing research and innovation, valorising available knowledge in the EU, and using Green Deal-targeted social, financial, and technological innovation to co-create, test, and

¹ https://ec.europa.eu/clima/policies/strategies/2050_en

² https://ec.europa.eu/commission/sites/beta-political/files/political-guidelines-next-commission_en.pdf

³ For the purposes of this topic "cities" should be intended as either city district (neighbourhood or zone of special interest of a city administered or governed by some type of "district council"), a city represented by a government unit (e.g. municipality) or an urban area (conglomeration or a functional area composed of many neighbouring cities or government units, represented by the respective government units).

deploy systemic, integrated solutions, technologies, and incentive schemes with cities to tackle the biggest polluters of the urban and metropolitan area.. It also implies designing incentives promoting investments (e.g. green infrastructure) into cities committed to climate neutrality and the Green Deal objectives. This will help test innovative solutions, technologies and incentives, while listening to the needs of citizens and engaging cities to act, to reach the scale that will make them economically attractive for industry as well as affordable, liveable and inclusive for the local authorities and citizens. It will also necessarily have to frame all the above mentioned elements taking into account the consequences and long-lasting impacts on cities of the current health and economic crisis, affecting for example mobility, transportation, urban planning, digitization, provision of services etc. It requires triggering and supporting lasting changes in social, business, and administrative practices and in individual behaviours with clear impacts on the reduction of greenhouse gas emissions, air pollution and other co-benefits that citizens, businesses and public authorities find desirable.

Scope:

This action should develop a one-stop shop platform that would provide the necessary technical, regulatory, financial and socio-economic expertise as well as assistance to cities for developing and implementing their climate action plans, and related social innovation action plans. The action should set up a partnership involving research organisations, academia, industry including social entrepreneurs, the financial sector including impact financiers, investors, philanthropists, NGOs, national and local authorities and citizens. The platform will also be responsible for the management of competitive calls addressed to third parties to fulfil the objectives of this action. This platform should facilitate the coordination of the EU ongoing activities in the area of climate neutrality and cities and should be sustainable, scalable and self-financed beyond the life of the action. Where relevant, the action should take into due account and build on existing platforms⁴, experience already matured by the Covenant of Mayors⁵ initiative and methodologies, analysis and processes developed by the Joint Research Centre of the European Commission as well as based on the principles and standards of the Join, Boost, Sustain Declaration⁶.

It should address all of the following four activities:

⁴ E.g. Smart Cities Marketplace and its Matchmaking facility: <https://eu-smartcities.eu>

⁵ <https://www.covenantofmayors.eu>

⁶ <https://ec.europa.eu/digital-single-market/en/news/join-boost-sustain-european-way-digital-transformation-cities-and-communities>

Activity 1: Climate action plans and Green Deal innovation:

- Develop a science-based set of indicators⁷ enabling the assessment of the climate, environmental and socio-economic impact of cities' climate neutral action plan in terms of greenhouse gas emissions reduction within the framework of the European Green Deal
- Develop innovative urban greening assessment methodologies for planning⁸ and monitoring GHG emissions reduction to meet the Green Deal ambitious targets.
- Provide harmonised specifications for inter-operable and comparable cities evidence repositories documenting action plan approaches and impacts;
- Support cities in identifying and possibly overcoming regulatory, institutional, governance, financing, public acceptance, and other barriers preventing progress and coordinated pathways towards climate neutrality;
- Design, in close collaboration with the cities, and the European Commission a concept for a climate neutral city contract coherently with the corresponding climate action plans, including the application process and assessment criteria; Particular attention should be paid to citizens' engagement, social innovation and social entrepreneurship, environmental, economic and health benefits, and just transition mechanisms.
- Support cities in innovating local governance—and where appropriate capacity building—necessary for implementing systematic and integrated climate neutral policies, building also on existing experiences developed by local networks⁹;
- Coordinate the “climate neutral cities signatories group”: Ensuring an operational customer driven link of this action with the cities as final users. Facilitating the sharing of experience and good practices and mutual learning between cities regarding the setting up and mainstreaming of co-creation processes engaging all relevant actors regarding the framing, deployment and assessment of their vision, strategy, and action plan to reach climate neutrality while ensuring their shared ownership;

⁷ For urban transport, the Sustainable Urban Mobility Indicators (SUMI) should be further replicated and support offered for adoption in the context of benchmarking urban mobility in the climate neutral city

⁸ including Sustainable Urban Mobility Plans (see <https://www.eltis.org/>)

⁹ e.g. CIVINETs: <https://civitas.eu/civinet>

Activity 2: Financial engineering:

- Identify strategies and financing solutions for cities to reach climate neutrality, taking account and building on the good practices developed by global, European and national initiatives and programmes such as Horizon 2020, ELTIS, ELENA, CIVITAS, EIP on Smart Cities and Communities (EIP-SCC) Marketplace, EIT Climate KIC, Intelligent Cities Challenge (ICC), European City Facility, JPI Urban Europe, Positive Energy Districts, Green City Accord, the European Green Capital award, Financial solutions should include but should not be restricted to those provided by InvestEU, EIB, EBRD and the European Structural and Investment Fund; collaboration with national development banks as well as commercial banks is encouraged.

Activity 3: Social innovation and citizens' engagement:

- Support cities and local communities in testing solutions (including new technologies, non-technological, and social innovations) that stem from EU R&I; this will entail a matching of cities' and local communities needs to R&I results through various means, e.g., match-making and brokerage hubs, and knowledge to identify possible solutions, as well as the support to test them at local level;
- Combine existing results of EU R&I with social innovation, and take advantage of the digital transformation and infrastructure to co-create and test solutions with local communities, including changes in social practices and behaviour;
- Provide support to cities for reinforcing not only communication but also citizens engagement activities. This will include sharing and using good practices on social innovation as well as enabling cities and local communities to exchange experiences and learn from each other when testing and implementing solutions, connecting more innovators and researchers and making them aware of citizens' needs, and, through all these channels, helping cities move closer to climate neutrality.

Activity 4: Research and Innovation for climate-neutral transformation of cities:

- Once the platform is established, it will launch open call(s) to support large scale pilots for the deployment in lead cities or districts of systemic solutions combining, as appropriate, technological, nature-based, social, cultural, regulatory and financial innovation and new business and governance models to underpin for climate transition, taking stock of existing best practises and solutions already available . These calls will be evaluated through external independent peer review process.

- In order to facilitate the upscaling of these solutions and their replicability, support for each lead city and/or district, the twinning with and mentoring of at least 2 other cities and/or districts from different countries facing structural disadvantages or with a size smaller than 50 000 inhabitants, which are willing to develop their proper climate action plan and implement it in a subsequent phase beyond the life of the current action.

These actions aim at a rapid, full-scale deployment at city or district level of systemic and integrated climate actions in order to reach climate neutrality by 2030. They should be integrated in a package of measures covering all sectors such as health promotion, water, food, energy, industry, housing (private housing and public buildings such as schools and other critical infrastructures), transport (including connected mobility and modal shift) and other sectors considered essential for climate neutrality , with digital, circularity as well as nature-based solutions as critical enablers, in the specific city context and the set timeline.

Participating cities and/or local communities are expected to engage the necessary resources and commit to the deployment of their action plan and the achievement of the expected impacts stated below.

This action, in particular the activities covered under Activity 4, allows for the provision of financial support to third parties in line with the conditions set out in Part K of the General Annexes. Due to the nature of the work to be supported under the call(s) supporting deployment of innovative solutions, the contribution to a third party may go beyond EUR 60 000. The selection of the third parties to be supported under the grant will be based on an external independent peer review of their proposed work.

The calls to be launched within the grant for the selection of third parties should respect the rules and conditions laid out in Annex K of the Work Programme, in particular as regard transparency, equal treatment, conflict of interest and confidentiality.

The consortium must possess, among others, good knowledge and expertise in EU urban-relevant programmes and initiatives, urban planning, state-of the-art in technological innovation for climate neutrality, social innovation and stakeholders engagement, financing programmes (such as the, Horizon 2020, EU European structural and investment funds, EIB, EBRD...) and European / international umbrella organisations (such as the C40, CIVITAS, POLIS, EU Covenant of Mayors/ Global Covenant of Mayors, ICLEI etc.).

The Commission considers that proposals requesting a typical contribution from the EU between EUR XX and XX million would allow this specific area to be addressed appropriately,

of which at least X million should be allocated to activities covered under Activity 4. Nonetheless, this does not preclude submission and selection of proposals requesting other amounts. Only one proposal will be selected under this area.

Expected Impact:

- Comprehensive methodology, including selecting criteria, and model for cities that want to achieve climate neutrality by 2030 covering cross-sectoral governance, citizens participations, social innovation and social entrepreneurship impact, financing and policy approaches, and an urban digital platform;
- Establish a EU level structure offering support to and promotion of systemic transformation of cities towards climate neutrality;
- Empower cities and local communities through social innovation to cross social tipping points and enable the implementation of the Green Deal;
- Mobilise the demand (citizens' needs) and showcase testing of innovative solutions drawing from European R&I through a socially inclusive mechanism to lead the transition to climate neutrality.
- Put in place measures allowing climate neutrality by 2030 for the participating leading cities and districts;
- Put in place measures towards climate neutrality by 2030 in European cities that will demonstrate visible substantial reduction of greenhouse gas emissions and air pollution as part of an agreed pathway to Climate Neutrality by 2050 or sooner;
- Improved modal share of sustainable and active transport modes. Reducing the negative externalities of urban and peri-urban transportation: congestion, pollution and road collisions. Enhanced multimodality and facilitating the use of sustainable and clean modes of transport.
- Ensure through twinning activities and other means to maximise impact and without leaving no one behind and that an appropriate geographical balance is achieved by demonstrating commitment of cooperation with at least 1 city per country.

Type of Action: Research and Innovation action (RIA)