

Allegato "10"

SECONDA PROVA SCRITTA

TRACCIA 2

Il Comune di Genova è chiamato a coordinare la proposta per la call europea nel seguito riportata.

Il candidato sviluppi, in considerazione di quanto sopra, la proposta progettuale. Si richiede di individuare, almeno, obiettivi, risultati attesi e struttura del progetto.

Il candidato dovrà rispondere interamente in lingua inglese.

Innovative nature-based solutions for carbon neutral cities and improved air quality

Topic Description

Specific Challenge:

Emissions of pollutants in air are a major concern worldwide, due to its direct consequence on human health, as well as its additional impacts on climate. In the EU, air pollution is estimated to cause 400 000 premature deaths per year, with cities producing more than 70% of greenhouse gases world-wide. Urban citizens, due to the concentration of population and sources of pollution in densely populated areas, are particularly vulnerable. Actions aimed at air quality improvement contribute, in many cases, also to reduction of GHG and other airborne pollutants emissions. Nature-based solutions based on the creation, enhancement, or restoration of ecosystems, including soils and green infrastructure, in cities can improve air quality and regulate GHG in the atmosphere, both directly through the removal of air pollutants and carbon storage and sequestration and indirectly by reducing energy needs and pollutants emissions through natural cooling and active mobility. In doing so, they also deliver multiple benefits related to different policy targets, for instance, health and wellbeing, biodiversity, urban regeneration, water, storm water and/or wastewater management and climate adaptation/mitigation. However, the opportunities offered by nature-based solutions to tackling air quality and GHG mitigation in cities depend on complex, highly context dependent processes and interlinkages. Furthermore, the contribution of these solutions in addressing the air and carbon challenge in cities, in tandem with other urban challenges as a result from their multiple services, is neither well understood, nor measured and assessed. Filling these knowledge and evidence gaps will make a strong case for wide deployment of such solutions.

Scope:

Actions should assess the direct and indirect contribution of nature-based solutions in diverse structures and configurations (e.g. mix of vegetation and trees, species, shape, spatial distribution of public green space and vegetation coverage) to combatting air pollution, reducing allergy potential of urban environment and mitigating GHG and other airborne pollutants emissions in cities including under future climate change scenarios.

Actions should recommend optimal solutions and appropriate typologies fitting to different contexts in terms of different climatic, environmental and socio-economic conditions and different urban designs. Benefits and co-benefits (including citizens' health and well-being, biodiversity and climate change adaptation), synergies (including impacts on social inequalities) and trade-off delivered by the deployed solutions must be evaluated. Tools, models, design guidelines, standards and protocols to integrate these solutions into local decision making and socio-economic transition pathways, including in spatial planning should be developed and validated.

Actions should enable the continuous monitoring of air pollution and atmospheric carbon concentration and thus contribute to improvement of relevant modelling capacity, deploying indicators enabling easy assessment, communication, comparison and sharing of best practice on the ground as well as digital solutions comprising networks of sensors, big data, geo-localisation, observational programmes such as Copernicus (and in particular the Copernicus Atmosphere Monitoring Service and the Climate Change Service with their value-added products and information) and GEOSS, satellite navigation and positioning services offered by EGNOS/Galileo, and citizens' observatories.

Actions should test innovative governance, business and finance models promoting participatory co-creation processes in developing, implementing and assessing impact of these solutions and taking into account interdependency with the city's hinterland and with others air quality mitigation measures

prode non es hante fe 06/12/18 [Signature]

Furthermore, to secure the widest possible accessibility of the generated data and knowledge for effective communication, public consultation, and exchange of experiences, the funded projects must upload their final data on established networks and information sharing mechanisms at European scale such as Oppla, the European Environment Agency (EEA) air pollution data centre and Climate-ADAPT.

An interdisciplinary approach, including citizen science and the participation of applied natural sciences, social sciences, data science and humanities disciplines (such as behavioural economics, gender studies, urban planning, design and governance) is considered crucial to properly address the complex challenges of this topic.

To enhance the impact and promote upscaling and replication of these solutions, actions should account for conditions and mechanisms for how the intervention, as part of the project proposed, works in delivering the desired outcomes to enhance our knowledge about the causal factors for how interventions work in context.

Furthermore, actions should engage in substantial networking and training activities to disseminate and exchange their experience, knowledge and deployment practices to cities that are planning to design and implement similar solutions in a successive phase beyond the duration of the project.

To enhance impact, cooperation and synergies with the activities undertaken within the Global Covenant of Mayors for Climate and Energy initiative, and in particular the regional Covenant of Mayors - Europe should be sought where appropriate. Actions should envisage clustering activities with other relevant ongoing and future nature-based solutions and relevant citizen observatories projects funded under previous and current H2020 Work Programmes for cross-project co-operation, consultations and joint activities on cross-cutting issues and share of results as well as participating in joint meetings and communication events. To this end, proposals should foresee a dedicated work package and /or task and earmark the appropriate resources accordingly. They should make use and contribute to knowledge exchange and networking European platforms (e.g. Climate-ADAPT, ThinkNature, OPPLA). Action should take advantage of data and information provided by the Copernicus programme.

Proposals should pay attention to the special call conditions for this topic. In grants awarded under this topic, costs for construction and installation of "infrastructure-targeted" interventions shall not constitute more than 20% of the total eligible costs. Beneficiaries' own resources and/or mobilisation and leverage of additional investments beyond Horizon 2020, whether private or public, should make up the remaining investment costs and should secure economic and financial sustainability for the execution of the project.

The Commission considers that proposals requesting a contribution from the EU in the range of EUR 10 million would allow this specific challenge to be addressed appropriately. Nonetheless, this does not preclude submission and selection of proposals requesting other amounts.

Expected Impact:

The project results are expected to contribute to:

in the mid-term, the creation of an European reference framework and the establishment of EU leadership in a new global market (supply and demand) for nature-based solutions, new economic opportunities, new products, services, protocols and standards, planning approaches and methods, leverage of investments, reduced regulative and administrative barriers, and new local green jobs;

increased evidence and awareness of the benefits of re-naturing cities for combatting air pollution and mitigating climate change and for improving health, well-being and resilience to the impacts of climate change;

creation of 'communities of practice', more effective policy making and better informed decision making across Europe, based on an EU-wide evidence base regarding efficacy, efficiency, cost-benefiting and comparative advantages of a range of tested, well documented, up-scalable and marketable nature-based solutions;

enhanced stakeholder and citizen ownership of the solutions through their effective and systematic involvement in co-creation processes for the development, implementation, monitoring and testing of the solutions and their integration in sustainable urban planning and design;

enhanced implementation of relevant EU air quality regulations and environmental policies and programmes, such as the EU Water Framework Directive, the 7th Environment Action Programme, the Urban Agenda for the EU, the Clean Air Programme, the EU Biodiversity Strategy, the EU Climate Change Adaptation Strategy and the conclusions of the COP21 Paris Agreement, and the 'Communication on Green Infrastructures', and of the Sustainable Development Goals (SDGs)

[Signatures]