

Calls for proposals

Call - Supporting the implementation of the Climate-Neutral and Smart Cities Mission

HORIZON-MISS-2026-04

Overview of this call¹

Proposals are invited against the following Destinations and topic(s):

Topics	Type of Action	Budgets (EUR million)	Expected EU contribution per project (EUR million) ²	Indicative number of projects expected to be funded
		2026		
Opening: 04 Feb 2026 Deadline(s): 17 Sep 2026				
100 Climate-Neutral and Smart Cities by 2030				
HORIZON-MISS-2026-04-CIT-01: Energy efficient urban and sub-urban public transport, complemented by shared mobility	IA	20.00 ³	Around 10.00	2
HORIZON-MISS-2026-04-CIT-02: Transition to low-temperature heating solutions in multi-apartment buildings	IA	18.00 ⁴	Around 6.00	3
Overall indicative budget		38.00		
General conditions relating to this call				
Admissibility conditions	The conditions are described in General			

¹ The Director-General responsible for the call may decide to open the call up to one month prior to or after the envisaged date(s) of opening.
The Director-General responsible may delay the deadline(s) by up to two months.
All deadlines are at 17.00.00 Brussels local time.

The budget amounts are subject to the availability of the appropriations provided for in the general budget of the Union for 2026 and 2027

² Nonetheless, this does not preclude submission and selection of a proposal requesting different amounts.

³ Of which EUR 20.00 million from the 'Climate, Energy and Mobility' budget.

⁴ Of which EUR 18.00 million from the 'Climate, Energy and Mobility' budget.

	Annex A.
<i>Eligibility conditions</i>	The conditions are described in General Annex B.
<i>Financial and operational capacity and exclusion</i>	The criteria are described in General Annex C.
<i>Award criteria</i>	The criteria are described in General Annex D.
<i>Documents</i>	The documents are described in General Annex E.
<i>Procedure</i>	The procedure is described in General Annex F.
<i>Legal and financial set-up of the Grant Agreements</i>	The rules are described in General Annex G.

Call - Joint Call between the Climate-Neutral and Smart Cities Mission, the New European Bauhaus and the Build4People Partnership

HORIZON-MISS-2026-06

Overview of this call⁵

Proposals are invited against the following Destinations and topic(s):

Topics	Type of Action	Budgets (EUR million)	Expected EU contribution per project (EUR million) ⁶	Indicative number of projects expected to be funded
		2026		
Opening: 04 Feb 2026 Deadline(s): 17 Sep 2026				

⁵ The Director-General responsible for the call may decide to open the call up to one month prior to or after the envisaged date(s) of opening.
The Director-General responsible may delay the deadline(s) by up to two months.
All deadlines are at 17.00.00 Brussels local time.

The budget amounts are subject to the availability of the appropriations provided for in the general budget of the Union for 2026 and 2027

⁶ Nonetheless, this does not preclude submission and selection of a proposal requesting different amounts.

EU Missions' Joint Calls				
HORIZON-MISS-2026-06-01-CIT-NEB-B4P: Introducing circular economy models in the construction sector, from buildings to city scale	IA	38.00 ⁷	Around 9.50	4
Overall indicative budget		38.00		

General conditions relating to this call	
<i>Admissibility conditions</i>	The conditions are described in General Annex A.
<i>Eligibility conditions</i>	The conditions are described in General Annex B.
<i>Financial and operational capacity and exclusion</i>	The criteria are described in General Annex C.
<i>Award criteria</i>	The criteria are described in General Annex D.
<i>Documents</i>	The documents are described in General Annex E.
<i>Procedure</i>	The procedure is described in General Annex F.
<i>Legal and financial set-up of the Grant Agreements</i>	The rules are described in General Annex G.

Call - Supporting the implementation of the Climate-Neutral and Smart Cities Mission

HORIZON-MISS-2027-04

Overview of this call⁸

Proposals are invited against the following Destinations and topic(s):

Topics	Type of	Budgets (EUR)	Expected EU	Indicative number
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⁷ Of which EUR 38.00 million from the 'Climate, Energy and Mobility' budget.

⁸ The Director-General responsible for the call may decide to open the call up to one month prior to or after the envisaged date(s) of opening.

The Director-General responsible may delay the deadline(s) by up to two months.

All deadlines are at 17.00.00 Brussels local time.

The budget amounts are subject to the availability of the appropriations provided for in the general budget of the Union for 2026 and 2027

Horizon Europe - Work Programme 2026-2027
Missions

	Action	million) 2027	contribution per project (EUR million) ⁹	of projects expected to be funded
Opening: 09 Feb 2027 Deadline(s): 23 Sep 2027				
100 Climate-Neutral and Smart Cities by 2030				
HORIZON-MISS-2027-04-CIT-01: Innovative microgrids for improved energy system integration and efficiency in urban contexts	IA	20.00 ¹⁰	Around 7.00	3
HORIZON-MISS-2027-04-CIT-02: Hydrogen cities	CSA	5.00 ¹¹	Around 5.00	1
HORIZON-MISS-2027-04-CIT-03: Inclusive and climate resilient multimodal passenger hubs enhancing modal shift towards sustainable transport and shared mobility	IA	18.00 ¹²	Around 9.00	2
HORIZON-MISS-2027-04-CIT-04: Circular economy in the city: Reducing waste from e-commerce and urban logistics	RIA	15.00 ¹³	Around 7.50	2
HORIZON-MISS-2027-04-CIT-05: Boosting the transformation towards climate-neutral cities, the net-zero economy and open strategic autonomy through Pre-Commercial Procurement (PCP)	PCP	26.87 ¹⁴	7.00 to 12.00	3
Overall indicative budget		84.87		
General conditions relating to this call				
<i>Admissibility conditions</i>	The conditions are described in General Annex A.			

⁹ Nonetheless, this does not preclude submission and selection of a proposal requesting different amounts.

¹⁰ Of which EUR 20.00 million from the 'Climate, Energy and Mobility' budget.

¹¹ Of which EUR 5.00 million from the 'Climate, Energy and Mobility' budget.

¹² Of which EUR 18.00 million from the 'Climate, Energy and Mobility' budget.

¹³ Of which EUR 15.00 million from the 'Climate, Energy and Mobility' budget.

¹⁴ Of which EUR 26.87 million from the 'Climate, Energy and Mobility' budget.

<i>Eligibility conditions</i>	The conditions are described in General Annex B.
<i>Financial and operational capacity and exclusion</i>	The criteria are described in General Annex C.
<i>Award criteria</i>	The criteria are described in General Annex D.
<i>Documents</i>	The documents are described in General Annex E.
<i>Procedure</i>	The procedure is described in General Annex F.
<i>Legal and financial set-up of the Grant Agreements</i>	The rules are described in General Annex G.

Call - Joint Call between the Climate-Neutral and Smart Cities Mission and the Adaptation to Climate Change Mission

HORIZON-MISS-2027-06

Overview of this call¹⁵

Proposals are invited against the following Destinations and topic(s):

Topics	Type of Action	Budgets (EUR million)	Expected EU contribution per project (EUR million) ¹⁶	Indicative number of projects expected to be funded
		2027		
Opening: 09 Feb 2027 Deadline(s): 23 Sep 2027				
EU Missions' Joint Calls				

¹⁵ The Director-General responsible for the call may decide to open the call up to one month prior to or after the envisaged date(s) of opening.
The Director-General responsible may delay the deadline(s) by up to two months.
All deadlines are at 17.00.00 Brussels local time.

The budget amounts are subject to the availability of the appropriations provided for in the general budget of the Union for 2026 and 2027

¹⁶ Nonetheless, this does not preclude submission and selection of a proposal requesting different amounts.

Horizon Europe - Work Programme 2026-2027
Missions

HORIZON-MISS-2027-06-01-CLIMA-CIT-NEB: Urban nature: supporting restoration of urban ecosystems, along urban transport networks and in the built environment	IA	40.00 ¹⁷	Around 10.00	4
HORIZON-MISS-2027-06-02-CLIMA-CIT-CCRI: Deploying innovative wastewater management, treatment and valorisation solutions in European cities and regions in the context of climate change	IA	27.50 ¹⁸	Around 9.00	3
Overall indicative budget		67.50		

General conditions relating to this call	
<i>Admissibility conditions</i>	The conditions are described in General Annex A.
<i>Eligibility conditions</i>	The conditions are described in General Annex B.
<i>Financial and operational capacity and exclusion</i>	The criteria are described in General Annex C.
<i>Award criteria</i>	The criteria are described in General Annex D.
<i>Documents</i>	The documents are described in General Annex E.
<i>Procedure</i>	The procedure is described in General Annex F.
<i>Legal and financial set-up of the Grant Agreements</i>	The rules are described in General Annex G.

¹⁷ Of which EUR 40.00 million from the 'Climate, Energy and Mobility' budget.

¹⁸ Of which EUR 7.50 million from the 'Food, Bioeconomy, Natural Resources, Agriculture and Environment' budget and EUR 20.00 million from the 'Climate, Energy and Mobility' budget.

100 Climate-Neutral and Smart Cities by 2030

The Work Programme 2026-27 of the Climate-Neutral and Smart Cities Mission, in line with the [Implementation Plan of the Cities Mission](#), supports the implementation of the Mission by providing strong and direct support to cities committed to climate-neutrality, enabling them to implement their climate action plans and achieve climate-neutrality by 2030. The cities benefitting from these actions will act as experimentation and innovation hubs for other European cities aiming to become climate-neutral by 2050.

Cities' green and digital transformation with the aim of climate-neutrality is associated with important co-benefits and urban qualities such as reduced air and noise pollution, more sustainable mobility, improved health and well-being, reduced urban environmental footprints, enhanced urban greening, more efficient use of energy and infrastructures, as well as improved waste and water management. It also improves policy coherence across sectors and stimulates participatory and inclusive decision-making.

The Cities Mission specifically addresses the following main European Commission policy priorities:

(1) A new plan for Europe's sustainable prosperity and competitiveness; (2) Supporting people, strengthening our societies and our social model; (3) Sustaining our quality of life - Food security, water and nature. In addition to a significant contribution to the objective of the [European Green Deal](#) to make Europe climate-neutral by 2050, the supported actions through the Cities Mission Work Programme will also complement initiatives such as the [EU Digital Strategy](#), [Green Deal Industrial Plan](#), [Net-Zero Industry Act](#), [Clean Industrial Deal](#), [Smart and Sustainable Mobility Strategy](#), [New EU Urban Mobility Framework](#), [European Declaration on Cycling](#), [Decarbonise Corporate Fleets Communication](#), [Energy Efficiency Directive](#), [renewed Sustainable Finance Strategy](#), [Renovation Wave](#), [Energy Performance of Buildings Directive](#), [Circular Economy Action Plan](#), European Affordable Housing Plan, [Biodiversity Strategy for 2030](#), [Zero Pollution Action Plan](#), [Nature Restoration Law](#), and [European Water Resilience Strategy](#). Further political priorities and synergies addressed by the Cities Mission include the [UN Agenda 2030](#), [New Leipzig Charter](#), and the [Urban Agenda for the EU](#).

The topics of the Work Programme 2026-27 reflect the cross-cutting nature of the Cities Mission. Several topics have been designed as joint activities with other parts of the Horizon Europe programme, including partnerships, other Missions and the New European Bauhaus Facility. The envisaged actions will aim at:

- Introducing circular economy models in the construction sector from buildings to city scale: **Joint action with the Built4People (B4P) Partnership and the New European Bauhaus Facility;**
- Transition to low-temperature heating, in individual and district heating systems;

- Innovative low-voltage direct current microgrids in multi-apartment buildings;
- Hydrogen Cities: **Consecutive call with the Clean Hydrogen Joint Undertaking;**
- Urban nature: supporting nature restoration, including through greening of urban transport and the built environment: **Joint action with the Mission on Climate Adaptation and the New European Bauhaus Facility;**
- Urban wastewater: Energy neutrality, energy efficiency, green-blue infrastructure in the context of climate resilience – including for storm water management: **Joint action with the Mission on Climate Adaptation and the Circular Cities and Regions Initiative;**
- Developing inclusive and climate resilient multimodal passenger hubs enhancing modal shift towards sustainable transport and shared mobility;
- Energy efficient urban and sub-urban public transport, complemented by shared mobility;
- Circular economy in the city: reducing waste from e-commerce and urban logistics;
- Innovative procurement for reducing greenhouse gas emissions.

Under Other Actions, this Work Programme addresses:

- Strengthening of the operational capacity of the Mission Platform established through a Framework Partnership Agreement (HORIZON-MISS-2021-CIT-02-03);
- Support for financial advisory services to be provided to help cities implement their investment strategy for becoming climate-neutral;
- Support to the Urban Transitions Mission of Mission Innovation.

These actions were informed by the [Youth Dialogue](#) with Commissioner Zaharieva on ‘[the future of our cities](#)’, a feedback opportunity involving city representatives and other co-design activities.

Proposals should demonstrate, as appropriate to their scope and size, how they internalise the principles of the Cities Mission, notably: (1) the contribution of the action to an overarching strategy aiming at climate-neutrality for cities, (2) the place of the action within a holistic and cross-sectoral approach to climate neutrality, and (3) diversity in terms of geographical location and size of cities.

Applicants are encouraged to show how their proposals take into account and build upon existing programmes and/or the results of previous R&I projects. Where applicable, they should consider the services offered by the EU-funded European Research Infrastructures¹; these services range from data sets in human behaviour to modelling or experimental techniques.

Strong synergies contributing to the implementation of the objectives of the Cities Mission is expected also from other relevant Horizon Europe partnerships such as the Driving Urban Transitions to a Sustainable Future (DUT). Topics under the Cities Mission Work Programme are also relevant for the Cancer Mission, in particular when addressing co-benefits generated by achieving climate-neutrality such as reduced pollution, improved health and wellbeing, increased active mobility contributing then to cancer prevention. Similarly, actions funded under the Cancer Mission focusing on behavioural change can contribute to the objectives of the Cities Mission especially when targeting actions at urban level. In addition, synergies are expected with the [Regional Innovation Valleys](#), which, in line with the [New European Innovation Agenda](#), bring together less and more innovative regions with a view to addressing the most burning challenges facing the EU, namely reducing the reliance on fossil fuels, increasing global food security, mastering the digital transformation (including cybersecurity), improving healthcare and achieving circularity. Moreover, strong synergies exist with the [LIFE Programme](#), a main EU funding instrument for environmental and climate action plans, particularly through its Climate Change Mitigation and Adaptation sub-programme, which aligns closely with the Cities Mission's objectives by supporting innovative efforts to reduce GHG emissions, enhance urban resilience, and promote climate change awareness.

Proposals should set out a credible pathway to contributing to the Climate-Neutral and Smart Cities Mission, and more specifically to one or several of the following impacts:

- Increased capacity among European cities, with particular attention to those selected under the Cities Mission, to implement their Climate City Contracts (CCCs) and to achieve climate-neutrality.
- Cities are taking action to increase energy and resource efficiency, promote circular economy, encourage urban regeneration and resilience, and they accelerate the uptake of innovative systemic solutions and clean tech in key areas (e.g., energy, mobility, construction, industry, spatial planning, environment, digitisation, and data handling).
- Cities are engaging and involving their citizens in the solutions, technologies developed, and actions taken to become climate neutral, in order to guarantee acceptance, adherence and adoption, as well as give particular attention to vulnerable groups.
- Cities are increasingly using data and digital technologies (such as data platforms, IoT, AI and local digital twins for predictive scenarios) for better decision-making and to drive efficiencies in delivering services and reducing emissions through open standards and shared technical specifications.
- Cities embrace innovative and inclusive cross-sectorial collaborative governance models, facilitating multi-level and multi-stakeholder engagement in decision-making and joint planning, as well as the CCC implementation in collaboration with citizens and local stakeholders.

- The CCCs identify and pool the demands of the cities in the Cities Mission across sectors, providing scalability and predictability for industry and investors, thus strengthening the competitiveness of European industry and SMEs.

Proposals are invited against the following topic(s):

HORIZON-MISS-2026-04-CIT-01: Energy efficient urban and sub-urban public transport, complemented by shared mobility

Call: Supporting the implementation of the Climate-Neutral and Smart Cities Mission	
Specific conditions	
<i>Expected EU contribution per project</i>	The Commission estimates that an EU contribution of around EUR 10.00 million would allow these outcomes to be addressed appropriately. Nonetheless, this does not preclude submission and selection of a proposal requesting different amounts.
<i>Indicative budget</i>	The total indicative budget for the topic is EUR 20.00 million.
<i>Type of Action</i>	Innovation Actions
<i>Eligibility conditions</i>	<p>The conditions are described in General Annex B. The following exceptions apply:</p> <p>The following additional eligibility criteria apply:</p> <p>At least three lead cities from different Member States or Associated Countries along with at least three follower cities, must participate ensuring a good geographical balance. Follower cities can be from the same Member State or Associated Country as the lead cities. At least one of the three lead cities must be one of the 112 cities selected for the EU Mission on Climate-neutral and Smart Cities¹⁹.</p>
<i>Technology Readiness Level</i>	Activities are expected to achieve TRL 6-8 by the end of the project – see General Annex B.
<i>Legal and financial set-up of the Grant Agreements</i>	<p>The rules are described in General Annex G. The following exceptions apply:</p> <p>Grants awarded under this topic will be linked to the following action(s):</p>

¹⁹ The EU Mission on Climate-Neutral and Smart Cities aims to deliver 100 climate-neutral and smart cities by 2030 and ensure that these cities act as experimentation and innovation hubs to enable all European cities to follow suit by 2050. On 28 April 2022, the Commission announced the 100 EU cities that will participate in the Mission. In addition, 12 cities have been selected from countries associated or expected to be associated the Horizon Europe programme.

	<p>HORIZON-MISS-2021-CIT-02-03</p> <p>Collaboration with the Cities Mission Platform²⁰ is essential and projects must ensure that appropriate provisions for activities and resources aimed at enforcing this collaboration are included in the work plan of the proposal. The collaboration with the Cities Mission Platform must be formalized through a Memorandum of Understanding to be concluded as soon as possible after the project starting date.</p> <p>Eligible costs will take the form of a lump sum as defined in the Decision of 7 July 2021 authorising the use of lump sum contributions under the Horizon Europe Programme – the Framework Programme for Research and Innovation (2021-2027) – and in actions under the Research and Training Programme of the European Atomic Energy Community (2021-2025)²¹.</p>
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Expected Outcome: This topic aims at supporting activities that are enabling or contributing to the Climate Neutral and Smart Cities Mission by accelerating the transition towards climate neutrality in cities. To this end, project results are expected to contribute to all of the following expected outcomes:

- Cities involved in this action advance in achieving their climate neutrality targets and reducing greenhouse gas emissions by **improving energy efficiency in urban and sub-urban public transport systems**, complemented by **urban mobility service car fleets – taxis, ride-hailing, car sharing** and other **active and shared mobility services**.
- Comprehensive **inventory and assessment** of existing instruments and measures to foster **electrification** and attractiveness of **urban and sub-urban public transport systems, urban mobility service car fleets and shared mobility**, accompanied by targeted **guidance** for responsible authorities, operators and providers through integration of measures to improve energy efficiency in public transport and new shared mobility services.
- **Upscaling of innovative and sustainable integrated mobility solutions**, identifying gaps and shortcomings in existing systems and exchanging of best practices in the pilot sites involved in the action leading to a state-of-the-art of electrification and attractiveness of urban and suburban public transport with complementary **urban mobility service car fleets** and other **active and shared mobility solutions**.

²⁰ Set up by Horizon 2020 project NetZeroCities - Accelerating cities' transition to net zero emissions by 2030, Grant Agreement n. 101036519, and scaled up through topic *HORIZON-MISS-2021-CIT-02-03: Framework Partnership Agreement (FPA) for the Climate-Neutral and Smart Cities Mission Platform*.

²¹ This [decision](#) is available on the Funding and Tenders Portal, in the reference documents section for Horizon Europe, under 'Simplified costs decisions' or through this link: https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/guidance/ls-decision_he_en.pdf

- Enhanced **assessment tools** to quantify the direct benefits and associated co-benefits of decarbonised urban mobility service car fleets and of new shared mobility solutions complementary to public transport (including evaluation of impacts on modal shift and increased intermodal mobility), the trade-off analysis between different solution and the recommendation of the most suitable implementation strategies, thereby helping to attract public investments.

Further **progress towards achieving the targets set by relevant EU strategies and policies** such as the [Zero Pollution Action Plan](#)²², the [Sustainable and Smart Mobility Strategy](#)²³, the [new EU Urban Mobility Framework](#)²⁴, the [Decarbonise Corporate Fleets Communication](#)²⁵ and the [Energy Efficiency Directive](#)²⁶.

Scope: Public transport is firmly at the centre of sustainable urban mobility policies at EU level and across Member States, in complementarity with active mobility and shared mobility services. However more needs to be done to make sure that **urban and suburban public passenger transport**, including **coaches**, and **urban mobility service car fleets** are **energy efficient** and **attractive**.

In addition, an optimal integration of public transport with other/new shared mobility services can increase its uptake by offering services that are complementary, offering coherent solutions allowing interconnection between mass transit and “last-mile” solutions. **Designing urban and sub-urban systems** that are **energy-efficient and attractive and are tailored** for complementary mobility options requires different thinking: e.g. new approaches to integrated urban planning; changes to or upgrades of infrastructure and redistribution of public space; better use of technology solutions to enable effective multimodality, including leveraging AI solutions; targeted local policies to promote and integrate different mobility options, to increase connectivity especially in peri-urban, rural, and underserved areas throughout the city, extending beyond the city centre.

The objective of this topic is to explore and test solutions to **increase energy-efficiency and attractiveness of urban and sub-urban public transport, urban mobility service car fleets, and other active and shared mobility solutions**, in the pilot sites involved in the proposals, including by facilitating **exchange of experiences and good practices and fostering learning at European level**. The work should lead to an updated and comprehensive overview of the **state of the art of the electrification of urban and sub-urban public transport systems, and urban mobility service car fleets and shared mobility solutions**, including an assessment of gaps and shortcomings in existing systems.

The topic invites proposals from consortia including at least three cities from different Member States or Associated Countries along with at least three follower cities, ensuring a

²² COM(2021) 400 final

²³ COM(2020) 789 final

²⁴ COM(2021)811

²⁵ COM(2025) 96 final

²⁶ DIRECTIVE (EU) 2023/1791 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 13 September 2023 on energy efficiency and amending Regulation (EU) 2023/955

good geographical balance. Follower cities can be from the same Member State or Associated Country as the lead cities. At least one of the three lead cities must be one of the 112 cities selected for the EU Mission on Climate-neutral and Smart Cities. The consortium should bring together academia, responsible local authorities, public transport operators, urban mobility service car fleet providers, shared mobility service providers, and other relevant stakeholders. The goal is to collaboratively test and **implement a mix** of technological and non-technological innovations, along with policy-based measures, to **enhance the energy efficiency and appeal** of urban and suburban public transport in complementarity with urban mobility service car fleets and shared mobility solutions. An assessment of the overall ecological footprint of the tested solutions should also be carried out, taking into account the whole value chain and possible rebound effects.

From the lessons learnt through the testing of solutions, **recommendations and guidance on optimal integration of energy efficient urban and suburban public transport with urban mobility service car fleets**, active and shared mobility solutions should be **provided for local authorities and public transport operators**. Recommendations and measures could cover e.g. newly-emerging technologies and soft measures such as marketing, real time information and awareness raising campaigns and co-creation of user-oriented solutions– with particular regard to the specific needs of diverse user groups. Proposals could test the establishment of new operating and business models. Proposals may include demonstrations, preparatory, take-up and replication actions, research activities, as well as tools to support local planning and policy making. To facilitate replication, upscaling and up-taking of the generated outcomes and to foster capacity building/upskilling of public authorities, local actors and communities, actions should engage in outreach, communication, dissemination and training activities.

This topic requires the effective contribution of SSH disciplines and the involvement of SSH experts, institutions as well as the inclusion of relevant SSH expertise, in order to produce meaningful and significant effects enhancing the societal impact of the related research activities.

Proposals must plan for an active collaboration amongst the projects selected under this topic - for dissemination, evaluation and coordination - facilitated by and within the CIVITAS initiative through the signature of a Memorandum of Understanding. Proposals should ensure that appropriate provisions for activities and resources aimed at enforcing this collaboration are included in the work-plan. Detailed description of the specific activities and common actions that will be undertaken is not required at proposal stage and can be further defined during the grant agreement phase. Collaboration with the Mission Platform is essential and should take place through the CIVITAS initiative. The latter should establish, through a collaboration agreement, clear links with the Mission portfolio for synergies and complementarities.

HORIZON-MISS-2026-04-CIT-02: Transition to low-temperature heating solutions in multi-apartment buildings

Call: Supporting the implementation of the Climate-Neutral and Smart Cities Mission

Specific conditions	
<i>Expected EU contribution per project</i>	The Commission estimates that an EU contribution of around EUR 6.00 million would allow these outcomes to be addressed appropriately. Nonetheless, this does not preclude submission and selection of a proposal requesting different amounts.
<i>Indicative budget</i>	The total indicative budget for the topic is EUR 18.00 million.
<i>Type of Action</i>	Innovation Actions
<i>Eligibility conditions</i>	<p>The conditions are described in General Annex B. The following exceptions apply:</p> <p>The following additional eligibility criteria apply:</p> <p>At least two cities, each from a different Member State or Associated Country, must participate as beneficiaries. At least one of the three cities must be one of the 112 cities selected for the EU Mission on Climate-neutral and Smart Cities²⁷.</p>
<i>Technology Readiness Level</i>	Activities are expected to achieve TRL 6-8 by the end of the project – see General Annex B.
<i>Legal and financial set-up of the Grant Agreements</i>	<p>The rules are described in General Annex G. The following exceptions apply:</p> <p>Grants awarded under this topic will be linked to the following action(s):</p> <p>HORIZON-MISS-2021-CIT-02-03</p> <p>Collaboration with the Cities Mission Platform²⁸ is essential and projects must ensure that appropriate provisions for activities and resources aimed at enforcing this collaboration are included in the work plan of the proposal. The collaboration with the Cities Mission Platform must be formalized through a Memorandum of Understanding to be concluded as soon as possible after the project starting date.</p> <p>Eligible costs will take the form of a lump sum as defined in the Decision of 7 July 2021 authorising the use of lump sum contributions under the Horizon Europe Programme – the Framework Programme for</p>

²⁷ The EU Mission on Climate-Neutral and Smart Cities aims to deliver 100 climate-neutral and smart cities by 2030 and ensure that these cities act as experimentation and innovation hubs to enable all European cities to follow suit by 2050. On 28 April 2022, the Commission announced the 100 EU cities that will participate in the Mission. In addition, 12 cities have been selected from countries associated or expected to be associated the Horizon Europe programme.

²⁸ Set up by Horizon 2020 project NetZeroCities - Accelerating cities' transition to net zero emissions by 2030, Grant Agreement n. 101036519, and scaled up through topic *HORIZON-MISS-2021-CIT-02-03: Framework Partnership Agreement (FPA) for the Climate-Neutral and Smart Cities Mission Platform*.

	Research and Innovation (2021-2027) – and in actions under the Research and Training Programme of the European Atomic Energy Community (2021-2025) ²⁹ .
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Expected Outcome: The projects are expected to deliver on one of or combination of the following topic outcomes:

- Faster transition of district heating systems towards low-temperature operations
- Faster transition of building heating systems towards low-temperature operations and
- Increased use of renewable energy and/or waste heat.

Scope: Low-temperature district heating systems in urban areas offer higher potential for integration of renewable energy sources and waste heat, but their deployment is slowed down because the existing stock of inefficient buildings has been designed for high-temperature heat delivery systems. The topic supports the creation of the conditions necessary for the conversion of existing supply solutions – district heating, as well as individual heating ones – into low-temperature alternatives, along with reducing and optimising the heat load of buildings.

Efficient district heating systems are expected to meet increasingly stringent criteria in terms of the use of renewable energy, waste heat and/or co-generation in line with Article 26(1) of the Directive (EU) 2023/1791. To help district heating operators meet those criteria, there is a need to demonstrate solutions that support the **transition to low-temperature district heating systems** operating at supply temperatures at below 70°C.

There is currently a limited choice of established non-fossil fuel heating and hot water systems to replace fossil-fuel based heating systems in multi-apartment buildings. There is a need to demonstrate systems based on **heat pumps solutions** to replace both central and individual fossil fuel boilers in existing residential multi-apartment buildings.

Proposals are expected to address at least **two** of the following:

- Demonstrate system design and technical solutions at district and building level, to enable the integration of various heat supply sources (particularly renewable energy sources and waste heat), and to facilitate the transition to low-temperature district heating systems. Furthermore, refine digital tools for the control and monitoring of district heating systems as well as digital tools to support decision-making both at the initial planning stages and for the standardized replication of solutions.
- Demonstrate building-level heating solutions for hot water and low-temperature heating with maximum heating supply temperatures up to 50°C in at least four residential multi-

²⁹ This [decision](https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/guidance/ls-decision_he_en.pdf) is available on the Funding and Tenders Portal, in the reference documents section for Horizon Europe, under ‘Simplified costs decisions’ or through this link: https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/guidance/ls-decision_he_en.pdf

apartment buildings of at least 1000 m² each. The solutions should be transferrable and standardised.

- Demonstrate building-level heating solutions for hot water and heating needs in at least four residential multi-apartment buildings of at least 1000 m² each that use either on-site renewable energy sources or an ambient or geothermal loop shared with other buildings / facilities, or a connection to district heating systems for the heat supply.
- At a building, district or city level, demonstrate approaches for connecting buildings via district heating networks and ambient or geothermal loops to reduce the overall energy demand to facilitate the deployment of low-temperature district heating systems and to improve heating systems' flexibility via the integration of heat storage, including in heat networks, by or with the inclusion of energy communities.
- Ensure the participation of local energy communities to assess their socio-economic benefits for the local community and heating system operators.

Projects are expected to demonstrate the proposed solutions in two different climate zones, at building, district and/or city level, and to assess the environmental, social and economic benefits of the proposed solutions for the local community and heating system operators while accounting for the regional economic and regulatory aspects. The system design must include advanced controls to allow exploiting the energy flexibility of individual heating systems in a collective way. Projects must present a concise state-of-the-art of existing relevant solutions, knowledge and tools from EU funded projects.

To ensure a balanced portfolio covering low-temperature heating solutions, grants will be awarded to applications not only in order of ranking but at least also to one application each that is the highest ranked covering district heating solutions and building-level heating solutions, provided that the applications attain all thresholds.

Projects are expected to contribute to the implementation of Climate City Contracts and/or Sustainable Energy Action Plans, Sustainable Energy and Climate Action Plans. Collaboration with the Cities Mission Platform is essential and proposals must make appropriate provisions for activities and resources aimed at enforcing this collaboration are included in the work plan of the proposal. The collaboration with the Cities Mission Platform must be formalized through a Memorandum of Understanding to be concluded as soon as possible after the project starting date.

HORIZON-MISS-2027-04-CIT-01: Innovative microgrids for improved energy system integration and efficiency in urban contexts

Call: Supporting the implementation of the Climate-Neutral and Smart Cities Mission	
Specific conditions	
<i>Expected EU contribution per</i>	The Commission estimates that an EU contribution of around EUR 7.00 million would allow these outcomes to be addressed appropriately.

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<i>project</i>	Nonetheless, this does not preclude submission and selection of a proposal requesting different amounts.
<i>Indicative budget</i>	The total indicative budget for the topic is EUR 20.00 million.
<i>Type of Action</i>	Innovation Actions
<i>Eligibility conditions</i>	<p>The conditions are described in General Annex B. The following exceptions apply:</p> <p>The following additional eligibility criteria apply:</p> <p>At least three cities, each from a different Member State or Associated Country, must participate as beneficiaries. At least one of the three cities must be one of the 112 cities selected for the EU Mission on Climate-neutral and Smart Cities³⁰.</p>
<i>Technology Readiness Level</i>	Activities are expected to achieve TRL 7-8 by the end of the project – see General Annex B.
<i>Legal and financial set-up of the Grant Agreements</i>	<p>The rules are described in General Annex G. The following exceptions apply:</p> <p>Grants awarded under this topic will be linked to the following action(s):</p> <p>HORIZON-MISS-2021-CIT-02-03</p> <p>Collaboration with the Cities Mission Platform³¹ is essential and projects must ensure that appropriate provisions for activities and resources aimed at enforcing this collaboration are included in the work plan of the proposal. The collaboration with the Cities Mission Platform must be formalized through a Memorandum of Understanding to be concluded as soon as possible after the project starting date.</p> <p>Eligible costs will take the form of a lump sum as defined in the Decision of 7 July 2021 authorising the use of lump sum contributions under the Horizon Europe Programme – the Framework Programme for Research and Innovation (2021-2027) – and in actions under the</p>

³⁰ The EU Mission on Climate-Neutral and Smart Cities aims to deliver 100 climate-neutral and smart cities by 2030 and ensure that these cities act as experimentation and innovation hubs to enable all European cities to follow suit by 2050. On 28 April 2022, the Commission announced the 100 EU cities that will participate in the Mission. In addition, 12 cities have been selected from countries associated or expected to be associated the Horizon Europe programme.

³¹ Set up by Horizon 2020 project NetZeroCities - Accelerating cities' transition to net zero emissions by 2030, Grant Agreement n. 101036519, and scaled up through topic *HORIZON-MISS-2021-CIT-02-03: Framework Partnership Agreement (FPA) for the Climate-Neutral and Smart Cities Mission Platform*.

	Research and Training Programme of the European Atomic Energy Community (2021-2025) ³² .
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Expected Outcome: Projects are expected to contribute to all the following outcomes:

- Improved awareness of the potential of Low Voltage Direct Current (LVDC) microgrids to support the goals of the European Green Deal and the Clean Industrial Deal, including as defined under the SET Plan³³ and the Solar Strategy³⁴.
- Increased acceptance of LVDC microgrids in Europe, with significant and measurable contributions to human and building safety (notably with respect to DC faults), energy and resource efficiency, integration of renewables & storage and demand response, peak power shaving, resilience, and (where applicable) established proof of concept on how LVDC microgrids can enable energy communities³⁵ to share energy assets and increase self-consumption of local renewables sources.
- Increased uptake in European cities, facilitated by technical guidelines for installation of LVDC microgrids and recommendations on regulatory alignment to European, national, regional and local authorities, as well as power distribution operators.
- Increased number of regulatory options and standards supporting EU industry leadership in the supply of LVDC solutions, in line with the Competitiveness Compass guidelines for fostering innovation and growth.

Scope: Most electric appliances in buildings are based on Direct Current (DC): PV panels, stationary and e-vehicle batteries, LED lighting, IT equipment, heat pumps and other appliances. Their connection to a LVDC microgrid inside the building would significantly improve energy and materials efficiency (replacing AC/DC converters by simpler DC/DC converters) and optimise local electrical and/or thermal energy storage and self-consumption of local renewables, contribute to (AC) grids stability through demand response and ancillary services (incl. reactive power support), and increase resilience by enabling islanded operation. The required power capacity of the connection of the LVDC microgrid to the AC (Alternating

³² This [decision](https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/guidance/ls-decision_he_en.pdf) is available on the Funding and Tenders Portal, in the reference documents section for Horizon Europe, under ‘Simplified costs decisions’ or through this link: https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/guidance/ls-decision_he_en.pdf

³³ [SET Plan LVDC Implementation Plan \(europa.eu\)](https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/guidance/ls-decision_he_en.pdf)

³⁴ COM(2022) 221 final, p14, The European Commission communication on the EU Solar Energy Strategy recognises that increasing the use of DC technologies could be beneficial to the electricity system: as renewable power from solar is produced in Direct Current (DC), conversion to Alternating Current (AC) to feed into the grid and then converting back to DC, e.g. to store energy, leads to energy losses; such conversion losses are currently growing because more devices and system, such as batteries, heat-pumps, data centres, electric vehicles or appliances, operate in DC.

³⁵ Energy communities – defined under the Renewable Energy Directive and the Electricity Market Directive, and further supported by the upcoming Citizens Energy Package are identified as a vehicle to empower citizens, small businesses and local authorities to produce, manage and consumer their own energy.

Current) distribution grid via a central AC/DC converter would be significantly lower than a traditional AC installation, thereby reducing pressure on city grid.

The LVDC microgrid could also be implemented at small neighbourhood level (e.g. a street), possibly in parallel to an existing AC grid, enabling more efficient and easier sharing of common energy assets and self-consumption in an energy community.

In order to reach this goal, proposals are expected to address all of the following aspects:

- Develop innovative, safe and sustainable LVDC microgrids design methods and tools, ensuring notably grid monitoring, control and safe handling of DC faults at affordable cost; develop methodologies and assess the life-cycle costs/benefits of LVDC microgrids (compared to traditional AC installations), for the application itself and the overall energy system (including the impacts on the AC distribution grid, for example, due to the injection of harmonics, or contribution to grid stability through ancillary services and demand response over the current and next day), from technical, environmental, economic and social aspects (notably on vulnerable consumers energy bill).
- Demonstrate in real life an LVDC microgrid, connecting all electrical applications in at least one residential, office or commercial building, or in one neighbourhood. The proposal must already include a review of the local regulatory framework(s) and grid codes and a demonstration that the real-life implementation(s) of the LVDC microgrid will be possible in the local context(s) (possibly through pre-agreed regulatory relaxation or ‘innovation sandbox’).
- Beyond the real demonstration(s), the installation of LVDC microgrid must be demonstrated virtually in other types of buildings, including at least one building under renovation, in the environment of different cities and countries, including at least one vulnerable urban area if possible, by numerical simulation using digital twins³⁶, with the objective of assessing the regulatory feasibility and life-cycle costs/benefits (detailed in the first bullet) in these different environments. The total number of real and virtual demonstrations must be at least 3.
- Identify regulatory barriers at European, national and distribution system operator levels, and make suggestions to resolve them.
- Contribute to standardization (CEN-CENELEC, IEC), notably contributing use cases.
- Develop LVDC solutions awareness, education and training materials (respectively for public authorities and general public, for students, for urban planners, project developers and installers), in collaboration with local academia and research partners.

³⁶ <https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/horizon-miss-2023-cit-01-02>

- Disseminate project results, engage all relevant stakeholders along the value chain, including residents, users, industry, and researchers, from the planning phase; organise at least one open workshop coupled with site visits.

This topic requires the effective contribution of social sciences and humanities (SSH) disciplines and the involvement of SSH experts, institutions as well as the inclusion of relevant SSH expertise, in order to produce meaningful and significant effects enhancing the societal impact of the related research activities, especially related to the last two bullets.

The projects under this topic shall be open to cooperate with each other on relevant tasks such as joint workshops and dissemination events and joint policy briefs and contribution to standardisation process, to maximise the collective impact.

Proposals should build on previous projects, notably Horizon Europe project [Shift2DC](#), as well as [HYPERRIDE](#), [TYGON](#), [HYNET](#) and [THEUS](#). Under the guidance of the relevant Executive Agency and with input of the European Commission, the selected projects will engage in clustering activities with other relevant projects supported under the Cities Mission, such as the ones on PED digital twins, to promote synergies and complementarities.

HORIZON-MISS-2027-04-CIT-02: Hydrogen cities

Call: Supporting the implementation of the Climate-Neutral and Smart Cities Mission	
Specific conditions	
<i>Expected EU contribution per project</i>	The Commission estimates that an EU contribution of around EUR 5.00 million would allow these outcomes to be addressed appropriately. Nonetheless, this does not preclude submission and selection of a proposal requesting different amounts.
<i>Indicative budget</i>	The total indicative budget for the topic is EUR 5.00 million.
<i>Type of Action</i>	Coordination and Support Actions
<i>Eligibility conditions</i>	<p>The conditions are described in General Annex B. The following exceptions apply:</p> <p>The following additional eligibility criteria apply:</p> <p>At least one of the cities selected for twinning must be part of the 112 cities selected for the EU Mission on Climate-neutral and Smart Cities³⁷.</p>
<i>Legal and financial</i>	The rules are described in General Annex G. The following exceptions

³⁷ The EU Mission on Climate-Neutral and Smart Cities aims to deliver 100 climate-neutral and smart cities by 2030 and ensure that these cities act as experimentation and innovation hubs to enable all European cities to follow suit by 2050. On 28 April 2022, the Commission announced the 100 EU cities that will participate in the Mission. In addition, 12 cities have been selected from countries associated or expected to be associated the Horizon Europe programme.

<i>set-up of the Grant Agreements</i>	<p>apply:</p> <p>Grants awarded under this topic will be linked to the following action(s):</p> <p>HORIZON-MISS-2021-CIT-02-03</p> <p>Collaboration with the Cities Mission Platform³⁸ is essential and projects must ensure that appropriate provisions for activities and resources aimed at enforcing this collaboration are included in the work plan of the proposal. The collaboration with the Cities Mission Platform must be formalized through a Memorandum of Understanding to be concluded as soon as possible after the project starting date.</p> <p>Eligible costs will take the form of a lump sum as defined in the Decision of 7 July 2021 authorising the use of lump sum contributions under the Horizon Europe Programme – the Framework Programme for Research and Innovation (2021-2027) – and in actions under the Research and Training Programme of the European Atomic Energy Community (2021-2025)³⁹.</p>
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Expected Outcome: A growing number of cities across Europe is developing hydrogen strategies, either for mobility applications or for decarbonising their local and peri-urban industries and hard-to-abate sectors. By acting as experimentation and innovation hubs, these cities can be testbeds for the energy transition, balancing decarbonisation with competitiveness and social cohesion.

Project results are expected to contribute to the following expected outcomes:

- Investments in - and deployment of - hydrogen applications and infrastructure for hard-to-abate sectors in and around cities to mitigate local air pollution and lead to economic growth and jobs, bringing urban environments at the forefront of sustainability and innovation.
- Communities of practice to foster the interaction between stakeholders from cities, ports, industry, local and regional government, as well as researchers and citizens.
- Enhanced synergies between the Climate-Neutral and Smart Cities Mission and the Horizon Europe Clean Hydrogen Partnership.

Scope:

³⁸ Set up by Horizon 2020 project NetZeroCities - Accelerating cities' transition to net zero emissions by 2030, Grant Agreement n. 101036519, and scaled up through topic *HORIZON-MISS-2021-CIT-02-03: Framework Partnership Agreement (FPA) for the Climate-Neutral and Smart Cities Mission Platform*.

³⁹ This [decision](https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/guidance/ls-decision_he_en.pdf) is available on the Funding and Tenders Portal, in the reference documents section for Horizon Europe, under 'Simplified costs decisions' or through this link: https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/guidance/ls-decision_he_en.pdf

The selected project is expected to establish ‘twinning’ of Hydrogen Valleys (in particular those that have elements relevant for cities or ports) with cities that are interested to decarbonise their local and peri-urban hard-to-abate sectors using hydrogen. Focus should be on hard-to-abate and/or hard-to-electrify sectors, such as industrial uses, heavy-duty and long-distance transport, aviation, maritime uses, or any combination thereof. The use of hydrogen for heating purposes is out of scope.

Twinning will help cities to access the best available expertise and tools that can enable them to identify and implement decarbonisation strategies based on renewable hydrogen. To foster cooperation between cities and Member States, it is encouraged that there is a geographical balance between the participating authorities to foster learning from different projects and approaches.

This twinning should be based on mentor-mentee pairings; these could also target enlargement countries, such as the Western Balkans, Ukraine, and Moldova.

The project is expected to:

- Organise a selection procedure (for example in the form of public calls for expression of interest) to identify the most promising twinning pairs that will be selected to develop collaborative activities;
- Develop and implement for each twinning pair a tailor-made set of collaborative activities;
- Deliver for each twinned city a detailed roadmap outlining the future steps to integrate renewable hydrogen in their industrial decarbonisation;
- Facilitate the interaction between participating cities to address shared challenges and solutions;

Collaborative activities can address for example:

- Feasibility assessments (including technology choices, sources of renewable hydrogen, business cases, regulatory issues and stakeholder engagement);
- Designing a detailed implementation plan (including funding strategy, permitting, infrastructure requirements, supply chain integration);
- Environmental and socio-economic impact assessment;
- Sharing best practices and lessons learned;
- Education and training.

The project is expected to enhance the synergies between the Horizon Europe Clean Hydrogen Partnership and the EU Mission on Climate-Neutral and Smart Cities by making

optimal use of the information available through the Hydrogen Valley Platform⁴⁰ and the Cities Mission Platform⁴¹. At least one of the cities selected for twinning must be part of the EU Mission on Climate-neutral and Smart Cities. The project must ensure that appropriate provisions for activities and resources aimed at enforcing this synergy are included in the work plan of the proposal. Under the guidance of the relevant Executive Agency and with input of the European Commission, the selected project will engage in clustering activities with other relevant projects supported under the Cities Mission to promote synergies and complementarities.

This action supports the follow-up to the July 2023 Communication on EU Missions assessment⁴².

HORIZON-MISS-2027-04-CIT-03: Inclusive and climate resilient multimodal passenger hubs enhancing modal shift towards sustainable transport and shared mobility

Call: Supporting the implementation of the Climate-Neutral and Smart Cities Mission	
Specific conditions	
<i>Expected EU contribution per project</i>	The Commission estimates that an EU contribution of around EUR 9.00 million would allow these outcomes to be addressed appropriately. Nonetheless, this does not preclude submission and selection of a proposal requesting different amounts.
<i>Indicative budget</i>	The total indicative budget for the topic is EUR 18.00 million.
<i>Type of Action</i>	Innovation Actions
<i>Eligibility conditions</i>	<p>The conditions are described in General Annex B. The following exceptions apply:</p> <p>The following additional eligibility criteria apply:</p> <p>At least three cities, each from a different Member State or Associated Country, must participate as beneficiaries. At least one of the three cities must be one of the 112 cities selected for the EU Mission on Climate-neutral and Smart Cities⁴³ and one of them as urban node on the TEN-T network⁴⁴.</p>
<i>Technology</i>	Activities and pilot demonstrations of technological nature of the

⁴⁰ [H2Valleys | Mission Innovation Hydrogen Valley Platform](#)

⁴¹ [Home - NetZeroCities](#)

⁴² COM(2023) 457 final and SWD(2023) 260 final

⁴³ The EU Mission on Climate-Neutral and Smart Cities aims to deliver 100 climate-neutral and smart cities by 2030 and ensure that these cities act as experimentation and innovation hubs to enable all European cities to follow suit by 2050. On 28 April 2022, the Commission announced the 100 EU cities that will participate in the Mission. In addition, 12 cities have been selected from countries associated or expected to be associated the Horizon Europe programme.

⁴⁴ <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32024R1679>

<i>Readiness Level</i>	proposed solutions in operational environment are expected to be at minimum TRL 7 by the end of the project – see General Annex B.
<i>Legal and financial set-up of the Grant Agreements</i>	<p>The rules are described in General Annex G. The following exceptions apply:</p> <p>Grants awarded under this topic will be linked to the following action(s):</p> <p>HORIZON-MISS-2021-CIT-02-03</p> <p>Collaboration with the Cities Mission Platform⁴⁵ is essential and projects must ensure that appropriate provisions for activities and resources aimed at enforcing this collaboration are included in the work plan of the proposal. The collaboration with the Cities Mission Platform must be formalized through a Memorandum of Understanding to be concluded as soon as possible after the project starting date.</p> <p>Eligible costs will take the form of a lump sum as defined in the Decision of 7 July 2021 authorising the use of lump sum contributions under the Horizon Europe Programme – the Framework Programme for Research and Innovation (2021-2027) – and in actions under the Research and Training Programme of the European Atomic Energy Community (2021-2025)⁴⁶.</p>

Expected Outcome: Project results are expected to contribute to all the following outcomes:

- Contribute to the objectives of the Climate-Neutral and Smart Cities Mission by accelerating the transition towards climate neutrality targets in cities and **reducing greenhouse gas emissions from transport** due to the improved operation of the multimodal hubs.
- **Reducing road congestion and improved air quality**, by increasing **shift towards sustainable and active modes of transport** for city and intercity trips.
- Contribute to the objectives of the TEN-T Regulation by increasing the **climate resilience of multimodal passenger hub infrastructures and services** to both long term impacts of climate change and sudden extreme events attributable to climate change.
- Increased **inclusivity, accessibility and improved experience** for all passengers at multimodal hubs, by proposing mobility solutions that respond to the needs of transports

⁴⁵ Set up by Horizon 2020 project NetZeroCities - Accelerating cities' transition to net zero emissions by 2030, Grant Agreement n. 101036519, and scaled up through topic *HORIZON-MISS-2021-CIT-02-03: Framework Partnership Agreement (FPA) for the Climate-Neutral and Smart Cities Mission Platform*.

⁴⁶ This [decision](https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/guidance/ls-decision_he_en.pdf) is available on the Funding and Tenders Portal, in the reference documents section for Horizon Europe, under 'Simplified costs decisions' or through this link: https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/guidance/ls-decision_he_en.pdf

users, irrespective of their age, gender, economic or social status, including equal access for reduced mobility.

- **Provide guidance and best practices** for national/regional/local authorities and urban transport authorities to improve the integration of walking, cycling, shared mobility and micro-mobility at and around in multimodal-hubs, and for identifying and deploying relevant monitoring and security measures related to climate impact on operations.

Scope: This topic focuses on the climate resilience of major multimodal passenger hubs' infrastructures and services connecting cities as well as peri-urban and rural areas. At least three demonstrators per project are required. As defined in the revised TEN-T regulation⁴⁷, 'multimodal passenger hub' means a connection point between at least two transport modes for passengers, where travel information, access to public transport and transfers between modes are ensured, such as park-and-ride stations, and which acts as an interface within and between urban nodes and between urban nodes and longer-distance transport networks.

Projects will complement the implementation of the above requirement for TEN-T urban nodes by demonstrating concrete solutions for improving the climate resilience of multimodal passenger hubs.

Transport is responsible of a significant share of pollution and greenhouse gas emission in cities. In addition, transport infrastructures and their operation can be subject to perturbation and deterioration due to climate change extreme events (storms, heavy rains, floodings, heat waves, etc.) or longer-term climate stresses (water scarcity, changing groundwater levels, drought, extreme temperatures, sea level rise and accelerated coastal erosion in coastal cities, etc.). Preparing passenger transport systems resilience and the adaptation capacity is crucial to ensure continuity of the transport service and safety of passengers. The recently published "Support study on the climate adaptation and cross-border investment needs to realise the TEN-T network" should be considered⁴⁸.

Proposals should:

- Develop and test innovative solutions that increase the number of within-hub flows and access/egress trips by public transport, active, shared and micromobility modes to/from the selected major multi-modal hubs considering improved connectivity, fleet rebalancing operations, etc.;
- Identify current and future local climate-related vulnerabilities of the selected multimodal passenger transport infrastructures and services, and determine the potential safety issues and economic and social losses caused by climate change extreme events or longer-term climate stresses that may lead to interrupted or low-quality service;

⁴⁷ <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32024R1679>

⁴⁸ <https://op.europa.eu/en/publication-detail/-/publication/26731a63-b904-11ef-91ed-01aa75ed71a1/language-en>

- Develop and test innovative solutions for climate-resilient multimodal passenger hubs and related transport services for protecting existing infrastructures and/or for building/managing new critical infrastructure capable of mitigating the potential climate change risks, as well as for maintaining services continuity and efficiency of operations. In this context:
 - o Develop nature-based solutions for increasing multimodal passenger hub's infrastructures resilience demonstrating the respective environmental, social, and economic benefits.
 - o Integrate digital monitoring and advanced yet practical digital and/or AI-based methods for assessing, preventing and managing adverse climate impacts that may affect the multimodal hub operation.
- Develop and test solutions to ensure or improve the inclusivity and accessibility of multimodal passenger hubs, accounting for both within-hub flows and access/egress trips, considering that climate change may particularly affect most vulnerable and marginalised populations⁴⁹;
- Establish co-designing process and engaging with the relevant stakeholders to ensure the successful uptake of the proposed and tested solutions, incl. and economic model, contributing to climate neutrality, climate adaptation and enhanced governance of the multi-modal passenger hubs.

Proposals should include activities promoting **the New European Bauhaus principles** (sustainability, aesthetics, and inclusion) among national, regional, and local authorities, citizens, and stakeholders through dedicated local initiatives (e.g. events, contests, citizens' dialogues, living labs).

Proposals should be implemented within the framework of a Sustainable Urban Mobility Plan (SUMP) or equivalent plan of the participating cities.

Under the guidance of the relevant Executive Agency and with input of the European Commission, the selected projects will engage in clustering activities with other relevant projects supported under the Cities Mission to promote synergies and complementarities. Synergies with CIVITAS community should be established, especially for disseminating the project results.

This topic requires the effective contribution of social sciences and humanities (SSH) disciplines and the involvement of SSH experts, institutions as well as the inclusion of relevant SSH expertise, in order to produce meaningful and significant effects enhancing the societal impact of the related research activities.

⁴⁹ (IPCC 2023)

HORIZON-MISS-2027-04-CIT-04: Circular economy in the city: Reducing waste from e-commerce and urban logistics

Call: Supporting the implementation of the Climate-Neutral and Smart Cities Mission	
Specific conditions	
<i>Expected EU contribution per project</i>	The Commission estimates that an EU contribution of around EUR 7.50 million would allow these outcomes to be addressed appropriately. Nonetheless, this does not preclude submission and selection of a proposal requesting different amounts.
<i>Indicative budget</i>	The total indicative budget for the topic is EUR 15.00 million.
<i>Type of Action</i>	Research and Innovation Actions
<i>Eligibility conditions</i>	<p>The conditions are described in General Annex B. The following exceptions apply:</p> <p>The following additional eligibility criteria apply:</p> <p>At least three cities, each from a different Member State or Associated Country, must participate as beneficiaries. At least one of the three cities must be one of the 112 cities selected for the EU Mission on Climate-neutral and Smart Cities⁵⁰.</p>
<i>Technology Readiness Level</i>	Activities are expected to achieve TRL 5-7 by the end of the project – see General Annex B.
<i>Legal and financial set-up of the Grant Agreements</i>	<p>The rules are described in General Annex G. The following exceptions apply:</p> <p>Grants awarded under this topic will be linked to the following action(s):</p> <p>HORIZON-MISS-2021-CIT-02-03</p> <p>Collaboration with the Cities Mission Platform⁵¹ is essential and projects must ensure that appropriate provisions for activities and resources aimed at enforcing this collaboration are included in the work plan of the proposal. The collaboration with the Cities Mission Platform must be formalized through a Memorandum of Understanding to be</p>

⁵⁰ The EU Mission on Climate-Neutral and Smart Cities aims to deliver 100 climate-neutral and smart cities by 2030 and ensure that these cities act as experimentation and innovation hubs to enable all European cities to follow suit by 2050. On 28 April 2022, the Commission announced the 100 EU cities that will participate in the Mission. In addition, 12 cities have been selected from countries associated or expected to be associated the Horizon Europe programme.

⁵¹ Set up by Horizon 2020 project NetZeroCities - Accelerating cities' transition to net zero emissions by 2030, Grant Agreement n. 101036519, and scaled up through topic *HORIZON-MISS-2021-CIT-02-03: Framework Partnership Agreement (FPA) for the Climate-Neutral and Smart Cities Mission Platform*.

	<p>concluded as soon as possible after the project starting date.</p> <p>Eligible costs will take the form of a lump sum as defined in the Decision of 7 July 2021 authorising the use of lump sum contributions under the Horizon Europe Programme – the Framework Programme for Research and Innovation (2021-2027) – and in actions under the Research and Training Programme of the European Atomic Energy Community (2021-2025) ⁵².</p>
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Expected Outcome: Projects are expected to contribute to all the following outcomes:

- Accelerated transition towards circular economy in the freight transport sector contributing to the objectives of the Climate-neutral and Smart Cities Mission;
- Increased adoption of new circular logistics solutions, including modular loading units and reusable transport packaging systems tailored for urban delivery settings;
- Improved integration of reverse logistics into urban logistics models to enable higher reuse and recycling rates;
- Optimised resource utilisation in urban logistics through innovative circular economy approaches, leading to significant reductions in material consumption and carbon footprint;
- Enhanced cooperation among urban stakeholders, including local authorities, logistics providers, retailers, and consumers, fostering circular business models;
- Policy recommendations and guidelines to support cities in integrating circular economy principles into urban logistics related regulations (e.g. within the Sustainable Urban Mobility Plans⁵³).

Scope: The rapid growth of e-commerce and urban logistics has led to an increase in packaging waste, inefficiencies in freight transport, and rising environmental impacts. Current urban logistics systems often rely on disposable packaging and fragmented transport operations, resulting in significant material waste and carbon emissions. Addressing these challenges requires innovative circular economy approaches, promoting innovative, circular and scalable solutions for reducing waste generation, in line with the revised EU Packaging Waste Regulation (PPWR), and improving resource efficiency in business-to-business and business-to-consumer logistics.

Building on previously funded projects' outcomes and leveraging potential complementarities with existing regional circularity hubs and other initiatives (e.g. the European Commission's

⁵² This [decision](https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/guidance/ls-decision_he_en.pdf) is available on the Funding and Tenders Portal, in the reference documents section for Horizon Europe, under 'Simplified costs decisions' or through this link: https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/guidance/ls-decision_he_en.pdf

⁵³ [Sustainable urban mobility planning and monitoring - European Commission](#)

Circular Cities and Regions Initiative (CCRI)⁵⁴ and the Driving Urban Transition Partnership (DUT⁵⁵), proposals should address all the following actions:

- Design and develop solutions for innovative, modular, reusable, and recyclable packaging and loading units. The proposed solutions should reduce single-use packaging in urban freight transport and demonstrate the benefits of their use in urban logistics processes, while considering the impact of packaging waste regulations on logistics and delivery models in urban areas.
- Develop and test digital tools and systems for tracking and optimising the use of the loading units, integrating technologies such as IoT and AI, as well as for secure stowage, transport, and handling.
- Engage urban stakeholders, including local authorities, logistics operators, retailers and citizens, in co-designing innovative solutions to implement reusable and recyclable packaging and use parcel lockers and micro-hubs (pick-up points) for returns (new items) and recycling (used items), thus promoting the transition to circular urban logistics.
- Demonstrate the proposed solutions in real-world pilots in a minimum of two diverse urban environments covering a diverse type of goods (e.g. fashion items, electric goods), in cooperation with logistics service providers, cities, and e-commerce actors. Pilots should also consider reverse logistics systems, and innovative return and reuse schemes.
- Explore and evaluate environmental, social, and economic (e.g. need for new business models and incentive schemes) impacts of circular economy approaches and specifically the potential of reverse logistics systems to enable circular flows of materials, reduce emissions, and support reuse schemes.
- Involve local authorities in a co-creation process to design enabling regulatory frameworks and market incentives aligned with local circular economy goals.
- Provide policy recommendations to facilitate the adoption of modular loading units and the integration of sustainable logistics measures into broader urban circular economy strategies across European cities.

Under the guidance of the relevant Executive Agency and with input of the European Commission, the selected projects will engage in clustering activities with other relevant projects supported under the Cities Mission to promote synergies and complementarities. Synergies with the CIVITAS urban logistics community should also be considered, especially for disseminating the project results.

⁵⁴ [Circular Cities and Regions Initiative | Circular Cities and Regions Initiative](#)
⁵⁵ [The DUT Partnership - DUT Partnership](#)

HORIZON-MISS-2027-04-CIT-05: Boosting the transformation towards climate-neutral cities, the net-zero economy and open strategic autonomy through Pre-Commercial Procurement (PCP)

Call: Supporting the implementation of the Climate-Neutral and Smart Cities Mission	
Specific conditions	
<i>Expected EU contribution per project</i>	The Commission estimates that an EU contribution of between EUR 7.00 and 12.00 million would allow these outcomes to be addressed appropriately. Nonetheless, this does not preclude submission and selection of a proposal requesting different amounts.
<i>Indicative budget</i>	The total indicative budget for the topic is EUR 26.87 million.
<i>Type of Action</i>	Pre-commercial Procurement
<i>Eligibility conditions</i>	<p>The conditions are described in General Annex B. The following exceptions apply:</p> <p>The specific conditions for actions with PCP/PPI procurements in section H of the General Annexes apply to grants funded under this topic.</p>
<i>Legal and financial set-up of the Grant Agreements</i>	<p>The rules are described in General Annex G. The following exceptions apply:</p> <p>Grants awarded under this topic will be linked to the following action(s):</p> <p>HORIZON-MISS-2021-CIT-02-03</p> <p>Collaboration with the Cities Mission Platform⁵⁶ is essential and projects must ensure that appropriate provisions for activities and resources aimed at enforcing this collaboration are included in the work plan of the proposal. The collaboration with the Cities Mission Platform must be formalized through a Memorandum of Understanding to be concluded as soon as possible after the project starting date.</p> <p>The Cities Mission Platform should in particular support cities with the preparatory work for the PCP and facilitate the upscaling as well as the replicability of the solutions that will be developed through the PCP⁵⁷.</p> <p>The beneficiaries may provide financial support to third parties to</p>

⁵⁶ Conceived through the Horizon 2020 project NetZeroCities - Accelerating cities' transition to net zero emissions by 2030, Grant Agreement n. 101036519, and scaled up through the topic *HORIZON-MISS-2021-CIT-02-03: Framework Partnership Agreement (FPA) for the Climate-Neutral and Smart Cities Mission Platform*.

⁵⁷ Resources for this are foreseen under the *Specific Grant Agreements to the Framework Partnership Agreement (FPA) for the Climate-Neutral and Smart Cities Mission Platform*.

	<p>provide financial incentives to final end-users to adopt the solutions. The support to third parties can only be provided in the form of grants. The maximum amount to be granted to each third party is EUR 200 000 to ensure the deployment and impact of the project outcomes.</p> <p>PCP/PPI procurement costs are eligible.</p>
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Expected Outcome: Projects are expected to contribute to the following outcomes:

- Public procurers stimulate from demand side the competitive development of market ready innovative solutions to reduce greenhouse gas emissions that can contribute to the transition of local communities towards climate neutrality, whilst strengthening EU open strategic autonomy;
- Public procurers leverage PCP to bring to the market innovative solutions in sectors relevant for climate change mitigation (such as energy efficiency in buildings, production and use of renewable energy, sustainable and smart mobility, digitalisation etc.) and implement those innovative solutions in the participant cities to reduce greenhouse gas emissions;
- Public procurers drive innovation and increase resilience in the supply chain by opening up opportunities for innovative companies established in the European Union's Member States and Horizon Europe Associated Countries, in particular SMEs and Startups, to access the public procurement market and scale up their business;
- Increased opportunities for wide market uptake and economies of scale for the supply side through increased demand for innovative solutions to reduce greenhouse gas emissions at the local level, wide publication of results and where relevant contribution to standardisation, regulation or certification;
- Present the expected greenhouse gas emission reduction in the participating cities by 2030 and 2050, in comparison to a baseline established at the beginning of the project.

Scope: By closing the gap between supply and demand in a way that reinforces EU open strategic autonomy, PCPs can make a key contribution to enhancing the European Union's economy and competitiveness⁵⁸. In order to master the green and digital transition and make our cities climate-neutral and liveable places, European public procurers need to lead by example by procuring more solutions to reduce greenhouse gas emissions. This topic therefore focuses on forward looking procurement of R&D to bring to the market new

⁵⁸ General Annex H to the work programme provides for specific conditions for PCP such as place of performance and commercialisation conditions that can require the majority of the procured R&D activities and later commercialisation/production of developed solutions to take place in the European Union's Member States and Associated Countries, as well as the possibility to limit the participation to the PCP procurement to economic operators that are established in the European Union's Member States and Associated Countries if there are sufficient economic operators in these territories that can develop the requested solutions. These conditions apply to this topic.

solutions to reduce greenhouse gas emissions that can increase Europe's resilience and preparedness to tackle the climate challenge.

Although a PCP action was already included under the Work Programme 2025 (HORIZON-MISS-2026-04-CIT-PCP-01), there is still a need for demand-driven innovation in this area. This topic supports public procurers, specifically local authorities, to collectively implement PCPs to drive innovation from the demand side and open up wider commercialisation opportunities for companies in Europe to take or maintain international leadership in new markets for net-zero technologies that can deliver solutions to reduce greenhouse gas emissions. The aim is to leverage PCP to encourage the development and to provide a first customer reference for the piloting, installation and validation of breakthrough innovations. Actions shall be implemented in compliance with the objectives and the sustainable and resilience public procurement obligations under the Net Zero Industry Act⁵⁹.

PCP actions target consortia of procurers with similar needs that want to procure together. This topic does not provide direct funding to developers, industry or research organisations to perform R&D. They will be able to respond to the call for tenders launched by consortia of procurers funded under this call. Specific guidance on PCP actions and minimum eligibility requirements can be found in General Annexes H of the Horizon Europe work programme.

Continuous dialogue between demand and supply side is required for the success of PCPs, therefore the effective involvement of end users (e.g. cities teams that would need to adopt climate mitigation solutions, regional structures cooperating with cities on climate mitigation, citizens etc.) needs to be considered in the proposal. Furthermore, to stimulate dialogue with the supply side, public procurers are required to organise an open market consultation before launching the procurement and to promote the call for tenders widely across Europe to potentially interested suppliers.

Proposals should demonstrate sustainability of the action beyond the life of the project. They should demonstrate how the project is anchored in a clear strategy to provide climate-neutral cities and enhance the economy in a sustainable way through stronger early adoption of innovative solutions to reduce greenhouse gas emissions. Activities covered should include cooperation with policy makers to reinforce the national policy frameworks and mobilise substantial additional national budgets for PCP and innovation procurement in general beyond the scope of the project.

Involvement of procurement decision makers is needed to ensure that end solution(s) are adopted by local public buyers, increasing the societal impact of the related research activities. Therefore, procurers should declare in the proposal their interest to pursue deployment of solutions resulting from the PCP in case the PCP delivers successful solutions and indicate whether they will (1) procure successful solution(s) as part of the PCP, (2) launch a separate follow-up procurement after the PCP to buy such type of solutions, (3) adopt successful solutions without the need to procure them (e.g. in case of open source solutions),

⁵⁹ [Regulation \(EU\) 2024/1735 of the European Parliament and of the Council of 13 June 2024 on establishing a framework of measures for strengthening Europe's net-zero technology manufacturing ecosystem and amending Regulation \(EU\) 2018/1724 Text with EEA relevance.](#)

(4) foresee financial or regulatory incentives for others to adopt successful solutions (e.g. in case the final end-users of the solutions are not the procurers but for example citizens). In these four cases, the procurers can implement the project as a fast-track PCP (see general annex H). In the first case, the procurers must foresee the budget in the proposal to purchase at least one solution during the PCP. In the second case, the procurers should include in the proposal a deliverable that prepares the follow-up procurement to purchase such type of solution(s) after the PCP. In the first and third case, the procurers must foresee sufficient time during the project to deploy and validate that the solutions function well after installation. In the fourth case, the procurers can use financial support to third parties to provide financial incentives to final end-users to adopt the solutions, with a maximum budget of EUR 200 000. Projects funded under this topic, which target the higher end of the budget range, should demonstrate a greater degree of ambition in terms of innovation level and/or deployment scope. The selection of the third parties to be supported under the grant will be based on an external review by independent experts of the proposed work.

Projects funded under this topic should include at least three cities of the 112 selected ones for the EU Mission on Climate-Neutral and Smart Cities⁶⁰, and the lead procurer from the buyers group should be one of these 112 cities. In addition to the buyers' group that will implement the PCP, projects are encouraged to actively cooperate with an additional group of follower cities in the preparation and follow up of the procurement, including possibly also in the testing of solutions, to smoothen faster uptake of solutions to the wider followers group. Collaboration amongst the projects financed under this topic and with the 'Climate-Neutral Smart cities' Mission Platform is essential to the increase impact and coherence of the action. Appropriate provisions for activities and resources aimed at enforcing this collaboration should be included in the work plan of the proposal. The Mission Platform will support cities with the preparatory work for the PCP. The Mission Platform will also support the upscaling and replicability of the developed solutions, and the monitoring of the impact of the projects using a common methodology and clearly established indicators. The collaboration with the Mission Platform must be formalised through a Memorandum of Understanding to be concluded as soon as possible after the project starting date. To ensure that the new solutions are appropriately identified, the projects should plan for liaising with the different other Horizon funded projects, partnerships and initiatives that promote innovation in the different domains (such as CCAM Partnership, 2ZERO Partnership, and Built4People Partnership, Circular Cities and Regions, and CIVITAS) to avoid overlaps or contradictory conclusions.

This action supports the follow-up to the July 2023 Communication on EU Missions assessment⁶¹.

⁶⁰ The EU Mission on Climate-Neutral and Smart Cities aims to deliver 100 climate-neutral and smart cities by 2030 and ensure that these cities act as experimentation and innovation hubs to enable all European cities to follow suit by 2050. On 28 April 2022, the Commission announced the 100 EU cities that will participate in the Mission. In addition, 12 cities have been selected from countries associated or expected to be associated the Horizon Europe programme.

⁶¹ COM(2023) 457 final and SWD(2023) 260 final

100 Climate-Neutral and Smart Cities by 2030: Other Actions

1. Specific Grant Agreement to the FPA to reinforce the operations of the Climate-Neutral and Smart Cities Mission Platform

Within the Framework Partnership Agreement (FPA) awarded under topic HORIZON-MISS-2021-CIT-02-03: FPA for the Climate-Neutral and Smart Cities Mission Platform, the selected consortia will be invited to submit a proposal for a Research and Innovation Action that will contribute to the implementation of the last three years of the action plan defined in the above FPA.

Expected Outcome: Project results are expected to contribute to all the following expected outcomes:

- Reinforce services aimed at supporting the implementation and iteration of the Climate City Contracts (CCCs) of the cities selected to participate in the Mission through the Call for Expression of Interest;
- Provide basic services targeted at cities falling under the second objective of the Mission as well as cities that applied to the Call for Expression of Interest, committed to the climate-neutrality target by 2030 but were not eventually selected in the final list;
- Support cities in the implementation of their investment plans through tailored advice and assistance offered by the **Climate City Capital Hub** and the **City Finance Specialists**. This activity builds on synergies between the Adaptation and Cities Missions, supporting cities in finding financing solutions for both mitigation as well as adaptation projects⁶²;
- Assist cities with **innovative and strategic procurement**, including joint procurement with other cities, bridging with EU mechanisms and collaborating with national platforms on procurement, for example through regulatory sandboxes;
- Provide **monitoring and reporting** on the implementation of the CCCs;
- Expand and regularly update the **open-source services of the online platform**, accessible to all cities;
- Carry out **mutual learning programmes** that support cities' move towards climate neutrality, building on the seasonal schools and on the EU Skills Academies under the Union of Skills, adopting a needs-based approach, responding to city requests;
- Foster **mutual learning and exchange of good practice** through for instance mentoring and twinning actions including both cities selected to participate in the Mission and mission-minded cities, in particular cities that are part of national Cities Mission networks;

⁶² For this purpose, the Adaptation Mission is financially contributing to the *Climate City Capital Hub*.

- Provide **analyses and briefs** to the European Commission, including ad hoc requests;
- Establish **cooperation and regular exchange with the R&I projects** that are and will be funded under the Climate-neutral and Smart Cities Mission Work Programme in order to identify complementarities, avoid potential overlaps and ensure synergies where relevant, to the benefit of the participating cities. This collaboration should be formalised through a Memorandum of Understanding with the relevant projects and initiatives;
- Maintain the structures for the **completeness check of potential CCC** submissions by mission-minded cities;
- Carry out **reviews of CCC iterations** submitted by Mission cities and report findings and recommendations to the Commission;
- Ensure delivery of the 2030 objectives and provide for longer term **sustainability of the tools and the portal** developed beyond the grant, and help ensuring the path towards climate-neutrality by 2050 for Mission-minded cities;
- Foster **collaboration between cities and (local) industry** to engage relevant actors in climate-neutrality efforts, building on the work of the Intelligent Cities Challenge (ICC), notably on Local Green Deals and capacity building tools, such as a [Blueprint on Local Green Deals](#); the [EU Academy on Local Green Deals](#); the Cities Guide on reskilling of local workforce; the Renovation wave in practice; and the [Tech4Good marketplace](#) with over 180 labelled digital and clean tech solutions deployed in cities.
- Expand **synergies with other initiatives** such as the **Covenant of Mayors** and the **Green City Accord**;
- Ensure appropriate continuation and reinforcement – in a Cities Mission context – of the services and support offered by the **Smart Cities Marketplace**, especially catering for small and mid-sized cities as well as Mission-minded cities:
 - o **Reinforcing the interaction with energy policy**, incl. the upcoming Citizens Energy Package and local heating and cooling plans;
 - o Complementing the activities of the Climate City Capital Hub, in particular by developing a **long-term relationship with a group of selected small and mid-sized (Mission-minded) cities** and guiding them through the process from development of a bankable project to closing the financing deal;
 - o Reinforcing project development by supporting the transition **from the pre-financing to the financing stage**;
 - o Identifying possibilities of **scaling-up** of solutions and investments;

- o Ensuring a **seamless integration with other services provided by the Mission Platform at front side**, whilst addressing different target groups with **tailored approaches at the backend**;
- o **Expanding the pool of engaged investors and** the recently established **pool of solution providers**;
- o Developing non-city developers' role, e.g. **local solution providers as project leads** or facilitators;
- o Position the Smart Cities Marketplace as part of the **Knowledge Repository of the Mission Platform portal**, promoting it as a repository of good practices.

Expected Impact: Proposals should set out a credible pathway to contributing to:

- Supporting the implementation of the Climate-Neutral and Smart Cities Mission.
- Accelerating the transition of cities towards climate-neutrality, including small and mid-sized ones under the Cities Mission's second objective.

Scope: This action aims at ensuring the Mission Platform's continued full operational capacity addressing and developing the actions needed to implement the relevant building blocks of the Framework Partnership Agreement (FPA) for the Climate-Neutral and Smart Cities Mission Platform while considering the lessons learned and the new priorities that emerged from the past years of its implementation.

The Mission Platform will assist the cities that were selected⁶³ as a result of the open Call for Expression of Interest which was launched in November 2021 and resulted in 377 expressions of interest from cities in all 27 EU Member States and from 9 associated countries. These cities respond to the first objective of the Mission to deliver at least 100 climate-neutral and smart European cities by 2030.

Cities that are not yet able to commit to the Mission's timeline but are willing to commit to accelerate their transition towards climate neutrality within a longer timeframe following the Cities Mission basic principles, will also receive basic support from the Mission Platform, including services offered by the Smart Cities Marketplace and under specific consideration of the signatories of the Covenant of Mayors. These cities respond to the second objective of the Mission to ensure that the cities responding to the first objective act as experimentation and innovation hubs to put all European cities in a position to become climate-neutral by 2050.

The Mission Platform should build on existing actions, including relevant ones developed through Horizon 2020 and Horizon Europe projects. It should collaborate closely with ongoing initiatives that have developed knowledge and expertise, in particular with the Covenant of Mayors and their methodologies and processes co-developed with the JRC, and the Covenant Community Group of City Practitioners.

⁶³

https://ec.europa.eu/commission/presscorner/detail/en/IP_22_2591

The Mission Platform should also make appropriate arrangements, either among partners or via sub-contracting, to assure continuity of the services and support provided by the Smart Cities Marketplace, producing synergies in particular with the activities of the Climate City Capital Hub and the City Finance Specialists.

Other assets of the Smart Cities and Communities context, including Energy Communities and Living-in.eu, the data space for smart communities, and the Common Services Platform, should be factored in. This should be done with regard to engaging public, private, and civil society stakeholders in supporting project financing and implementation, as well as promoting shared standards and technical specifications to facilitate data exchange and ensure interoperability of solutions. Synergies should be ensured with the European Urban Initiative of the Cohesion Policy, the Urban Agenda for the EU, and actions funded under the DIGITAL European Programme.

The Mission Platform will coordinate with the European Commission to ensure that advice and support provided to cities remains aligned to the latest policies and initiatives and makes full use of available tools and services provided or supported by the Commission.

In addition, it will draw in national-level support and expertise through close cooperation with the Cities Mission's national networks, established under the calls HORIZON-MISS-2021-CIT-01-01 and HORIZON-MISS-2024-CIT-02-01.

The general conditions, including admissibility conditions, eligibility conditions, award criteria, evaluation and award procedure, legal and financial set-up for grants, financial and operational capacity and exclusion, and procedure are provided in parts A to G of the General Annexes.

This action supports the follow-up to the July 2023 Communication on EU Missions assessment⁶⁴.

Specific conditions:

The evaluation committee will be partially composed by representatives of EU institutions.

Form of Funding: Grants not subject to calls for proposals

Type of Action: Specific grant agreement awarded without call for proposals in relation to a Framework Partnership Agreement

Indicative timetable: Second quarter 2026

Indicative budget: EUR 50.00 million from the 2026 budget⁶⁵

⁶⁴ COM(2023) 457 final and SWD(2023) 260 final

⁶⁵ Of which EUR 50.00 million from the 'Climate, Energy and Mobility' budget.

2. Financial advisory services and technical assistance to Mission cities

This action aims at supporting the provision of financial advisory services and technical assistance to the 112 cities selected as part of the Climate-neutral and smart cities Mission through its Call for Expression of Interest with the objective to develop and subsequently implement their investment strategy for becoming climate-neutral. Through a top-up of existing activities and advisory structures such as the European Local Energy Assistance (ELENA), Mission cities will receive targeted support including e.g. technical studies, energy audits, business plans and financial advisory, legal advice, tendering procedure preparation, project bundling, project management.

The action will be implemented through the existing advisory agreement with the EIB Group for the implementation of the InvestEU Advisory Hub.

This action supports the follow-up to the July 2023 Communication on EU Missions assessment⁶⁶.

Legal entities:

EIB, 98-100, boulevard Konrad Adenauer L-2950 Luxembourg

Form of Funding: Indirectly managed actions

Type of Action: Indirectly managed action

Indicative timetable: First quarter 2026

Indicative budget: EUR 20.00 million from the 2026 budget⁶⁷

3. Dissemination and information activities

Communication activities such as meetings, conferences, out-reach communication events/papers/materials and publications should support dissemination of knowledge and information to relevant stakeholders.

Form of Funding: Procurement

Type of Action: Public procurement

Indicative timetable: Second quarter 2026

Indicative budget: EUR 0.05 million from the 2026 budget⁶⁸

⁶⁶ COM(2023) 457 final and SWD(2023) 260 final

⁶⁷ Of which EUR 20.00 million from the 'Climate, Energy and Mobility' budget.

⁶⁸ Of which EUR 0.05 million from the 'Climate, Energy and Mobility' budget.

4. Support to the implementation of the Urban Transitions Mission of Mission Innovation

The Urban Transitions Mission⁶⁹ is an initiative co-led by the Commission, as member of Mission Innovation on behalf of the European Union, the Global Covenant of Mayors and the Joint Programming Initiative Urban Europe (the transnational R&I funding network behind the co-funded Horizon Europe Partnership DUT). It aims at working with a cohort of up to 300 cities worldwide to demonstrate by 2030 integrated pathways towards holistic, people-centred urban transitions built around clean energy and innovative net-zero carbon solutions. Activities will include the promotion of capacity building, deep demonstrators and enhanced R&D investment that take into account different forms of innovation and challenge-based typologies of different urban environments.

This grant will be awarded without a call for proposals to the legal entity identified below as the Global Covenant of Mayors. On account of its technical competence, its high degree of specialisation and for its role as co-lead of the Urban Transitions Mission, the Global Covenant of Mayors will continue to provide the services of the Mission Director⁷⁰, responsible for the coordination of mission activities, the involvement of Mission Innovation members and partners including through facilitating communication activities, meetings and exchange of experience, the organisation of the annual innovation summit and the engagement of stakeholders towards the successful implementation of the mission statement.

Specific conditions

Legal and financial set-up of the Grant Agreements: The rules are described in General Annex G. The following exceptions apply:

- Eligible costs will take the form of a lump sum as defined in the Decision of 7 July 2021 authorising the use of lump sum contributions under the Horizon Europe Programme – the Framework Programme for Research and Innovation (2021-2027) – and in actions under the Research and Training Programme of the European Atomic Energy Community (2021-2025)⁷¹.

Legal entities:

Global Covenant of Mayors as part of the Foreningen C40 Cities Climate Leadership Denmark, Rådhusstræde 6, 2., 1466 København K, Denmark

Form of Funding: Grants not subject to calls for proposals

⁶⁹ <https://urbantransitionsmission.org/>

⁷⁰ Currently supported through Grant Agreement n. 101102296 MI UTM - A grant to support the Mission Director and the Annual Innovation Summit of the Urban Transitions Mission under Mission Innovation.

⁷¹ This [decision](#) is available on the Funding and Tenders Portal, in the reference documents section for Horizon Europe, under ‘Simplified costs decisions’ or through this link: https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/guidance/ls-decision_he_en.pdf

Type of Action: Grant awarded without call for proposals according to Financial Regulation Article 195 (f)

The general conditions, including admissibility conditions, eligibility conditions, award criteria, evaluation and award procedure, legal and financial set-up for grants, financial and operational capacity and exclusion, and procedure are provided in parts A to G of the General Annexes

Indicative timetable: First quarter 2026

Indicative budget: EUR 1.00 million from the 2026 budget⁷²

5. Financial advisory services and technical assistance to Mission cities

This action aims at supporting the provision of financial advisory services and technical assistance to the 112 cities selected as part of the Climate-neutral and smart cities Mission through its Call for Expression of Interest with the objective to develop and subsequently implement their investment strategy for becoming climate-neutral. Through a top-up of existing activities and advisory structures such as the European Local Energy Assistance (ELENA), Mission cities will receive targeted support including e.g. technical studies, energy audits, business plans and financial advisory, legal advice, tendering procedure preparation, project bundling, project management.

The action will be implemented through the existing advisory agreement with the EIB Group for the implementation of the InvestEU Advisory Hub.

This action supports the follow-up to the July 2023 Communication on EU Missions assessment⁷³.

Legal entities:

EIB, 98-100, boulevard Konrad Adenauer L-2950 Luxembourg

Form of Funding: Indirectly managed actions

Type of Action: Indirectly managed action

Indicative timetable: First quarter 2027

Indicative budget: EUR 20.00 million from the 2027 budget⁷⁴

6. Scientific and technical services to the Climate-Neutral and Smart Cities Mission

The Joint Research Centre (JRC) has provided scientific and technical support to the preparatory and early implementation phases of the Climate-Neutral and Smart Cities Mission, hereafter referred to as the Cities Mission. The purpose of this action is to maintain

⁷² Of which EUR 1.00 million from the 'Climate, Energy and Mobility' budget.

⁷³ COM(2023) 457 final and SWD(2023) 260 final

⁷⁴ Of which EUR 20.00 million from the 'Climate, Energy and Mobility' budget.

continued scientific and technical support throughout the implementation phase of the Mission aiming at achieving climate-neutrality in the cities participating in the Cities Mission by 2030 and in all other EU cities by 2050, in line with the European Green Deal objectives. The activities will provide extended data, methodologies and analysis for accelerating the transition towards climate-neutrality throughout European cities while also assessing the progress and overall impact of the Cities Mission. This activity will be implemented in close coordination with the Commission's Mission Team and the Mission Owners' Group as well as in collaboration, where relevant, with the Mission Platform.

Type of Action: Provision of technical/scientific services by the Joint Research Centre

Indicative timetable: First quarter 2027

Indicative budget: EUR 0.50 million from the 2027 budget⁷⁵

⁷⁵ Of which EUR 0.50 million from the 'Climate, Energy and Mobility' budget.

EU Missions' Joint Calls

Proposals are invited against the following topic(s):

HORIZON-MISS-2026-06-01-CIT-NEB-B4P: Introducing circular economy models in the construction sector, from buildings to city scale

Call: Joint Call between the Climate-Neutral and Smart Cities Mission, the New European Bauhaus and the Build4People Partnership	
Specific conditions	
<i>Expected EU contribution per project</i>	The Commission estimates that an EU contribution of around EUR 9.50 million would allow these outcomes to be addressed appropriately. Nonetheless, this does not preclude submission and selection of a proposal requesting different amounts.
<i>Indicative budget</i>	The total indicative budget for the topic is EUR 38.00 million.
<i>Type of Action</i>	Innovation Actions
<i>Eligibility conditions</i>	<p>The conditions are described in General Annex B. The following exceptions apply:</p> <p>The following additional eligibility criteria apply:</p> <p>At least three cities, each from a different Member State or Associated Country, must participate as beneficiaries. At least one of the three cities must be one of the 112 cities selected for the EU Mission on Climate-neutral and Smart Cities⁷⁶.</p>
<i>Technology Readiness Level</i>	Activities are expected to achieve TRL 6-8 by the end of the project – see General Annex B.
<i>Legal and financial set-up of the Grant Agreements</i>	<p>The rules are described in General Annex G. The following exceptions apply:</p> <p>Grants awarded under this topic will be linked to the following action(s):</p>

⁷⁶ The EU Mission on Climate-Neutral and Smart Cities aims to deliver 100 climate-neutral and smart cities by 2030 and ensure that these cities act as experimentation and innovation hubs to enable all European cities to follow suit by 2050. On 28 April 2022, the Commission announced the 100 EU cities that will participate in the Mission. In addition, 12 cities have been selected from countries associated or expected to be associated the Horizon Europe programme.

	<p>HORIZON-MISS-2021-CIT-02-03</p> <p>Collaboration with the Cities Mission Platform⁷⁷ is essential and projects must ensure that appropriate provisions for activities and resources aimed at enforcing this collaboration are included in the work plan of the proposal. The collaboration with the Cities Mission Platform must be formalized through a Memorandum of Understanding to be concluded as soon as possible after the project starting date.</p> <p>Eligible costs will take the form of a lump sum as defined in the Decision of 7 July 2021 authorising the use of lump sum contributions under the Horizon Europe Programme – the Framework Programme for Research and Innovation (2021-2027) – and in actions under the Research and Training Programme of the European Atomic Energy Community (2021-2025)⁷⁸.</p>
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Expected Outcome: Project results are expected to contribute to all of the following expected outcomes:

- Measurable reduction in the energy and other resources use and the whole life-cycle GHG emissions of buildings⁷⁹ and building stock (residential and non-residential) by introducing circular economy activities at building, district and city level;
- Measurable reduction in the material footprint of buildings and building stock;
- New and replicable business models for increased application of circularity principles in buildings and construction products.

Scope: Applying circularity principles in the construction sector at building, district and city level can reduce the whole life-cycle GHG emissions and support more efficient resource use of the building stock, and help deliver climate-neutral and smart cities, and a more sustainable built environment. To achieve this, there is a need for tools, solutions and associated business models with market potential that facilitate the adoption of inclusive circular construction economy models, as well as a more efficient use of buildings, ultimately reducing the need to extract raw materials

Proposals are expected to address all of the following:

- Develop and demonstrate tools and solutions at district or city level to support the introduction of circularity principles in the construction sector, and quantify their

⁷⁷ Set up by Horizon 2020 project NetZeroCities - Accelerating cities' transition to net zero emissions by 2030, Grant Agreement n. 101036519, and scaled up through topic *HORIZON-MISS-2021-CIT-02-03: Framework Partnership Agreement (FPA) for the Climate-Neutral and Smart Cities Mission Platform*.

⁷⁸ This [decision](https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/guidance/ls-decision_he_en.pdf) is available on the Funding and Tenders Portal, in the reference documents section for Horizon Europe, under 'Simplified costs decisions' or through this link: https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/guidance/ls-decision_he_en.pdf

⁷⁹ See Article 2(24) of Directive (EU) 2024/1275

impacts (for example: urban mining; reuse and recycling of construction products and materials and other resources, use of secondary biobased materials; building's innovative and adaptive design, renovation, and repurposing of buildings in line with waste prevention and circular economy principles).

- Develop and demonstrate solutions for the diagnosis and performance characterisation of already used construction products and demolition waste, in terms of their condition and potential reuse, and to create inventories of reclaimed products and materials, as well as appropriate business models including marketplace tools with components and material banks.
- Develop and demonstrate whole life-cycle GHG emissions inventories of buildings to support decision-making and public actions in line with the Energy Performance of Buildings Directive (EPBD) recast.
- Contribute to reducing regulatory barriers and developing standards, where relevant.
- Ensure the integration of different value chains, active involvement of all relevant construction sector stakeholders, policy-makers and the people impacted by the solutions developed, including SMEs, building owners, local authorities and civil society.
- Demonstrate the proposed tools and solutions in at least three cities, each from a different Member State or Associated Country, including with a view to showcase potential for large scale cross-border re-use of construction materials and products. The cities must participate as beneficiaries. At least one of the three cities must be one of the 112 cities participating in the EU Mission on Climate-Neutral and Smart Cities.

Under the guidance of the relevant Executive Agency and with input of the European Commission, the selected projects will engage in clustering activities with other relevant projects supported under the Cities Mission to promote synergies and complementarities.

This topic implements the co-programmed European Partnership on 'People-centric sustainable built environment' (Built4People). As such, projects resulting from this topic will be expected to contribute to the objectives of Built4People and its network of innovation clusters⁸⁰ and report on results to Built4People in support of the monitoring of its KPIs.

This topic also implements the New European Bauhaus (NEB). As such, projects resulting from this topic will be expected to interact with the NEB hub for results and impact, the NEB Community, and other relevant actions of the NEB initiative through sharing information, best practice, and results.

This action supports the follow-up to the July 2023 Communication on EU Missions assessment⁸¹.

⁸⁰ https://built4people.eu/b4pic_network

⁸¹ COM(2023) 457 final and SWD(2023) 260 final

HORIZON-MISS-2027-06-01-CLIMA-CIT-NEB: Urban nature: supporting restoration of urban ecosystems, along urban transport networks and in the built environment

Call: Joint Call between the Climate-Neutral and Smart Cities Mission and the Adaptation to Climate Change Mission	
Specific conditions	
<i>Expected EU contribution per project</i>	The Commission estimates that an EU contribution of around EUR 10.00 million would allow these outcomes to be addressed appropriately. Nonetheless, this does not preclude submission and selection of a proposal requesting different amounts.
<i>Indicative budget</i>	The total indicative budget for the topic is EUR 40.00 million.
<i>Type of Action</i>	Innovation Actions
<i>Eligibility conditions</i>	<p>The conditions are described in General Annex B. The following exceptions apply:</p> <p>The following additional eligibility criteria apply:</p> <p>Entities from at least four cities, each from a different Member State or Associated Country, must participate as beneficiaries. At least one of the four cities must be one of the 112 cities selected for the EU Mission on Climate-neutral and Smart Cities⁸² and at least one must be a signatory to the Adaptation Mission Charter⁸³.</p>
<i>Legal and financial set-up of the Grant Agreements</i>	<p>The rules are described in General Annex G. The following exceptions apply:</p> <p>Eligible costs will take the form of a lump sum as defined in the Decision of 7 July 2021 authorising the use of lump sum contributions under the Horizon Europe Programme – the Framework Programme for Research and Innovation (2021-2027) – and in actions under the Research and Training Programme of the European Atomic Energy Community (2021-2025)⁸⁴.</p> <p>Grants awarded under this topic will be linked to the following</p>

⁸² The EU Mission on Climate-Neutral and Smart Cities aims to deliver 100 climate-neutral and smart cities by 2030 and ensure that these cities act as experimentation and innovation hubs to enable all European cities to follow suit by 2050. On 28 April 2022, the Commission announced the 100 EU cities that will participate in the Mission. In addition, 12 cities have been selected from countries associated or expected to be associated the Horizon Europe programme.

⁸³ See the list of Charter Signatories <https://climate-adapt.eea.europa.eu/en/mission/the-mission/regions-and-local-authorities>

⁸⁴ This [decision](#) is available on the Funding and Tenders Portal, in the reference documents section for Horizon Europe, under ‘Simplified costs decisions’ or through this link: https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/guidance/ls-decision_he_en.pdf

	<p>action(s):</p> <p>Collaboration with the Cities Mission Platform and the Mission Adaptation's Platform is essential and projects must ensure that appropriate provisions for activities and resources aimed at enforcing this collaboration are included in the work plan of the proposal. The collaboration with the Mission Platform must be formalized through a Memorandum of Understanding to be concluded as soon as possible after the project starting date.</p>
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Expected Outcome: In support of the implementation of the Nature Restoration Regulation, the Adaptation and Cities Missions, and the New European Bauhaus, projects are expected to contribute to all of the following outcomes:

- Development of approaches, tools and methods, on how and where to restore, increase and maintain urban green space and tree canopy cover to achieve the greatest positive impacts - on climate mitigation and adaptation, biodiversity, soil, air and water quality, quality of life, disaster resilience, and human health.
- Uptake and deployment of solutions to map, restore, increase and maintain urban green space and tree canopy cover, via pilot sites in lead cities, including along urban transport networks⁸⁵.
- Monitoring, evaluation and assessment of the environmental, economic, social and health benefits of the solutions deployed in pilot sites.
- Dissemination of results to follower cities and relevant target groups in other countries and cities.

Scope: To address the expected outcomes, individual projects will be required to address all the following aspects, with at least three in each pilot site:

- Develop and test approaches, tools and methods to understand how different patterns of urban green space and tree canopy cover impact on local temperature regulation / heat island effect, biodiversity, water scarcity, stormwater and landslide management, local air quality; and how changing / increasing the distribution / quantity / connectivity of urban green space and tree canopy cover could help build more resilient and biodiverse urban ecosystems.
- Identify obstacles and barriers limiting the development of urban green spaces and tree planting / maintenance, including interface issues between green structures and underground infrastructure (underground pipes, etc.) and overall root growth and survival, water scarcity and the shortage of supplies of native tree seedlings. Develop

⁸⁵ Urban transport networks can include streets, roads, car parks, public transport systems, pavements, waterways and other non-motorized transport infrastructure.

innovative solutions that address such barriers and ensure the sustainability of urban green spaces and trees.

- Develop innovative measures and practices to increase urban green space and tree canopy cover, with consideration of what types of trees or other plants are best suited to enhancing biodiversity, supporting climate mitigation and adaptation, improving human health and quality of life while ensuring connectivity to avoid isolated or fragmented solutions.
- Explore multifunctional solutions, addressing infrastructure and urban planning that can bring co-benefits on aspects such as managing stormwater, enhancing biodiversity, providing recreational spaces, sheltering from extreme weather, reducing inequitable access to nature, noise reduction.

All projects are required to

- deploy innovative measures and practices to increase urban green spaces and/or tree canopy cover in at least two pilot sites in two *lead* cities, including at least one pilot site along an urban transport network or in the built environment.
- involve local communities, including disadvantaged groups, and local stakeholders, including public and private land and property owners, in the design and development of these measures and practices
- monitor, evaluate and assess the environmental, economic, social and health impacts of the measures taken in the pilot sites⁸⁶.
- outline plans for ensuring the sustainability and legacy of the efforts beyond the project's duration.

Each project funded under this topic must involve entities⁸⁷ from at least four cities, each from a different Member State or Associated Country. At least one of the four cities must be one of the 112 cities selected for the EU Mission on Climate-neutral and Smart Cities⁸⁸ and at least one must be a signatory to the Adaptation Mission Charter⁸⁹. Pilot sites should be created in at least two *lead* cities, and structured engagement should take place with at least two *follower* cities to share best practices. Proposals should review, build on and connect to

⁸⁶ Environmental impacts should include at least: air-water-soil quality, ambient temperature, biodiversity, noise. Economic impacts should include at least: energy costs, maintenance costs, impact on local businesses. Social impacts should include at least citizen perception, public health, personal safety.

⁸⁷ For example competent authorities for environment, transport, planning or housing.

⁸⁸ The EU Mission on Climate-Neutral and Smart Cities aims to deliver 100 climate-neutral and smart cities by 2030 and ensure that these cities act as experimentation and innovation hubs to enable all European cities to follow suit by 2050. On 28 April 2022, the Commission announced the 100 EU cities that will participate in the Mission. In addition, 12 cities have been selected from countries associated or expected to be associated the Horizon Europe programme.

⁸⁹ See the list of Charter Signatories <https://climate-adapt.eea.europa.eu/en/mission/the-mission/regions-and-local-authorities>

other relevant projects funded by Horizon Europe and Horizon 2020, to avoid overlaps or contradicting conclusions⁹⁰.

To increase impact and coherence, proposals should include a mechanism and the resources to establish operational links and collaboration/coordination with the 'Climate-Neutral Smart cities' Mission platform, the EU Mission on Adaptation to Climate Change's Implementation Platform and the Coordination and Support Action 'New European Bauhaus hub for results and impact'. Collaboration with these Platforms is essential, and projects must ensure that appropriate provisions for activities and resources aimed at enforcing this collaboration are included in the work plan of the proposal.

Under the guidance of the relevant Executive Agency and with input of the European Commission, the selected projects will engage in clustering activities with other relevant projects supported under the Climate-Neutral and Smart Cities and Climate Adaptation Missions as well as the New European Bauhaus Facility to promote synergies and complementarities. Synergies should also be explored and, as appropriate, pursued with other relevant initiatives, such as the Green City Accord, European Green Capital / Leaf Awards, European Urban Initiative and the Covenant of Mayors.

This action supports the follow-up to the July 2023 Communication on EU Missions assessment⁹¹.

HORIZON-MISS-2027-06-02-CLIMA-CIT-CCRI: Deploying innovative wastewater management, treatment and valorisation solutions in European cities and regions in the context of climate change

Call: Joint Call between the Climate-Neutral and Smart Cities Mission and the Adaptation to Climate Change Mission	
Specific conditions	
<i>Expected EU contribution per project</i>	The Commission estimates that an EU contribution of around EUR 9.00 million would allow these outcomes to be addressed appropriately. Nonetheless, this does not preclude submission and selection of a proposal requesting different amounts.
<i>Indicative budget</i>	The total indicative budget for the topic is EUR 27.50 million.
<i>Type of Action</i>	Innovation Actions
<i>Eligibility conditions</i>	The conditions are described in General Annex B. The following exceptions apply: The following additional eligibility criteria apply:

⁹⁰ Including *inter alia* projects under the call HORIZON-MISS-2023-CLIMA-CITIES-01-01 [Urban greening and re-naturing for urban regeneration, resilience and climate neutrality](#).

⁹¹ COM(2023) 457 final and SWD(2023) 260 final

	<p>Entities from at least four cities or regions, each from a different Member State or Associated Country, must participate as beneficiaries. At least one entity in each project must be from one of the 112 cities selected for the EU Mission on Climate-neutral and Smart Cities⁹² and at least one must be from a signatory to the Adaptation Mission Charter⁹³.</p>
<i>Legal and financial set-up of the Grant Agreements</i>	<p>The rules are described in General Annex G. The following exceptions apply:</p> <p>Eligible costs will take the form of a lump sum as defined in the Decision of 7 July 2021 authorising the use of lump sum contributions under the Horizon Europe Programme – the Framework Programme for Research and Innovation (2021-2027) – and in actions under the Research and Training Programme of the European Atomic Energy Community (2021-2025)⁹⁴.</p> <p>Grants awarded under this topic will be linked to the following action(s):</p> <p>Collaboration with the Cities Mission Platform and the Mission Adaptation's Platform is essential and projects must ensure that appropriate provisions for activities and resources aimed at enforcing this collaboration are included in the work plan of the proposal. The collaboration with the Mission Platform must be formalized through a Memorandum of Understanding to be concluded as soon as possible after the project starting date.</p>

Expected Outcome: Projects are expected to contribute to all of the following outcomes:

- Development of innovative practices for urban wastewater management, adapted to climate change, taking into account: energy efficiency, energy and secondary raw material recovery and water reuse, including opportunities for renewable energy generation and secondary resource production, implemented at city and regional level.

⁹² The EU Mission on Climate-Neutral and Smart Cities aims to deliver 100 climate-neutral and smart cities by 2030 and ensure that these cities act as experimentation and innovation hubs to enable all European cities to follow suit by 2050. On 28 April 2022, the Commission announced the 100 EU cities that will participate in the Mission. In addition, 12 cities have been selected from countries associated or expected to be associated the Horizon Europe programme.

⁹³ See the list of Charter Signatories <https://climate-adapt.eea.europa.eu/en/mission/the-mission/regions-and-local-authorities>

⁹⁴ This [decision](#) is available on the Funding and Tenders Portal, in the reference documents section for Horizon Europe, under 'Simplified costs decisions' or through this link: https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/guidance/ls-decision_he_en.pdf

- Deployment and upscaling of treatment infrastructures and management solutions for water, storm water and wastewater in cities and regions, with positive effects on climate adaptation, biodiversity, pollution reduction, resource valorisation and energy efficiency.
- Dissemination of knowledge about innovative practices, governance and business models for integrated (waste)water management, in the context of climate change - among relevant stakeholder groups to facilitate effective replication and upscaling.
- Development of actionable insights to support European cities and regions in addressing the main administrative, governance and financing barriers for rain- and waste-water management, recovery of resources (secondary raw materials, water and energy) and their (market) valorisation.

Scope: This topic supports the implementation of the [EU Mission Climate-Neutral Smart Cities](#), [EU Mission on Adaptation to Climate Change](#) as well as the EU [Circular Cities and Regions Initiative](#) (CCRI). It aims to support the water sector in European cities and regions in accelerating their climate neutral, climate resilient and circular transition.

The recast EU Urban Wastewater Treatment Directive⁹⁵ introduces new requirements on energy neutrality at national level for urban wastewater treatment plants treating population equivalents of over 10,000 (UWWTPs). It also requires management plans for stormwater overflows, and consideration of circular economy measures to stimulate the reuse of nitrogen, phosphorus and water.

Investment in wastewater infrastructure is very costly and often focuses on wastewater collection and treatment. To optimise this investment, it is important to explore holistic approaches taking into account extreme weather events and combining land use to better manage rain run-off, wastewater characteristics to optimise recovery of resources (secondary raw materials, water and energy), and knowledge of the sewer network to avoid pollution events linked to stormwater overflows and contamination of recovered products. Adding a regional dimension could also pool resources between smaller wastewater utilities.

To address these needs, proposals will be required to develop integrated approaches to address all of the following aspects:

- Deploy nature-based solutions e.g vegetated ditches, treatment wetlands and storage ponds designed to support biodiversity and favour infiltration and where possible to harvest rainwater for reuse at city and regional level, while addressing the effects of climate change.
- Implement sustainable urban drainage principles and green-blue storm water management solutions to avoid and reduce pollution from rain and storm water, including during extreme weather events.

⁹⁵ [Directive \(EU\) 2024/3019 of the European Parliament and of the Council of 27 November 2024 concerning urban wastewater treatment \(recast\)](#)

- Implement energy efficiency and recovery technologies from sewers and/or one or multiple UWWTPs by pooling resources; this can include renewable energy from solar energy production, waste heat recovery or biogas production from sludge.
- Explore the pooling of resources at regional level to rationalise investment in resource recovery technologies and address the associated regulatory barriers through local end-of-waste criteria.
- Incorporate solutions to reuse (waste)water in the context of increased pressures on availability of water resources
- Conceptualise, implement and test possible combinations of urban wastewater treatment, valorisation and reuse processes in selected European cities and regions (the so-called “demonstrators”).
- Identify enabling conditions, e.g. legislative, regulatory, policy, governance, financing, to support the deployment of the tested solutions in other European cities and regions (the so-called “replicators”).
- Develop actionable insights that European cities/regions can use to address barriers related to wastewater reuse and valorisation, to allow further replication and upscaling.

Each project funded under this topic must involve entities from at least four cities or regions, each from a different Member State or Associated Country, with on-the-ground testing in at least two *demonstrator* cities/regions, and engagement with at least two *replicator* cities/regions to identify enabling conditions for wider deployment. In the participating cities or regions the local water management organisation should be part of the consortium. At least one entity in each project must be from one of the 112 cities selected for the EU Mission on Climate-neutral and Smart Cities⁹⁶ and at least one must be from a signatory to the Adaptation Mission Charter⁹⁷.

Under the guidance of the relevant Executive Agency and with input of the European Commission, the selected projects will engage in clustering activities with other relevant projects supported under the Climate-Neutral and Smart Cities and Climate Adaptation Missions to promote synergies and complementarities. Synergies should be explored and, as appropriate, pursued with other relevant initiatives, such as the Green City Accord, European Green Capital / Leaf, European Urban Initiative, the Covenant of Mayors Europe and the New European Bauhaus

⁹⁶ The EU Mission on Climate-Neutral and Smart Cities aims to deliver 100 climate-neutral and smart cities by 2030 and ensure that these cities act as experimentation and innovation hubs to enable all European cities to follow suit by 2050. On 28 April 2022, the Commission announced the 100 EU cities that will participate in the Mission. In addition, 12 cities have been selected from countries associated or expected to be associated the Horizon Europe programme.

⁹⁷ See the list of Charter Signatories <https://climate-adapt.eea.europa.eu/en/mission/the-mission/regions-and-local-authorities>

Proposals should ensure due consideration of the requirements of the Urban Wastewater Treatment Directive, of work performed or underway in other relevant Horizon Europe funded projects including under the Water4All co-funded partnership, and of synergies with the Hubs4Circularity initiative.

This action supports the follow-up to the July 2023 Communication on EU Missions assessment⁹⁸.

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⁹⁸ COM(2023) 457 final and SWD(2023) 260 final