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European Climate Initiative Review and 2030 Climate Neutrality Gap Report

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Summary

This report summarises the findings from Task 1.1.1 European Climate Initiative Review, which identifies the relevant existing initiatives which fall within the scope of the Climate City Contract's development and implementation, and examines the compatibility and gaps of these initiatives. It also explores how they can potentially be integrated into the Climate City Contract process.

Approval

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Abbreviations and acronyms

Acronym	Description
CCC	Climate City Contract
CoM	Covenant of Mayors (EU)
EC	European Commission
EU	European Union
EuC	Eurocities
GCA	Green City Accord
MS	Member States
SECAP	Sustainable Energy and Climate Action Plan
SUMP	Sustainable Urban Mobility Plan
VC	Viable Cities
WP	Work Package

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Keywords

NetZeroCities; Climate City Contract; Climate Neutrality; Climate Strategy; Climate Action Plans; Multi-level governance

Introduction

The Climate City Contract (CCC) is the cornerstone of the European Mission for 100 Climate-Neutral and Smart Cities by 2030, positioning cities' pathway to climate neutrality by 2030 and engaging actors locally and through a multi-level governance process. However, most cities are not starting with a blank slate and will need to incorporate existing plans and commitments into their CCC where appropriate. This Deliverable explores these plans and commitments at the European level and examines how they might be considered as part of the CCC process.

The Deliverable identifies the key relevant plans and commitments which are most likely to feature within the scope of the CCC process, filtered from a longer list of initiatives against a series of criteria. It also explores two examples of the CCC process at the national level – in Sweden and Spain – in greater detail, and briefly summarises existing national initiatives and/or collaborations between cities in several other Member States.

A CCC concept and process for the Cities Mission as part of the NetZeroCities project are still under development, so this Deliverable is an input into that task rather than drawing definitive conclusions.

Task Description

The description of Task 1.1.1 in the grant agreement is to “Map existing EU climate initiatives and processes (e.g., SECAPs, SUMPs, Climate City Contracts Sweden), conduct compatibility and gap analysis to assess how they can be integrated with a CCC process and building on related activities of the European Mission for “Climate-Neutral and Smart Cities by 2030”. Given the complexity and collaborative nature of designing the CCC concept and process, this Deliverable is focussing on the current landscape to inform overarching CCC development, rather than specifying how the plans and commitments can be incorporated into a city's CCC.

Actions

Deliverable 11.1 set out a detailed Action Plan for the delivery of NetZeroCities. Below are the actions set out for T1.1.1 and the production of D1.1. These Actions form the basis and structure of this report.

Actions	Start Date	Due Date	Responsible
<ul style="list-style-type: none"> Action 1: Identify the relevant EU/EC initiatives, including commitments and plans, guidelines and processes. 	M1	M2	Eurocities
<ul style="list-style-type: none"> Action 2: Create a template for collating the relevant data and information 	M2	M2	Eurocities
<ul style="list-style-type: none"> Action 3: Complete templates for identified EU/EC initiatives 	M2	M3	ICLEI and Eurocities

• Action 4: Identify and summarise relevant national initiatives for climate commitments and/or planning	M2	M2	Viable Cities
• Action 5: Develop case studies of existing CCC (or similar) processes	M2	M3	Viable Cities
• Action 6: Review draft	M3	M4	Eurocities
• Action 7: Finalise report	M4	M4	Eurocities

1 Methodology

In collaboration with task partners and aligned with the Actions above, a practical methodology was developed and implemented, including:

- Using task partners' expertise and desk research, a long list of initiatives at EU level was identified. A decision was made to exclude national and regional initiatives at this point, but rather to address them as part of the CCC support needs assessment (T1.3.3) where more information and analysis can be obtained directly from cities, allowing them to adapt the CCC process for their own local context. Some relevant national initiatives are also covered in Actions 4 and 5 exploring the existing CCC processes in Sweden and Spain and the summary of relevant national city collaboration and/or engagement with national governments (i.e., a pre-cursor to CCCs).
- For the EU and other relevant initiatives, they have been categorised by the type of instrument (e.g., voluntary commitment, legally required, planning, initiatives/programmes, etc).
- As there are many instruments, a set of criteria was developed to prioritise the instruments to be reviewed in more detail. While all instruments are relevant for cities to varying degrees, not all of them have a strong impact on the design and implementation of the CCCs.
- Using a combination of desk research and engagement with relevant organisations, partners completed the templates for the high priority/high impact instruments.

1.1 Selection criteria for European initiatives

Many of the initiatives identified contribute to the overall context and environment in which cities are working on climate neutrality. While these are important to climate neutrality overall, they have a limited impact on the CCC process so they have been excluded from the deeper analysis.

The key priorities for further exploration are initiatives where cities:

- Make a clear commitment to become climate neutral (or a sectoral equivalent)
- Are required to prepare and submit an action plan outlining how they will meet a commitment
- Make commitments or declarations regarding governance or citizen/stakeholder engagement that is directly or indirectly related to climate neutrality.

The EU initiatives highlighted in yellow in the table are those that meet these criteria and will be explored in greater depth in Action 3. Those highlighted in pink are not initiatives at the European level but will be explored further as future inputs into the CCC concept and process development.

1.2 European initiatives

	European	Other
Voluntary commitments	Covenant of Mayors	Race to Zero / Race to Resilience
	European Climate Pact	C40 commitments (buildings, mobility, etc)
	European Mobility Week	
	Green City Accord	
	Living-in.eu (Join, Boost, Sustain declaration)	
	Civitas Declaration	
	Circular Cities Declaration	
Legally required		
Plans / initiatives linked to commitments	SECAPs/SEAPs	
	Urban Greening Plans	
	SUMPs	
Actions / initiatives	100 Intelligent Cities Challenge	Doughnut Economics Action Lab
	100 Positive Energy Districts	
	Circular Cities & Regions Initiative	
Awards	European Green Capital / Green Leaf Awards	WWF One Planet City Challenge
	European Capital of Innovation Award	
	European Mobility Week Awards	
	CIVITAS Awards	
Other		Paris Agreement / Glasgow Pact
		SDGs

2 Template

A template for the relevant data and content was developed by the partners incorporating key background and context of the initiative, details on the scope and processes, who is involved, any fund linked to the action, future plans and how it might be relevant to the CCC development.

Name:	
Level: EU / National / Regional / Other (pls specify)	Type: Legally required / Voluntary Commitment / Initiative linked to commitment
Objectives:	
Scope: what's included? Scope 1, 2, 3 and/or other areas (incl co-benefits)	
Process: what's the process (step by step) or minimum requirements?	
Who: who is involved? What kind of network or stakeholders participate?	
Funding: is there funding linked to this action? If so, how much and from where and for what time period?	
Past: why was this initiated? What problem/issue was it trying to solve? When did it start? When is it due to end?	Future: What are the future plans for this initiative?
Relevance to Mission: how relevant is this for achieving or accelerating climate neutrality by 2030 in cities?	
Links to CCC: how could this link to the CCC?	
References/links: include links to resources and information	

3 Details of European Initiatives

3.1 Covenant of Mayors

Level: EU initiative

Type: Voluntary commitment

Objectives:

The Covenant of Mayors for Climate and Energy aims to increase support for local activities, provide a platform for greater engagement and networking by cities, and raise public awareness about adaptation and mitigation and the measures needed.

The overarching objective for the Covenant of Mayors' signatories is "2050: Towards fairer, climate-neutral Europe for all".

"We, Mayors from all over Europe, hereby step up our climate ambitions and commit to delivering action at the pace that science dictates, in a joint effort to keep global temperature rise below 1.5°C - the highest ambition of the Paris Agreement.

Our vision is that, by 2050, we will all be living in decarbonised and resilient cities with access to affordable, secure and sustainable energy. As part of the Covenant of Mayors - Europe movement, we will continue to (1) reduce greenhouse gas emissions on our territory, (2) increase resilience and prepare for the adverse impacts of climate change, and (3) tackle energy poverty as one key action to ensure a just transition."

Scope:

Scope 1 emissions

Scope 2 emissions

Adaptation, Resilience, Energy Poverty and some support for access to funding

Process:

The diagram below sets out the three-step process for cities to become signatories of the Covenant of Mayors.



The diagram below shows how cities then move from making the commitment to developing a Sustainable Energy and Climate Action Plan (SECAP - see below).



Who:

The Covenant of Mayors is an initiative of the European Commission’s Directorate-General for Energy (DG ENER) and is delivered through a service contract by a consortium including Energy Cities, Climate Alliance, Eurocities, the European Federation of Agencies and Regions for Energy and the Environment (FEDARENE), and the Council of European Municipalities and Regions (CEMR).

The Covenant has wide coverage across Europe, and currently has 10,791 signatories.

Covenant community



Funding:

There is no direct funding available to cities, although participants in the twinning programme have their travel expenses covered. The process of becoming a signatory is at the city’s expense.

Past:

The Covenant of Mayors was launched in 2008 in Europe with the ambition to gather local governments voluntarily committed to

Future:

DG ENER and DG CLIMA will continue to support cities through the covenant and adapt the support to the new ambitions for 2050. The current service contract for



<p>achieving and exceeding the EU climate and energy targets.</p> <p>Not only did the initiative introduce a first-of-its-kind bottom-up approach to energy and climate action, but its success quickly went beyond expectations.</p> <p>In 2014, the European Commission launched the Mayors Adapt initiative. Based on the same principles as the Covenant of Mayors, this sister initiative was focusing on adaptation to climate change. Mayors Adapt invited local governments to demonstrate leadership in adaptation, and was supporting them in the development and implementation of local adaptation strategies.</p> <p>The Covenant of Mayors and Mayors Adapt initiatives officially merged. The new Covenant of Mayors for Climate & Energy - the goals and direction of which were defined with cities through a consultation process - was both more ambitious and broad-ranging: signatory cities pledged to actively support the implementation of the EU 40% GHG-reduction target by 2030 and agree to adopt an integrated approach to climate change mitigation and adaptation and to ensure access to secure, sustainable and affordable energy for all.</p> <p>In April 2021, the Covenant added a new commitment for cities to sign - climate neutrality by 2050.</p>	<p>delivery of the Covenant of Mayors support ends in December 2023.</p>
<p>Relevance to Mission:</p> <p>The commitment to climate neutrality by 2050 presents important context for many cities, with the need to speed up the achievement of that ambition when joining the Mission.</p>	
<p>Links to CCC:</p> <p>Becoming a signatory to the Covenant of Mayors sets some early foundations for the CCC, although the CCC process will require a more ambitious target, climate neutrality by 2030, and engagement with citizens and stakeholders, as well as an Investment Plan.</p>	
<p>References/links:</p> <p>Official commitment document - https://www.covenantofmayors.eu/component/attachments/?task=download&id=1017</p>	



For more information about the Covenant of Mayors - <https://www.eumayors.eu/>

3.2 Green City Accord

Level: EU	Type: Voluntary commitment
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Objectives: The Green City Accord (GCA) is a European Commission initiative to mobilise European mayors committed to safeguarding the natural environment. It aims to improve the quality of life of all Europeans, and accelerate the implementation of relevant EU environmental laws at the local level. By joining the Accord, cities commit to step up their efforts in five areas - water, air, nature and biodiversity, circular economy and waste, and noise - by 2030.

Scope:
Achieving the GCA goals will require taking actions and measures that are also relevant for the climate neutral transformation process. For example, the measures cities will take to improve air quality under the Green City Accord (ie. creating low/zero emission zones, making transport cleaner, promoting energy efficient buildings) are also relevant to climate change mitigation; nature-based solutions can deliver benefits to several areas of the Green City Accord, while at the same time contributing to climate change adaptation and/or mitigation; certain measures related to sustainable energy, mobility and the greening of buildings can simultaneously deliver on the objectives of both the Green City Accord and the Mission. Other relevant measures include tree planting, reducing waste incineration, identify and protect quiet areas, among many others.

Process:
City authorities willing to formally join the Green City Accord are requested to go through the approval of the municipal council, followed by the signature of the [GCA political commitment document](#) by the mayor or equivalent. A political commitment is required to ensure long-term support and resource mobilisation for the objectives of the initiative. Signatories are required to submit a baseline report two years after signing. This report should contain information on the baseline situation, the targets which the city has set for itself to meet by 2030 and an overview of the measures and actions that the city intends to take to achieve the targets. Cities then need to submit progress reports every three years. To monitor progress towards the Green City Accord’s objectives and allow for comparability across cities, a small set of mandatory [indicators](#) has been established. All signatories will use these indicators for reporting purposes.

Who:
The Green City Accord is a movement of European cities committed to safeguarding the environment. The initiative is funded by the Directorate-General for Environment (DG ENV) and is being implemented by a consortium composed of Eurocities, ICLEI and the Council of European Municipalities and Regions.

Funding:
There is no funding currently.

Past:	Future:
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<p>The Green City Accord was launched in October 2020 with the aim to improve implementation of the EU environmental acquis, modelled on the Covenant of Mayors.</p> <p>The Green City Accord was created to help support the delivery of the European Green Deal and the UN Sustainable Development Goals.</p> <p>It covers five areas of environmental policy: air quality; water quality and efficiency; nature and biodiversity; waste and circular economy; noise.</p> <p>The initiative now has 86 signatories from around 17 countries.</p>	<p>Future plans are not yet known. The current service contract has been extended until end 2022.</p>
<p>Relevance to Mission:</p> <p>The Green City Accord covers sectors that are fundamental for climate action, or are areas of co-benefits. Identifying and building synergies between climate and environmental action can help plan and implement actions and measures that deliver benefits to climate mitigation, adaptation and to one or more environmental areas of the GCA. There are therefore significant opportunities to create synergies and strengthen cooperation with the GCA.</p>	
<p>Links to CCC:</p> <p>The Green City Accord monitoring framework, commitment process and support structure could serve as inspiration for the CCC and the lessons learned could be used to build on existing work.</p>	
<p>References/links: include links to resources and information</p> <ul style="list-style-type: none"> • Project website: https://ec.europa.eu/environment/green-city-accord_fr • Project leaflet: https://ec.europa.eu/environment/system/files/2021-04/GCA-leaflet-EN-www.pdf • Political commitment document: https://ec.europa.eu/environment/system/files/2021-01/Green%20City%20Accord%20political%20commitment.pdf • Mandatory indicators: https://ec.europa.eu/environment/system/files/2021-05/GCA_mandatory%20indicators_overview_FINAL.pdf 	

<h3>3.3 Living-in.eu / Join, Boost Sustain Declaration</h3>	
<p>Level: EU</p>	<p>Type: Voluntary commitment – governance initiative</p>
<p>Objectives:</p>	



Living-in.EU aims for a cohesive, digital Europe where every city and community can enjoy the economic and social benefits of a green and digital transformation. All over Europe, cities and communities develop, use and share trustworthy technology which is applied to create green and digital solutions that help their citizens and businesses prosper.

To accomplish that, Living-in.EU sets the following objectives:

- Support and accelerate the development and scaling up of green and digital solutions such as inter-operable digital platforms, data spaces and (local) digital twins in and for cities and communities
- Measure impact of green and digital solutions to achieve the UN sustainable development goals in an EU context (in line with the ambition of [Europe’s Digital Decade](#))
- Create awareness and increase the capacity of cities and communities involved in the use of digital and green solutions to be more effective and create results for the long term and embrace the digital transformation.

Scope: what’s included? Scope 1, 2, 3 and/or other areas (incl co-benefits)

Living-in.EU doesn’t specifically address any emissions scope however it does contribute to governance and actions which can enable decarbonisation.

Process:

Cities sign the [Living-in.EU declaration](#) which commits them to multi-level governance and undertaking a series of digital actions. Involvement of all signatories to develop knowledge sharing, capacity building, technical meetings, monitoring and measuring tools and communication activities to advance the uptake and upscale of green and digital solutions.

Who:

Living-in.EU is an initiative of Eurocities, Open and Agile Smart Cities (OASC), European Network of Living Labs (ENoLL) as core partners, with support from the European Commission (DG CNECT, GROW, Regio, ENER), and the Committee of the Regions.

Funding:

The initiative was launched two years ago and counts on the voluntary commitments of all the networks involved as well as of the signatories.

The Digital Europe Programme call on the governance of the Living-in.EU initiative will provide €2 million funding spread over 4 years to the winning consortium for supporting with the governance of the initiative, including managing the secretariat.

Past:

The rationale behind the launch of this multi-level governance collaboration is to maximise the benefits of digital solutions scaling them up across all cities and communities in the EU. To achieve this, a number of legal and financial barriers, as well as technical and capacity building challenges, must be overcome.

Future:

After two years of work, the initiative will receive direct EU financial support through the Digital Europe Programme with a specific call on the governance of the Living-in.EU and several other related calls such as on data spaces and advancing digital transformation in smart communities.



<p>The initiative was launched in December 2019 in Oulu with the signing of the political declaration, its principles and commitments at financial, technical, legal, education and capacity building, and monitoring and measuring level.</p>	<p>The funding for the governance of the initiative is meant to:</p> <ul style="list-style-type: none"> • Grow the membership of the movement, both signatories and supporters, so that all Member States are represented at national, regional and local levels and a significant proportion of the EU population is covered; • Grow the number of technology companies as supporters that are active in supplying local digital twins and/or their components and organised around a joint vision compatible with Living-in.EU principles; • Support the co-creation work of the movement and managing its sub-groups (financial; technical; legal; education and capacity building; monitoring and measuring; communication and marketing) and iconic projects teams (including, but not limited to Local Data Platforms, Local Digital Twins, Citizen Cards and the Digital Neighbourhood Instrument); • Bring consortium members' expertise to all sub-group and iconic project domains to further develop the Living-in.eu specifications and assets and to create new ones in close cooperation with signatories and supporters; • Foster the take up of Living-in.eu specifications and assets to increase the number of interoperable Urban Data Platforms in the EU based on living-in.eu commonly agreed open standards/specifications as well as the number of Urban Digital Twins; • Support the engagement of cities and communities with other relevant DEP actions for smart cities and communities as well as other EU activities and programmes in related areas (including, but not limited to the Mission on Climate Neutral and Smart Cities, the Mission on Adaptation to Climate Change, the Intelligent Cities Challenge, Smart Cities Marketplace, ISA² programme and CEF Digital, H2020 and Horizon Europe projects); • Facilitate the dialogue with the various smart cities and communities actors to
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	<p>nourish conversations about the transformation of our places and life styles towards greater sustainability, accessibility and aesthetics promoted by the New European Bauhaus to advance the construction of a more ecological, social and cultural Europe.</p>
<p>Relevance to Mission: The EU digital and green transition go hand-in hand. Accelerating digital transformation in the EU is crucial for supporting the achievement of the Green Deal and Mission objectives. Working towards the achievements of the Living.in-EU commitments will support and facilitate climate neutrality in cities.</p>	
<p>Links to CCC: The direct links to the CCC relate more to its implementation rather than its development, however, there may be some lessons related to multi-level governance that can be applied to the CCC process.</p>	
<p>References/links: include links to resources and information www.living-in.eu</p>	

<h3>3.4 CIVITAS Declaration</h3>	
<p>Level: EU</p>	<p>Type: Voluntary commitment</p>
<p>Objectives: The CIVITAS Initiative, launched by the European Commission in 2002, currently supports over 330 European cities of all sizes to introduce and test ambitious and innovative measures that foster sustainable urban mobility. In order to achieve their objectives, the cities implement a set of bold, integrated measures that are selected specifically to match local circumstances and to radically improve the urban mobility.</p>	
<p>Scope: Scope 1 and 2 emissions</p>	
<p>Process: 1. To join CIVITAS as a member city, local authorities need to sign the CIVITAS City Declaration and the accompanying Annex. Membership is free of charge and open to all of those who are willing to sign the declaration. By signing the Declaration, cities commit to:</p> <ul style="list-style-type: none"> • Introduce an ambitious sustainable urban mobility policy, integrating innovative measures, technologies and infrastructure. • Support and contribute to the achievement of the aims of the CIVITAS Initiative. • Share experiences and learn about other cities’ progress and achievements by participating in the CIVITAS network and community. 	



2. Authorities can foster their political commitment, boost collective expertise, and get equipped to put mobility at the centre of decarbonisation through inter-city exchange and peer learning, networking and training offered by experts.

Who:

The CIVITAS community is a network of cities, for cities, dedicated to encouraging cities to believe they too can change their transport systems and make them more sustainable. The Initiative is funded by the Directorate-General for Mobility and Transport (DG MOVE), with project implementation overseen by the European Climate, Infrastructure and Environment Executive Agency (CINEA). In addition, the Policy Advisory Committee (PAC) is a group of elected local politicians that acts as an advisory board to the CIVITAS community. It meets regularly with DG MOVE and provides a local perspective on EU mobility policy. Lastly, the CIVITAS National Networks (CIVINETs) act as CIVITAS ambassadors at the local level, overcoming language and contextual barriers for local authorities and organisations interested in sustainable urban mobility.

Funding:

There is no earmarked or specific funding for CIVITAS cities, but by signing the CIVITAS Declaration and becoming part of the community, the cities can become directly involved in CIVITAS projects. This provides financial support to implement sustainable mobility measures, and to help cultivate, through different activities, a culture change among politicians and the wider public.

Coordination and Support Actions through Horizon 2020 (like CIVITAS SATELLITE and CIVITAS ELEVATE) have also provided funding to the CIVINETs - networks that promote the CIVITAS approach at the local level, differentiated by region and clustered by language - to pursue their activities through the CIVITAS Activity Fund. Funding is expected to be continued through the Horizon Europe work programme.

Past:

CIVITAS is an acronym of City-VITALity-Sustainability. CIVITAS is an initiative of the [European Union](#) to implement sustainable, clean and (energy) efficient urban [transport](#) measures. It was set up to address issues around congestion in EU cities.

CIVITAS has been around for almost 20 years. CIVITAS I started in early 2002 (within the [Fifth European Community Framework Programme](#)), with 19 cities clustered in 4 demonstration projects. CIVITAS II started in early 2005 (within the [Sixth Framework Programme](#)), consisting of 17 cities in 4 demonstration projects. CIVITAS PLUS started in late 2008 (within the [Seventh Framework Programme](#)), with 25 cities in 5 demonstration projects. CIVITAS PLUS II started in 2012, with 8 cities in 2 demonstration projects (lab projects). And CIVITAS 2020 started in 2016, with 17 cities in 3 demonstration projects (lab

Future:

CIVITAS 2030 - the European Commission plans to continue to support the take up of innovative, replicable urban mobility solutions in Europe, involving local authorities and other stakeholders.

Together with ELTIS, CIVITAS is part of the EU policy on urban mobility as a key flagship that encourages innovative sustainable mobility at the local level.



<p>projects). The next iteration is called CIVITAS 2030.</p>	
<p>Relevance to Mission: Transport accounts to up to one-third or more of emissions in many cities. Mobility and CIVITAS have crucial roles to play in the EU's climate-neutral and smart cities Mission, and to help cities achieve drastic emission reductions.</p>	
<p>Links to CCC: Guide the practical implementation of mobility elements of the CCC and provide expertise on bringing the city together to tackle ambitious change.</p>	
<p>References/links: https://civitas.eu/</p>	

3.5 Sustainable Energy and Climate Action Plans (SECAPs)

<p>Level: EU</p>	<p>Type: Plan linked to a commitment</p>
<p>Objectives: A cornerstone of the Covenant of Mayors, the Sustainable Energy and Climate Action Plan (SECAP) is the planning document that shows how a city will reach its vision and target by 2030. The development of the SECAP primarily draws on the findings from the Baseline Emission Inventory (BEI) and the Climate Change Risk and Vulnerability Assessment (RVA). Through the development of the BEI, the signatory is able to develop an overview of its greenhouse gas (GHG) emissions, and set appropriate strategies to reach its reduction target of at least 40% by 2030 compared to the baseline. Similarly, the RVA identifies the most relevant climate hazards and vulnerabilities affecting the local authority, facilitating the process of addressing such risks through the development of an adaptation strategy and identification of appropriate adaptation actions. Therefore, the SECAP defines concrete measures for both climate mitigation and adaptation, with timeframes and assigned responsibilities, translating the long-term strategy into action. Signatories commit themselves to submitting their SECAPs within two years following adhesion (Bertoldi, 2018).</p>	
<p>Scope: The Covenant of Mayors concerns action at local and regional level within the competence of the local authority. The SECAP should concentrate on measures aimed at reducing GHG emissions such as carbon dioxide (CO₂), and the final energy consumption by end users, as well as include adaptation actions in response to the impacts of climate change. The Covenant's commitments cover the geographical area of the local authority (town, city or region). Therefore, the SECAP should include actions concerning both the public and private sectors. However, the local authority can play an exemplary role and therefore take outstanding measures related to its own buildings and facilities, vehicle fleet, etc.</p>	



For climate change mitigation, the main target sectors are buildings, equipment/facilities and urban transport. The SECAP may also include actions related to local electricity production (e.g., development of solar photovoltaic (PV), wind power, combined heat power (CHP), improvement of local power generation), and local heating/cooling generation. In addition, the SECAP should cover areas where local authorities can influence energy consumption in the long term (such as land use planning), encourage markets for energy efficient products and services (public procurement), as well as changes in consumption patterns (working with stakeholders and citizens). The industrial sector is not a key target of the Covenant of Mayors, so the local authority may choose to exclude actions in this sector.

For adaptation to the impacts of climate change, the SECAP should include actions in the sectors and areas, which are likely to be most vulnerable to climate change in a city (hotspots). Vulnerable sectors (e.g., buildings, transport, energy, water, waste, land use planning, environment and biodiversity, agriculture and forestry, health, civil protection and emergency, tourism) can vary considerably within urban perimeters, from one city to another, from urban areas to more rural areas: this is why gaining a deep understanding of the hazards and vulnerabilities of the local authority is of paramount importance (Bertoldi, 2018).

Process:

The SECAP development process consists of the following steps (Bertoldi, 2018):

1. Initiation phase
 1. Political commitment and signing of the Covenant
 2. Mobilise all municipal departments involved
 3. Build support from stakeholders
2. Planning phase
 1. Assessment of the current framework: Where are we?
 2. Establishment of the vision: Where do we want to go?
 3. Elaboration of the plan: How do we get there?
 4. Plan approval and submission
3. Implementation phase
 1. Implementation
4. Monitoring and reporting phase
 1. Monitoring
 2. Reporting and submission of the implementation report
 3. Review

In order to ensure that the submitted SECAPs are well in line with the Covenant of Mayors for Climate and Energy principles, it must meet the following eligibility criteria - minimum requirements (Covenant of Mayors Office, 2016):

- The Municipal Council or equivalent body must approve the action plan.
- The action plan must clearly specify the Covenant mitigation (i.e., at least 40% CO₂ emission reduction by 2030) and adaptation commitments.
- The action plan must use the results of a comprehensive BEI and RVA.
- For mitigation, the action plan must cover the key sectors of activity - Municipal, Tertiary, Residential and Transport:
- The BEI must cover at least three out of four key sectors.
- The mitigation actions must cover at least two out of four key sectors.



Who:

There are three key actors in the SECAP development process (Bertoldi, 2018):

1. Municipal council or equivalent body.
2. Local administration.
3. Stakeholders.

Here is a list of potentially important stakeholders in the context of the SECAP development (Bertoldi, 2018):

- Local Authority: relevant municipal departments and companies (municipal energy and water utilities, transport companies, etc.).
- Local and regional energy agencies.
- Representatives of national/regional/provincial administrations and/or neighbouring local authorities, to ensure coordination and consistency with plans and actions that take place at other levels of decision.
- Financial partners such as banks, private funds, ESCOs, insurers.
- Institutional stakeholders like chambers of commerce, chambers of architects and engineers.
- The building sector: building companies, developers, housing authorities.
- Transport /mobility players: private/public transport companies, etc.
- Energy suppliers, utilities.
- Water supplies utilities.
- Business and industries.
- Civil protection (e.g., police and fire departments).
- NGOs and other civil society representatives' incl. students, workers etc.
- Public (e.g., residents).
- Knowledgeable persons (consultants, ...)
- Existing structures (Agenda 21 ...)
- Universities, schools and research centres/institutes.
- Hospitals/emergency services.
- Tourists and tourist industry, where appropriate.
- Agricultural community, where appropriate.
- Port authority and/or coast guard, where appropriate.
- Media.

Funding:

The successful elaboration and implementation of SECAPs requires sufficient financial resources.^[1] There is no funding directly linked to this action. Local government can fund the development of the SECAP through a municipal budget, whether via budget-lines devoted to a specific action or as a part of broader work programmes, but it is not the only option available. Cities can explore opportunities beyond funding at the local level. Many countries have relevant regional and/or national funding mechanisms, which either support climate/energy action in general, or aim at specific measures (Chapman et al, 2019).

A good starting point for cities wishing to investigate financing opportunities is the [Funding Page](#) of the Covenant of Mayors for Climate and Energy website. It supports the Covenant of Mayors for Climate and Energy community with clear and practical information of funding and financing opportunities (Covenant of Mayors Office, 2021):

- The *Interactive Funding Guide* gathers information on the funding initiatives managed by the European Union (EU), the Member States and key financial institutions such as



<p>the European Investment Bank. Next to these, the guide includes information about support services and innovative financing schemes.</p> <ul style="list-style-type: none"> ▪ The <i>Useful Links</i> section collects the most relevant financing publications for the Covenant of Mayors for Climate and Energy community including best cases examples and lessons learnt. 	
<p>Past:</p> <p>Following the adoption of the EU’s Climate and Energy Package in 2008, the European Commission (EC) launched the Covenant of Mayors, to endorse and support the efforts deployed by local authorities in the implementation of sustainable energy policies addressing climate mitigation by means of a reduction in fossil fuels consumption (AREA Science Park, 2022).</p> <p>In October 2015, following a consultation process on the future of the Covenant of Mayors, the EC launched the new integrated Covenant of Mayors for Climate and Energy, which goes beyond the objectives set for 2020. The signatories of the new Covenant commit to reduce their CO₂ emissions (and possibly other GHG) and to adopt a joint approach to tackling mitigation and adaptation to climate change (AREA Science Park, 2022).</p> <p>Signatories of the Covenant of Mayors for Climate and Energy have committed to prepare and implement a SECAP before 2030 (AREA Science Park, 2022).</p>	<p>Future:</p> <p>As Europe and the world has already entered the decade leading up to 2030, the Covenant of Mayors for Climate and Energy continues to ensure that the three pillars (mitigation, adaptation and energy poverty) are turned into the overarching priority of our times and that ambitious action follows. This envisions that by 2050 all European citizens will be living in climate-neutral, decarbonized, and resilient cities with access to affordable, secure, and sustainable energy while undergoing a just transition. Signatories of the Covenant of Mayors for Climate and Energy will continue to: (1) reduce greenhouse gas emissions on their territory, (2) increase resilience and prepare for the adverse impacts of climate change, and (3) tackle energy poverty as one key action to ensure a just transition (Covenant of Mayors Office, 2021(b))</p>
<p>Relevance to Mission:</p> <p>The development and implementation of SECAPs closely relates with the EU Mission on Climate-Neutral and Smart Cities. The following arguments indicate the relevance of the SECAP to the EU Mission:</p> <ul style="list-style-type: none"> ▪ Strategic consistency (incl. time horizon) - the EU Mission will support, promote and highlight European cities in their systemic transformation towards climate neutrality by 2030. In parallel, European cities use SECAPs as a comprehensive set of actions that local authorities plan to undertake in order to reach their climate mitigation and adaptation goals by 2030. However, this would require a much more ambitious goal over the same timeframe. ▪ Methodological approach - the EU Mission takes a cross-sectoral and demand-led approach, creating synergies between existing initiatives. In parallel, local authorities elaborate the SECAP with the help of a sound knowledge of the local situation in terms of energy and greenhouse gas emissions, as well as of climate hazards, vulnerabilities and impacted policy sectors. 	



- **Focus on research and innovation** - the EU Mission focuses on research and innovation, helping cities to make the best use of existing EU programmes and to address their funding and financing gaps. In parallel, the development of the SECAP draws on the findings from the interdisciplinary BEI and the RVA.
- **Stakeholder engagement** - the EU Mission will mobilise local authorities, citizens and business, investors as well as regional and national authorities to achieve the Mission's objectives. In parallel, stakeholder participation in the development and implementation of SECAP is important because of their energy and climate activities and their impact on the environment.

Links to CCC:

There is a strong link between the development of SECAPs and the CCC process. The following arguments indicate the connection between the SECAPs and the CCC:

- **Climate commitment** - the CCC will set out plans for the city to achieve climate neutrality by 2030 and to signal the city's firm commitment to mainstream these plans into their overall city planning processes. In parallel, by the implementation of the SECAPs local authorities translate their commitment to reduce carbon emissions and increase resilience into practical action and investment projects.
- **Systemic approach** - the aim of the preparation and the implementation of the CCC is to reduce "silo mentality" that causes fragmentation and to build inclusiveness, trust and legitimacy of the necessary actions. In parallel, SECAPs seek and identify complementarities between mitigation and adaptation, and mainstream them into existing sectoral policies in order to foster synergies and optimise the use of available resources.
- **Continuity in climate action planning** - the CCC will set out the actions for the city to achieve climate neutrality by 2030 which will build on and expand the approach taken for SECAPs, thus ensuring some continuity in climate action planning at the local level.
- **Investment needs and strategy** - to scale up and deploy innovative solutions for delivering on the cities' climate action commitments towards climate neutrality the CCC will include an investment plan. In parallel, development of the SECAP (through the BEI and RVA) helps cities to define the basis for setting the priorities of substantial mitigation and adaptation investment and running costs at local level.

References/links:

<https://www.covenantofmayors.eu/>



3.6 Sustainable Urban Mobility Plans (SUMP)

Level: EU

Type: Plan linked to a commitment

Objectives:

A Sustainable Urban Mobility Plan (SUMP) has as its central goal improving accessibility of urban areas and providing high-quality and sustainable mobility and transport to, through and within the urban area. It is Europe's de-facto urban transport planning concept, a strategic and integrated approach that aims to improve the quality of life for the citizens. It regards the needs of the 'functional urban area' and its hinterland rather than a municipal administrative region.

Sustainable Urban Mobility Plans are defined as "a strategic plan designed to satisfy the mobility needs of people and businesses in cities and their surroundings for a better quality of life. It builds on existing planning practices and takes due consideration of integration, participation, and evaluation principles." [\[1\]](#)

Scope:

Scope 1 and 2 emissions

Process:

A Sustainable Urban Mobility Plan addresses all modes and forms of urban and regional transport. It aims to provide sustainable and high-quality transport and mobility in the functional urban area and enhance its accessibility. As key components a SUMP requires a thorough analysis of the current situation and the future trends, a widely supported common vision and strategic objectives and an integrated set of regulatory, promotional, financial, technical and infrastructure measures to deliver the objectives - whose implementation should be accompanied by systematic monitoring and evaluation.

A SUMP integrates technical, infrastructure, policy, and soft measures to improve performance and cost-effectiveness. It aims to meet the basic mobility needs of all users. The SUMP concept emphasises aspects of participatory planning, vertical and horizontal integration, and mechanisms for monitoring, evaluation and quality control.

12 Steps:



Figure 1: The 12 Steps of Sustainable Urban Mobility Planning (2nd Edition) – A decision maker’s overview



Who:

Cities lead on the development of the SUMP following the above process and engaging with local stakeholders.

Funding:

There are numerous projects funded by the European Commission to support cities in the SUMP development and implementation phases (see SUMPs-Up). At the national level, countries have specific frameworks in place and funding opportunities for cities to access to elaborate the SUMP or implement specific measures.

Past:

The policy that facilitated the establishment of the SUMPs has been gradually and systematically developed by European policy makers since 2005. Building on the Thematic Strategy on the Urban Environment (2005), and the Green Paper on Urban Mobility (2007), the Action Plan on Urban Mobility (2009) proposed ‘twenty measures to encourage and help local, regional and national authorities in achieving their goals for sustainable urban mobility’; the first action was ‘Accelerating the take-up of sustainable urban mobility plans’. The Transport White Paper formulated concrete targets for urban transport to contribute to strategic global and European policy goals.

In 2009, the European Commission first adopted the Action Plan on Urban Mobility, which proposes

Future:

The Smart and Sustainable Mobility Strategy states:

“Cities are and should therefore remain at the forefront of the transition towards greater sustainability. The Commission will further engage with cities and Member States to ensure that all large and medium-sized cities that are urban nodes on the Trans-European Transport Network (TEN-T) network put in place their own sustainable urban mobility plans by 2030. The plans should include new goals, for example on having zero emissions and zero road fatalities. Active transport modes, such as



<p>measures to encourage and help local, regional and national authorities in achieving their goals for sustainable urban mobility. Also, the 2011 Transport White Paper “Roadmap to a Single European Transport Area - Towards a competitive and resource efficient transport system” advises cities to develop Sustainable Urban Mobility Plans. The European Commission adopted the Urban Mobility Package “Together towards competitive and resource-efficient urban mobility” in December 2013. Now, Sustainable Urban Mobility Planning is Europe’s de facto urban transport planning concept. Since the publication of the Urban Mobility Package in 2013, the concept of Sustainable Urban Mobility Plans has been widely taken up across Europe and internationally.</p>	<p>cycling, have seen growth with cities announcing over 2300 km of extra cycling infrastructure. This should be doubled in the next decade towards 5000 km in safe bike lanes. Clearer guidance is needed on mobility management at local and regional level, including on better urban planning, and on connectivity with rural and suburban areas, so that commuters are given sustainable mobility options.”</p>
<p>Relevance to Mission: The SUMP process and ambitions provide an important contribution and guide for the journey towards climate neutrality. SUMPs have the potential to be a useful tool to support detailed mobility decarbonisation at city level.</p>	
<p>Links to CCC: Good potential lessons in terms of steps and critical path for city engagement. The revised guidelines are the result of an intense one-year stakeholder engagement process, coordinated by main authors Rupperecht Consult and led by a special Editorial Board, which includes DG MOVE, the CIVITAS SUMP projects, Eltis, INEA, DG REGIO, JASPERS, and leading mobility researchers.</p>	
<p>References/links: include links to resources and information</p> <p>https://www.eltis.org/sites/default/files/sump_decision_makers_summary_interactive_high.pdf</p> <p>https://civitas.eu/resources/session-9-sustainable-urban-mobility-plans-sumps</p>	



4 Case studies of existing CCC processes - Spain and Sweden

4.1 The case of the EU Cities Mission Mirror Group and citiES 2030 in Spain

Excerpt from “Accelerating Urban Climate Neutrality Through National Multi-Stakeholder Platforms: The Case of Spain” *Valentina Oquendo-Di Cosola, Julio Lumbreras, Jaime Moreno Serna*, from “NEXT GENERATION EU CITIES - Local Communities in a Post-Pandemic Future”, edited by Anna Lisa Boni and Andrea Tobia Zevi, December 2021, p. 35-54, <http://www.itd.upm.es/2022/01/10/accelerar-la-neutralidad-climatica-urbana-a-traves-de-plataformas-multiactor-el-caso-de-espana/?lang=en>¹

The EU Cities Mission Group in Spain

The definition and co-design of each mission in Spain is being led by the Ministry of Science and Innovation which, through “mirror groups”, represent the Spanish context and develop proposals and suggestions for the implementation of each mission at the national level. These multidisciplinary and multisectoral groups include actors from the scientific, technological, economic, regulatory, and social fields, with the intention of defining proposals and solutions that respond to the interests of the agents pursuing the objectives of each mission.

In the case of the Cities Mission, the process has been orchestrated by the Universidad Politécnica de Madrid (UPM), who created with the Barcelona Global Health Centre (ISGlobal), Iberdrola and the Spanish chapter of the UN Sustainable Development Solutions Network (Red Española de Desarrollo Sostenible) a multi-stakeholder partnership called “El Día Después” (EDD). Based on an innovative organisational model, it was set up to provide a response to the crisis caused by the Covid-19 pandemic based on Sustainable Development Goals (SDGs). Since its creation in March 2020, EDD has become a space for connection, learning, generation of meaning and shared narratives, and incubation of innovative projects through the stable and deep collaboration of a large number of actors from different sectors of society. It is organised around multi-sectoral communities of practice, one of which focuses on the transformation of cities and has become the Spanish embodiment of the intent of the EU Cities Mission. In particular, the “Urban Transformation Community”, is the “mirror group” of the Cities Mission in Spain, working as an “incubator of transformative projects”. It is composed of high-level decision-

¹ Note that this section on the EU Cities Mission Mirror Group in Spain is an excerpt from a book and reflects the views of its authors - Valentina Oquendo-Di Cosola, Julio Lumbreras and Jaime Moreno Serna - not necessarily those of the authors of this Deliverable or the NZC consortium.

makers from more than twenty Spanish towns and cities, as well as representatives of the government, private companies, technology centres, universities, and civil society. The Community's main objective is to provide a space for multi-stakeholder collaboration aimed at experimenting and coordinating work towards the definition of solutions for implementing the EU Cities Mission in Spain. To achieve this, it provides cities and other stakeholders with shared working guidelines and methodologies that promote continuous interaction, exchange of learning, and the co-creation of multi-stakeholder alliances with a common purpose: that of achieving climate neutrality in cities through the regeneration of economic, social, and environmental fabrics.

The goals of the EU Cities Mission currently represent the Community's roadmap, within which the drafting and signing of climate contracts with cities has been established as the main instrument for transformation. In Spain, the signature of these contracts represents an added value for the community, both for the traction that brings together different Spanish cities working toward the common goal of accelerating decarbonisation, and for the ability to offer a long-term perspective of work and collaboration in the context of a transformation process likely to take 10 years. The community constitutes a hub where specialists and decision-makers come together to develop a collective interpretation of urban challenges based on the ideological diversity and heterogeneity of their organisations of origin. In addition, processes are put in place to enable the following goals:

- To design and implement an open systemic innovation platform as a tool for the transformation of participating cities.
- To promote a portfolio of innovation projects directly linked to the aspirations of local citizens.
- To create a network of public and private actors that will work as an open innovation platform.
- To identify a set of principles, criteria, and methodologies for urban transformation in Spain and Europe (learning by experimentation, a demand-driven portfolio approach, and the use of transformation levers).
- To attract potential funding partners for such processes.

To achieve its objectives, the Urban Transformation Community aims to fulfil two main functions: firstly, orchestration of a broad group of actors, facilitating strategic conversations that favour the establishment of a shared long-term vision such as implementation of the European Mission of Cities in Spain; and secondly, fostering the exchange of learning, which contributes to establishing a space that inspires generosity, avoids competition and profit-seeking, and attempts to address complex problems from a systemic perspective. Both functions are reinforced by a team of facilitators who create a flexible and organised context to accelerate dynamics and ensure compatibility with the actors involved.

citiES 2030: accelerating climate neutrality

With the European Cities Mission providing an opportunity to reach a clear climate neutrality target, and mobilisation of the unprecedented volume of investment proposed by the Next Generation EU Recovery Fund, the "citiES 2030: accelerating climate neutrality" initiative has been launched within the framework of the "Urban Transformation Community".



The “citiES 2030” initiative aims to position Spain at the forefront of European climate action and drive systemic innovation with a mission-driven approach, accelerating the implementation of solutions that deliver social, economic, and environmental benefits while implementing collaboration, shared learning, multi-stakeholder partnerships and strengthened multilevel governance models, and communicating impact in a way that connects and engages citizens.

The added value of this platform is related to the abovementioned acceleration vectors:

- Collaboration: a context is created for cities and actors involved in urban transformation to collaborate stably and continuously, by introducing systemic vision into the definition of projects to ensure their transformative capacity and scalability to other contexts.
- Shared learning: learning generated through action and experimentation is facilitated to accelerate urban transformations initiated in other cities.
- Multi-stakeholder partnerships: institutional and administrative capacity is strengthened to articulate networks of actors around key transformative projects for climate neutrality.
- Multi-level governance: local innovations are channelled and communicated to national and European administrative levels to ensure policy coherence.

Following the EU Cities Mission’s proposal, “citiES 2030” has initiated a process to transform Spanish cities that will articulate political commitment to decarbonisation and accelerate the development of roadmaps towards climate neutrality. To this end, the initiative is developing two complementary processes that contribute to implementing the mission in Spain.

- Development and signing of climate contracts: these are designed to form a living tool driven by the needs of each city to determine scope, activities, and timing, that will help unlock priority transformation vectors such as new forms of participatory and innovative governance, new economic and financing models, integrated urban planning, new digital technologies, and improved innovation management. citiES 2030 has initiated this process with the four largest cities in Spain: Barcelona, Madrid, Seville, and Valencia, in three phases: (i) securing the political backing of the city councils of each of the cities involved; (ii) defining the commitment made by the cities, which consists of adherence to a transformation process and the design and approval of a roadmap toward decarbonisation; (iii) incorporating national and regional stakeholders to sign the contract. As multi-level governance is essential to the success of the mission, the contract must be signed by the city council and by relevant national or regional authorities, together with a representative of the European Commission. A first pre-contract has already been signed by the four cities and the Spanish government on September 8, 2021 (Ministerio para la Transición Ecológica y el Reto Demográfico, 2021).
- Design and implementation of a portfolio of transformative projects that will help ensure that all actions under the climate contract contribute to the objectives of the EU Cities Mission. Actions must therefore be linked to the local, regional, and national agenda for climate neutrality and ensure that measures implemented will not be disconnected or stop working once the time horizon has been reached. For this purpose, citiES 2030 is conducting a continuous reflection on the notion of transformative projects and, in lockstep, has defined a series of criteria to ensure that



selected projects have transformative capacity, are fully scalable, and are aligned with local, national and European public policies. These two processes are currently being developed in collaboration with the city councils involved in the citiES 2030 initiative. Several co-creation sessions have been held to ensure that the commitment made by cities has political backing and is adapted to the characteristics of each territory. To develop portfolios of transformative projects, citiES 2030 collaborates with the technical staff of city councils to identify synergies, exchange learning, and involve external actors.

A multi-stakeholder approach is part of the citiES 2030 strategy to involve a wide range of actors and strengthen networks based on reciprocity, trust, and collaboration. Therefore, in addition to cities, the following actors are involved:

- Ministries, as representative parts of the national sphere, fulfilling the fundamental role of offering a broad perspective that connects national and European urban strategies with regional and local ones. Most of the political, fiscal, and regulatory frameworks likely to accelerate transformative initiatives come from the national and European governance levels. It is therefore essential to ensure that the technical, financial, and social efforts made to achieve climate neutrality in Spanish cities have ministries' support.
- Universities, as catalysts and accelerators of systemic change in cities. Collaboration between cities and universities leads to an increase in critical mass for the development of truly transformative and systemic projects, as well as the co-creation of solutions between people from different fields of knowledge and environments with a common purpose: climate neutrality.
- "El Día Después" (EDD) alliance, as an articulator and facilitator between the different actors in citiES 2030 and other transformational initiatives in the Spanish context, with a view to generating synergies that share the aims of citiES 2030. The alliance also coordinates the incorporation of actors from private, academic, and civil society sectors independent of citiES 2030, to continuously enrich and improve work processes.
- Urban Transformation Community, a unique space for advancing a collective understanding of the challenges faced by cities and identifying opportunities and initiatives to accelerate the mission.

Working with such diverse actors and ambitious goals requires a strategic, inclusive, and cross-cutting governance model, working at different scales and levels and with a long-term framework. To achieve it, citiES 2030 proposes a model centred on the following components:

- (i) Multi-level governance that promotes the coordination and alignment of actions at different levels of government;
- (ii) a multi-stakeholder nature that ensures the inclusion of all relevant stakeholders in the urban transformation process; and
- (iii) distributed leadership among the actors involved in the platform.

The above-mentioned cities (Barcelona, Madrid, Seville, and Valencia) have already participated in this initiative, but a total of 12 Spanish cities are expected to join to achieve a massive transformation of the Spanish urban context. Not only large cities (more than



250,000 inhabitants) but medium-sized towns (between 50,000 and 250,000 inhabitants) and small towns (up to 50,000 inhabitants) will participate.

4.2 The case of Viable Cities and Klimatkontrakt 2030 in Sweden

Sweden was the first country to create a multi-stakeholder network for urban transformation in 2017 with Viable Cities, <https://en.viablecities.se/>. The programme's mission is "climate-neutral cities by 2030 with a good life for everyone within the planetary boundaries".

Viable Cities is a catalyst for new forms of cooperation between cities, industry, academia, research institutes, and civil society, and currently has more than 100 members. The network strives to mobilise societal actors to change the way Swedish cities work in line with national environmental and climate objectives and international commitments linked to global sustainability goals - Agenda 2030 and the Paris Agreement. It is one of Sweden's 17 Strategic Innovation Programmes (SIPs), with a special focus on the transition to climate-neutral and sustainable cities, working within a time frame of 2017-2030. Viable Cities is a member organisation with currently over 100 members from all sectors in society. It is being implemented with concerted support from Vinnova, the Swedish Energy Agency, and Formas, in which the Swedish Energy Agency is the principal government agency. The KTH Royal Institute of Technology is the organisation hosting the initiative.

Viable Cities has a total allocated budget of around €100 million for the 2017-2030 period, of which 50 % is co-funded by cities, business, academia and other stakeholders.

Klimatkontrakt 2030

Klimatkontrakt 2030 (Climate City Contract 2030) is a concentrated effort from Swedish cities and the national level to speed up the work to enable the transition towards climate-neutral cities 2030. As of December 2021, 23 Swedish cities and five government agencies are signatories to the Klimatkontrakt 2030 process. It is an agreement between cities, government agencies, and Viable Cities in a facilitating capacity, in which all parties commit to make concrete contributions. The contract is a long-term commitment and process that ensures cooperation between cities and the national level. The climate neutrality scope included in Klimatkontrakt 2030 is based on and starting from the objectives adopted politically in each city, and updated annually, see <https://en.viablecities.se/klimatkontrakt-2030>.



Klimatkontrakt – annual update and revision process to 2030

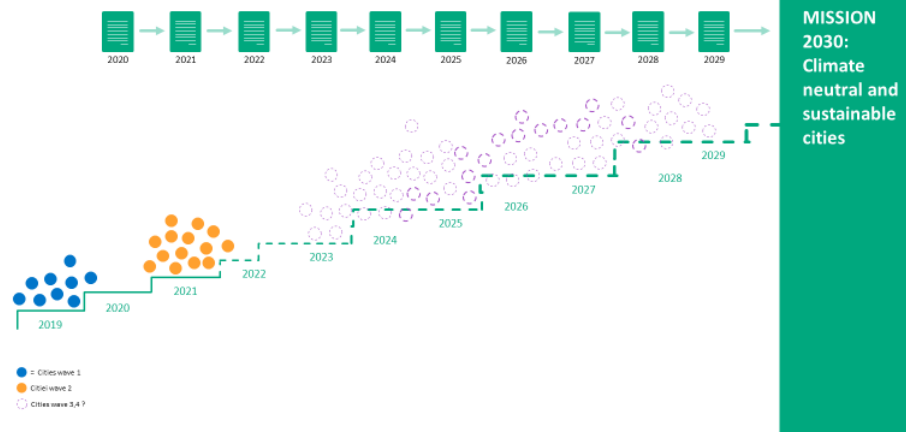


Figure 1: Swedish Climate City Contract annual update and revision process to 2030 (Source: Viable Cities)

When the first Viable Cities Climate City Contracts were signed in December 2020, this was the first such climate city contracting process in the EU. As such, it can directly inform and inspire the upcoming EU Cities Mission Climate City Contracting process, complementing it with a strong national contribution, and creating potential for “cascading” climate city contracts at national and EU level. Since there is no one clear path forward, test of approaches is needed, and Climate City Contract 2030 will develop over time. These contracts will therefore be revised every year, both at local and national level.

Cascading climate city contract

Climate city contracts are the whole picture from which the portfolio initiatives are built. Happens at several levels at the same time.

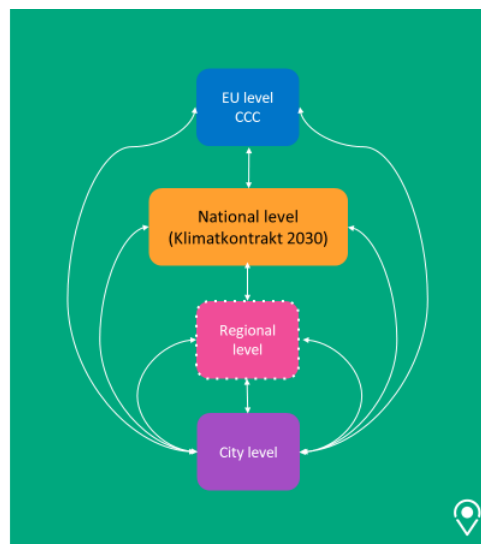


Figure 2: Swedish Cascading Climate City Contract model (Source: Viable Cities)

The national climate city contracting process connects the cities (and their ecosystems) to relevant government agencies, in an annually revised and updated climate contracting process, connected to the Viable Cities mission. The EU mission process “100 climate neutral and smart cities by 2030”, is also engaging several of the participating Swedish cities, creating opportunities to connect scope, geographic approaches etc, and as such has also guided many Swedish cities in their strategic approaches.



A first version of the climate city contract, Klimatkontrakt 2030, was signed in December 2020 by mayors from nine cities/municipalities. Signatories include the country’s three largest cities (Stockholm, Gothenburg, and Malmö) plus four university cities (Uppsala, Lund, Umeå, and Växjö), one Stockholm suburb (Järfälla), and one smaller municipality (Enköping). In October 2021, 14 additional towns and cities were selected from a group of around 30 that expressed interest in an open call and have now started the process to sign a climate city contract in December 2022. With the expansion to 23 cities in Sweden, the cities together encompass 40 % of Sweden's population, working to create ecologically, economically and socially sustainable cities. Cities that work well for the people who live in it, that are good for the economy of citizens, businesses and society - and - that are good for the climate and our planet. Signing the climate city contracts for the national level are Directors-General from five national government agencies; the Swedish Energy Agency, Swedish innovation agency Vinnova, the research council for sustainable development Formas, the Swedish Agency for Economic and Regional Growth, and the Swedish Transport Administration.

Locally, each participating city is also gathering its local implementation and innovation partnership, including business, academia, civil society and public sector stakeholders to develop local contracts or roadmaps (see the example of Malmo below).



Figure 3: Visualisation of the National and Local CCC approach in Malmö, Sweden (Source: Allison Wildman, ICLEI)

To facilitate the mission-oriented work, Viable Cities has focused its dedicated budget on a "Climate-neutral cities 2030" flagship initiative, in several instalments. For the 3-year period 2021-2024, around €10 million has been allocated to support the 23 cities and their partnerships.



The strategic work to update the climate city contracts in 2021 included to develop *Climate investment plans, Citizen engagement and Digitalisation and digital tools* to support the climate transition. This work will be continued as a horizontal part of the development work during 2022, see <https://en.viablecities.se/revidering2021>.

In 2022, several other strategic development initiatives will also be conducted within Viable Cities:

1. Transition Labs, including three Forums, will be organised in collaboration with all 23 municipalities and five government agencies, with the aim of further developing the content of Climate City Contract 2030.
2. System demonstrations - a controlled method for testing sustainable systems transition consisting of a combination of innovative solutions in a real-world environment - and with consideration for the context in which it is intended to function
3. A pilot to develop regional climate city contracts is implemented with the two northernmost regions in Sweden. It is also the ambition that this work to further develop Climate City Contract 2030 at a regional level will lead to new forms of collaboration that may be interesting to implement in other Swedish regions.
4. International mission for climate-neutral cities by 2030, done to further strengthen links between Swedish and joint European efforts to achieve climate-neutral cities by 2030. This will take place within a range of initiatives involving cities, government agencies and the Viable Cities programme; for example, connecting with and contributing to initiatives such NetZeroCities, the Driving Urban Transition partnership and New European Bauhaus.
5. Viable Cities and the municipalities have agreed to conduct an annual review of the municipalities' results within the framework of Climate City Contract 2030, and prepare documentation for an annual monitoring at municipal and national levels.

Since its inception, Viable Cities has also provided significant input and exchanges with other national networks under development across Europe, most notably the Spanish CitiES 2030 platform.

5 National existing or planned initiatives in selected EU Member states

In addition to the Spanish and Swedish examples above, below are short descriptions of some relevant national existing or planned initiatives in four other EU Member States: Austria, France, Greece and Italy.

5.1 Austria

In the national approach to the Cities Mission, the Austrian core country team is planning to build synergies with the following existing and planned activities and processes in Austria:

- *Austria and Fit4UrbanMission* - In November 2020, the Austrian Ministry of Climate Action launched Fit4UrbanMission, a competitive call for Austrian cities to develop plans for climate neutrality by 2030 in view of the Cities Mission. Nine cities have



already committed to apply with their concepts. After the final selection in May, each city will receive a EUR 100,000 grant and support from the National Smart City Platform and other national agencies such as AustriaTech and the National Climate Fund. The Ministry of Climate Action is also developing a concept for a national implementation plan in the context of the Cities Mission (European Commission, 2021).

- BMK has launched a “Mission Cities Action Group” among the relevant Federal Ministries, supporting agencies and key stakeholders for the Cities Mission. This internal group within the government administration aims to co-design and coordinate actions in innovation policy and beyond in other BMK policy domains (mobility, energy and environmental protection)
- The Austrian government has adopted a clearly defined goal to achieve climate-neutrality by the year 2040. The national “RTI-strategy 2030” of the government of Austria explicitly calls for direct involvement in the EU Missions.
- The Federal Ministry for Climate Action, Environment, Energy, Mobility, Innovation and Technology’s (BMK) national RTI-strategy for mobility 2040 provides a comprehensive strategy framework for mission-oriented research and innovation funding in the dedicated mission field “Cit-ies”. BMK plans to closely align ongoing and future national R&I strategies and programmes with the Cities Mission of Horizon Europe. These activities involve relevant major funding sources in Austria.
- The Smart Cities Network Austria, established by BMK, serves as the central city network for the support and acceleration of innovation processes in cities, especially when it comes to working towards climate neutrality. This mutual learning platform is a crucial instrument to foster communication and coordination, both horizontally between local administrations, as well as vertically with the national level.
- An initiative of BMK, several Mobility Labs (“Mobilitätslabore”), Innovation Labs (“Innovationslabore”) and Demonstration Labs (“Reallabore”) have been established to provide real-world test environments and supplementary tools for innovative approaches on the local to regional level. These labs will play an important role in context-related experimentation and implementation.
- BMK as the coordinator actively shapes and guides the prospective co-funded Partnership on Driving Urban Transitions (DUT) within Horizon Europe as a large-scale R&I funding initiative and knowledge hub for implementation of climate-relevant projects and activities in cities.

5.2 France

The following existing and planned initiatives and processes in France include:

Cities Mission

- *France and EcoCités* - The French Ministry in charge of Urban and Territorial Planning provides targeted support to 30 cities and urban agglomerations under the EcoCités label. Eco-city projects benefit from funding under cross-policy programmes involving the public and the private sector, with actions tailored to cities and their historic, geographic and climatic context (European Commission, 2021).
- Information events in cities, dedicated to citizen participation



- Workshops with cities/associations of cities/territories, to integrate their needs (to build national positioning on priorities)
- Workshops with cities /associations of cities/territories, to promote their participation
- Start work regarding national governance of missions.
- Preparation of interministerial and intersectoral partnerships (MESRI-MTE, Ministry of territorial cohesion MCTRCT).

Climate change

- Coordinating the governance of climate change with other issues (energy, biodiversity, sustainability etc) at the range of governance levels (regional/local)
- Creating opportunities and supporting capacity building in inter-municipal authorities to take up the role of organising authorities for energy distribution, which allows them to create a strategic vision for renewable energy production, to set up intelligent management of networks, to programme plans for energy renovation, to prepare the equipment needed for the development of electric vehicles etc.
- Support for communities via ADEME's (French Energy Agency) PACT^{2E} mechanism, which aims to reduce the vulnerability of territories to climate change (extreme hazards, impacts, health and economic crises). National calls for projects are proposed regularly, for example, urban/rural planning and development.
- "Learning communities", organised by the DGALN (Planning, Housing and Nature Department of the Ministry for Ecological Transition) to foster cooperation between actors, identify existing actions and design new ones that make it possible to overcome difficulties faces locally to accelerate the ecological transition.

5.3 Greece

The Greek Government is putting due emphasis on the issue of Climate-Neutral and Smart Cities, by including it as one of the main priorities in its Recovery Plan. In January 2022, a Memorandum of Cooperation between 13 Greek Cities and the Hellenic Ministry of Environment and Energy was signed to support the Mission implementation in Greece (Hetel, 2022). The 13 cities are: Kozani, Trikala, Karditsa, Kalamata, Ioannina, Heraklion, Thessaloniki, Kalamaria, Alexandroupolis, Corfu, Mytilene, Agrinion & the Association for the Development of Municipalities of West Athens (Agia Varvara, Agioi Anargiroi, Egaleo, Ilion, Koridalos, Peristeri, Petroupolis, Fili, Chaidari) (Siountri, 2022).



5.4 Italy

Italy is currently delivering or planning to deliver the following activities and processes:

- European Cities Mission – National Mirror Group: The mirror group of the European Mission 100 Climate Neutral and Smart Cities involves key specialists which aim to contribute to proposals and solutions that respond to the interests of the Italian cities involved in the objectives of the European Mission.
- The National Research Program (PNR) promotes the implementation of technological and socio-economic innovation measures through the implementation of energy communities (EC) with multiple actors to increase the resilience and self-sufficiency of the energy system, improve the quality of life in cities and promote the repopulation of small towns and rural areas. Expected impact: Development of technologies and system architectures for the management and operation of Energy Communities; innovative methods for energy planning and for the assessment of its impacts on the socio-economic system, the environment and resilience to climate change; new business models for Energy Communities with regard to the efficient and shared use of resources; implementation of Energy Communities and increase in energy awareness and citizen participation; development of industrial, residential and mixed energy communities and PEDs (Positive Energy Districts).
- Piano Nazionale Integrato per l'Energia e il Clima 2030 (Integrated National Energy and Climate Plan 2030) (PNIEC): the Integrated National Energy and Climate Plan 2030 is a fundamental tool implemented by the Italian Ministry of Economic Development that marks the beginning of an important change in Italy's energy and environmental policy towards decarbonisation. The Plan is structured in five lines of action, which will be developed in an integrated manner: from decarbonisation to energy efficiency and security, through the development of the internal energy market research, innovation and competitiveness. The objective is to achieve a new energy policy that ensures full environmental, social and economic sustainability of the national territory and accompany this transition.
- Piano Nazionale Infrastrutturale per la Ricarica dei veicoli Elettrici (National infrastructure plan for recharging electric vehicles) -PNIRE: it constitutes a concrete project for the development of national electric mobility. In particular, the programme envisages the creation of infrastructure networks for recharging electrically powered vehicles, as well as the renovation of the building stock for the purpose of developing such networks. It also defines the guidelines to guarantee the unitary development of the recharging service for vehicles powered by electric energy in the national territory, on the basis of objective criteria that take into account the actual needs in the various territorial realities, assessed on the basis of the competing profiles of private vehicle traffic congestion, the criticality of atmospheric pollution and the development of the urban and extra-urban road network and motorways.



Conclusion

The concept of the Climate City Contract is still relatively new and innovative. Across Europe, the only example that has been implemented is in Sweden where they prioritised the first stage of contracting between city administrations and national government agencies. Some cities are now applying the CCC approach horizontally to their own local stakeholders and citizens to further develop the roadmaps and action plans necessary for climate neutrality by 2030.

Spain is now following the lead of Sweden, implementing both a vertical and horizontal process, which started with a preliminary agreement between the four largest cities in Spain (Barcelona, Madrid, Seville and Valencia) and the national government. The engagement and development of the CCCs will now continue in greater detail. Subsequently, four additional cities have joined in the CCC process.

Beyond these two examples, the EU Mission has prompted recent announcements and initiatives in several MS to bring cities together and to collaborate, or declare their intention to collaborate, around climate neutrality. This sets a good foundation for the development of CCCs through the Mission.

At the European level, there are also several initiatives – predominantly voluntary commitments and associated action plans – which have been a precursor to the Mission and will be important building blocks for the CCC commitments and action plan/roadmaps in Mission cities, as well as establishing reporting frameworks and platforms which will need to be considered as part of the CCC process. These initiatives have not been designed to target climate neutrality by 2030, however cities have put a lot of work into developing and implementing them, particularly SECAPs and SUMPS, and it is important that the CCC process build upon existing work rather than attempt to start from a blank slate. Cities will, however, have to undertake a gap analysis to understand and decide how to speed up their journey to climate neutrality.

As this Deliverable is an input into the development of the CCC concept and process, it is not yet known how prescriptive they will be. However, there are lessons to be learned particularly from the 12 step SUMP development process which could act as a useful starting point, with modifications to align with the CCC ambition of collaboration and reciprocity of commitments and actions.



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