



**NET
ZERO
CITIES**

Climate City Contract Progress Report

**The CCC as an Instrument for Climate Governance in
European Mission Cities**

Deliverable D1.11

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Abbreviations and acronyms

Acronym	Description
CA	City Advisor
CCC	Climate-Neutral City Contract
EC	European Commission
EOI	Expression of Interest
GHG	Greenhouse Gases
NZC	NetZeroCities
SECAP	Sustainable Energy and Climate Action Plan
TM	Transition Management
WP	Work Package



Summary

This report assesses the progress of the Climate City Contract (CCC) process in the EU *100 Climate-Neutral and Smart Cities Mission* (Cities Mission), to inform current Mission Cities as well as non-mission cities interested in accelerating action towards climate-neutrality. In addition to laying the analytical underpinnings of the CCC as a transition governance model, by establishing how the CCC serves as both a document, i.e. product, and as a process, this report assesses the progress Mission Cities have made with their CCC governance process.

As a document, or "product," the CCC is a governance tool that provides a framework for drafting cities' actions and investments to achieve climate-neutrality. It consists of a 2030 Climate-Neutrality Commitment document, supported by a 2030 Climate-Neutrality Action Plan, and a 2030 Climate-Neutrality Investment Plan. As a process, the CCC is a transition governance model that guides cities in developing these plans with local and regional stakeholders and ensuring their commitment to implementation. We highlight four main functions of the CCC governance model and assess Mission Cities' progress on each of these: coordination (led by the Transition Team), co-creation (through the Transition Arena), anchoring (ensuring stakeholders' commitment), and governance learning and innovation (focusing on the municipality's reflexivity and adaptation capacity). The results of this study are based on interviews, surveys, and workshops conducted with varying city representatives and City Advisors.

Results show that the CCC as a document or product is perceived as a useful strategic and systemic instrument, although translating ambitious visions into tangible plans remains challenging. Hence, finding a balance between the standard nature of the CCC and the variety of local contexts remains an area for improvement. Regarding the coordinating function, Transition Teams vary widely in terms of set-up and resource distribution and are most often municipally led. They highlight that engaging a wide range of stakeholder groups, especially citizens and the private sector has been especially challenging. Results for the co-creation function demonstrate that the ownership of the CCC plans still lies mainly with local government, rather than being fully distributed over carried stakeholders as cities still struggle to create value propositions for stakeholders and rely on consulting stakeholders over properly involving them. Transition arenas are therefore not always properly established and do not always become the focal point for local transition governance, where business, public organisations, academia and civil society stakeholders work together to develop transition plans for climate neutrality. Instead, this forum of quadruple helix actors (although often unequally represented in an arena dominated by public organisations and mostly lacking civil society) is used primarily for consultation purposes to provide input to the plans developed by the municipality. However, this also limits the level of ownership they are willing to take over the plans.

The anchoring function results illustrate that political support and engagement from city leaders has generally improved due to the CCC process. However, the continuity of climate plans is a concern with upcoming local elections and national government alignment and support for local climate action is often still lacking. Furthermore, cities are facing challenges in anchoring concrete commitments and active



involvement from private sector stakeholders in particular. Finally, results for the Governance Learning function demonstrate that the CCC has helped municipalities to improve their governance skills by encouraging them to restructure their internal processes, involve more stakeholders, and collaborate with other cities. This has allowed many cities to experiment with different methods of shared governance. However, despite these efforts, it remains a challenge to embed reflexive learning and monitoring to improve the CCC's effectiveness. Furthermore, many of the efforts to build governance capacities were experimental rather than structured and purposeful.

The report concludes by presenting recommendations for cities to enhance their CCC experiences and effectiveness. These recommendations urge cities to leverage the CCC as a strategic tool, to prioritize internal and external anchoring of commitments, to adapt their governance approaches, and to build their capacities for reflexive learning.

Keywords

Climate-neutral city contract, climate governance, stakeholder and citizen engagement, commitments, transition team, anchoring.



Introduction

In this report we: 1) provide an update on the progress of the CCC process of EU *100 Climate-Neutral and Smart Cities Mission* (Cities Mission); and, in support of this first objective we 2) lay the theoretical basis for the Climate City Contract (CCC) process as a transition governance model for climate planning and action in local governments across Europe. As such, the report will provide an overview and analysis of the reflections of both Mission Cities as well as NZC consortium partners (City Advisors (CA) in particular) on the CCC process so far.

As part of the European Commission's *100 Climate-Neutral and Smart cities Mission*, 112 selected Mission Cities are striving for net zero emissions by 2030. To accelerate the necessary actions, every city develops a CCC. The CCC functions as a declaration of intent, outlining the necessary actions and investments in a detailed and actionable format, as well as the stakeholders committed to these actions and investments.

At time of writing (March '24), 37 Mission Cities have submitted their CCCs to the European Commission. The first 10 cities to receive the Mission Label submitted their CCC in April '23 (first window) and now have a CCC endorsed by the European Commission (to access the Mission Cities Capital Hub). In March '24, a second round of 23 cities have been awarded a Mission Label. The EU Mission Label aims to give public and private funders confidence in Mission Cities' ambitious and comprehensive climate-neutrality plans.

NZC Task 1.6 has aimed to support cities in reflecting on and learning from their CCC governance process, in order to improve and accelerate climate action planning. One key component of urban transformative capacities is reflexive learning (Wolfram et al., 2016). Urban transitions depend on the stakeholders' ongoing reflection and learning as they confront their disparate viewpoints, collaborate to create shared perceptions, identify knowledge gaps, and attempt to close them by conducting and learning from experiments (Holscher, 2018; Loorbach, 2007). Reflexive learning helps to understand why some activities have worked and others have not, as well as whether current governance modes require modification and adaptation and what circumstances might allow new governance configurations to develop.

To this end, learning sessions were organised in the run up to CCC submission. In addition, more 'traditional' data collection methods of a survey and follow-up interviews on the CCC process were used to contribute to a more reflexive attitude for the participating city representatives. D1.11 presents the results of this task: the outcomes of participating cities and the NZC consortium's reflections on the CCC process so far.

In addition, to enable a learning attitude in relation to the CCC governance process, the report also provides the NZC consortium insights into barriers experienced and support needs expressed by cities in relation to the CCC. As such, it hopefully provides a learning opportunity for the consortium too, as the results can be used to improve our support to the Mission Cities.



In the first chapter, the theoretical model underpinning the CCC as a governance instrument is outlined. This culminates in an analytical model to guide the research, for which the methodological approach is described in Chapter 3. Chapter 4 presents the results, centred on the CCC as a product and as a process (including the Transition Team, the Transition Arena and the anchoring process of the CCC model, as well as insights on learning and capacity building). The report concludes by outlining the key building blocks for the CCC as a governance model, and recommendations on how to address the gaps between what the CCC process 'should be' and how cities currently experience it.



1 Theoretical framework

The CCC is both a product and a process. As a product, it is a governance tool that provides a framework for a non-binding contract between the municipality and local stakeholders, including action and investment plans on how to make the city climate neutral. As a governance process – or governance model – it provides guidance to cities on how to develop the plans in the CCC together with local and possibly regional stakeholders and how to ensure that these plans are anchored in all participating organisations so that they commit to their implementation. This chapter, first, discusses how the CCC as a (product or) governance tool creates a framework for transition plans of cities. Second, it details the theoretical underpinnings of the CCC as a transition governance (process or) model, which can be considered a unique adaptation of the Transition Management (TM) model, but which goes beyond merely contributing to local governance approaches and aims to become the model for European urban climate governance at the local level. The chapter also presents the key elements of the CCC model proposed by NetZeroCities, including insights into the roles and responsibilities of the Transition Team and Transition Arena, and how to build the commitment of participating organisations to implement the action and investment plans outlined in the CCC.

1.1 CCC as a product

The CCC as a product is a governance tool that provides a framework for cities to develop a comprehensive portfolio of commitments, actions and investment strategies on how to achieve climate-neutrality by 2030. It is aimed at mobilizing a diverse group of stakeholders towards the shared goal of climate-neutrality and leveraging existing knowledge within cities. The conceptual underpinnings of the CCC draw inspiration from the demonstrably successful frameworks of similar projects, such as Viable Cities in Sweden and CitiES2030 in Spain, which have set precedents for effective climate action through cooperative engagement and strategic investment¹.

The CCC as a product includes three essential components: a 2030 Climate-Neutrality Commitment document, and an annexed 2030 Climate-Neutrality Action Plan and 2030 Climate-Neutrality Investment Plan, which support the commitments with detailed actions and investment approaches

The 2030 Climate-Neutrality Commitments serve as a robust framework through which cities can declare their dedication to achieving climate-neutrality and detail their strategies. Although not legally binding, it holds political accountability and requires the mayor or equivalent at a minimum, and as many key stakeholders as possible to sign it. The document includes each city's 2030 climate-neutrality target, referencing the city's Mission Expression of Interest and any further commitments, as well as the administrative territories included in each city's 2030 target. Additionally, the commitment plans summarize each city's strategic priorities and the systemic process that will be undertaken to achieve its targets, guided by the CCC governance model (discussed in more detail in section 2.2). The

¹ See NetZeroCities Deliverable 1.3 for key differences: [D1.3-Climate-neutral-city-contract-concept.pdf](https://netzerocities.eu/D1.3-Climate-neutral-city-contract-concept.pdf) (netzerocities.eu); (Littek & Wildman, 2022).



document is envisaged to be reviewed and amended regularly to include new stakeholders and to adjust specific actions to changing circumstances.

The 2030 Climate-Neutrality Action Plan details the strategic interventions and innovative actions required to address cities emissions across various sectors by bridging the gaps in policy, regulation, project planning, funding, finance, and implementation to achieve climate-neutrality by 2030. The plan is composed of three distinct parts. Firstly, it assesses the current state of climate action, including a greenhouse gas emissions inventory, an evaluation of current policies and strategies, and an analysis of systemic barriers and opportunities that could impact the achievement of goals. Secondly, the action plan outlines several transition pathways toward achieving climate-neutrality by 2030. This includes climate-neutrality scenarios and impact pathways, climate-neutrality portfolio design and indicators for monitoring, evaluation, and learning. Third, the plan also incorporates enabling measures such as governance innovation and social innovation interventions.

The 2030 Climate-Neutral Investment Plan constitutes a pivotal element in Mission Cities' endeavour towards climate-neutrality. The overarching objective of the Plan is to enable Mission Cities to mobilize and align public, private, and civic capital strategically on a large scale to finance and fund pathways to climate-neutrality. The Investment Plan entails a comprehensive and systemic mapping of the costs and capital required to achieve climate-neutrality by 2030, as specified in the Action Plan. This initiative contributes to structuring the way cities can plan, organize, and develop their economic and financial strategies, making it easier to secure capital from funding platforms and financial institutions.

Again, the Investment Plan is comprised of three parts. First, an analysis of the current state of climate investment, which includes existing climate action funding and financing, evaluation of barriers to climate investment, and strategic funding and financing. Secondly, it provides pathways to achieve climate-neutrality by 2030, including cost scenarios, capital planning for climate-neutrality, and economic and financial indicators for monitoring, evaluation, and learning. Finally, it outlines the enabling financial conditions required for climate-neutrality by 2030, through climate policies for capital formation and deployment, identification and mitigation of risks, and stakeholder engagement for capital and investment.

Altogether, these plans make up the CCC and are pre-requisites to obtaining the EU Mission Label. This label acknowledges the completion and successful development of the CCC and recognizes Mission Cities plans towards climate-neutrality. The EU Mission Label supports cities in accessing funding, notably by opening access to the Mission Cities Capital Hub. "The Hub's aim is to help cities to overcome traditional barriers to climate action implementation through a dual-edged approach of providing initial project development assistance and connecting public and private financial institutions to the cities." Gaining the EU Mission Label is however not the end goal of the EU *100 Climate-Neutral and Smart Cities* Mission, but rather an encouragement as cities are still expected to (1) continue engaging new stakeholders and securing their commitment, (2) continue monitoring and evaluating their CCC and (3) subsequently review and update the Investment and Action plans regularly (for instance biennially), and further tailor the plans to their unique circumstances and adapt to the dynamic climate action landscape.



1.2 CCC as a governance model

Transforming the urban economy to a sustainable one means offering zero-emission alternatives for services, products and production processes that involve GHG emissions. Since municipalities lack the means and capacity to develop and finance innovation on such a large scale, the transition to climate-neutral cities requires the contribution of other local stakeholders (both in terms of innovation and investment), from citizens to private businesses and public organisations (Betsill and Bulkeley, 2007). To meet this challenge, cities need to reform their governance practices and explore new models and approaches that go beyond municipal boundaries and enable shared governance (Khan, 2013).

Transition Management (TM) is a governance model that aims to influence government action in a way that enables social change towards sustainability by moving towards new, innovative forms of governance that involve the interaction of many actors from distinct parts of society (Frantzeskaki et al, 2012; Nevens et al. 2013). It is based on participatory and reflexive strategic planning by enabling frontrunners to become agents of the change and co-create transformative solutions (Frantzeskaki, 2022).

Over the last two decades, transition management has been applied to a wide range of sustainability issues, policy contexts and geographical scales, and provides a compelling approach for managing sustainability transitions (Frantzeskaki et al, 2018). Transition Management can be applied across sectors and in different geopolitical contexts, as well as to support urban sustainability transformations. It offers a portfolio of tools that share the goal of enabling changes in practices and structures towards sustainable development targets (Neven and Roorda, 2014; Loorbach et al., 2015).

Transition management is a prescriptive governance approach that takes sustainable development as long-term goal (Loorbach, 2010). This model proposes a series of mutually reinforcing steps and related activities (Roorda et al., 2014):

1. *Setting the scene* - as a first step, a Transition Team is formed to guide and facilitate the transition management process.
2. Exploring the *local dynamics* - the Transition Team conducts a systems and actor analysis to help set the scene for the Transition Arena involving a diverse group of local change agents.
3. Framing the *transition challenge* - the Transition Arena creates a common problem frame.
4. *Envisioning* a sustainable city - the Transition Arena then develops a shared vision for a sustainable city.
5. Reconnecting the *long- and short-term goals* - as a final step, the Transition Arena develops the transition plans to the envisioned future.
6. Engaging and *anchoring* - the Transition Arena makes the transition agenda public so that others can adopt and adapt it.
7. *Taking action* - initiating transition experiments in line with the transition agenda.



As a separate task, *monitoring and evaluation* supports reflexivity and reflexive learning throughout the entire process (Nevens et al., 2013).

In every version of the TM model, the Transition Arena is at the heart of the transition management process, a temporary setting that includes 15-20 frontrunners from different parts of local society with various competences, who participate in a series of meetings to envision a sustainable future and develop transition plans for its realization (Roorda et al, 2014). Frontrunners are not just involved as stakeholders, but as individuals who should be empowered change agents and have the ambition to lead local transition processes (Loorbach, 2007; Hölscher et al., 2019).

While more and more cities across Europe and globally experiment with transition governance and attempt to bring about systemic changes in the local economy towards sustainability, the long-term effects of transition governance in the TM model are still only known to a limited extent. Specifically, the literature is sparse on how and to what extent transition plans developed in the TM model were implemented in the long run, how stakeholder collaboration continued after the transition plans had been developed, or to what extent and how widely transition thinking was diffused and embedded in different sectors of local societies (Nevens and Roorda, 2013; Hölscher, 2018; Frantzeskaki et al, 2018; Hölscher and Wittmayer, 2018).

In the design of the Cities' Mission, the expectations of the governance framework to be established by cities were partly based on the TM model and its process structure. Cities were invited to set up a Transition Team that coordinates the CCC process and which was also tasked with setting up a so-called Transition Arena that include quadruple helix groups of local stakeholders including business, academia, civil society and public organisations. The municipality should also be part of this arena whose purpose is the development of the transition plans for the city summarized in the CCC (see Figure 1). At the same time, cities were asked to develop a framework (CCC governance model) that could provide a backbone for long-term collaboration of local stakeholders to achieve climate-neutrality. Compared to the TM model, the CCC governance model places particular emphasis on the implementation of transition plans and the anchoring of organisational commitment. Therefore, instead of focusing on the different steps of this process, which are difficult to capture in such a long-term model, the CCC governance model is built on the most important functions that are key to enabling urban transitions:

1. **Coordinating function** - Transition intermediaries who lead and coordinate the transition process (Transition Team)
2. **Cocreating function** - Stakeholders' collaboration and cocreation to develop transition plans (Transition Arena)
3. **Anchoring function** - Stakeholders' commitment for the implementation of the transition plans (Anchoring)
4. **Governance learning function** – Reflexivity and adaptation capacity of the municipality



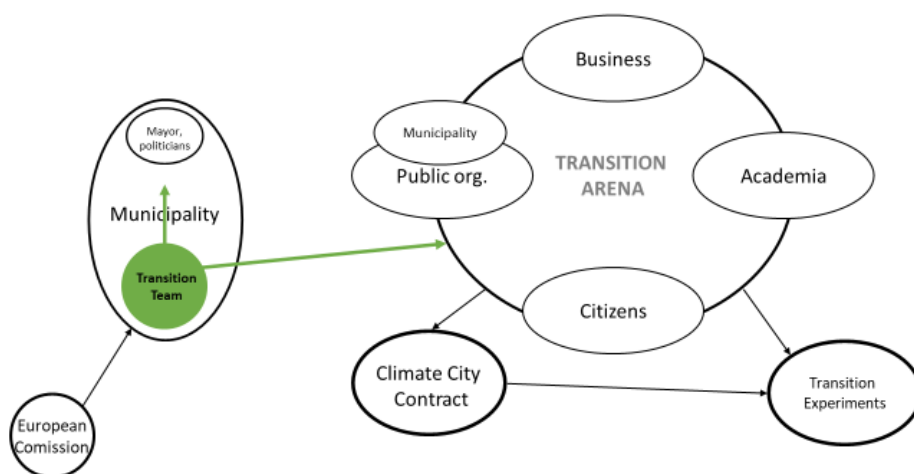


Figure 1. CCC governance model

1.2.1 Coordinating function

The European Commission has urged local authorities to establish a governance framework for the advancement of CCCs, which includes developing action portfolios and investment plans to facilitate the local transition towards climate-neutrality. Given that transitions necessitate extensive and profound socio-economic changes, it is imperative for local authorities to assume new responsibilities and develop new capabilities to effectively oversee these transitions (Soberón et al., 2023).

On the one hand, the Cities Mission considers municipalities as the primary responsible party for establishing the structure for managing the local climate transition. Therefore, they were invited in the Cities Mission to establish a so-called Transition Team to take on this role and facilitate urban transitions². The Transition Team is an intermediary team hosted by the municipality, although it may also have external members. Their aim is to mobilize all actors and sectors of the local society to work together and align their efforts and develop holistic solutions that drastically reduce their emissions. To do so, the Transition Team sets up and supports the Transition Arena, which is composed of quadruple helix organisations responsible for developing the CCC.

On the other hand, the municipality, ideally with representation from many departments, is also present in the Transition Arena as one of the organisations and actively contributes to the development of the CCC. To prepare municipalities for taking on the new roles that governing transitions require, the Transition Team initiates and supports systemic changes within the municipality.

The Transition Team therefore has two roles: an *intermediary* and a *change agent*.

Hence, Transition Team members should be selected based on the skills, abilities and knowledge of methods required to fulfil this dual role: such as a good knowledge of the municipality and local

² See also the Transition Team Playbook, available on the Cities Mission portal: [Transition Playbookv0.1.pdf \(netzerocities.app\)](https://netzerocities.app/Transition_Playbookv0.1.pdf).



environment, extensive network, stakeholder involvement, group/process facilitation and design, project management, communication, knowledge management, etc.

Once the Transition Team is set up, they can start planning the activities that the two roles will require.

Transition Team as an intermediary

To set up, coordinate and facilitate transitions the following steps need to be taken: identifying stakeholders, onboarding them to the Transition Arena, and then organizing their continued cooperation. Therefore, fulfilling the coordinating role, the Transition Team, first, needs to identify the organisations it wants to invite to participate in the Transition Arena. The Transition Arena is a collaborative platform that is not static but is constantly changing and evolving, as the CCC is ideally reviewed and redesigned according to necessity and the list of organisations participating in the current plans may change. It can thus start with a few carefully selected stakeholders representing business, academia, citizens and public organisations and preferably include actors from all sectors of the local economy or build on an already established network consisting of different types of stakeholder groups. However, to achieve structural changes in society, more stakeholders need to be involved in the long term.

Second, the identified stakeholders should become active partners in the arena. The arena has a multi-level dimension, as some organisations that are important in the local economy, and possibly also large emitters, do not operate locally, but their planning and decision-making take place at the national or sometimes EU level such a local unit of a large international company, or big NGOs that may represent citizens well, but they do not have a local group in every city. In some other cases, the local government is not the right level actor because, for example, in debates on infrastructure or subsidies, decisions must be taken at the national and regional level. Hence, in addition to the horizontal dimension, the arena must also have a vertical dimension that links it to actors at national level. Therefore, when designing the arena, strategies must be developed to align the different dimensions and for continuously onboarding new actors who can join the cooperation at different stages.

Third, once the stakeholders are on board, it is important to plan ways and means of cooperation and co-creation. While the Transition Arena can take many forms, certain features to ensure smooth operation and active participation should be built into any type of arena. The Transition Team's main role in the arena is to facilitate the joint creation of transition plans, assist transition experiments, and support internal communication and decision-making.

1.2.2 Cocreating function – Transition Arena

In the context of urban transition, the arena is a specialized community of stakeholders that focus their efforts on reducing emissions. The expectation is that the plans developed around this priority will introduce new areas and ambition targets that individual organisations have not previously addressed to the same extent because they were too challenging or too far outside their comfort zone. The plans and projects developed by the arena can also be more ambitious in terms of budget, scale and complexity compared to individual plans.



The Transition Arena is a form of network governance (Khan, 2013) that differs from traditional hierarchical governance by being more flexible and built on collaboration between corporate and public entities. Similarly, to the TM model, arena participants engage in shared visioning to imagine the whole picture of a sustainable city, ensuring that all issues that need to be addressed are addressed and plans are developed systemically and holistically (Loorbach and Rotmans, 2010). In the ideal scenario, it is thus the arena's responsibility, not the Transition Team's, to develop the CCC. However, the municipality, as a stakeholder in the arena, is expected to participate in this process.

The development of the transition plans, the co-creative work needs to be designed. While there is no one-size-fits-all solution, there are certain responsibilities that need to be provided in the arena to ensure its smooth operation. The arena participants therefore need to decide how they want to structure the work in the arena and what work streams they want to follow, so that the arena can meet its objectives of both developing interim plans for climate-neutrality and anchoring organisations. Many cities, for example, set up working groups around different focus areas. Once these working groups have been set up, it is important to establish a framework for co-creation: a goal and sub-goals should be defined, and these should be coupled with deadlines and concrete outputs. In addition, participants need to agree on the roles and tasks of the members, as well as on the way of internal communication and coordination within each working group.

Another important responsibility is related to the main coordination within the arena. This helps oversee and link the various group activities and ensure that all efforts are aligned with the mission and proceed at the same speed. This facilitates learning and communication within the arena and with the outside world. Those who coordinate must also assess the work's progress and ensure it meets members' expectations.

Third, it is important to have some form of representation, to appoint people who can represent the work and become the face of the transition process to the outside world. In addition, setting up a body of high-level representatives can play an active role in both recruiting new organisations and anchoring existing ones (this will be discussed in more detail in the next sub-section on anchoring).

Fourth, communication is also an important responsibility that needs to be carefully designed in the arena. Therefore, internal communication channels within the arena should be established to facilitate communication within and between working groups. These can be diverse types of communication channels and platforms, such as emails, chat rooms, newsletters, but equally important are platforms for tacit learning and reflection, workshops and physical meetings.

For voluntary collective action to happen, one of the success factors is the trust that members have in each other and in the mission. There should be added value that the Transition Arena, as a community, can provide for its members. As organisations come together on a voluntary basis to work together on climate change and make real investments, trust becomes the essential glue that makes their cooperation work. Voluntary collective action requires strong trust between members, trust that others can be relied upon and that nobody will freeride. Trust requires personal interaction, a physical space where members of the arena can meet and get to know each other on a regular basis. Ultimately, a well-



functioning arena builds trust not only among its members, but also across the city, and encourages people and organisations to join the mission. The better known and recognized the arena becomes in a city, the greater the social pressure on organisations to join.

Therefore, the more a community of arena members can be built, the more they share a common identity, the more committed they can be. To foster this, it is good to give the arena a brand, with a name, a logo and a website. They can put out their own events and celebrations, and a common narrative that connects people for a good cause. At the same time, the arena needs to develop its external communication channels, which play an important role in attracting new organisations and raising its profile in the local community to further strengthen the engagement of existing members.

Once the arena's structure is set up and the different functions are enabled, it is also important to agree on how decisions are made, which are made at working group level, and which require the whole arena's involvement. Furthermore, to ensure that the arena runs smoothly and that there are not too many conflicts, the participants' roles and responsibilities must be clearly defined. In addition, a code of conduct should be established and accepted by all, including core values and rules, such as how to deal with conflicts, underperformance and absentees.

1.2.3 Anchoring function

Anchoring refers to the development of internal commitment within participating organisations of the local ecosystem to embrace and implement the transition plans. This requires changes in the internal planning and budgeting of the organisations, so that plans developed jointly with other organisations can become part of the organisation's individual plans. While members of the Transition Team can help anchor the municipality by involving different departments in the planning process, representatives of the Transition Arena can anchor their own organisations.

Anchoring the municipality

As a change agent, the Transition Team can induce changes within the municipality to make climate an overarching consideration in all decision-making. However, to become a leader that can support other organisations on this journey, local governments must first commit. Staff in different departments, such as health, education or urban planning, need to understand the urgency and importance of the mission, how it is relevant to their work, and how they can contribute to the cause.

To break down the silos within the local government and to introduce a holistic approach to climate-neutrality, it is important to create a network of people from all different departments who understand and agree with the mission and share the urgency of transition. This will be a network of change agents that the Transition Team can work with and who can help them get high-level leaders, politicians and even the mayor on board. This internal network of change agents can help create an institution-wide network and support internal change. This requires building their capacity, which the Transition Team can help with by organizing training or giving specific presentations. Then, their commitment and involvement must be kept at a high level, as systemic change in an organisation takes time. Therefore, the Transition Team needs to develop a learning infrastructure, platforms and opportunities within the municipality where like-minded people can meet, learn and exchange ideas.



Anchoring organisations

Anchoring organisations - increasing their commitment to implementing the transition plans – is also a longer complex procedure that needs to start at moment of involvement in the arena and be nurtured and deepened throughout the transition process. They must first be motivated to join the arena and show a willingness to explore new ways and areas of collaboration and investment. Second, they need to learn new skills, roles and methods that will enable them to develop joint transition plans and help their organisations adapt to co-creation. Third, they also need to develop their organisations' commitment to embracing the plans and to implementing them.

Motivating

Organisations may have a number of reasons for joining the Transition Arena, which can be grouped into three main categories according to Lindenberg's goal-frame theory (2007). Adapting this framework, which groups individual motivations for action, to organisations we can identify the following categories:

1. Economic benefits - to protect and enhance one's assets
2. Social benefits - to improve one's current state
3. Normative benefits - to behave in an appropriate manner

Research shows that the presence of at least two types of benefits is necessary to decide to join the arena. First, the perspective of economic benefits can attract organisations. For example, the municipality could offer its land for lease for climate-neutral investments or set up a one-stop shop for easy licensing. Furthermore, as initiatives and measures to reduce emissions will intensify in the future, companies that are first to develop zero-emission alternatives for products and services can also enjoy a first mover advantage, acquiring a significant advantage in the longer term. Second, social benefits can also be appealing for organisations. Participation in the arena usually attracts public attention, which brings recognition and appreciation from the local community. Third, normative benefits, such as protecting the environment for future generations is something that many organisations consider important and where they want to do their bit.

Understanding organisational motivations for joining the arena can aid in creating an incentive portfolio that provides various forms of benefits. Municipalities may provide the different quadruple helix stakeholder groups with benefits such as streamlined project permitting in the arena, lease of municipal land, special subsidies, or tax incentives. The municipality could incentivize academic partners to participate by offering research resources or granting access to municipal data. Citizens can take part in civic budget campaigns by concentrating on certain issues in their local surroundings. However, not only municipalities can incentivize other stakeholder groups to participate, but they can also incentivize each other. Citizens can exert public pressure on firms to play part in the transition and can also incentivize local governments to take a leadership role in the endeavour by voting for parties and politicians dedicated to the change. There is a long list of incentives that all other stakeholder groups can potentially offer each other. To ensure this happens, they can be encouraged or *nudged* through



specific information campaigns, such as raising awareness about climate change and how local businesses can get involved in reducing emissions.

Enabling

Once organisations opt to take part in the Transition Arena, they will appoint a representative to attend arena meetings, contribute to collaborative visioning and planning, and contribute to the creation of the CCC. This involves developing their comprehension and ability to engage in mission-driven planning and innovation within network governance. To do so, first, the support architecture of the arena must be built by defining roles and duties, developing procedures, and setting up different services. This involves determining the ways in which the Transition Team can assist the work in the arena and how to manage a hybrid work structure that combines voluntary (arena members) and professional employment (Transition Team and other expert support).

Developing long term commitment

Organisations that become members of the arena designate a representative to engage in the collaborative planning process on their behalf. This person will gain new skills, acquire knowledge in topics like mission-driven innovation and urban transition management, as well as learn methodologies and procedures. The focus and values of the transition work are often also new to the organisational culture he/she arrives from.

However, this learning process does not take place simultaneously in their organisations. So, when these representatives present plans or arena processes to their organisations containing new terminology, ideas and principles, it can easily create tension and conflict between the two institutional cultures (arena and organisation), which can lead to resistance to implementing the transition plans. Therefore, it is necessary to build understanding and commitment in the organisation to ensure that the entire institution can commit to implementation of the transition plans. This requires a two-sided anchoring strategy: an internal and an external strategy.

Internal anchoring requires arena participants to become change agents whose capacity needs to be built to be able to:

- Translate and interpret the transition plans to their organisation's language, processes and rules and present them in a way that is the easiest to understand and the most inspiring for the people.
- Introduce rewards or spread new value stories throughout the organisation to increase people's motivation to change.
- Ultimately, strive to build transition plans into organisational budgets and appoint people and develop action plans for implementation.

The Transition Team can enable this process by supporting the learning of arena participants (e.g., capacity building workshops) and organizing reflexive sessions to share issues, experiences and develop anchoring strategies.



External anchoring helps the internal anchoring work of arena members in inducing systemic changes in their organisations from the outside. External anchoring consists of functions that can be built in the arena's design and aim to engage the management of each organisation into the transition work and increase their commitment. While internal anchoring is a bottom-up process, as representatives are often appointed at the lower part of the organisational hierarchy, external anchoring is top-down aiming to directly engage organisational leaders. To do so, one potential option is to set up a board of high-level representatives within the arena, including CEOs and directors of already committed organisations who could have easier access to the directors of other participating organisations. Second, projects that emerge from the joint work in the arena, provide an opportunity to implement transition plans and anchor participating organisations. Their achievements, including partial results, help to continuously communicate small wins, which maintain enthusiasm, build trust and thus create a stronger sense of ownership among non-directly involved arena members.

1.2.4 Governance learning

Learning is the process of continuously adjusting one's opinions by considering evidence, personal experience, and new information. Governance learning here refers to the process of learning by policymakers and other government actors at the local and national level about the development and implementation of participatory planning procedures with the aim of enhancing their efficacy for guiding climate transitions (Newig, 2016). Municipal officers can acquire knowledge deliberately, for example, by conducting policy experiments and evaluating evidence systematically regarding implementation and effects (Sabel and Zeitlin, 2012, Sanderson, 2002). Alternatively, learning can occur incidentally or intuitively, through trial and error or the spontaneous assimilation of experience (Bennett and Howlett, 1992).

Learning is an essential function that accompanies transitions and is an iterative process including a series of trials and errors (Swilling and Hajer, 2017). This requires the constant reflection of all stakeholders on individual and group efforts (Doci et al., 2022). The manifestation of progress may not be immediately apparent, as it involves the gradual alteration of individuals' mental frameworks and methods, which serve as the foundation for significant transformations (Rohracher, 2023). Active and regular reflection, rather than measurement, can become the primary form of evaluation, which can also trigger deep learning in participants. Reflexive learning helps to understand why some activities have worked and others have not, as well as whether current governance modes require modification and adaptation to achieve certain goals and what circumstances might allow new governance configurations to develop.

During the process of urban transitions, municipalities are acknowledged for their various significant responsibilities, including providing or arranging funds, initiating projects, facilitating processes, and assuming leadership positions (Wittmayer et al., 2017). Nevertheless, municipalities have challenges in incorporating transition management logic and network governance principles into their prevailing everyday operations (Gudde et al., 2021). Network governance in the public sector context entails a transition from traditional hierarchical forms of governance, which are controlled by public administrations, to more flexible forms of governance. These new forms involve the active participation



of private actors such as businesses, citizen associations, and non-governmental organisations (NGOs) in the policymaking process (Khan, 2013). To effectively function in network governance, cities must adopt a cultural shift and nurture the opportunities to collaborate (Soberon et al., 2023), and invest in this collaboration outside the traditional municipal boundaries.

Learning therefore is an essential part of the 'Mission' that also needs to be systemically induced and ensured in each city. Thus, the Transition Team, as an intermediary, also has a role to play in supporting learning within the municipality for acquiring collaboration capabilities and work in network governance and promoting structural organisational changes that enables these capabilities. Furthermore, participation in the Cities Mission provides a unique opportunity for cities to learn from each other and from each other's experiences, as well as from experts in the NetZeroCities consortium.

1.2.5 Summarizing: key functions of CCC as a process

From the previous, we see the following four functions emerge which play a crucial role in managing the transition. First, a coordinating function: transition intermediaries (the Transition Team) lead and coordinate the transition process. Second, a cocreating function: stakeholders collaborate and cocreate the transition plans in the Transition Arena. Third, an anchoring function: stakeholders are (or need to be) empowered to ensure their commitment to the implementation of the transition plans and embedding the CCC vision into their organisations. Fourth, a governance learning function: reflexivity and adaptation capacity of the municipality and their governance network is key to ensure effective and accelerated pathways to climate-neutrality in the Mission Cities.

2 Methodology

To identify the extent to which Mission Cities have been able to put the CCC governance model to practice, this research was conducted in a qualitative way, based on different data sources and corresponding methods of analysis. This chapter outlines first the analytical framework based on the theoretical model described in Chapter 1. It then describes the data collection process and the methodologies used for data analysis.

2.1 Analytical framework

The purpose of this report is to assess to what extent and in what form Mission Cities have been able to adopt the CCC governance framework and what benefits the CCC as a governance tool could bring in creating the conditions for local planning and management of transitions. While the CCC as a governance tool and model provides guidance to cities on how to design and manage transitions, it also recognizes the differences between European cities in terms of size, location, profile, culture, income and a range of other factors. The report therefore aims to identify possible changes and solutions that could help improve the CCC model.

CCC as a product

First, we were interested in how cities interpret the CCC as a governance tool and how the work on the different parts of the CCC document has affected local transitional governance. At the same time, we



were also interested in their experiences of completing the CCC document, and what they would change or add to it.

CCC as a process

As mentioned in the theoretical part, CCC as a governance model builds on transition management (TM) and adopts its process structure. At the same time, it goes beyond the TM model and aims to develop a framework that can provide a backbone for long-term cooperation among local stakeholders to achieve climate-neutrality. Compared to the TM model, the CCC governance model places particular emphasis on the implementation of transition plans and the anchoring of organisational commitment. Therefore, instead of focusing on the different steps of this process, which are difficult to capture in such a long-term model, our analysis aims to explore whether cities can establish the most important functions that are key to enabling urban transitions. Consequently, we will focus on the following functions and their accompanying indicators summarized in the table below.

Table 1. The functions and the related indicators that guided our analysis

	Function	Indicators	Description
1	Coordination function	Composition and operation of the Transition Team (TT)	We were interested in who are involved in the TT and what kind of skills they require, how they operate and if they have budget and dedicated hours for working on the CCC process.
		Role and purpose of the team	We were interested in the team's main role and purpose if the Transition Team was set up to coordinate the CCC process (intermediary) or it was mainly working on the CCC development alone (executor).
		Onboarding members to the arena	This indicator explores the TT approach to the Transition Arena: whether they have an onboarding strategy (who/how/when to onboard in the arena), plans for expanding the arena and strategies for stakeholder engagement, and challenges they experienced in this process.
2	Cocreation function	Quadruple helix representation	This indicator explores the composition of the Transition Arena, if business, public organisations, academia and civil society are equally represented and involved in the development of the CCC.
		Level of stakeholder engagement in CCC development	Stakeholder engagement refers to the level of involvement of arena stakeholders in the development of the CCC (informing/consulting/ creation). We were also interested in which arena members were primarily responsible for writing the CCC and if different departments of the municipality were involved in its development.
		Arena design and operation	We were interested how the Transition Arena was set up and designed, how work in the arena is organized and coordinated.



3	Anchoring function	Ownership of the transition plans in the CCC	This indicator explores the level of ownership of the different stakeholder groups and the municipality has over the transition plans in the CCC and to what extent they are ready to implement these plans.
		Broad institutional involvement of the municipality	We were interested to know whether the TT involved different departments of the municipality in the CCC process and to what extent the process was prioritized and resourced.
		Political/management support for the CCC process	We were interested to know if the CCC process is supported within the municipality and if they received support from the national government.
		Engaging and committing arena organisations to CCC implementation	This indicator explores if and how the TT worked on engaging and committing the arena organisations to the implementation of the CCC.
4	Governance learning function	Impact of the CCC on governance	This indicator explores to what extent the CCC process enabled municipalities to develop collaboration capabilities and work in network governance.
		Structural organisational changes in the municipality	We were interested if the CCC process involved structural organisational changes in the municipality.
		Inter-city cooperation and learning	This indicator explores if cities have established connection within the mission program to exchange knowledge and learn from each other.

In addition to the features and related indicators, we were also interested in how our respondents assess the transition process in their city: how satisfied they are with the process and what challenges they can identify.

2.2 Data collection

The analysis of the CCC process has consisted of a mix of data collection approaches: interviews, a survey and feedback collected at three in-person learning sessions. The data was collected between June 2023 and February 2024, as shown in the timeline in Figure 2.

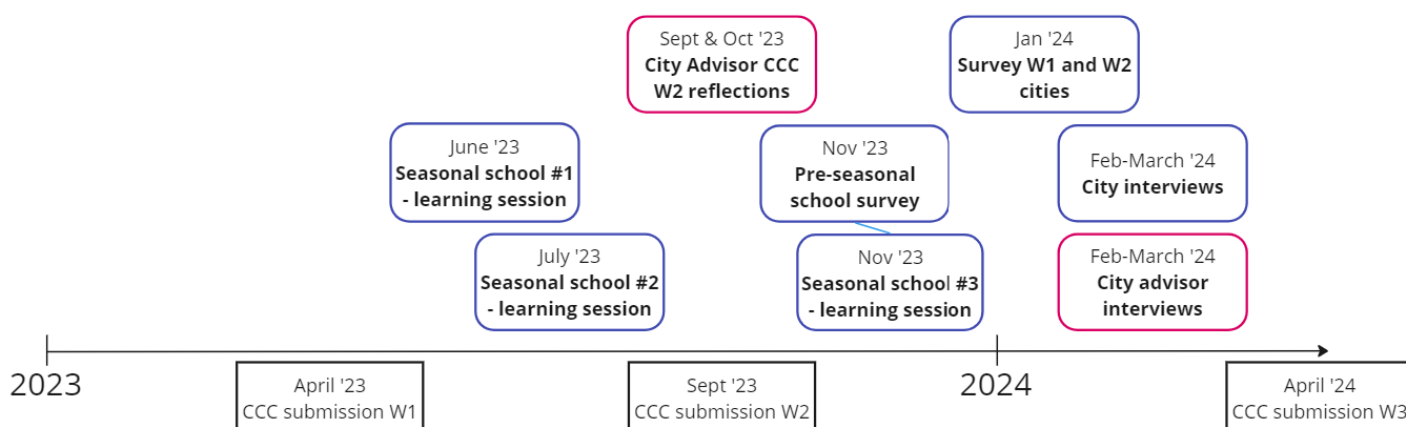


Figure 2. Timeline of data collection



For the analysis, the interview and survey results have formed the primary data source, while the input given at the CA and seasonal school sessions will be used as complementary data to better illustrate and support the results. In addition, we have attempted to set a 'baseline' for the CCC progress results based on the analysis of the Mission Cities Expressions of Interest, which was carried out in September 2022 by the City Advisor team.

Survey

In February 2024, a survey invitation was sent to all contacts of the Mission Cities that submitted their CCC in windows 1 and 2. 14 full responses were collected; as these responses were anonymous, unfortunately it cannot be ruled out that responses were given by city representatives of the same city. In addition, as 37 cities (and 14 full responses) is not sufficient to provide generalisable results, no quantitative results will be generated based on this survey.

The interview data was collected between 30 January and 12 February 2024. Responses were collected from three cities with a submitted CCC in window 1 and 11 cities with CCC submitted in window 2. City interviewees were self-nominated, and so can show a bias towards exhibiting successes and best practices.

Interviews

In the survey, city representatives were asked to if they had interest to take part in a follow up interview. This led to four follow-up interviews with city representatives. The interview results were anonymised to provide a secure environment, giving the cities space for expressing best practices as well as concerns. In addition, four City Advisors, each representing around 8-10 cities, were interviewed.

The interviews were structured with aid of an interview guide. Interview themes for both interview types were similar, following the analytical framework described earlier in this Section. Interview guides for both interview types can be found in Appendix A.

Learning sessions at seasonal schools

Mission Cities were invited to take part in various seasonal schools to support their CCC process, in the run up to the submission of their (first) CCCs. Participants in these three day in-person workshops in June (Milan), July (Santander) and November (Budapest) 2023 are all part of their city's Transition Teams, most of which have not submitted their CCC – the seasonal schools' function is to provide guidance on the different parts of the CCC process, such as social innovation, citizen and stakeholder engagement, the economic model and impact pathways. Representatives (generally local government employees) of around 20-25 cities participated in each of these schools.

As part of the seasonal schools, CCC reflection sessions were organised, where feedback on the cities' individual CCC processes was collected. Each city representative discussed with a peer the following questions:

- What made your process successful so far?



- What do you want to improve about your CCC process?
- What CCC-related topic/theme/issue would you like to discuss with other cities?
- What kind of support do you need in the coming months?

Their answers were collected on A5 cards. A total of 37 responses were collected between June and November 2023.

Collective reflection sessions by City Advisors

Following CCC submission window 2, two collective sensemaking reflection sessions were organised online, in September and October 2023, with all City Advisors as well as other consortium members involved in the 'light touch review' of CCCs prior to the more formal window 2 submission via NZC to the consortium portal in order to undergo the CCC completeness check ahead to submission to the European Commission. A MIRO board was used to collect feedback on different categories:

- Good practices
- Attitudes towards the CCC
- Learnings
- Support needs

The relevant post-it's collected on this board were used as data for the analysis, fully anonymized and aggregated.

Units of analysis: Mission Cities' CCCs

In sum, Mission Cities were followed at several different stages of their progress. Table 2 shows which stages the different data collections have focused on.

Table 2. Mission City stages per data source

Data source	Mission Cities
Seasonal schools	20-25 Mission Cities at each school, all in process of CCC writing prior to submission; from these cities, a total of 23 responses were collected across the three summer schools.
City Advisor sensemaking sessions	Window 2 cities representing 27 cities
Survey	Window 1 and 2 cities
City interviews	Window 1 and 2 cities
City Advisor interviews	Each City Advisor supports 8-10 Mission Cities, some with submitted CCC, representing around 35 cities

2.3 Data analysis

The analytical framework as described in Section 2.1 was guiding for the analysis of all data sources.



Interview data, survey results, learning session feedback and City Advisor feedback were clustered thematically, following the elements of the analytical framework.

To validate and bring together the results from the various data sources, two validation sessions were organised with all researchers included, plus an external researcher not previously involved in the coding, clustering and analysis. Upon conclusion of integrating all research results, an additional sensemaking workshop was organised with all researchers involved as well as other WP team members to identify gaps and avenues for further research, as input for the Discussion section of this report.



3 Results

3.1 'Baseline' – the Expressions of Interest

To be able to participate in the Cities Mission, European cities were asked to submit an Expression of Interest (EOI) early 2022. In this EOI, cities described their emissions and climate ambitions, as well as their barriers and capacity building needs related to climate actions at that time. At the start of the Mission, the City Advisors analysed the EOIs of the 112 selected Mission Cities to develop city typologies and to identify initial support needs. Below, we extract the support needs related to the CCC process from this analysis and use it as a baseline for assessing the CCC progress.

At the moment of application to the Mission, 89% of the cities had already adopted post-2020 targets and 80% of the cities agreed to include all sectors into reaching climate-neutrality by 2030. However, at that point a lot of cities still lacked an overview of the residual emissions as well as the sectoral actions already planned. As such, for most it was difficult to determine what it would take to actually reach net zero in 2030, especially when it comes to finance and investment planning. Only 3% stated to have a fully integrated investment strategy to deliver climate-neutrality. About 17% were only getting started in estimating their investment needs and the remaining 80% were somewhere in between, with 56% not having estimated their capital requirements yet.

Accordingly, the three capacity building needs that were mentioned the most in the EOIs were:

- Knowledge on climate finance;
- Cross-sectoral knowledge on climate-neutrality and;
- Skills on investment planning

While some municipalities may already have core teams and established collaborations on the climate change portfolio, most had not yet been introduced to the Transition Team and Transition Arena concepts. Within the CCC process, these vehicles could possibly play a role in capacity building needs such as:

- Difficulty in building collaborations between public and private sectors;
- Insufficient administrative and/or operational capacity;
- Lack of citizen participation and proactiveness;
- Regulatory red tape and;
- Slow behavioural transformation, including cultural barriers.



3.2 CCC as a product

The CCC as a product provides a comprehensive framework for cities to develop their commitments, action plans, and investment strategies toward achieving climate-neutrality by 2030. In the following, we show how diverse cities perceive the CCC as a product, thereby highlighting the challenges faced in its development and implementation. Thereafter, recommendations for improvement proposed by the respondents are elaborated upon.

A strategic and systemic instrument

Mission Cities are currently at very different stages in their CCC process, from advanced – building on pre-existing plans and stakeholder networks around climate action – to beginning – creating an integral climate-oriented plan for the city for the first time – and from highly motivated to struggling with understanding what the CCC can be for them and whether it is a valuable undertaking. A majority of survey respondents indicates the CCC has been a useful instrument in supporting the Transition Team’s work, which has helped address existing barriers and seize new opportunities for working on climate-neutrality.

Our main findings indicate that the CCC is widely regarded to facilitate a strategic approach towards achieving climate-neutrality. One city representative noted that the CCC "is a tool to be more strategic about becoming climate-neutral, that the Climate City Contracts and in particular the portfolio of actions is an opportunity to be very strategic about what we focus on and where we think the barriers and the levers are. Hence, it goes beyond a simple checklist of actions by prompting cities to identify interconnected challenges and solutions." This comprehensive approach allows cities to prioritize actions tailored to their specific contexts and leverage the CCC to address systemic obstacles hindering progress towards climate-neutrality. As such, cities also expressed the CCC as facilitating systemic thinking, that helps cities adopt a more systemic approach, beyond typical project-based approaches. This sentiment was reinforced during the City Advisor reflection sessions, where City Advisors underscored the CCC's ability to generate awareness of the crucial importance of embracing a systemic mindset and aligning with the theoretical underpinning of the CCC as a tool that promotes systemic thinking and a holistic approach to addressing emissions across various sectors.

Connecting the dots

Overall, cities indicate that the development of the CCC has provided a good opportunity for them to bring together their existing projects, processes, networks and opportunities (learning sessions, interviews). This shows that transitions in different forms have already started in the participating cities, but these processes often have not yet been identified and linked in a systemic way. As one of the seasonal school participants described, participating in this mission helped them to “connect the dots in the system”. Envisioning the trajectory in a more integrated way appears to lead to acceleration of already ongoing activities, according to one City Advisor. Furthermore, being part of the Mission also creates momentum for the cities, for instance in attracting and engaging more stakeholders. This is due to the Mission's systemic approach, which provides a framework for a diverse set of potential co-benefits, including but not limited to, the reduction of greenhouse gas emissions, as well as potentially



the high profile of the programme. Energy savings and other such co-benefits make it more appealing to a broader range of stakeholders who are motivated to commit to the Mission's objectives. Furthermore, a more integrated outline of plans also supports municipalities in approaching and engaging with larger (e.g., industrial, multinational) companies.

Yet this brought the challenge of deciding which strategies, visions and ambitions should form part of the CCC and based on which criteria. For instance, various cities already have a SECAP³ in place. Pre-existing plans and stakeholder networks have provided a fruitful basis for cities to further build upon with the CCC process, according to one city representative: “[We had a] kind of pre-climate city contract, I guess you could say. But what happened in the years after that is that we saw that just signatures alone were not enough to actually catalyse the kind of action that we needed. So, we saw in the Climate City Contract an opportunity to go further and to go deeper and instead of just having a general signature, try to define commitments at the level of individual projects.”

Increasing the level of ambition of the connected portfolio

Being more advanced also appears to have its downsides. Some cities perceive the CCC as a superfluous exercise, which impedes their progress. According to one City Advisor, these cities feel that participation in the CCC requires a considerable amount of redundant work and unnecessary detail which is seen as impeding their progress, and "determining how the CCC is a valuable addition to existing work, without just repeating and imposing it into an existing local context with processes in place" proved difficult. Several interviewees express doubts in their approach to the CCC, such as focusing too much on existing plans; “I think, in developing the portfolio we focused too much on looking at what was already ongoing and trying to take that and build on it, versus being more disciplined about identifying the main barriers and then building interventions and projects around those”, one city representative reflects. The City Advisor reflection sessions indicated that for some, the CCC is just another instrument or ‘roadmap’ added to existing ones employed by the municipality which does not benefit an integrated approach.

Moreover, some cities tended to 'sell' their activities through the CCC rather than admitting weaknesses and risks, and City Advisors suggested that the process would improve by confronting challenges more. One seasonal school participant did indicate that the CCC was an opportunity to increase funding and recognition for already existing plans, by bringing them together in one place while slightly increasing their level of ambition.

While most interviewees reflect that the actual Mission goal – climate-neutrality by 2030 – is likely extremely challenging under current conditions/might feel unachievable, they see value in the Mission approach overall: the cross-sectoral, systemic outlook on an ambitious goal motivates different ways of thinking, planning and acting. One city representative reflects: “I think the value of the program lies in

³ A Sustainable Energy and Climate Action Plan (SECAP) commits local signatories to take action on the reduction of greenhouse gas emissions, climate mitigation and climate adaptation measures. See JRC Guidebook ‘How to develop a Sustainable Energy and Climate Action Plan (SECAP)’ for more information: [JRC Publications Repository - Guidebook 'How to develop a Sustainable Energy and Climate Action Plan \(SECAP\)'](#) (europa.eu)



'what if we set this as a goal? What would it take for us to get there?'. Because that enables you or motivates you to think in another way. And so, you're moving away from just incrementally moving forward to, 'OK, but if we had to get there, that would probably mean we would have to transform the system in some way. And so, what are steps we can take towards transforming the system?' [...] So, I think it is a very valuable approach." Furthermore, setting an ambitious goal motivates action, according to another city representative: "We still think it is realistic to have that goal because if you don't have that goal, nothing will happen. And so, we use it as a catalysator, as a tool in our ambition." Cities do, however, simultaneously struggle with such near-unattainable goals, but tend to decide in favour of setting high ambitions, according to one City Advisor.

Allowing for local conditions and uniqueness

In addition to the above, survey respondents recognized the CCC as a powerful tool to assess their unique strengths, and, as expressed by a city interviewee, the CCC facilitates "establishing what makes you as a city special in your innovation steps [...] innovation in governance or investments. So, every city has strengths and so, to tell that story and to have this comprehensive picture". Hence, the CCC is a narrative device, useful "for surfacing trends across the cities and providing clear insights for where support might be useful, especially as you know it reflects on barriers and things like that." This sentiment was reemphasized during the City Advisor sessions, which indicated that the CCC was an instrument to contextualize the cities' journey towards climate-neutrality within their historical context, fostering a sense of identity, and showing the significance of their efforts. Overall, across data sources, communication and providing a narrative (or storytelling) were indicated to be important capacities to anchor the 2030 climate goals in the cities' citizens and stakeholder networks. As a key barrier, a seasonal school participant mentioned "to tell the whole picture/story of climate protection – clear and detailed for all people." A clear narrative was considered essential to effectively generate commitments.

To address these challenges and enhance the CCC's efficacy, interviewees and seasonal school participants have proposed a range of improvements and adaptations. A recurring theme is the need to strike a balance between clear guidelines and flexibility for local adaptation. One City Advisor noted that they "feel the Climate City Contract has been top-down process, fairly prescriptive. Now it will be interesting to see if we can merge into more of a middle ground [...] the work that we need to do moving forward with the Climate City Contract is how to maximize impact for the cities, which will require flexibility in certain areas or strategizing really. [Yet] I think there's certain areas that we need to be rigid on in order to ensure a level of standardization across the Climate City Contracts to enable the most effective support from NetZeroCities, but also from the Commission, from national governments". Additionally, others called for greater latitude to align the CCC with their existing local systems and needs, to be able to build on existing frameworks.

From visions to tangible plans through the CCC template

However, translating these ambitious visions into tangible plans has presented challenges. Survey data reveals that the investment pathways component, which encompasses scenarios, planning, and monitoring indicators, posed the most significant hurdle. Cities also experienced difficulties in mapping the current climate investment landscape, enabling financial conditions, and engaging diverse



stakeholders in the writing process. This can partly be attributed to the fact that, as noted by a City Advisor, "the level of detail required is a challenge for the analysis needed from costing and emissions reduction perspectives." In contrast, more straightforward elements like defining goals, priorities, processes, and securing signatories are relatively easier to accomplish. As one city representative said: "the commitment part was easiest to write [...], but scenarios and investment were challenging." and "it's not easy to fill this for cities not so advanced in strategies and mindset change...It seems like writing homework again and again, answering the same questions in cycles." This disparity highlights the complexities inherent in translating high-level climate ambitions into tangible investment roadmaps and enabling environments. Connecting action planning to financing strategies and longer-term financial planning were noted as key lessons from the CCC process by two survey respondents respectively.

During the seasonal schools the respondents were in the midst of writing their CCC, and the cities raised a variety of support needs around the CCC format, ranging from the general to the specific: insights into how other cities formulated their actions, support on calculating and estimating emissions, on approaches in planning stakeholder sessions to create the action plan, aligning commitments, action and investments, and on structuring of the document, among others.

The CCC template was not always easy to understand (and was, at the time of research, still undergoing improvements). Cities' suggestions from the survey focused on reducing redundancies, such as consolidating overlapping Action and Investment Plan components, and adopting more concise formats akin to the Commitment Plan for improved readability and stakeholder engagement. Regarding the action plan, cities struggled with constructing a connected portfolio of actions. Notably, one city advocated for incorporating consumption-based emissions into the CCC templates, recognizing the importance of addressing both production and consumption-related emissions for comprehensive climate action. Cities also emphasized the need for enhanced guidance materials, such as detailed tables, charts, and more online interactions with advisors, as well as tailored one-on-one support for navigating CCC submissions. Both in the survey and the seasonal schools, cities indicated the preference to view already labelled CCCs developed by other cities (of which there weren't many at the time) as inspiration. In addition to sharing examples from other cities, facilitating multi-level dialogues across governance levels was also proposed to avoid reinventing processes and ensure more effective implementation.

A currently predominant challenge is moving from planning and writing the CCC to implementing it. The first major steps have been taken, said one City Advisor: "They've already done most of the mental work, which is outlining and understanding the difficulty of the process". Yet now the steps towards delivering on the plans are still unclear to many cities. Or, as one seasonal school participant put it: "After submission, what?". A potential reason for this is the level of abstractness of the Cities Mission approach, which is difficult to communicate to stakeholders and operational local government staff (e.g., technical staff). The CCC vision needs to be translated into locally fitting, practical actions. This ties in with a challenge around resources at the local level; in some cases, City Advisors did see clear visions and planning, but a lack of staff and resources to implement the plans (this challenge is detailed further in Section 4.3.1 on the coordinating function).



CCC reiterations

City Advisors express that iterating on the CCCs would be key to deal with future uncertainties and difficult changes like behavioural and cultural shifts. The first CCC represent the first concrete step towards reaching climate-neutrality. One City Advisor says: “My hope is that the Climate City Contract process has set cities up and started laying the groundwork for a clearer implementation process from a prioritization perspective. From a challenges perspective and hopefully from a gaps perspective, like what do we not know that we need to know? Or what work still needs to be done, and how do we do it?”. One concern as expressed by a City Advisor is that moving to implementation while iterating a CCC might take up too much time.

Importantly, none of the survey respondents indicated to plan on stopping the work on the CCC after receiving the Mission Label. As one survey respondent states: “[the] CCC needs to be an iterative process”. At the seasonal schools, city representatives did raise questions about the level of detail required for, and benefits of, receiving a Mission Label. One City Advisor remarked that while this is encouraging, the actual objective of working on the CCC is not the Label but the transformative change happening in the local governments and their stakeholder landscape.

3.3 CCC as a process

As mentioned in the theoretical part, the CCC as a governance model aims to develop a framework that can provide a backbone for long-term cooperation among local stakeholders to achieve climate-neutrality. This model emphasizes the implementation of transition plans and the anchoring of organisational commitment. At the same time, it recognizes the differences between European cities in terms of size, location, profile, culture, income and a range of other factors. Therefore, instead of focusing on the different steps of this process, which are difficult to capture in such a long-term model, our analysis aims to explore whether cities can establish the most important functions that are key to enabling urban transitions. In the followings we explore how cities established the different functions and how learning from these examples can help further improve the CCC model.

3.3.1 Coordinating function

Governing transitions requires a coordinating function to be fulfilled by transition intermediaries who can lead and facilitate the development of the CCC. This function is mostly fulfilled by a team, the so-called Transition Team, that aims to mobilize actors and sectors in the city to work together, align their efforts and develop holistic solutions for climate-neutrality. In the following paragraphs we discuss the findings with regards to the set-up and functioning of the Transition Team – including what resources facilitate their functioning, their roles and purpose, and their onboarding strategy for stakeholders to the arena in practice.

Set-up and composition of the Transition Team

Across cities, Transition Team set-up and functions vary greatly. In some cases, entirely new governance structures were set up to develop the CCC and in others, one or two people from the municipality were responsible for the city’s CCC. However, most cities have a municipal team as their



Transition Team which coordinates the CCC process, often formed from the group that submitted the Expression of Interest for the Cities Mission. In the survey and seasonal school results we found that in some cases the municipal Transition Team is supported by external consultants to write the CCC. Generally, the core members of the Transition Teams are situated in the municipalities' climate or environmental departments or agencies, but we also identified Transition Teams consisting of members from multiple municipal departments or external organisations.

The way that the Transition Team is set-up is influenced by the cities' motivation to be part of the Mission and the intensity of the administrative and political support for the Mission. Cities with a history of collaborative work on climate change have an advantage in setting up their Transition Team, since they could make use of existing connections and had experience with cross-domain working.

Resources for the Transition Team: budget and staff

Resource availability emerged as a pivotal factor. Numerous cities at the seasonal schools cited insufficient municipal resources, primarily human capital, time, and funding constraints, as obstacles. Overseeing and managing a large portfolio of Mission-related projects is difficult to do with limited budget and capacity, especially with time pressure to get as much as possible done by 2030, according to both a city representative and a City Advisor. Internal strategic decisions by local governments to reprioritize public resources toward climate action could offer a potential solution; "let the municipal budget reflect that climate is a priority" stated one city representative.

In terms of staffing, one City Advisor highlighted a particular challenge – the loss of institutional knowledge and expertise due to staff turnover, as some municipal officials transitioned to alternative career paths, often in the private sector, after developing proficiency in climate action planning. This 'brain drain', as described by multiple interviewees, impedes efforts to build sustained climate policy capacity within local governments. Furthermore, the monitoring and evaluation requires more resources than currently available, according to one city representative. That said, only a small share of survey respondents indicated that insufficient municipal time, capacity and funding were allocated to the CCC process – this could be explained by the self-selection mechanism of participating in a survey. Some cities pointed specifically at the lack of financial support from higher (/national) level government. We distinguish here between funding for establishing the CCC (as a product) and organizing the CCC process on the one hand, and financing the actions planned with the CCC on the other. This paragraph concerns the first; the latter will be elaborated upon in the section on anchoring the CCC with other stakeholders (Section 4.3.3).

Access to data emerged as another critical resource. Some city representatives struggled with data collection (for instance, monitoring mobility patterns or climate vulnerabilities). They indicated support needs in the calculation of GHG emissions, carbon sink impacts, quantification of co-benefits and measuring the impact of actions. One seasonal school participant indicated: "We are very interested to learn about innovative climate scenario modelling tools, inventories to collect city-level climate data, and other frameworks for implementing climate actions."



Transition Team roles – dedication required

Many Transition Teams have been set up for the purpose of the Mission and are specifically focused on guiding the transition towards climate-neutrality. In multiple cases, the Transition Teams are building on already existing teams as well as plans and policies related to climate action. Currently, they are mostly trying to create alignment internally within the municipality in order to find synergies and shape the journey towards climate-neutrality. Our respondents understand the role of the Transition Team as active coordinators of the Mission across the different departments of the municipality as well as organizing commitment from local stakeholders, involving them in the climate goals and the CCC process. Their understanding of the intermediary role of the Transition Team is therefore in line with the coordination function defined in the analytical framework.

Making the Cities Mission the primary task for one dedicated person or a small team was highlighted as a success factor for the CCC work. In some cities, the lack of such dedication within the municipal organisation – or even a lacking sense of importance or urgency of the Cities Mission or climate-neutrality in general - was described as a barrier to the process. The role of middle-level managers has emerged as a crucial factor in facilitating cross-departmental coordination and knowledge-sharing, as highlighted by a City Advisor: "the cities have discovered that what they need very much and strongly is a middle-level managers who connects the political tops to the working people who are just doing daily work and the middle-level managers should talk to each other and are responsible for cross-sharing all the information."

Overall, respondents identified the following roles and responsibilities for the Transition Team in the process towards climate-neutrality in their city:

- Coordination and point of contact; within the municipality, within the arena or stakeholder networks, and for the NetZeroCities consortium and the Mission.

Key activities include stakeholder mapping, engagement, ecosystem development, and citizen/community outreach. This role also entails further expanding the current Transition Team, as some consist of only one or two members, which is insufficient for the required number of tasks and roles.

- Shaping the CCC process including writing the CCC

In addition to project management, this entails coordinating the portfolio of actions and their implementation, strategy design, fund monitoring, and grant management (or more broadly finance management). Moreover, respondents indicate that communication, storytelling, education, and awareness-raising are crucial for embedding the CCC within their arena, tying into stakeholder engagement activities.

- Monitoring, evaluation, reporting, learning

Most cities have a monitoring framework in place. Additionally, cities also saw managing knowledge exchange – for instance in international city networks – as a key responsibility for the Transition Team.



However, only setting up a team does not necessarily lead to any specific action for this also requires long term devotion to the work. As mentioned, some Transition Teams lack the resources to dedicate time to facilitate the Transition Arena or execute other Transition Team tasks and roles (e.g., long term CCC monitoring).

Skillset

Seasonal school participants indicated that while their Transition Teams possessed diverse skillsets, not all necessary competencies were represented. Most teams do at least have operational competencies, some also listed strategic (visioning, political) and technical (data or engineering) skills. A variety of other competencies were also mentioned: for instance, EU relations, project management, spatial planning and financial modelling. For example, as indicated by one seasonal school participant: “The Transition Team [...] is composed of a main coordinator responsible for the contacts with NZC etc., supported by specialists in climate monitoring, specialist in European relations and specialist in climate action and mobilisation.”

As enablers, several city representatives also mentioned characteristics related to mindset such as: persistence, open-mindedness and commitment. Furthermore, they indicated their wishes to increase skills in communication and dissemination, learn about strategies for the “positive contamination of ideas” (seasonal school participant) and are interested to take part in similar events to share progress and experiences.

City Advisor support

One city representative mentioned “having a clear understanding of the intended outcomes, processes and products of the Transition Team and the CCC” as their key enabler. In the NetZeroCities set-up, City Advisors are well placed to offer such clarifications on the CCC process. Their personal contact and support, and that of the consortium more generally, was also referenced as a necessary resource, particularly in the areas of digital support, language and translation, communication and operational support. “The advisors should be pushing, demanding and nudging”, a seasonal school participant noted.

Onboarding members to the arena

We were also interested in the Transition Teams’ approaches to the Transition Arena: whether they have an onboarding strategy (who/how/when to onboard in the arena), plans for expanding the arena, and the challenges they experienced in this process. Our results show that while onboarding stakeholders to the Transition Arena is seen as an ongoing process – one which cities are working on, while vigorously developing their action plans and setting their priorities – it is also considered as a big challenge. This applies to the involvement of private stakeholders and of different levels of government, such as national and regional governments, in the Transition Arena. Additionally, onboarding citizens was deemed particularly difficult, partly due to uncertainty about whom to engage and how.

Transition Team as intermediary

First, resources are mostly needed for stakeholder engagement, building relationships with new and existing stakeholders. Setting up an external governance structure that works is an ongoing process of



trial and error. Second, the involvement of the local government in the Transition Arena was divisive; while some interviewees found the municipality's presence crucial, others were rather critical towards their plans and activities. In some instances, mistrust in government is a challenge for stakeholder engagement in the Transition Arena. To address these challenges, respondents found it crucial that the Transition Team also takes on an intermediary role. One urban consultant reflected: "Actually at this moment, we are kind of reconsidering the governance structure, because we feel that [the arena] is in a different position than the municipality, because we are not the municipality, we are a separate organisation and an independent organisation, that also must be able to sometimes be more critical of the actors, including the municipality. And last year we got very close to the municipality and then it became a bit blurry. So now we're kind of reconsidering that."

Strategy for onboarding and raising awareness

In addition, the lack of societal knowledge and commitment to tackle climate change was also reported as an obstacle for onboarding. In countries with a tradition of education on climate, it might be easier, but joining efforts on climate action and developing new ways of working together is experienced as difficult. As one of the city representatives said: "Engagement was not that much of a problem, but the challenge was how far our stakeholders are willing to go in their commitments." This challenge is further explored in Section 4.3.3 on anchoring.

Therefore, a lot of cities are currently at the beginning of the process of trying to set up an onboarding strategy to cope with these different challenges. To do so, they started organizing a variety of events (neighbourhood tables and dialogue methods, media attention and launch events) for different groups, either focused on stakeholder type (such as businesses, academia or citizens) or more thematic (e.g., centred around energy transition, mobility and transport, and nature-based solutions). This indicates that although in many cases cross-sectoral collaboration is taken seriously, onboarding activities are still often siloed.

Disparities in engagement levels

Our analysis revealed notable disparities in stakeholder engagement efforts. Certain municipalities with well-established climate teams and stakeholder platforms, demonstrated more advanced progress in this area. In contrast, one City Advisor reflected that municipalities that appeared to lack "strong traditions of climate action and civil society engagement," struggled more to productively engage stakeholders, for "they are not aware of how and who to engage with". Reasons for this are amongst others: mistrust towards the government, weak civil society, cultures and traditions that are not collaborative, participatory or have a limited history with climate action. These municipalities have just started the process of mapping their stakeholders. In other municipalities there was already a lot of participation processes in place which the Transition Team could build on; we will elaborate on this in Section 4.3.2; level of stakeholder engagement. This highlights the diverse starting points and capacities, underscoring the need for tailored support and capacity-building efforts.



Challenges with citizen engagement

Finally, a particular challenge seems to be the active involvement and commitment of citizens to join the local climate action plan, even though many respondents indicate this as a must. Citizens' support is crucial as they are accountable for a substantial part of the (consumer-related) emissions and privately owned properties. In the seasonal schools, communication and interaction with citizens was pinpointed as a challenge. Moreover, some of the seasonal school participants experienced deeper underlying barriers for engaging their citizens in the 2030 climate goals: "people's willingness to change habits", "human behaviour" and "behavioural change". Municipalities try to address citizens by hosting workshops, launching campaigns focused on behavioural changes regarding consumption, and engaging citizens representative groups and homeowner associations with less rather than more success. However, seasonal school participants express that despite the many programmes aimed at changing behaviour at the household level, such as building insulation, heating system changes, renovation schemes, municipalities are struggling with changing citizens' habits.

3.3.2 Cocreating function

Since municipalities lack the means and capacity to develop and finance innovation on a city scale, the transition to climate-neutral cities requires the contribution of other local stakeholders as well (both in terms of innovation and investment), from citizens to private businesses and public organisations. To meet this challenge, municipalities need to reform their governance practices and explore new models and approaches that go beyond municipal boundaries and enable shared governance. In this section we will summarize how cities enabled the co-creation of the CCC, by focusing on the quadruple helix stakeholder groups: their modes and extent of their involvement in the Transition Arena and how their collaboration and cocreation work was enabled and supported.

Composition of the Transition Arena

As mentioned, cities' Transition Teams are still working on strategies to broaden their Transition Arena, so it might be too early to draw strong conclusions from their current experiences on their composition. However, we can highlight some of our first insights. Some cities are more advanced and have already established the framework of their Transition Arenas integrating the participating stakeholders and coordinated by external stakeholders like non-profits. As one of the cities described their arena: "The Platform has five workgroups organized according to emission sectors, but these workgroups are interoperable, their activity is shared with all the Platform members. Thus, there are several points of connection covered during the meetings of the members".

While proven to be difficult, most municipalities have some form of commitment from a couple of external stakeholders such as academia and (publicly owned) utility companies. Some of the frontrunner cities already have more established arenas with signatories from private companies, industry and citizens. However, it is still unclear for many municipalities how to organize structural collaboration and long-term commitments towards implementation. Therefore, we have little insights into the structural design and operation of the Transition Arenas. The involvement of academic partners was indicated by multiple seasonal school respondents to be an enabler of the CCC process, sometimes even to bolster political support.



Level of stakeholder involvement in CCC development

While it was clear from our findings that involving quadruple helix stakeholders was a challenge in many cities, we were also interested in the extent, if any, stakeholders in the arena as well as different departments of the municipality were involved in the development of the CCC (information/advice/creation). First, our results showed that many cities perceive the CCC as a catalyst for collaboration, bringing together diverse perspectives and resources. This collaborative aspect of the CCC is viewed as a vital asset in mobilizing concerted efforts toward achieving sustainable transformation.

Across cities, there was a common recognition of the need for stakeholder engagement in the CCC process. However, our findings reveal varying levels of progress across cities and regions. For cities with pre-existing stakeholder platforms and engagement processes, the CCC served as an enabler deepening these relationships and formalizing commitments at the project level. As one municipal representative stated, "It didn't yet bring, [the CCC process] new stakeholders to work with, but it was deepening the work we do with them [...] we have had better conversations, and we will begin to do more things".

In many cases, stakeholder involvement in the CCC means informing stakeholders about existing plans and collecting their feedback. In the most advanced cases, joint creation processes were mentioned in which stakeholders were involved in the development of the action plan. From the survey we found that external stakeholders and citizen groups have begun to also because of the CCC.

Structural collaboration is challenging

However, a common characteristic among many cities is the absence of collaborative relationships with external stakeholders. Until the Cities Mission, contact with stakeholders would always be ad hoc and project-based, while the CCC commitments require long-term commitment based on trust and a shared vision. Since there has been limited time to build this trust and vision, commitments are not always as ambitious as hoped for. One City Advisor commented on this saying: "I think what we found last year is that time was quite short to really invest in those conversations with stakeholders to [...] secure really strong commitments."

City Advisors reflected that generally, the development of the CCC was mainly a municipality-led process and other local stakeholders were only occasionally and/or partly involved. This is illustrated by the fact that the CCC's commitment documents, in which they declare their commitment and participation, were often still only signed by municipally owned companies or municipally related public entities. And even in these cases, these organisations were often unaware of the meaning of what this commitment would entail. City Advisors indicate in most cities, a lack of concrete commitments from other stakeholders persists. In the survey we found that other government entities, academic institutions, and private sector entities might have contributed to the CCC creation process but have limited involvement in the writing phase. Non-profit organisations and civil society groups are generally excluded from both writing and co-creation processes.



Overall, the private sector was highlighted as a difficult stakeholder type to collaborate with, even though our survey data indicated that cooperation with private sector partners happened more often than with civil society partners. Acknowledging this, one of the City Advisors mentioned that: “Many cities have raised the need for support on engaging with private sector stakeholders”. However, cities struggled with pointing out the benefits of joining the Mission to them and expressing why their commitment and time investment would be important. Unsurprisingly, building a value proposition for external stakeholders was highlighted as a key barrier to the CCC process. It was also unclear to some cities which obligations or commitments were required by external parties before signing the CCC. One city representative indicated a lack of motivating tools for companies to take part in CCC preparation.

3.3.3 Anchoring function

This section looks at the extent to which cities have been able to anchor local organisations in the CCC process and commit them to the implementation of action and investment plans. Anchoring promotes the organisation's commitment to ownership of the CCC's transition plans throughout the entire transition process. In the following, we examine the extent to which both the Transition Team and the members of the arena have succeeded in building organisational commitment to the CCC's plans. While the Transition Team can support anchoring within the municipality, the arena stakeholders can anchor their own organisations.

Ownership of CCC plans

First, we were interested in who takes ownership of the plans in the CCC and whether the local organisations involved in the planning process are committed to implementing them. Our most striking finding is that, in most cases, the local government is the main or only party that fully embraces the transition plans. We found varying levels of commitment among other stakeholder groups. While in many cases municipally owned organisations and companies showed a higher level of engagement, typically being the organisations that signed a commitment statement as part of the CCC, other stakeholder groups, in particular citizens, were generally not even part of the process and their interests and contributions were not reflected in the plans. As summarised by one of the City Advisors: cities have “very big difficulties of engaging the citizens and sharing this ownership.”

Building an investment portfolio

Investment planning was arguably the biggest challenge faced by the seasonal school attendees. They indicated a need for support with the economic analysis and the economic model. Many cities struggle with building a (realistic) investment portfolio and negotiating for private sector capital investments, convincing their stakeholders to invest in their plans. “How do we make bankable projects?” (Seasonal school participant). Particularly co-investing with external stakeholders in bigger infrastructure projects is a challenge. Cities were also looking for innovative finance examples. “Concrete business models of certain investments/practices could be discussed in detail to help transferability” (Seasonal school participant). One city representative mentioned a lack of knowledge on bankable project finance schemes, and limited experience with this topic at the municipality. Additionally, cities searched for additional funding from e.g., the EU. Some cities indicated that direct funding streams, i.e., bypassing the national government, would be necessary for it to support climate-neutrality actions in their cities.



Municipal anchoring

Secondly, we wanted to examine the extent to which the Mission was anchored within the municipalities. Specifically, we were interested in the level of political and leadership support for the Transition Team, and the extent and breadth of involvement of different municipal departments in the CCC process. With regard to the latter, we found that there were wide variations between cities. Multiple respondents highlighted interdepartmental communication, engagement and collaboration as a key barrier in the CCC process: “To put it bluntly, they just say that it's outside their scope of work. That's it.” a City Advisor explained the situation. However, one participant indicated that assembling people from different municipal departments has actually helped address municipal silos.

Other City Advisors see the reasons in the difficulty to explain what the CCC is: “I think it's sometimes challenging with the Cities Mission because it's very abstract. It's very hard to communicate it.”, or in the size of the Transition Team: “in some municipalities where you already have like 11 people in the climate team, it's amazing. But then you also see that they can do quite a lot of things with themselves, right, and then in municipalities where you have very tiny climate team or just established climate team, they are much more relying on the other departments to actually contribute.” To assist members of the Transition Team in this process, City Advisors provide tailored support to break through resistance from different departments that do not consider climate issues relevant to their work. They are doing valuable work to help different municipal departments better understand the importance of their involvement in climate work.

At the same time, the results of our survey show that in many cities, participation in the Cities Mission has led to prioritisation of resources (time, funding, capacity) within city government for climate-neutrality activities and increased the space (capacity, time, mandate) to experiment with innovative governance practices (e.g., living labs, policy experiments, novel co-creation methods, ...).

Political support

Political backing and regular interaction with the administrative and political leaders to be able to pitch ideas provides room to go beyond predefined paths. Seasonal school participants even named political support and commitment as key to the success of setting up a CCC process. Overall, the survey indicates working on the CCC has improved political support for climate action, and ambitions for climate-neutrality by 2030 have been adopted more widely within the municipal organisations as well as by their external stakeholders. One urban consultant described this as follows: “All mayors are aware of the Mission. All mayors that I've worked with are supportive of the Mission. Mayor of [name removed to preserve anonymity] is extremely supportive and hands on with his approach. It's very uplifting to see so much political commitment.”

Still, various seasonal school respondents expressed their concerns about the limited understanding by political leaders of the Cities Mission and role of the Transition Team, as well as on political engagement and ownership of the Mission. City representatives also expressed their concerns about the continuity of their climate plans and actions in the face of local elections. A related question for many cities in the seasonal schools is that of multilevel governance and engagement of other government levels in their



CCC process. Municipalities are struggling in particular with national level political support. An inquiry that emerged from the seasonal school learning sessions was how to involve the national government in the transition towards climate-neutrality. The topic of subsidiarity was also raised as an issue; who is responsible for which climate actions and policies? For instance, urban greening is often a local responsibility, while transport and mobility infrastructure planning tends to be determined at higher regional or national government levels, leading to tensions when it comes to cross-sectoral interventions.

On the other hand, there is also a group of city representatives that shared their contentment about political endorsement of their work and the Mission in general. They reported receiving a strong mandate, high level support, and permanent commitment from their mayor. Some show political awareness, as stated by a seasonal school participant: “We managed to have the municipal council sign the project before the election, which keeps the project alive even now the majority has flipped.”

National government support

However, both interviewees and survey respondents reported much lower levels of commitment and support from national government. Climate-neutrality ambitions for 2030 are generally not well supported at national level, indicating a gap between local ambitions and national policy frameworks. In more than a few examples, support at the national level for municipal plans was highlighted to even be counterproductive. This could potentially be stemming from conflicting political interests between the national and EU-level governments. A related barrier is political disconnect with the EU Cities Mission, a sense of lack of ownership. “I never thought that politicians are so important until you see what happens where they're not there, because then it's a technocratic mission and it needs to have a heart and soul. It needs to have a spokesperson who has ownership of the mission who is willing to stick his neck out for the project. If this is not there, it will not accelerate,” says one City Advisor. Additionally, some cities would value more explicit commitment of the European Commission, not only in terms of occasional funding but also in relation to necessary regulatory changes.

One country example highlights difficulties caused by the institutional set-up of government and alignment between local, regional and federal governments, particularly in relation to navigating the overlaps between mandates for both cross-sectoral climate issues and domain-specific plans, as expressed by a city representative: “There's a high overlap in policy and in climate policy, spatial planning. [With regards to] energy, everything which is linked to permits is on the regional level, but then nuclear power plants are on the national level. [...] So, this institutional mix up is the main challenge.”

3.3.4 Governance learning function

The CCC has aimed to catalyse a shift in how municipalities across regions reevaluate and restructure their governance practices. Our results do indicate that this process has encouraged experimentation with innovative approaches to fostering climate-neutrality and has thus been a learning process. In the following, we illustrate the varying ability of cities to adapt their external and internal governance structures, engage in inter-city collaboration and build their capacities as part of the CCC process.



CCC as enabler for networked (transition) governance

Despite the difficulties experienced, the majority of Mission Cities that responded to the survey indicated their governance processes and stakeholder engagement in particular has changed for the better with working on the CCC. In cases where stakeholder involvement was not present at the outset, working on the CCC did tend to help cities understand that changes were needed to their way of working. City interviewees indicate that due to the CCC process, they bring together pre-existing thematic working groups in their stakeholder arena and a more active mobilisation of the existing network more structurally.

Recognizing the importance of stakeholder involvement in the CCC, city representatives were interested in learning about successful approaches during the seasons schools to engage stakeholders for the long term, and to keep and foster these relationships. In addition to questions around how to start up and secure long-term and meaningful relationships with external stakeholders, this question was also raised from a very practical angle: could the NetZeroCities consortium offer support in managing connections with stakeholders and organising get-togethers at regular intervals? Also, cities could use more support in communication strategies to onboard new stakeholders.

Structural changes to the municipal organisation

Survey results reveal that the CCC has widely encouraged the integration of climate-neutrality as a priority within municipal administrations. As a result, the CCC process compels municipalities to reevaluate and restructure their internal governance practices. Our analysis identified three common forms of internal restructuring: the formation of Transition Teams, cross-departmental collaborations, and the hiring of dedicated staff.

As stated earlier, in many cities a Transition Team was established because of participating in the Cities Mission, although oftentimes these teams comprised staff already working on climate-neutrality and related topics. As previously noted, our findings show a diverse landscape in the establishment of Transition Teams across cities. Many Western and Northern European municipalities were able to build upon pre-established teams carrying out similar functions due to the existence of analogous programs before the CCC. In contrast, the CCC prompted the creation of Transition Teams, although differing in names and structures, in regions like Central and Eastern Europe, where climate governance frameworks were less mature, "they now have an official climate team, the Mission has helped develop and instigate this", according to one City Advisor. This highlights the role of the CCC in initiating the necessary structural changes within municipal administration, particularly in regions where such frameworks were previously lacking. Section 4.3.1 on Transition Team composition has already provided our findings on this topic.

The formation of cross-departmental collaboration and the alignment of actions across various municipal departments emerged as a prominent theme in our analysis. City representatives indicate that they have made adjustments to their governance due to the CCC work, for instance by setting up new working groups. As one city representative noted, because of the CCC: "departments are working together and aligning actions and seeing each other on a regular basis, specifically around the topic of the climate."



Finally, in response to the incorporation of the CCC, cities have turned towards broadening support for the program by hiring a wide range of experts. One city representative stated that: “human resources are giving much more support for the program”, and therefore, says one City Advisor, “municipalities have hired people in the context of the Mission as a sole focus”. One interviewee also stated that some of these experts are now hired as permanent employees, suggesting the anchoring of the CCC into the city: “all the people are hired, they are on board, and they are not hired for a project, but forever [...]. They have no limited contracts, and they are, hired directly under the mayor.”

Cross-City Collaboration

The CCC process has prompted cities to engage in inter-city cooperation, fostering knowledge exchange and collaborative learning. At the seasonal schools, cities expressed their wish for city-to-city exchange and peer learning as an enabler of their individual CCC progresses, to exchange best practices but also problems and to “find allies”, as one seasonal school participants put it. Our analysis found that inter-city collaboration within the CCC framework can take both formal and informal shapes, to foster knowledge exchange and joint problem-solving efforts.

To begin with formal co-operation, cities often turn to collaboration platform to instigate knowledge sharing. These platforms facilitate structured exchanges between participating cities, providing opportunities for joint learning, resource sharing, and collaborative problem-solving. Additionally, city twinning programs, such as the Pilot Cities program, enable regular meetings between partnered cities to exchange insights and best practices on specific topics relevant to their climate action plans, as one city representative stated: “We do so within the Pilot Cities Program. We are twinned with two other cities...as part of that, we have had several meetings with them where we exchange where we try to learn from each other”. Finally, some national governments have set up formal groups or platforms to support cities participating in the CCC, enhancing coordination and assistance at a higher level.

Moreover, within formal collaborations, municipal officials may serve as mentors to guide other cities through the CCC process, leveraging their experiences and expertise to support peers in navigating challenges and maximizing opportunities. Regions with multiple cities participating in the CCC may also benefit from increased leverage in securing inter-city cooperation, as they can pool resources and coordinate efforts more effectively.

In addition to formal mechanisms, cities also engage in informal collaboration, driven by a spirit of peer learning and solidarity. Informal exchanges occur outside of structured programs, with cities seeking input, feedback, and support from one another on an ad-hoc basis. As one City Advisor revealed, “I think a lot of cities have done that informally...seeking input and feedback from different cities, especially cities who have gone through the process.” As such, “a lot of cities have connected in various ways and cities have shared, for instance, CCC components with other cities,” notes one City Advisor. Despite visible cooperation between cities, results show that some cities fail to fully grasp the benefits of working together, and at times neglect to take on such initiatives proactively, states another City Advisor:“... in



general I can say...there's a lot of strength in the cooperation and the cities still do not fully grasp that there is a part that they can actually write together."

Finally, our results also show that cities have extended their collaboration beyond the boundaries of the CCC program, reaching out to neighbouring cities that may not be formally labelled as Mission Cities, to advise them on how to follow suit: "The Mission says they are giving the Label to certain cities. But we try to involve our neighbouring cities. [...] we are dealing with more than 10 cities, informing them, and asking them to try to give awareness to these [climate-related] issues [...] we are just transferring information and updating them, about what's being done."

Learning and capacity building

In addition to inter-city learning, several other learning mechanisms were highlighted during the seasonal schools. Prior experience in international climate-neutrality research projects, internal experts and monitoring and control process were all mentioned as CCC process enablers. One city representative also reflected on the importance of their "history in climate protection and climate adaptation" (Budapest winter school participant). As another example, one municipality organised training sessions led by experts on social innovation for different stakeholders.

In other CCCs there was less evidence of research and innovation. "Experimentation and reflexivity are replaced with incrementalism based on technical monitoring", it was reflected during a City Advisor reflection session. Many municipalities have at least some forms of internal evaluation and monitoring frameworks. Yet particularly qualitative impact (for instance, in relation to stakeholder engagement) is difficult to measure, as stated by one city representative: "It's more difficult for us to assess our impact because it's more qualitative, it's more about 'those stakeholder meetings that we had, what kind of effects did they have?'". Seasonal school participants indicated they need more tailored support with data management to support learning and monitoring. Some cities also take part in the Pilot programme where sense-making and peer to peer learning is part of the activities.

Some cities are not used to dealing with failure and uncertainty, whereas the nature of the climate transition requires flexibility being built into their plans. One City Advisor reflected: "What I've noticed is it's very hard for them to test solutions in the CCC and also be ready for failure. [...] They would like to be certain that it's going to work. They would like to be certain that the numbers are going to prove that they're right. And I think this is one of the biggest challenges. So, living with uncertainty of the future and also one of the [...] cities has actually built this into their document, so they say that they are aware that everything might change and that their plans need to be flexible. So that's their plan for now. And now they have also a monitoring strategy to be able to adapt as they go - this is a requirement for everyone, but it's just one city that actually fully grasped it." City Advisors further noted that the iterative process that is needed to allow for reflection and adjustment is still missing in the overall strategy of some of the cities they support. One municipal affiliate "my feeling and my experience has been that learning and sensemaking has been more difficult to get integrated in the municipality because it's not really part of its tradition or something. I think it's also more difficult for a municipality to say 'we're experimenting' if things could go wrong, because of course they are the ones who have to go back to the voters and the



public and defend what they have done. So, I appreciate that they are in a more difficult position there. But I think it would be good for them to move more in the direction of embracing, learning and sensemaking.”

Building blocks for the CCC governance process

In this concluding chapter, we summarize the key takeaways of the CCC process for Mission Cities so far and highlight the essential building blocks for the CCC governance process, both to encourage Mission Cities in taking on the next phases – implementation and iteration – as well as to guide non-mission cities in their endeavour to become climate-neutral, possibly by embarking on the CCC process.

4 Conclusions

At the start of our exploration into Mission Cities’ experiences with the CCC, we listed the crucial steppingstones for an impactful CCC governance approach:

- Creating a **Transition Team** to lead and coordinate the transition process.
- Cocreating transition visions and plans – the CCC – with the **Transition Arena**
- **Anchoring** the CCC: ensuring stakeholders’ commitment to implementation of the transition plans
- **Reflexivity** and capacity for adaption by the governing actors (governance learning)

Ideally, both the Transition Team and the arena will have a dual function. The Transition Team works as an intermediary, to identify, onboard and coordinate the stakeholder (transition) arena, and is an active participant in this arena. Simultaneously, the team is a change agent: it induces changes in municipal organisation to better accommodate and accelerate actions for climate-neutrality. The dual function of the Transition Arena is to co-develop CCC plans and to empower arena members to adopt ownership over the plans (‘anchoring’).

Based on our interviews, survey and learning and reflection sessions, we have observed the following challenges and best practices.

Using the CCC as strategic instrument for transformative governance

The CCC is perceived to facilitate a strategic and comprehensive approach towards achieving climate-neutrality. Our study has shown that how the CCC prompts to identify interconnected challenges and solutions tailored to the local contexts, going beyond a simple checklist of actions is highly appreciated. Additionally, the CCC writing process has allowed cities to bring together existing projects, processes, networks and opportunities into a more integrated outlook, with a long-term orientation.

The experience in terms of whether the CCC feels like it is building on previous work or really does generate additional overview and benefits differs across cities – the CCC either is experienced as redundant or refreshing. Similarly, the ambitious objective of the Cities Mission, becoming climate-



neutral by 2030, is either felt to be a positive driver and motivation or an overwhelmingly unattainable goal. To improve the CCC-as-a-product template, it has been suggested to reduce redundancies across sections, adopting more concise formats like the Commitment Plan, incorporating consumption-based emissions, and providing enhanced guidance materials and templates. Sharing exemplar CCCs from other cities and facilitating multi-level governance dialogues could also provide support in navigating the submission process more effectively.

However, translating the ambitious visions outlined in the CCC into the action and investment plans has proven to be challenging. The investment pathways component, encompassing scenarios, planning and monitoring indicators, all appeared to be the most difficult aspect to write. Many cities also struggled with mapping the current climate investment landscape, writing the enabling financial conditions and engaging diverse stakeholders in co-creating these plans.

The CCC works well – in terms of stakeholder engagement, political support, etc. – if it is used as narrative device to assess and present the unique strengths and vision of the municipality and the broader Transition Arena.

Although the CCC template aims to provide standardisation, we identify a need for more flexibility to align it with local systems, capabilities and pre-existing climate plans. As such a key challenge remains to strike the right balance between standardisation and adaptability. An additional gap not fully addressed is the lack of clarity on next steps after CCC submission, with many cities unsure how to move from planning to implementation.

In sum, while the CCC product is valued for promoting strategic and contextualized climate planning, as well as for creating a narrative that encourages other stakeholders to join the climate mission, there is a need for additional support to operationalize high-level ambitions into detailed, locally relevant pathways for transformative investment and implementation. Striking the right balance between standardization and flexibility for local adaptation of the CCC framework also remains an area for continued refinement.

The Transition Team is a municipal affair

With regards to the Transition Team, we found that in general, there is a decent understanding of the role and responsibility of the Transition Team, but the manifestation of the Transition Teams varies considerably across cities. One of our main findings is that working across domains and departments remains challenging in most cases. While respondents are aware of the importance of the involvement of local stakeholders and different municipal departments in the development of the CCC, in practice it is often tasked to the Transition Team that has frequently too little time and resources to create collective ownership even across the municipal organisation. In multiple cases this leads to one or two people from the sustainability department taking on most of the work of writing the CCC, sometimes aided by external consultants.

When it comes to onboarding members to the Transition Arena it is often unclear what kind of commitment is required from stakeholders. Therefore, the need to build a value proposition for external stakeholders was highlighted in multiple conversations. Moreover, we identified a need for a narrative



on the importance of a collective approach to the mission as it is still a major challenge to many cities to establish structural collaboration and commitments on the long-term.

Most of the municipalities approached the mission from a traditional governance model where it is the municipality's responsibility to develop a roadmap. Therefore, the Transition Teams are mostly set up for the development of the CCC and their role as an intermediary, who enables and supports the co-creation of the CCC by local stakeholders, was less prevalent.

Anchoring the CCC in the Transition Arena: stakeholder engagement and co-creation

Our most notable finding is that, in most instances, the local government is still the primary or sole entity that fully embraces the transition plans. Although municipally owned organisations and companies often demonstrated a greater degree of involvement, typically by signing a commitment statement as part of the CCC, other stakeholder groups, particularly citizens, were generally not yet part of the process. As a result, their interests and contributions were not taken into account in the plans. Moreover, it gives us limited insight into the structural design and operation of Transition Arenas, as they are not yet well established.

Numerous cities face challenges in developing investment plans and engaging in negotiations for private sector capital investments, while also persuading private stakeholders to invest in the proposed initiatives. Collaborating with external stakeholders in larger infrastructure projects, especially in terms of co-investment, is a significant difficulty. Cities face difficulties in securing concrete commitments and active involvement from private sector stakeholders in the CCC process, often struggling to articulate clear incentives or reasoning for their participation.

Cities tend to focus on low hanging fruits, such as academia and publicly funded organisations, with regards to stakeholder engagement. While various cities have held successful and well-attended events, the CCC process is generally not seen as an opportunity to build new relationships and trust. And although the CCC has generally improved stakeholder engagement processes, the extent of involvement varies, with many cities still primarily informing stakeholders about existing plans and collecting feedback rather than enabling true co-creation.

Political support and multi-level governance

According to our respondents, political support and dedication were crucial for the successful establishment of a CCC procedure. In summary, we found that working on the CCC has enhanced political backing for climate action, and the goal of achieving climate-neutrality by 2030 has gained broader acceptance among municipal organisations and their external stakeholders.

However, many respondents also shared their concerns regarding the political leaders' insufficient comprehension of the Cities Mission and the function of the Transition Team. They also raised issues about political engagement and ownership of the Mission. Municipal officials have voiced their apprehensions about the continuity of their climate plans and actions in light of upcoming local elections.



The level of administrative and political support for the Mission is enabled in particular by political support and support from mid-level management, as they play a key role in the allocation of resources towards climate-neutrality measures. Many municipalities, however, struggle with finding political support on multiple levels of government (e.g., regional and national). Additionally, the whimsical reality of politics and the discrepancy between the short-term interests and long-term ambitions within the municipalities are often hard to deal with for the Transition Team members. Finally, onboarding academic partners to the Transition Arena was mentioned as an enabler for political support.

Participating in the Mission strengthened local climate governance in cities by increasing awareness, political and institutional support. It is unclear, however, if this support will be continuously available after gaining the Mission Label or after elections. In some countries, there is a strong disconnect between local and national government support, the lack of the latter often hinders local climate action. The findings suggest a disparity between the aspirations at the local level and the policy frameworks established at the national level. Although some members of the Transition Team were granted a robust mandate, substantial backing, and enduring commitment by their mayor, they reported significantly diminished levels of dedication and support from the national government. In addition, several cities would appreciate a more specific commitment from the European Commission, not just in terms of occasional financial support, but also regarding necessary regulatory adjustments.

Governance learning

This study has found the CCC process to have kicked off governance learning in municipal climate governance, by driving structural changes, expanding stakeholder involvement and enabling valuable inter-city collaboration. Hence, a significant number of cities demonstrate that the CCC has enabled a shift towards more networked, transition-oriented governance.

Internally, the CCC has widely driven the integration of climate-neutrality as an organisational priority within municipal administrations. Common structural changes include the formation of dedicated Transition Teams, increased cross-departmental collaboration, and hiring of climate experts. These internal restructurings indicate a governance shift in a multitude of municipal organisations.

Our survey results indicate that in numerous cities, involvement in the Cities Mission has resulted in the allocation of more resources (such as time, funding, and capacity) by city governments for climate-neutrality initiatives. Additionally, it has created opportunities to explore and implement innovative governance practices, such as living labs, policy experiments, and novel co-creation methods. However, several participants also emphasized that interdepartmental communication, participation, and collaboration form significant challenges in the CCC process, partially because of the challenge in articulating the purpose of the CCC.

The CCC has also fostered inter-city collaboration through both formal platforms like twinning programs as well as informal peer exchange. Our respondents expressed their appreciation for these opportunities for knowledge-sharing, joint problem-solving and collaborative learning from peers. However, some still do not fully grasp the potential benefits of such cooperation or fail to partake in these activities.



In terms of building reflexive governance capabilities, evidence is mixed. While some cities leverage prior experience, experts and monitoring processes, others struggle with embracing experimentation. Anchoring reflexivity and iterative learning remain a challenge for many municipal organisations. Hence, additional tailored support on areas like data management, sense-making and flexibility is needed. In this regard, the personal contact with the City Advisors and the general support from the consortium was generously welcomed. It was argued that this plays a big role in learning and the understanding of the Mission and the CCC process.

In sum, the governance learning component appears more isolated than originally envisioned - in many cases, it has not yet permeated through municipal organisations as an integral driver of climate action. The Mission provided an opportunity for many cities to strengthen their collaboration capabilities and experiment with methods that enable shared governance. However, these efforts were rather experimental than applied in a structured and purposeful manner.

From plans to implementation

Upon completing the CCC, moving from plans to implementation is the next hurdle. The Mission Label is not seen as the end goal (although the details required for, but also the benefits of the Mission Label were questioned). In general, we are still at the very beginning of the CCC process, and many cities were under a lot of time pressure to develop the CCC in the proposed timeframe. Developing a first version of the CCC is only a start to the entire process. The coming years will show the further development of the process with regards to implementation, reflections and iterations of the CCC.

5 Discussion: recommendations for cities

Although multiple trajectories can possibly lead to local governance being more climate oriented, our research indicates a few best practices that could guide cities – local governments and their stakeholders – on their path. Below we highlight these best practices and summarize our recommendations to cities looking to take inspiration from Mission Cities and start a CCC journey.

Non-mission cities

For non-mission cities interested in implementing the CCC model, the first important step is to lay the foundations – properly – which is often challenging: setting up the Transition Team, identifying and engaging stakeholders in the arena, and developing and recording climate-neutral commitments and plans with the arena, as outlined in Chapter 1 of this report. The mission aims to equip cities to lead climate transformation and to develop the governance structures and collaborative skills needed to achieve this. Accordingly, the CCC is not the end goal, but the means to create a networked, decentralized governance framework that sees climate transformation as a shared responsibility.

From CCC planning to implementation

Essential for moving from planning to implementation (but important to consider already in the early planning phases) is to make sure to involve, engage and ‘anchor’ your stakeholders, i.e., to encourage and empower them to take ownership over the transition plans. Key recommendations are:



Use the CCC as a tool to benefit you

While some cities reported that the CCC provided some redundant work (rewriting that 'felt like homework'), others were able to use it to their advantage in connecting departments and identifying synergies. Other best practices to let the CCC work to your advantage:

- The CCC can be used as communication tool to encourage stakeholders to participate; write it as such. Communication and storytelling are an important part of CCC work: framing helps in difficult political environments too. Move beyond listing plans and stakeholder mapping to describing the key pillars of your CCC, how these apply to your unique setting, and which local actors are involved and how.
- Additionally, develop a clear narrative which presents benefits and incentives of the work to effectively engage and secure commitments from diverse stakeholders, particularly the private sector and citizens.
- Look at the CCC process and mission as an opportunity to transform your governance structure, not just to reuse your existing plans. The CCC itself is a mean, not a goal; it is about understanding your climate action approach, the set-up of the municipal organisation as well as its stakeholder relations, and finally set the shared mission and how to get there. The added value of the Cities Mission is this opportunity for transformation; but build on (but not redo) what you already have.

Internal anchoring

To reinforce local climate governance, the vision and mission need to be anchored in the municipal organisation.

- The Transition Team needs the mandate to make decisions, otherwise creating an internal support structure for the plans is difficult. This implies that the mandate for CCC planning should be elevated to a high level of local decision-making power; work on gaining access to different department heads and the mayor.
- Share responsibility across departments. Currently, other departments beyond the climate related one do not always feel responsible for CCC implementation; they are also not held accountable. However, the involvement of representatives from these departments should go beyond attending meetings and being informed. Diversify the Transition Team, on a structural basis. The more civil servants across the municipality are involved, the more solid the movement is also in the face of changing politics.
- Try to go beyond 'in principle' support by politicians and managers: raise awareness and engagement with the plans (and mission) internally, by creating a shared ownership and anchoring department heads, and making it relevant to their own department aims, targets and outcomes



- Avoid 'brain drain': outsourcing the CCC to external consultants or temporary staff is a risk to the anchoring process as it decreases the sense of ownership within the organisation and increases the chances of the CCC becoming 'just another document'. The Transition Team can be hosted by the municipality but should not be the sole responsible for the CCC, rather taking an intermediary role. In an ideal scenario (although we recognize how difficult this is in practice), all stakeholders should be active authors and contributors to the CCC document.

Innovate your governance approach

Governing transitions usually needs more-than-incremental change to how visions are set, actions are planned, and decisions are made.

- Be open to trying a radically different governance approach. There is not one way to do it right, but an alternative is needed to increase support from citizens and other stakeholders. Adopt – or at least experiment with - a more networked governance, in which both planning and investing happens jointly with stakeholders. This means ownership over the decision-making and implementation of plans is shared between you and your stakeholders (including citizens). The CCC allows for experimenting with such collaborative approaches to intervening in your city's development.
- However, it is not only mindset: you are also supported (or hindered) by how institutional structures within and outside your organisation are set-up. You can only change them to a certain level, so focus on those you can influence. For instance: showing successful results already achieved in the sphere of cross-sectoral or climate governance to those with decision-making power (e.g., the City Council, the Mayor) can help generating trust in next moves planned by the Transition Team.
- Take working across silos seriously because this is 1) a key challenge for most municipalities still but 2) it also delivers the fastest and most long-lasting results in terms of climate action, which is cross-sectoral by default. Involve others from the start to create broader ownership over the CCC plans.

Anchoring; go beyond 'just' engagement

Our research revealed that it is still mostly municipalities that show ownership over the CCC. However, this ownership should be shared further, both within the municipality and other government layers, as well as with external public and private stakeholders. To better anchor your CCC:

- Focus on stakeholder engagement beyond municipal companies; private sector and citizens should be involved too, and at the very beginning of the process already, not only when the plans are implemented. Most cities have already taken the first great step: stakeholder engagement activities. But to anchor the plans, with increased ownership and commitment, plans need to be cocreated.
- For many stakeholders, it is unclear what kind of commitment is needed; be clear about what you expect, how you organise their input and involvement, and 'what's in it for them'.



- Involve stakeholders in co-defining the value proposition: what advantages will their contribution and involvement bring? This will be different per locality and per stakeholder type. Explore their agenda and expectations and include them in ongoing and planned projects.
- Create an incentive portfolio: what kind of incentives can the municipality provide to each stakeholder. For instance, co-investing with private sector actors can benefit them by lowering the investment risk and therefore rates. Networking opportunities are also often of interest.
- Support these organisations to become change agents themselves, internally in their organisations and externally, in their networks.
- National level support is key issue; lobbying by your mayor or other local actors with a large network and decision-making power could be of benefit here.
- Integrate social justice as an explicit aim – it is good practice to pioneer and experiment, and often cities choose more well-off or advanced neighbourhoods to do so (such as science parks). Include the most vulnerable and diverse neighbourhoods to generate greater impact or take scaling these experiments to such neighbourhoods into account from the outset.

Build your capacities

The societal transitions required for climate-neutrality are ambitious; learning is inevitable to be equipped to handle such necessary governance transformation.

- Use the CCC and Mission-related activities as learning opportunities. For instance, use the Mission network: foster inter-city collaboration through formal (Mission-facilitated) and informal (self-organised) means to enable knowledge exchange, joint learning, and shared problem-solving. The Mission Platforms offers various kinds.
- Embrace your CCC as a living document. Let your monitoring and evaluation explicitly feed into its rewriting and adjusting on a regular basis.
- Learn about reflexivity (see for instance the work by Van Mierlo and colleagues (Van Mierlo et al., 2015; Beers and Van Mierlo, 2017)) and utilise it for the iteration of your CCC. You can continuously include new stakeholders, new actions, new investments and renew agreements over the course of the Mission.



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Appendix A. Interview guides

Interview guide for the CCC progress report (for cities)

- Please introduce yourself. (city, work)
- When did you get involved in the mission and what is your role exactly?
- What do you think, what was the main reason for the city to join the mission and what does it expect from it?
- Can you describe your view on the CCC? What is it? (This question meant to explore to what extent they understand what the CCC as a product is, and a process)
- Have you set up a Transition Team – a team responsible for coordinating this process? Who are the members? Did you already have such a team before?
- What is the main role/purpose of this team?
- Do you involve other stakeholders (arena) in the development of the CCC? If no, do you plan to do that? When? How? To what extent: is the purpose of the arena to inform/consult/co-create?
- If yes, who have you involved / how many organisations are there (business, public organisations, academia, civil society)? Could you onboard all the organisations you wanted? Did you have an onboarding strategy (stakeholder analysis, portfolio of incentives)?
- Do you have plans to continue onboarding and expanding the arena?
- Do you experience difficulties with onboarding (new) stakeholders and if so, which?
- How is the arena designed? How often do you meet? How do you work together?
- Have you started involving more/new stakeholders since the implementation of the CCC. Did it the CCC change your way of working with stakeholders?
- Do the participating organisations feel ownership over the plans? Do you think that they are committed to implement them?
- (How) Does the Transition Team support their engagement and commitment?
 - Making clear to the organisations what is expected from them (contribute to the development of the plans but also implement them)
 - Support them to develop internal commitment in their organisation (capacity building for becoming a change agent)?
 - Engage in direct bilateral discussions with each participating organisations to explore why they joined and what would they need for full commitment (willing to invest and implement)



- Make sure that the organisations budget for the plans (put them into their budget plans)
- Does the Transition Team involve a variety of departments from the municipality to the transition/arena work? Which ones? In what form?
- Do you have support from your managers and politicians for this work? To what extent are they aware of the mission and see it as a priority?
- Is there any/ What significant changes can you observe in the workings of your municipality since working with the CCC framework?
- What challenges have you faced in this process since you have started?
- How satisfied are you with the process? Do you think that climate-neutrality is a feasible goal to achieve within this time frame?
- Is there increased corporation between cities that has started through CCC, what does that corporation look like?

Interview guide for the CCC progress report (for CAs)

- Please introduce yourself. Which cities do you support?
- Can you describe how the cities you support are doing in this process? What have they done already?
- What do you think, what was the main reason for the cities (one by one) to join the mission and what do they expect from it?
- Have they set up a Transition Team – a team responsible for coordinating this process? Who are the members? Did they already have such a team before?
- What is the main role/purpose of this team? To what extent do they have ownership of the CCC – or is it others (e.g., the arena)?
- Do they involve other stakeholders (arena) in the development of the CCC? If no, do they plan to do that? When? How? To what extent is the purpose of the arena to inform/consult/co-create?
- If yes, who have they involved / how many organisations are there (business, public organisations, academia, civil society)? Could they onboard all the organisations they wanted? Did they have an onboarding strategy (stakeholder analysis, portfolio of incentives)?
- Has the municipality started involving new stakeholders since the implementation of the CCC. Did the CCC change their way of working with stakeholders?
- Do they have plans to continue onboarding and expanding the arena?
- Do they experience difficulties with onboarding (new) stakeholders and if so, which?



- How is the arena designed? How often do they meet? How do they work together?
- Do the participating organisations feel ownership over the plans? Do you think that they are committed to implement them?
- (How) Does the Transition Team support their engagement and commitment?
 - Making clear to the organisations what is expected from them (contribute to the development of the plans but also implement them)
 - Support them to develop internal commitment in their organisation (capacity building for becoming a change agent)?
 - Engage in direct bilateral discussions with each participating organisations to explore why they joined and what would they need for full commitment (willing to invest and implement)
 - Make sure that the organisations budget for the plans (put them into their budget plans)
- Does the Transition Team involve a variety of departments from the municipality to the transition/arena work? Which ones? In what form?
- Do they have support from municipal managers and politicians for this work? To what extent are they aware of the mission and see it as a priority?
- Are cities changing their municipal structures through the CCC?
- What challenges have the cities faced in this process since you have started?
- How satisfied are you with the process? Do you think that climate-neutrality is a feasible goal to achieve within this time frame?
- Is there increased cooperation between cities that has started through CCC, what does that cooperation look like?

