Report summarizing support given to pilot and twin cities on the CCC

Deliverable D6.2

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Abbreviations and Acronyms

Acronym	Description
WP	Work Package
CSG	City Support Group
CCC	Climate City Contract
CCCs	Climate City Contracts
CTM	Climate Transition Map
GHG	Greenhouse Gases
IP	Investment Plan

Summary

This report offers an overview of the assistance provided to Pilot and Twin cities concerning the Climate City Contracts (CCC) process, with a particular focus on fostering systemic change. This deliverable is closely aligned with Task 6.2, which pertains to the deployment of systemic innovation methodology within the CCC process in both Pilot and Twin cities, including support for City Advisors.

The support extended to cities is structured in a chronological order, commencing with activities related to the development of the Climate Transition Map, although this is not the primary focus, as it is covered in other deliverables. The report then progresses to highlight the assistance provided prior to the first CCC review window, including elements such as **webinars, guidance documents and support to City Advisors**. It proceeds to discuss specific support mechanisms during the **first CCC review window**, followed by insights gained from **summer schools** held between the first and second CCC review periods. Woven throughout this timeline are the **learnings and reflections** that emerged during the entire process, enriching the overall understanding of CCC implementation and systemic change.

From a systems change perspective, Cities' Climate City Contracts (CCCs) are a **governance innovation tool** designed to catalyze the transition toward climate neutrality. These contracts are **not the ultimate goal but rather instruments for driving the climate neutrality process**. The primary emphasis should always be on the journey toward climate neutrality itself. CCCs play a crucial role in **capturing and transparently documenting the progress made so far while also highlighting the existing gaps** in areas such as data, governance, inclusivity, and actions. Addressing these gaps strategically is paramount, and a mere listing of successes falls short of the mark. Good CCCs continually explore their potential to unlock new steps in the climate transition journey and unite diverse stakeholders toward common objectives. For cities concurrently involved in the Pilot City Programme (PCP), **synergizing PCP activities** with CCCs can significantly expedite the climate transition.

We observed that effective CCCs exhibit several defining characteristics. They act as **meta-strategies** that bring cohesion to existing initiatives and plans, bridging disparate efforts and connecting with broader city priorities such as health, economic development, and social cohesion. These CCCs follow **a strong strategic logic**, prioritizing actions that directly target identified barriers and form a portfolio aimed at these priorities. Their impact pathways are well-defined, illustrating how the portfolio will produce the desired effects. **A compelling narrative** underpins their strategy, explaining why they focus on specific priorities and how their design intentionally tackles identified barriers. **Social innovation and stakeholder mobilization** are seamlessly integrated into their core portfolio. They **utilize the CCC template strategically, going beyond table-filling to present a comprehensive and dynamic strategy.** Effective CCCs articulate alignment with the city's mission, recognize their role as market and lifestyle influencers, and subtly or explicitly reference the Climate Transition Map phases to demonstrate

the transition process and stakeholder buy-in. **Visual representations** are employed to provide clarity and direction, especially in illustrating city barriers, priorities, and their portfolio's interactions.

Conversely, weaker CCCs exhibit several shortcomings. They often comprise copied content from other documents, resulting in **disconnected sections** and lacking coherence. Disjointed lists of emission sectors, policies, barriers, actions, indicators, social innovations, and governance interventions are common, with **no clear connecting logic**. Weaker CCCs may list actions across all sectors and levers simply to fulfil table requirements, **without conveying a discernible sense of purpose or direction.** These CCCs **may prioritize solutions over a learning or impact-driven strategy,** missing opportunities for meaningful progress. It's crucial for cities to be mindful of these pitfalls to ensure that their CCCs remain effective tools for advancing their climate transition goals.

Keywords

Climate City Contract, Systems Change, Support, Cities

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1. Introduction

The **Climate City Contracts (CCCs)** support cities to tackle climate change by connecting and improving their existing plans to make them more **systemic and therefore impactful.** As noted in the NZC Grant Agreement, this report shall offer a comprehensive overview of the support provided to Pilot and Twin cities, with a focus on fostering systemic change. As we have also given support to **Mission Cities** on systems change and their CCC's, we have also included those.

Starting with activities related to the Climate Transition Map, we explore the assistance provided before the initial CCC review window, including **webinars, written guidance, playbooks, and support to City Advisors**. We then delve into **support mechanisms during the first review window** and insights from the summer schools. Throughout, we share learnings that enrich our understanding of CCC implementation and systemic change. **CCCs are more than contracts; they are tools for driving climate neutrality**. Effective CCCs bring cohesion to initiatives, follow a strong strategic logic, and prioritize actions that target barriers. They integrate social innovation and stakeholder mobilization, using the CCC template strategically. This report underscores the importance of addressing these challenges strategically and harmonizing CCCs with broader city priorities. The reviewed CCC's are a testament to the dedication of cities and stakeholders in the CCC journey and offer valuable insights to aid cities, worldwide, in their pursuit of climate neutrality.

2. Support to Cities Before the CCC Window 1

The NZC team focused on systems change (NZC WP6) held a deep commitment to infusing systemic thinking into the Climate City Contracts (CCC) of Pilot, Twin, and Mission cities, and this endeavour began well before the CCC review process commenced. The following sections give an overview of the work that was done to build the foundations for good CCC's. This was, among others, developing the Climate Transition Map, supporting the development of the CCC Template, delivering training on systems change to City Advisors and providing a number of webinars to cities.

2.1. Support Provided to WP1 on the CCC Template and the Climate Transition Map

NetZeroCities has developed a central tool to articulate the journey ahead and what it demands in holistic terms: the **Climate Transition Map**. A key navigation element for cities within the platform - both on the NZC portal and in discussions - the Climate Transition Map (CTM) describes the work towards climate neutrality as an iterative journey strengthening 7 ingredients (or phases) for an accelerated transition.

As noted in an earlier deliverable D6.1, the Climate Transition Map was created to visualize a systemic transition pathway of a city. The CTM accessible on the portal links relevant documents to each section.

The key differences to a "standard" project process are:

● Usual project process often have a linear pathway. Thanks to its non-linear structure, cities can 'enter' the map where they see fit. All sections relate to each other and may be implemented in parallel.

- Standard project process often focus on solutions too quickly. In the CTM, there is an emphasis on understanding the systems before rushing to solutions. This is necessary to uncover the root causes of issues and, therefore, stand a chance of changing the system in the long term.

- Business as usual project process are often prescriptive. The CTM instead is mission-led. Building and expanding the mandate is a continuous process that is expanded as the Mission progresses.

- Usual project process often focus on a single lever of change, the CTM places an emphasis on working with the ecosystem to strengthen democracy and multi-stakeholder buy-in, as this is necessary to implement ambitious climate action.

- Standard project process often conduct learning and scaling at the end. In the CTM, learning, scaling, and institutionalising is mainstreamed from the outset, not at the end of a project cycle.
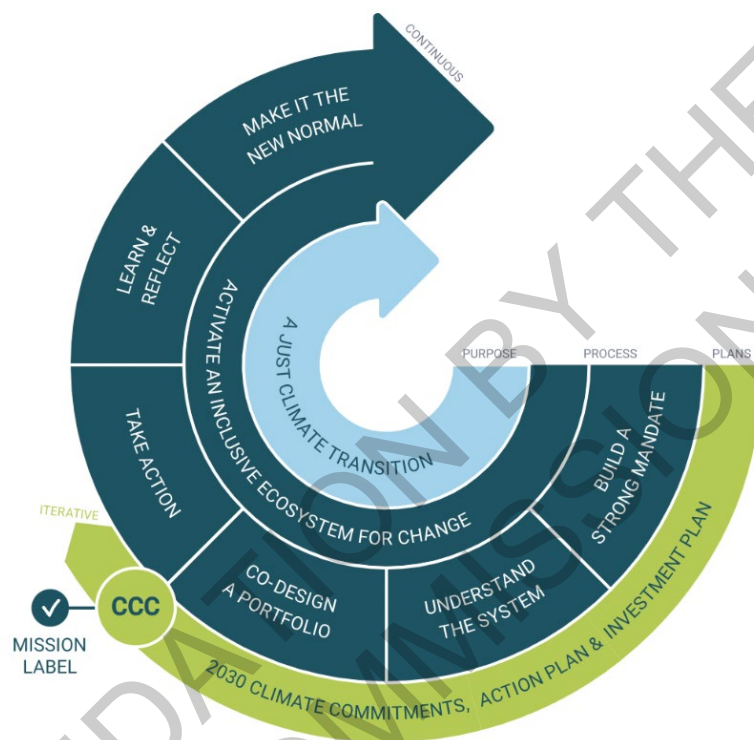

Figure 1: Climate Transition Map with CCC Process

As one can see the Climate City Contract covers the first sections of the CTM. The final decision of the CCC Template Structure was with WP1 but was influenced and supported by WP6. The input included recommendations on the approach, the structure of the document(s), and on the concrete sections and questions. The aim was to create a modular and flexible document that allowed regular updating.

2.2. Written Guidance and Playbooks

Systemic thinking is predicated on the ability to interconnect different elements, ideas, and approaches. However, establishing these connections necessitates a fundamental understanding of the individual components and potential linkages between them. For instance, consider an individual with a technical engineering background who possesses a profound understanding of a city's energy system. While this knowledge is invaluable, they might lack insight into how social innovation can facilitate novel circular business models. Furthermore, many individuals may not fully grasp how systems thinking can aid in analysing underlying patterns, thereby increasing the likelihood of effecting long-term systemic change. In essence, elevating the collective comprehension of multiple themes and their interdependencies is imperative for the successful management of the transition. This recognized need underpins many of our initiatives within NetZeroCities.

In the spring of 2022, it culminated in the collaborative publication of the **Quick Reads** on the Portal. These concise resources elucidate key aspects crucial to the systemic transition of a city, offering concrete examples and thought-provoking questions. Topics covered encompass "Leading Collaborative Systems Change", "Social Innovation", "Governing a Transition", "Financing the Mission", "Monitoring & Learning for Impact", and more. Additionally, it inspired the creation of the Pilot City

Guidebook, which provides illustrative examples, supplementary resources, and links to subjects that are typically underrepresented but vital for systemic transformation.

In EU-funded programs, it is customary for a single City Officer to oversee implementation. However, for the Mission to thrive and cities to adeptly manage their transitions, greater involvement is required from a diverse array of individuals within the city and its ecosystem. This does not necessarily entail hiring additional staff (although it can be advantageous) but rather entails enhanced coordination among existing personnel engaged in climate action. These individuals should actively forge alliances with external partners beyond the municipal sphere, recognizing that many emissions are beyond the direct control of the municipality. To ensure that city structures facilitate systemic change, WP6 has drafted the **Transition Team Playbook**. This resource delineates various models observed in different cities, their strengths and weaknesses, and the skills we recommend cities cultivate or seek in new recruits.

Furthermore, effective communication is essential for garnering support and enthusiasm among municipal stakeholders, local actors, and the broader community. In this vein, WP6 has contributed to the **Communication Playbook**, which offers an array of visual and communication tools to assist cities in conveying their efforts, the EU Cities Mission, and NetZeroCities in a comprehensible manner. This toolkit encompasses strategies for local-level climate action communication, an elevator pitch for introducing the city's climate neutrality journey to diverse audiences, and an editable slide deck for visually showcasing their work.

2.3. Support to City Guides

The individuals from WP6 support the City Advisors in their understanding of systems change and innovation from the outset. Their welcome and **onboarding materials** already included selected resources. Additionally, **introduction and overview calls with specific input on systems change** and space to ask questions were held. The City Advisors were also **invited to strategic conversations**, so that linkages could be made in both directions. Finally, some City Advisors could come to the **Summer Schools in Milano and Santander**, which helped their understanding of the different elements of the Climate Transition Map.

2.4. Webinars

Additionally, as part of our support for cities in adopting a systemic change perspective while preparing their CCCs, we organized a series of informative webinars. Specifically:

- **Mandate Setting Webinar, 22. September 2022**
  The intention of this webinar was to distill experiences and transferable recommendations from the speakers on three different parts of mandate setting:

  Internal Mandate Setting: How do you get support from the administration, political representatives (across departments and political parties; senior and junior) and resources to mobilise a transition team and to achieve the Mission? How are you making the climate agenda less vulnerable to political changes in the administration?
  External Mandate Setting: How do you strengthen support across society (media, academia, citizens, campaign groups, private sector...), build new partnerships, a collaborative network and improved governance structures to resource the Mission? How might this help to make the climate agenda less vulnerable to political changes in the administration?
  Other parts of Governing: How do you get support and commitment from regional, national (and other) government levels to resource action and align policy as needed to achieve the Mission target?

  Speakers:

- o Katrien Rycken, Director Leuven 2030
- o Maria Vassilakou, Former Deputy Mayor, City of Vienna; Mission Board Member; currently working with Greek cities
- o Jordi Peris, Urban Strategy and Sustainable Agenda General Coordinator, Major's Office, València
- o Anna Ledin, Director, Environment Administration, City of Gothenburg
- o Johan Gammelgård, Director of Innovation, Municipality of Umeå
- o Martijn van Stam, Strategic Sustainability Advisor, The Hague
- o Luise Fischer, Systems Innovation Co-Lead, NetZeroCities, Climate KIC

- ## Activate an Inclusive Ecosystem for Change Webinar, 27 Sep. 2022

The ecosystem development webinar explored the continuous engagement with stakeholders and actors in the local context incl. the analysis and mobilisation of the ecosystem, building a shared vision, cultivating collaboration, building the capacity to act, and stewarding a shared vision. The recording and slides of the webinar can be found here.

Speakers:

- o Adriana O'Phelan, Democratic Society
- o Tamami Tiffany Komatsu, Politecnico di Milano
- o Anna Hutunen, Climate KIC
- o Saara Vauramo, Nautre Positive Solutions
- o Ville Uusitalo, LUT School of Energy Systems
- o Hanna Kopra, Citizen of Lahti
- o Marc Aguilar, BitLab, Barcelona
- o David Nordling, DigidemLab, Göteborg
- o Michele D'Alena, Fondazione per l'Innovazione Urbana, Bologna

- ## Understanding the System Webinar, 29. September 2022

The webinar focused on developing a holistic understanding of the current state of affairs, as well as developing future scenarios. The recording and slides can be found online. The themes covered were:

- ○ Delivering a GHG Emissions Inventory
- ○ Analysing action gaps and capital needs
- ○ Mapping the system and resource flows and identifying key obstacles
- ○ Identifying the levers for change

Speakers:

- ○ Francesca Rizzo, Full Professor, Politecnico di Milano
- ○ Åsa Minoz, Innovation Strategist - Viable Cities
- ○ Julio Lumbreras, Associate Professor at the School of Industrial Engineering (UPM), and Visiting Scientist at Harvard T.H. Chan School of Public Health
- ○ Ed Synnott, Cities Advisor, NetZeroCities
- ○ Jane McLaughlin, Cities Advisor, NetZeroCities
- ○ Niels Jansen, Ellery Studio
- ○ Fermin Cerezo, Head of Innovation Department, The City of Valencia
- ○ Marika Milani, Head of Urban Development, Housing Environment, The City of Bologna
- ○ Ivan Ivankovic, Head of Enviromental Sustainability, The City of Zagreb
- ○ Helena Kyrki, Manager for Sustainable Development, The City of Zagreb

- ● **Co-Creating Portfolio Webinar, 4. October 2022**

  This webinar aimed to put Mission cities' internal teams in a position to engage with the "Co-create a portfolio" phase of their journey, a key process to create an impactful Action Plan and Investment Plan. It provided the necessary basis for cities' teams to understand what we call a portfolio approach and clarified this new vocabulary. The webinar used thought-provoking examples from experts and inspirational cities for Mission cities to be able to plan their work for the co-creation of their portfolio: who to engage, what activities to prepare for, what needs to be available to start the process.

  Speakers:
  - o Karen Björk Eyþórsdóttir, City of Reykjavik
  - o Sofi Obrstad Halling, City of Oslo
  - o Borge Håmsø, City of Oslo
  - o Frazer Osment, LDA Design
  - o Joost Beunderman, Dark Matter Labs, NetZeroCities Consortium
  - o Eugénie Cartron, Dark Matter Labs, NetZeroCities Consortium
  - o Gyorgyi Galik, Dark Matter Labs, NetZeroCities Consortium

3. Support to Cities on their CCCs in Window 1

The assessment and assistance provided to cities for the development of their CCCs were organized into specific timeframes, or "windows." The initial window, during which cities could submit their Climate City Contracts (CCCs) for feedback and support, was open from March 6th to March 15th, 2023. Subsequently, the review process for the submissions for the first window occurred from March 15th to April 15th.

The two following sections presenting the CCC reviews, which were conducted by WP1 with support from WP6 and others, are divided into an operational introduction, covering the cities that handed in CCC's and the teams that reviewed them, and more content focused reflections.

3.1. Operational Overview – Window 1

The table below offers an overview of the cities that submitted their CCCs during the first window, the groups to which they were assigned following the review, and whether any of these cities are engaged in the Pilot City Programme. It is important to note that WP6 extended support to all participating cities, not solely the Pilot Cities, with the aim of reinforcing the systemic approach within their CCCs.

City	Also Pilot City – yes/no	Group
Cluj-Napoca, Romania	Yes	Group 1: These cities passed <u>most elements</u> of the CCC checklist in all three parts: Commitments, Action Plans and Investment Plans. Please note that this is an initial assessment of *completeness*, not quality. These are not "grades" in the sense that group 1 got a "first" and so on.
Stockholm, Sweden	No	
Madrid, Spain	Yes	
Valencia, Spain	Yes	
Valladolid, Spain	Yes	
Vitoria Gasteiz, Spain (IP resubmitted after checklist validation)	Yes	
Klagenfurt, Austria (IP resubmitted after checklist validation)	No	

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Mannheim, Germany (IP resubmitted after checklist validation)	Yes	
Sønderborg, Denmark (IP resubmitted after checklist validation)	No	
Zaragoza , Spain (IP resubmitted after checklist validation)	Yes	
Helsingborg, Sweden	No	Group 2: These cities passed most elements of the CCC Commitments and Action Plan checklist, but not the Investment Plan (IP). They will need further support and /or engagement on the IP. Our aim should be to bring them to group 1 as soon as possible, subject to city willingness and consortium resources.
Marseille, France	No	
Helsinki, Finland	No	Group 3: These cities did not pass most elements of the CCC checklist in each of the three parts. Note that these cities have generally very advanced climate plans and approaches.
Malmö, Sweden	Yes	
Sevilla, Spain	Yes	

The review process included written feedback and a follow-up call with the city. The specific composition of the review teams, called 'Pods', is detailed in the list below. Each review pod included at least one member from WP6 who had actively participated in the discussions detailed therein. For CCCs assessed by Pod 3 and Pod 4, two WP6 members participated in the review process.

Pod 1	- Lead: Ghazal (AIT) - GHG & Inventory Related Content: Ciaran (AIT)l - Stakeholder and Citizen Engagement: Adriana (DemSoc) **Transformation and Impact Pathways: Eugenie (DML)** - Investment Plan Elements Lead: Harry (BWB)
Pod 2	- Lead: Olga K and Marina L (ICLEI) - GHG & Inventory Related Content: Mira (CKIC) - Stakeholder and Citizen Engagement: Hade Dorst, Geiske Bouma (TNO) **Transformation and Impact Pathways: Nikhil (CKIC)** - Investment Plan Elements Lead: Asen + Elisa Maes (BWB)
Pod 3	- Lead: **Joost (DML)** - GHG & Inventory Related Content: Apurva (Metabolic) - Stakeholder and Citizen Engagement: Adriana (DemSoc) **Transformation and Impact Pathways: Luise (CKIC)** - Investment Plan Elements Lead: Asen (BWB)

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Pod 4	o Lead: Andrea (CARTIF) o GHG & Inventory Related Content: Andrea (CARTIF) o Stakeholder and Citizen Engagement: Tamami (POLIMI) o **Transformation and Impact Pathways: Carla (CARTIF), Luise (CKIC)** o Investment Plan Elements Lead: Harry (BWB)
Additional Finance Pod	o Asen, Harry, Sofia (BWB) o Sabine, Alokananda Nath (Frankfurt School) o Julio (UPM) o Fedra (SEI) o Vaibhav (SP)

3.2. Considerations – Window 1

We know that a systemic approach includes a holistic perspective, interconnectedness, the inclusion of multiple perspectives, feedback loops, continuous learning and emergence among others. However, particularly when reviewing in a group, it is much easier if the standards for "what is excellent, good, medium and weak CCCs from a systemic change perspective" have been discussed.

For the official review of the CCCs guidance, questions for reviewers were created, which can be found in the table below.

Point	Question	Section
1.4	Does the Commitments document outline the co-benefits of climate action for a city?	Section 2 - Goal
2.14	Does the AP identify systemic barriers for climate action in the city's ecosystem to support the planning and corresponding strategic action?	AP Module A-3
2.15	Does the AP identify systemic opportunities for climate action in the city's ecosystem to support the planning and or corresponding strategic actions?	AP Module A-3
2.19	Does the AP identify and detail the short-term and long-term outcomes leasing to net-zero?	AP Module B-1
2.20	Does the AP identify co-benefits (indirect impacts) related to climate neutrality?	AP Module B-1
2.21	Does each action plan in the AP reference one or more direct impact(s) (emission sources of sectors)?	AP Module B-2
2.22	Does each of the actions reference a field of action, and an intended outcome?	AP Module B-2
2.27	Does the AP include indicators to monitor progress towards outcomes and impacts outlines in Module B-1?	AP Module B-3
2.30	Does the AP outline next steps with regards to its development and iteration cycle (e.g. improvements and milestones to be tackles in the next iteration of the CCCs)?	AP general

Beyond the official review, partners were in contact with cities through various channels. Therefore, WP6 took the time to discuss how a good systemic Climate City Contact would look like. From these discussions, we learnt that it would be essential to review the following points from a systemic change perspective:

- Is the CCC primarily a **compilation of sector-specific efforts** or does it exhibit a **systemic approach**?
- If it adopts a systemic approach, is it only well-articulated on paper, or is there **tangible evidence of its implementation** in practice?
- To what extent does the CCC garner **support and buy-in from diverse city stakeholders**, including the mayor, departments, utility companies, private sector, academia, and citizens?
- Is the CCC authored by an external consultant with limited decision-making authority or **by the relevant city departments and partners responsible for implementing the initiatives**, such as utility companies?
- Do the **CCC intentions and plans align effectively with its funding strategy**?
- Is the **language** used in the CCC **clear and unambiguous, including the identification of potential gaps** and a transparent plan for addressing them?
- Does the CCC exclusively emphasise technological solutions, or does it **embrace a mixed approach** that encompasses broader aspects?
- Is the CCC primarily focused on climate-related goals, or does it encompass a **wider spectrum of sustainability governance**?
- Does the CCC refine and enhance existing initiatives, or does it venture into uncharted territories, **seeking new commitments**?
- Is the CCC a rigid blueprint, or does it foster a **dynamic learning process** and adaptability?

After these initial conversations, the first CCC's were reviewed. In good Climate City Contracts, the following could often be observed:

- **Emphasis on Transition Process:** CCCs are best viewed as vehicles for advancing the climate neutrality transition process itself, rather than isolated objectives. It's the process of achieving climate neutrality that takes precedence.
- **Transparent Progress Tracking:** Effective CCCs place a strong emphasis on transparently documenting the progress made to date. They also keenly identify gaps in data, governance, inclusivity, and actions. Equally crucial is the clear articulation of strategies devised to address these gaps. It's imperative to go beyond merely listing successes.
- **Unlocking Potential:** Good CCCs processes continually assess their potential to propel the city's climate transition journey. They are agile in identifying new steps and adept at uniting diverse stakeholders towards common goals.
- **Integration with PCP:** For cities concurrently engaged in the Pilot City Programme (PCP), good CCCs explore the synergy with PCP activities to significantly expedite the climate transition.
- **Meta-Strategy for Coherence:** Successful CCCs act as meta-strategies that harmonize existing initiatives. They create coherence by aligning disparate efforts and plans, even connecting with broader city priorities such as health, economic development, and social cohesion.
- **Strong Strategic Logic:** Effective CCCs exhibit a robust strategic logic. They prioritize actions that directly confront barriers, forming a portfolio that targets these priorities. The pathways to impact are clearly defined, illustrating how this portfolio will yield the desired outcomes.
- **Compelling Narrative:** A well-structured CCC tells a compelling story. It explains why its portfolio zeroes in on specific priorities and how it is intentionally designed to tackle identified barriers. Furthermore, it vividly articulates alignment with the city's overarching mission.
- **Incorporating Social Innovation:** Rather than being tacked on as afterthoughts, successful CCCs seamlessly integrate social innovation and stakeholder mobilization actions into their core portfolio.

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- **Strategic Use of CCC Template:** Effective CCCs adeptly exploit the CCC template, going beyond the mere act of filling tables to present a comprehensive and dynamic strategy.
- **Alignment with Mission:** Good CCCs articulate how both existing and new activities seamlessly align with the city's mission.
- **Market and Lifestyle Shaping:** Good CCCs Impact pathways vividly demonstrate the city's pivotal role as a shaper of markets and lifestyles. This influence manifests through infrastructure, policies, regulations, governance decisions, and ecosystem engagement choices.
- **Reference to Climate Transition Map:** Good CCCs subtly or explicitly reference the Climate Transition Map phases. This not only highlights the transition process but also gauges the level of buy-in from key stakeholders.
- **Visual Representations:** Effective CCCs employ visualizations to convey the city's barriers, priorities, and how the portfolio interacts with them. Visual aids bring clarity and direction to the strategy.

Consequently, **weaker CCCs** showed the following characteristics:

- **Copying from Other Documents:** Weaker CCCs often consist of content copied from other documents, resulting in disconnected sections that lack coherence.
- **Disjointed Lists:** They frequently present disjointed lists of emission sectors, policies, barriers, actions, indicators, social innovations, and governance interventions without a clear connecting thread.
- **Comprehensive but Directionless Actions:** In contrast to effective CCCs, weaker ones may list actions across all sectors and levers merely to fulfil table requirements, lacking a discernible sense of purpose or direction.
- **Solution-Oriented Rather Than Impact-Driven:** Weaker CCCs may prioritize solutions over a learning or impact-driven strategy, potentially missing opportunities for meaningful progress.

In conclusion, effective CCCs function as dynamic instruments for guiding cities on their journey toward climate neutrality. Weaker CCCs, in contrast, run the risk of becoming static documents that fail to drive substantial change. Successful CCCs prioritize strategy, coherence, inclusivity, and purpose, ultimately expediting climate transitions in cities.

3.3. Recommendations for the CCC Template Structure

Following the initial CCC review, it became evident that our template structure could benefit from enhancements. Consequently, the WP6 working group reconvened to deliberate on recommendations aimed at simplifying systemic work for cities. These recommendations were categorized into long-term, medium-term, and short-term changes and have seen partial implementation, which is a promising step forward.

Long-term Recommendations for the CCC Template from a Systemic Change Perspective

The WP6 Reflection Meeting emphasized that CCC processes are more than mere "filling-in exercises"; they represent a people-centric journey. Feedback indicated that some Action Plans appeared fragmented, as if crafted by different individuals or departments. A similar observation applied to Investment Plans and their alignment with Action Plans. Experts in systemic change advocated for a more integrated, coherent, simplified, and modular approach, moving away from linear PDF or Word documents towards interactive, regularly updated formats. The proposal also includes expanding the Gap Analysis Tool, developed by WP10, to encompass social, systems, and participatory solutions. Combining this tool with the Financial Tool would then enable flexible, multidisciplinary, co-creative CCC planning, with an increasing level of ambition over time. This modular approach would incorporate

monitoring, evaluation, and mainstreamed learning. Recognizing that sensitive (political or interpersonal) issues are seldom documented in writing, the expert group suggested offline tools for understanding root causes, while online or hybrid tools could facilitate portfolio creation and solution determination.

Mid-term Recommendations for the CCC Templates from a Systemic Change Perspective
The discussion centred on the CCCs "cruising altitude" and flexibility. Currently, cities are required to include numerous details, occasionally duplicating content from prior strategies. Recognizing that cities must adhere to past City Council decisions, it was suggested that CCCs be regarded as meta-strategies, connecting existing strategies and strategically addressing gaps. Other strategies, frameworks, or roadmaps which work in synergy with Climate Action Plans could be included as annexes. While setting minimum CCC content standards, flexibility could be afforded to cities in terms of delivery and composition. This more flexible approach, that seeks to connect existing strategies on a higher level rather than duplicating everything existing with the same level of detail also simplifies the process for cities.

Short-term recommendations for the CCC Templates from a systemic change perspective
In the short-term, restructuring the current template was deemed essential to reinforce the people-centred approach and reduce redundancy. It was also suggested that the Action Plan and Investment Plan be consolidated into a single document, even if appearing sequentially, ensuring accessibility for city counterparts. Furthermore, the feedback process, which often focused on specific fields ("What do I need to fill in for the Mission Label?"), was seen as limiting explorative, honest conversations about city transformation. WP6 recommended leveraging City Support Groups and cultivating deeper relationships to facilitate more substantial, enduring conversations. This approach aligns with the understanding that the CCC is not merely a written document but a dynamic process.

4. Support in Between Submission Windows

Support to cities on systemic change after the first review window was again diverse. This section below gives more details on the Action Plan Webinar, the capability building programme, and the first and second Summer School in Milan (IT) and Santander (ES), as well as the NetZeroCities Conference. The focus of these summaries is the support given to cities from a systems change perspective.

4.1. Action Plan Webinar, 30. May 2023
Action Plan Webinar – 30 May | Recordings **Part 1**, **Part 2**, **Part 3** | **Download presentations**
This webinar was structured in three parts. In the beginning, Jordi Peris (City Strategies Coordinator of the Mayor's Office) and Fermín Cerezo Peco (Head of Innovation Department) form the City of Valencia outlined their learnings on drafting the Action Plan. Thereafter, Agnes Schönfelder (Local Green Deal Office – Spokesperson EU Green Deal, International Climate Policy Advisor and CEO Climate Action Agency) from the City Of Mannheim gave her view. In part 3 Andrea Gabaldon Moreno (CARTIF) from WP10 and, Eugénie Cartron and Joost Beunderman (Dark Matter Labs) from WP6, summarized the key learnings of Window 1.

These learnings included the list of what makes a 'good' and a 'weaker' CCC gathered from the reflection session from Window 1 submission support, detailed in section 3.2 above.

4.2. Capability Building Programme

In June 2023, six complementary modules for capability building that connect with the steps of the Climate Transition Map were officially launched on the portal. Each module comes with a variety of content, such as videos, reading materials and tools, as well as live events and discussion forums on the NetZeroCities Portal, with a high focus on peer-to-peer interactions between cities. From a systemic change perspective, as outlined above, it is essential to understand the connection between modules. The capability-building programme, therefore plays a crucial role in enabling systemic change. The individual modules are:

- **Building a shared understanding:** Understanding the Mission as a multi-stakeholder strategic planning and learning process, building a transition team and establishing a governance structure for your local context.
- **Activating ecosystems for change:** Co-creating a vision for your city, engaging citizens and stakeholders and maximising social innovation.
- **Setting up a baseline for action:** Using science-based indicators to enable planning, monitoring and assessment of the climate, environmental and socio-economic impacts of your city's Action Plan.
- **Experimenting with a portfolio of actions:** Working with new techniques to move from fragmented actions to a strategic portfolio of complementary actions.
- **Building a strong economic case:** Developing the economic case that will serve as the foundation for your net-zero strategic plan and financing strategy.
- **Developing a financing strategy**: Understanding the purpose of a financing strategy, exploring activities and good practices to develop one and laying it down in an Investment Plan that matches the portfolio of actions identified.

These modules have progressively been expanded on, over the months of June and July, and will be further refined over the October 2023 - March 2024 period to best support cities, particularly with Window 3 CCCs submission on the horizon. WP6 is particularly contributing to the modules "Building a shared understanding" and "Experimenting with a portfolio of actions".

4.3. Summer School in Milano, 7-9 June, 2023

It is clear that exchange in person, in an informal environment, that allows learning in-between cities and from and with experts from NZC, is of higher quality than learning online. Particularly the **difficult themes,** which are often those with **high risk**, are likely to be discussed only in person. Referring to the capability building framework as developed in NZC D3.2 (p.24) *''learning with and from others recognises that learning in group dynamics is more fruitful, where multiple viewpoints can be presented and assumptions challenged.''* Thus, to be able to cultivate change within and among organisations it is pivotal to exchange, compare and reflect in order to learn from other points of view. The role of longer, in-person meetings in small groups, should therefore not be underestimated.

The two- and half-day intensive Summer School, which was led by the Politecnico di Milano (member of the consortium), aimed at supporting cities to improve their CCCs across a spectrum of themes. These included the design of coherent portfolios, sound funding strategies, and the adequate use of social innovation. Key tools and approaches were introduced in workshops and peer-to-peer spaces, for the cities to learn from each other, in light of the CCC submission.

The below agenda provides an overview of the activities that took place over the two-and-a-half days spent in Milano. The Summer School in Santander, which took place a few weeks later, followed a similar structure.

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Schedule	June 7 (Milano – Design campus via Durando 10)		Schedule	June 8 (Como – Politecnico residence, via Zezio 58)		Schedule	June 9 (Como – Politecnico residence, via Zezio 58)	
				Group 1	Group 2		Group 1	Group 2
			9.00-11.00	Portfolio Codesign	Transition Team	9.00-11.00	Pathways and Indicators	Social Innovation
			11.00-11.15	Break		11.00-11.15	Break	
			11.15-13.15	Investment Plan	Porfolio Codesign	11.15-13.15	Social Innovation	Pathways and Indicators
14.00-15.00	Welcome and Opening		13.15-15.00	Lunch & Learning session Kirsten Dunlop – EIT Climate KIC		13.15-15.00	Lunch and networking	
15.15-17.15	Group 1	Group 2	15.00-17.00	Group 1	Group 2	15.00-18.00	Learning session Individual coaching session with NZC expert group	
	Transition Team	Stakeholder Engagement		Stakeholder Engagement	Investment Plan			
17.15-17.30	Break		17.15-18.15	Learning session Boosting your CCCs				
17.30-18.30	Learning session From submitted CCCs							
18.30-21.00	Aperitif in Milano Design Campus Bus transfer to Como		20.00 -22.00	Dinner in Como Circolo dei canottieri Viale Giancarlo Puecher, 6				

Figure 2: Milano Summer School Schedule

The following cities attended the Summer School: Bologna*, Firenze*, Heidelberg, Lappeenranta, Leuven*, Malmö*, Parma*, Reykjavik, Limassol*, Porto, Vilnius, Sofia, Aachen*, Bergamo*, Roma*, Eilat, Kosice, Milan*, Turin*, Guimarães*, Gabrovo, Mannheim*, Tartu and Valladolid*

Those cities highlighted with a star are also part of the NZC Pilot City Programme. The Summer School was also attended by a number of City Advisors, who also supported with their understanding of approaches and tools that can be used across disciplines.

It must be noted that tackling climate action in a City can feel overwhelming, particularly if the approach is systemic. It is therefore important to nurture an open, approachable, and tolerant atmosphere that will allow people to learn, make mistakes and try again if things don't work out the first time.

WP6 prioritises an open atmosphere as an essential element of a systemic approach. As an example, Julio Lumbreras and his team from Polytechnic University of Madrid (UPM) found a playful allegory for the Climate City Contract, in terms of it being akin to "cooking risotto". All parts of the Climate Transition Map go together, like the ingredients of a risotto. The Summer School is a place to learn about the individual ingredients, and then test and combine them as cities proceed in their transition.

Figure 3: Julio Lubreras as Summer School

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The cities were divided into two groups of around 15 people each, to ensure good communication and collaboration across cities, as much as possible. The two groups had the same sessions but in a slightly different order. Each workshop was highly interactive, with cavasses and group work done by cities.

The entire Summer School can be seen as support to cities on systemic change, as it assists them in weaving the different individual parts together. However, the "Transition Team" and "Portfolio Codesign" sessions need to be mentioned specifically, as WP6 strongly focused on them.

Figure 4: Transition Team Session at Summer School

The final Learning Session, conducted on the Friday (9th of June), was open to all attending cities to request for support and feedback from all session hosts on specific questions relating to their CCCs and beyond. The **feedback from the Summer School was very good,** with 91,3% of participants stating afterwards that they would recommend it to other cities.

4.4. Mission in Progress: Climate-Neutral and Smart Cities Conference 2023, 26-27 June 2023

End of June 2023 the NetZeroCities conference took place in Brussels at the Maison de la Poste. To give all cities attending the conference the opportunity to learn from the content developed for the Summer School we shortened and adapted the sessions to suit a wider audience. This allowed participants of the Practitioners Track, many of them writing their CCCs at the time, to deepen their understanding of the Climate Transition Map and its interconnected parts.

Figure 5: NetZero Cities Conference

4.5. Summer School in Santander, 21-23 July 2023

A second edition of the Summer School took place in Santander from 21 to 23 July 2023. The agenda outlined above in section 5.3 was largely replicated for this summer school. The sessions, while similar, integrated small improvements based on the feedback from the Summer School in Milan. The below agenda outlines the activities that took place over the two- and half-day event.

Day 1	Day 2		Day 3	
Free for travel	Welcome		Welcome	
Welcome reception	Session 2A (2h) **Portfolio co-design**	Session 2B (2h) **Transition team**	Session 5A (2h) **Social innovation**	Session 5B (2h) **Stakeholder engagement**
Inspirational speech: Kirsten Dunlop (Climate KIC CEO)	Break & networking		Break & networking	
Inauguration keynotes	Session 3A (2h) **Pathways and indicators**	Session 3B (2h) **Investment planning**	Session 6A (2h) **Stakeholder engagement**	Session 6B (2h) **Social innovation**
Lunch	Lunch		Lunch	
Session 1A (2h) **Transition team**	Session 1B (2h) **Portfolio co-design**	Session 4A (2h) **Investment planning**	Session 4B (2h) **Pathways and indicators**	**Individual coaching sessions** (2h)
Break	Break			
Collective learning session 1 (1h)	**Collective learning session 2 (1h)**		Free for travel	
Free time	Free time			
Dinner	Dinner			

Table 1: Santander Summer School programme (July 21-23rd 2023)

The following cities participated in the summer school: Barcelona*, Differdange, Guimarães*, Istanbul Klagenfurt, Kranj*, Lisbon, Madrid*, Miskolc, Münster*, Porto, Sevilla*, Tartu, Taurage, Thessaloniki, Vilnius, València*, Valladolid*, Vitoria-Gasteiz*. Those highlighted with a star are also part of the Pilot City Programme. The others are Mission Cities.

Overall, the feedback from the summer school was once again very positive. Cities emphasised the added value and the need for **community-based learning**. In this regard, city representatives articulated the benefit of being in close contact with their City Advisors as well as the NZC Consortium. This type of third-party support helps to create perspective, identify blind spots and find synergies. Moreover, it increases the sharing of knowledge and best practices across European cities. City representatives express their desire for regular peer-to-peer exchange, and sharing of best practices and lessons learnt. Coming together with their peers, across Europe during a Summer School, makes City representatives feel part of the bigger Mission movement and empowers them to persevere and create a strong narrative around the Cities Mission. Accordingly, we observe a need to increase the understanding of how to use the **CCC as a strategic tool**, and as a leverage for engagement, communication and dissemination.

5. Support to Cities on their CCCs in Window 2

5.1. Operational Background – Window 2

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Cities were able to upload their CCCs drafts to receive feedback from 6-15th of September 2023. This was also the deadline for them to update their GHG emissions inventory on CDP-ICLEI Track or MyCovenant if they are using one of these reporting platform. The Completeness Check and informal feedback ahead of the formal submission to the European Commission is taking place while this report is being written (from September 15th to October 15th). The support given to cities of this window is therefore "work in progress" but shall still be part of this report.

This time, Window 2 CCC support is organised around a vertical (holistic) review to prevent the disconnection of the various sections of the CCC and instead favour an integrative feedback. The review pays particular attention to the narrative presented by the city and its ability to approach the work systemically, from inventory and goals to barriers and priorities identification all the way into portfolio, impact pathways and investment planning.
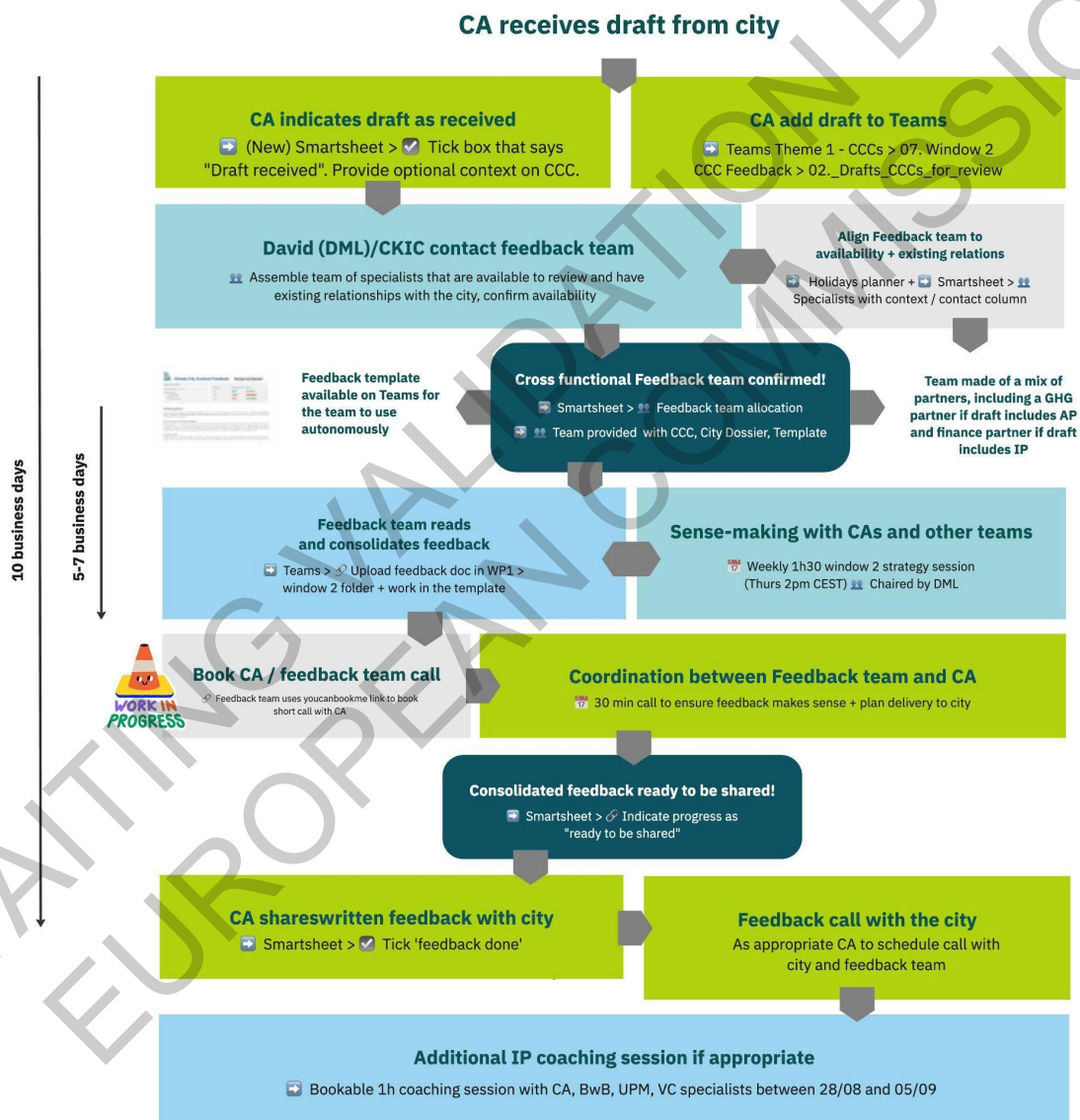

Figure 6: Window 2 Review Process

5.2. Considerations – Window 2

Key considerations of the currently running review are:

- **A strong narrative for engagement:** A document that tells the story of how the city is going to reach its goal (short, clear, direct, looking ahead). A document that is an invitation to (and catalyst for) stakeholder engagement. A document that has a clear identity and narrative throughout (including visual ID, inclusive language aiming at connection).
- **A strategic intent:** A document that articulates a clear sense of direction (unique to the context, e.g. a transition for community resilience, transition of an heritage city, transition "the Mediterranean way"...). A strong logic - priorities responsive to barriers, a portfolio aiming at these exact priorities and impact pathways demonstrating how this portfolio is expected to produce the necessary effects to address these priorities. A meta-strategy unifying existing initiatives, creating coherence in dispersed efforts and plans (existing SECAP, multiple city strategies…). A portfolio articulating well how existing and new activities are aligned to the Mission.
- **Clear, explained and defined targets including data and potential gaps:** A document that states a clear target (e.g. 100% reduction of GHG emissions, scope 1 and 2 for a specific geographic boundary and related to a robust baseline by 2030) and then works this through in the GHG emissions inventory, action plan, and investment plan in a coherent manner. If certain parts are not measured at the moment (e.g. methane or other GHGs) it is noted explicitly rather than omitted. Moreover, potential emissions, domains, or scopes gaps are clearly defined and outlined.
- **Flexibility:** Good CCC's do not need to align with the template as long as they cover the required information and reference documents with adequate details.
- **Potential for learning and impact:** A story of why this portfolio is good: why it is focusing on what it needs to focus on, how it is voluntarily structured to address identified priorities and barriers. A portfolio which integrates social innovation, governance and stakeholder engagement actions to the portfolio, rather than seeing them as being an add-on. An impact pathway logic demonstrating that the city understands the role of qualitative and quantitative intermediary outcomes (economic or social benefits) to unlock significant emission reductions.

6. Update on Twinning Programme

The Twinning Programme, which has been led by WP5, will have its official public kick-off meeting on the 28th of September 2023, from 13:30 - 15:30 (CET).

Within the context of NetZeroCities, the Twinning Learning Programme aims to support local authorities to develop or further develop innovative approaches to rapid decarbonisation in municipalities through twinning. The objectives of the Twinning Learning Programme are as follows:

- To identify factors and mechanisms within municipalities which have led to successful implementation of pilot activities to accelerate the transition towards climate neutrality by 2030 in Pilot Cities and in Twin cities before or by 2050.
- To develop, or further develop, deep decarbonisation policies and pilot activities in municipalities.
- To disseminate the process and lessons learnt across Europe.

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Twin and Pilot Cities will be matched with the intention to replicate lessons learnt across the pilot activities. This shall help Twin Cities to capitalise on the achievements and experiences of Pilot Cities, rather than "reinventing the wheel".

Apart from the shared challenges, the programme team, when matching Twin Cities to Pilot Cities, also considers geography and city size. Finally, all Twin Cities will have committed to become climate neutral by or before 2050.
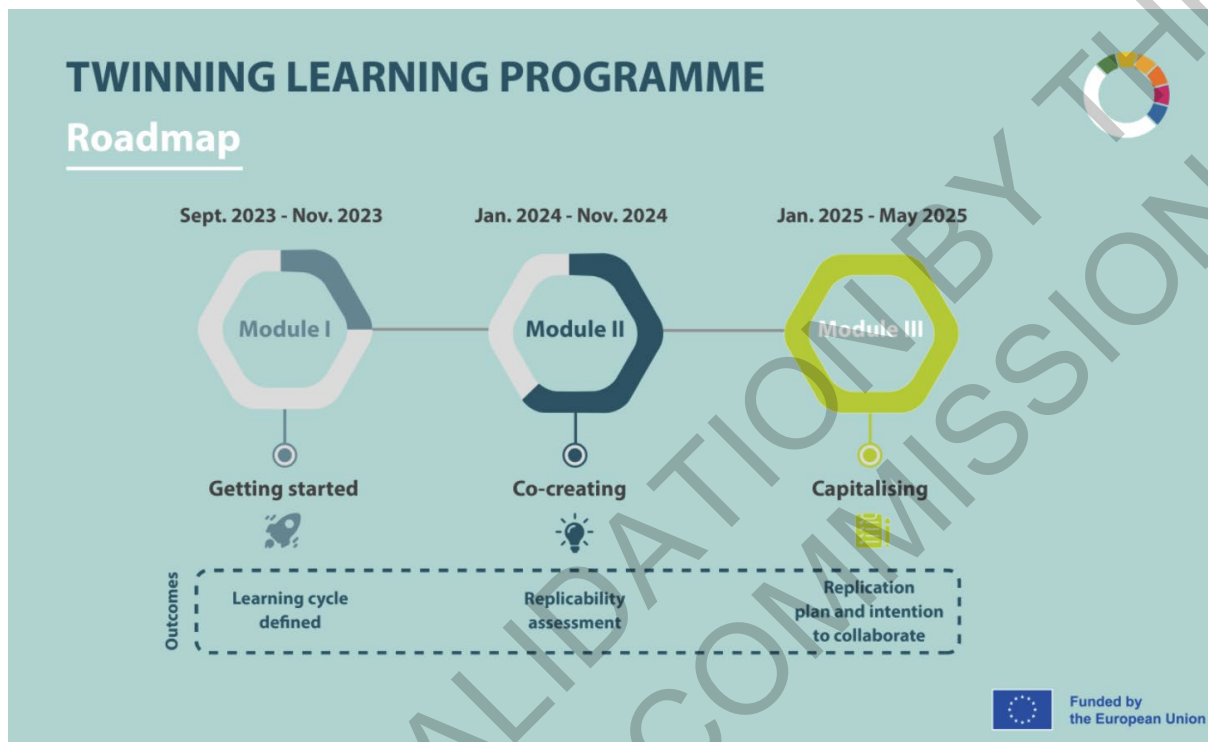

Figure 7: First Modules of the Twinning Learning Programme

7. Conclusion

Concluding it can be noted that the support to the CCCs is a journey as well. As the needs of the pilot, twin and mission cities evolve so will the offers and responses from the NZC platform. What seems to be clear is that support to the cities on their CCCs is highly appreciated if delivered in small in-person meetings. It also seems to be clear that the CCC has a value add if it connects existing other strategies and supports cities to access additional resources, rather than duplicating existing plans and roadmaps.

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