NET ZERO CITIES
SGA2-NZC

City Finance Needs Assessment Report

Deliverable D2.2

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Table of Contents

Abbreviations and acronyms 3
Executive Summary 4
Introduction 8
Chapter I – Context Setting 10
1.1. Contextualising Insights from NZC Deliverables and Complementary Activities 10
1.2 Key Trends in Investment Plan Reviews highlighted during the review process by EC and EIB 13
1.3. Positioning the Deliverable 2.2. within the NZC Knowledge Framework 14
Chapter II – Exploring Sectoral Focus of the CCC IP within EU Cities Mission 15
2.1. Sustainable Transportation as a Key Driver of Climate Neutrality 15
2.2. Energy Efficiency and Renewable Energy 16
2.3. Built Environment and Housing 18
2.4. Other sectors 19
2.5 Reflection 19
Chapter III – The People Driving the Mission: City Teams, Decision-Making and Coordinating Efforts for Implementation 22
3.1. Building Team Capacity for Effective Implementation 22
3.2. Political Tensions and Coordination Challenges Across Levels of Governance 23
3.3. Reflections 24
Chapter IV – Navigating the Framework: The Impact of Policies and Regulations on Investment Plan Implementation 25
4.1. Placing Climate as a Secondary Focus 25
4.2. Debt Ceilings - Balancing Fiscal Responsibility and Investment Constraints 25
4.2.1. The Ripple Effect of Debt Ceilings on Key Investment Levers 26
4.3. Reflections 27
Chapter V – Getting People Onboard for the Mission: Stakeholder Engagement in Implementing the CCC IPs 28
5.1. Focus on the City Budgets in CCC IPs 28
5.2. The Challenge of Private Sector Engagement 29
5.3. The Need for Citizen Engagement 29
5.4 Reflections 30
Conclusion 31
Bibliography 33
Annexes 34

Annexes

Annex 1 : List of cities analysed

Annex 2: Structural Data Set of IP Analysis

Annex 2.1: City Finance Assessment Reports

Disclaimer

Abbreviations and acronyms

Acronym	Description
BFD	Better Funding Dialogue
BwB	Bankers without Boundaries
CA	City Advisor
CCC	Climate City Contracts
CFS	City Finance Specialists
CCC IP	Climate City Contract Investment Plan
DML	Dark Matter Labs
ESCO	Energy Service Companies
CCC IP	Investment Plan
ICLEI	Local Governments for Sustainability
NZC	NetZeroCities
PPP	Public-Private Partnership
PCP	Pilot City Programme
SPV	Special Purpose Vehicle
UPM	Universidad Politécnica de Madrid
VC	Viable Cities (Sweden)
WP	Work Package

Executive Summary

This deliverable examines the climate finance ecosystem based on an in-depth analysis of Climate City Contract CCC IP (CCC IP) triangulated with other key sources of insight, and by doing so aims to foster a shared understanding of effective practices and strategic partnerships. The aim is to strengthen knowledge transfer, capacity building, and service efficiency for the finance theme across NZC Grant agreements (NZC, SGA-NZC and SGA2-NZC).

An analysis of CCC IP from 93 cities participating in the Climate City Contract (CCC) submission windows 1–4 of the EU Cities Mission reveals key financial trends and challenges affecting their climate neutrality goals.

From the CCC and their CCC IP, it is evident that cities face significant challenges in defining climate ambitions and identifying financial strategies that match the scale and urgency of required transformations. Compounding this issue is the difficulty many cities encounter in developing plans that are both realistic and responsive to rapidly evolving circumstances, making effective implementation even more challenging. Many CCC IPs rely on outdated municipal financial data rather than comprehensive fiscal assessments, leading to gaps in long-term planning and financial alignment. This shortcoming stems partly from the novelty of this exercise, and the deep need for capacity building, resulting in CCC IPs that, in their first version, still lack depth and precision. However, despite these limitations, CCC IPs are critical tools for framing and structuring cities' ambitions, and indeed for subsequent capacity building, potential iteration and targeted financial support, hence providing the best available pathways for transition within current constraints. Insights from other documented resources within the EU Cities Mission, national and local practices, academic research, consortium expertise (via discussions with city advisors, support specialists, and finance experts from NetZeroCities) validate these findings.

Supplementing this report are individual city CCC IP summaries and needs analysis which were made available to City Finance Specialists (CFS) and other finance support colleagues, and are also included in Annexes 2 and 2.1.

Key takeaways highlight the importance of:

I. Strengthening Institutional Capacity and Governance

A key challenge is the need to strengthen institutional capacity and governance structures to mobilise, manage, and sustain climate financing effectively. Many cities face gaps in financial expertise, fragmented governance, and limited coordination, all of which hinder the execution of CCC IP. In response to these challenges, some cities, such as Sønderborg, have chosen to delegate climate planning and coordination to external actors, bringing in specialised expertise to support and complement internal capacities.

Even well-designed projects risk delays, inefficiencies, and underutilisation of available funding without strong internal structures and governance mechanisms. Climate and infrastructure projects within cities are often fragmented across various departments or municipal companies, with limited collaboration or sharing of information. CCC IP are frequently developed in isolation, without sufficient input from finance or accounting teams, which results in gaps in feasibility and long-term viability. These efforts are rarely grounded in a realistic understanding of internal systems or sound financial planning. While there may be a basic level of coordination aimed at completing tasks, this coordination is typically ad hoc and far from optimised[1].

Addressing these challenges requires:

- Bridging the gap between ambition and execution, by equipping municipal teams with the financial and technical expertise needed to develop bankable, investment-ready projects.

[1] *Working Session for CA/CFS Input on D2.2*, validation workshop, held March 15 and April 11, 2025. Unpublished internal document

- Improving Public-Private Partnerships (PPP) and investor engagement, to structure projects that attract capital through clearer risk-sharing models and financial guarantees.

- Ensuring regulatory and policy alignment, reducing compliance roadblocks and unlocking additional funding streams.

Without strong institutional capacity and governance, cities risk falling into a cycle of underfunded, uncoordinated, and inefficient investment efforts, ultimately slowing down progress toward climate neutrality.

II. Strengthening Early-Stage Support for Project Development and Multi-Level Coordination on Finance

Amongst the many needs for capacity building around finance aspects of the Mission, the primary one is that without robust financial planning and early-stage intervention, cities risk developing climate neutrality projects within their portfolio that struggle to secure funding, lack credibility, and remain disconnected from implementation realities. This should consider that 90-95% of investment required for cities climate-neutrality pathways will occur on assets that are not under the direct control of the city. Providing early targeted support in the project concept development phase, financial modelling, regulatory alignment, and investor engagement can significantly improve feasibility, scalability, and long-term impact. This ensures that climate ambitions are not just aspirational but financially viable and implementation ready.

Additionally, analyses have shown that greater coordination and alignment efforts are necessary to enable cities to effectively implement their CCC IP. As highlighted in Chapter 4, cities are often constrained by national regulatory frameworks. Establishing a platform for structured dialogue between different levels of governance—centred around finance—would help to overcome these barriers, enhance policy coherence, and ensure that cities have the fiscal space and support needed to deliver on their climate-neutrality objectives. This is addressed through the Better Funding Dialogues (BFD) framework in Task 2.6 SGA2, with the first report available in D2.17[2]. BFD facilitates coordination among cities, national, and EU actors to streamline funding access, reduce administrative burdens, and better align financial tools with local climate needs.

Key areas for early-stage support include:

- Strengthening financial capacity and strategic planning is essential to align CCC IP with viable funding mechanisms and ensure long-term financial sustainability. A key step is expanding city Transition Teams to include representatives from municipal finance departments, enabling financial considerations to be integrated into decision-making from the outset. This is a core rationale behind the CFS role, which is designed to build internal capacity and forge stronger links between climate planning and finance teams. In some cities, CFSs have already been formally integrated into Transition Teams, reinforcing their strategic function and accelerating alignment between climate ambitions and financial planning.

- Aligning CCC IP with policy and regulatory frameworks to streamline approvals and avoid compliance roadblocks. This includes expanding climate investment analysis to incorporate regional, national, and EU involvement in city decarbonisation plans, as these higher levels of government provide incremental funding opportunities, regulatory incentives, and policy levers that influence both public and private sector investments. Since regional, national, and EU governments are often responsible for the incentives and regulations that motivate citizens and businesses to decarbonise, cities must align their financing strategies with these broader policy frameworks. These insights are further supported by findings from the Better Funding Dialogues

[2] Bakhcheva, I., Crudi, F., Lewandowska, N., & Odigbo, N. (2025). *Interim Better Funding white paper* (Deliverable D2.17). ICLEI Europe.

(BFD), which emphasize the importance of multi-level coordination to unlock effective climate financing[3].

- Facilitating innovation in blended finance models, PPPs, and alternative investment mechanisms is essential to diversifying funding sources and enhancing long-term financial sustainability. Cities must engage not only with private investors but also with public financial institutions, multilateral banks, and mission-driven funds to structure financing that balances risk, return, and social impact. Early engagement with utilities, businesses, and industries is crucial to securing commitments on funding and greenhouse gas (GHG) reduction plans. However, past experiences show that PPPs alone are not always the best solution, with some cities encountering misaligned incentives, governance challenges, and affordability concerns. While alternative or blended capital structures can address some of these issues, they are not a panacea, cities must still negotiate from a position of strength to ensure fair terms and appropriate risk-reward balances. This is where the support provided by CFSs and the Climate City Capital Hub is especially valuable. By equipping cities with the technical expertise, financial insight, and support in legal implications they need, these resources help level the playing field in transactions such as PPPs, bond issuances, or external investments, ensuring cities can secure equitable outcomes that reflect their role and risk exposure.

- To avoid these issues, cities should explore blended capital structures, including green bonds, climate funds, concessional financing, and community-driven investment models, ensuring that public value remains at the core of private sector collaboration. By adopting a more flexible, impact-driven financial approach, cities can encourage co-investment opportunities, align decarbonisation efforts across sectors, and drive systemic change while maintaining strong public oversight, accountability, and equity in climate investments.

By integrating these elements, cities can develop well-structured CCC IP aligned with funding opportunities, reducing financial and operational risks.

III. <u>Unlocking Long-Term Value through Place-Based Integrated Projects and Stakeholders Engagement</u>

- A critical finding is that cities must shift from fragmented, short-term, siloed projects to long-term, place-based strategies. While ‘early win’ projects are important to demonstrate progress within the EU Cities Mission, many current CCC IPs remain sector-specific, reactive, and disjointed, limiting their ability to drive sustained impact and systemic change. A place-based, integrated approach—grounded in the local context and actively engaging key stakeholders such as businesses, industries, and households—ensures that climate investments are not only technically sound but socially embedded. This enables shared ownership, resilience, equity, and long-term economic regeneration, unlocking deeper value and accelerating implementation.

- This approach can:
  - Break the cycle of short-termism by embedding climate action into broader urban policy and development strategies.
  - Maximise local impact and co-benefits by aligning CCC IP with local needs—ensuring interventions reflect economic, social, and environmental contexts—while creating opportunities for households, local businesses, and industries to participate financially, whether through direct investment, in-kind contributions, or innovative financing models.
  - Leverage cross-sector collaboration, integrating climate finance with urban regeneration, mobility, housing, and economic policies; while structuring projects to attract co-funding from commercial actors, utilities, cooperatives, and institutional investors.

[3] Bakhcheva, I., Crudi, F., Lewandowska, N., & Odigbo, N. (2025). *Interim Better Funding white paper* (Deliverable D2.17). ICLEI Europe.

- Ensure financial and institutional sustainability, creating business cases that attract long-term investment, mitigate stranded assets, and prevent policy fragmentation.

To unlock long-term value, cities must move beyond single-sector, siloed approaches and implement place-based, integrated projects that prioritize equity, leverage multi-sector synergies, and address systemic barriers to investment.

Keywords: Investment plan, sustainable finance, green finance, NetZeroCities.

Introduction

The accelerating urgency of the climate crisis has placed cities at the forefront of systemic transformation, with investment planning emerging as a cornerstone of efforts to reach climate neutrality by 2030. Within this context, the purpose of this report is to develop of a deeper understanding of the financial landscape facing Mission cities under the EU cities Mission framework. This document offers a strategic analysis of CCC IPs of 93 out of 112 cities, triangulating quantitative and qualitative data to identify financial trends, implementation barriers, and pathways to scale up investment. The report is designed to support cities, practitioners, and decision-makers—especially within the NZC consortia and its European Commission stakeholders—in evaluating and refining their approaches to financing climate neutrality. Ultimately, the aim is to enhance the strategic readiness of Mission Cities and facilitate access to the capital required for deep decarbonisation.

This deliverable focuses specifically on the investment planning dimension of the Climate City Contracts (CCC), drawing insights from the coding and scoring of city IPs across key sectors and financial instruments. By analysing investment priorities, financing mechanisms, and sectoral coverage, the report sheds light on how cities are structuring their climate neutrality ambitions, and the extent to which these plans are actionable, fundable, and aligned with broader policy frameworks. The scope of the analysis includes cities that received the Mission Label in the first three selection windows (December 2023 – May 2025), representing a diverse geographic and institutional cross-section of the EU urban landscape. While not exhaustive, the sample provides a representative basis for assessing prevailing trends and identifying systemic bottlenecks in urban climate finance.

The findings are informed by a mixed-method approach: desktop review and structured scoring of CCC IPs; consultation with CAs; validation from CFS and the Climate City Capital Hub; and selective insights from complementary dialogues such as those under SGA2-NZC's "Better Funding" task. This triangulation of data sources allows for a robust, nuanced understanding of both the strengths and weaknesses of current investment planning approaches. The analysis is structured around five core themes, corresponding to the chapters of this report: the broader mission context, sectoral investment focus, team capacity and governance structures, regulatory and policy constraints, and stakeholder engagement strategies.

Given its intended audience—ranging from EU institutions to local transition teams—this report is classified as 'Sensitive'. It is intended for internal use by NZC consortia members and relevant European Commission bodies, including the Mission Secretariat, CINEA, the Joint Research Centre (JRC), and other related entities. While the findings aim to inform long-term strategy development and policy alignment, they are also designed to provide immediate, operational value to cities currently navigating the transition from planning to implementation. By surfacing practical insights, investment gaps, and recurring systemic challenges, this report sets the stage for more coordinated, resilient, and impactful financial strategies to accelerate the urban climate transition across Europe.

Purpose and Scope

The purpose of this Deliverable is to obtain a deeper understanding of Mission City finance needs through an analysis of CCC IP, triangulated with other relevant data. It identifies areas for improvement, highlights key financial trends, and provides strategic insights to support cities, city practitioners, and decision-makers in the EU Cities Mission. The paper aims to enable the NetZeroCities consortia and EU counterparts to evaluate their current investment planning approaches and support the formulation of strategies to secure necessary financing for climate neutrality.

This report is classified as 'Sensitive' and will be shared primarily with:

- Net Zero Cities consortia members across NZC, SGA-NZC, SGA2-NZC, and future stakeholders.
- European Commission stakeholders, including the Mission Secretariat, Mission Board, CINEA, JRC, and other relevant bodies.

At this stage, the **scope** of this analysis at this stage covers 93 out of the 112 EU Cities Mission that received the Mission Label during the first three windows (from December 2023 to May2025). Each city IP was analysed individually: the IPs were coded and scored according to the prioritised sectoral projects and the planned instruments for raising funds to finance climate neutrality initiatives. Data reviewed and ranked from the accompanying Excel sheet will be incorporated and cited throughout this document, where relevant. The key trends were then identified based on the scoring system for the cities' IP. This assessment drew upon the City Support Group's evaluation of existing funding and financing structures for climate action, highlighting key challenges cities face in securing investment and implementing their net-zero strategies.

Building on this analysis, we developed concise, city-specific documents that assessed each city's financing ambitions, mechanisms, and potential pathways, while also identifying gaps and barriers. Additionally, we posed targeted questions for consideration, informed by the information provided in the CCC IP. However, rather than focusing solely on solutions, our approach prioritised a structured assessment of challenges on the ground, ensuring that City Finance Specialists could engage from a well-defined starting point, facilitating more effective intervention and strategy development.

The methodology for this analysis involved collecting data through various channels:

1. **CCC IP analysis:** the core of the assessment focused on a detailed review of each city's CCC IP, examining the scope of proposed climate actions, sectoral priorities, and financial strategies. This in-depth analysis helped identify strengths, gaps, and opportunities for improvement.
2. **Exchange with CAs:** written consultations were held to complement the CCC IP analysis with practical insights from the everyday city work towards achieving climate neutrality.
3. **Validation from the CFSs and the Climate City Capital Hub** through bilateral consultations in February-June 2025 and a facilitated workshop with CFS on 11th of April 2025.
4. **Adding insights from the "Better Funding" dialogues and Deliverable 2.17 within SGA2-NZC Task 2.6 (where applicable):** although not directly connected to the goals of this, "Better Funding" dialogues contributed valuable insights into the challenges of CCC IP. implementation.

The timeline for this work spans from March 2024 to June 2025.

This analysis has its **limitations** as it is based on a sample of 93 cities, which may not fully represent the diversity of all Mission Cities. The varying quality and depth of the CCC IP can be attributed to differences in time, resources, and expertise available during their development.

Additionally, geographical representation may not be perfectly balanced. The analysis relies mostly on desktop research, and there is a discrepancy between the time of analysis and the actual implementation progress. As such, in some cases the CCC IPs may not accurately reflect the status but rather include historical data presented as present-day information.

The report is divided into five chapters. **Chapter I** covers the broader *context setting*, outlining the goals of the EU Cities Mission, the climate neutrality targets for 2030, and the role of investment planning in enabling systemic urban transformation. **Chapter II** highlights the *sectoral focus* of the CCC IP within Mission Cities, analysing how different domains — such as transport, energy, housing, and the built environment — are prioritised and financed. **Chapter III** examines *the people driving the mission*, focusing on the composition and function of city teams, the internal decision-making processes, and the coordination mechanisms cities are using to move from planning to implementation. **Chapter IV** explores how cities are *navigating the framework*, assessing the influence of national and EU-level policies, fiscal rules, and regulatory barriers on the execution of Climate City Contract CCC IP. **Chapter V** turns to the challenge of *getting people on board for the mission*, investigating how cities are engaging local stakeholders — including citizens, businesses, and civil society — to secure buy-in, co-financing, and sustained participation in their climate efforts.

Chapter I – Context Setting

This chapter provides the background context by reviewing the substantial body of knowledge generated through previous NetZeroCities deliverables, reports, and complementary activities. These prior works serve as the foundation for the insights and examples presented in this paper, enabling us to build on and advance the programme's ongoing efforts.

1.1. Contextualising Insights from NZC Deliverables and Complementary Activities

From the outset of the EU Cities Mission, it has been clear that aligning the ambition and urgency of climate neutrality pathways with a finance strategy that matches the scale and complexity of the challenge presents a significant hurdle.

At an early stage, several key reports outlined critical challenges:

The **Mission Board Report** laid the foundation for the transition to 100 Climate-Neutral and Smart Cities by 2030, emphasising systemic transformation, governance innovation, and financial mechanisms. It called for a multi-actor, multi-level governance model that enables collaboration between local, national, and EU institutions. Central to this is the Climate City Contract—a structured mechanism aligning municipal, regional, and national efforts, underpinned by broad stakeholder engagement.

However, the report also underscored that current urban finance mechanisms are fragmented and risk-averse, limiting large-scale investment. It advocated for a blended finance model—combining EU programmes, national budgets, and private investment—to create scalable, flexible, and catalytic capital solutions. The report also emphasised cities' roles as systemic innovators, calling for integrated urban strategies that combine technological, digital, and governance tools.

Beyond governance and finance, the report envisions cities as catalysts for systemic innovation, serving as testbeds for integrated urban planning and technological solutions. Instead of isolated climate initiatives, cities should adopt cross-sectoral strategies leveraging digital platforms, smart city innovations, and data-driven decision-making. The report underscores that cities are not merely recipients of climate policies but active leaders in shaping European and global approaches to urban sustainability.

NZC Deliverable 13.1 (March 2022) assessed the early challenges faced by 64 cities across 22 EU Member States and 3 associated countries. It identified five enabling themes[4]:

I. Policy and Governance: Cities require stronger regulatory frameworks and policy alignment across government levels. Siloed municipal decision-making and rigid national policies hinder effective climate action. Climate City Contracts were recognised as a promising tool for multi-stakeholder collaboration, enabling cities to align their strategies with regional and national policies. However, national contexts vary significantly in how coordination challenges are perceived and addressed. In Finland, coordination is not seen as a major obstacle, with existing governance structures generally considered effective. In contrast, Greece views coordination as something that will emerge more organically through the momentum of the green transition, even though it is not currently regarded as a pressing issue. These contrasting perspectives highlight that while some countries operate with established institutional frameworks, others are relying on future systemic shifts to close

[4] Liakou, L., Flanagan, B., Altman, N., Rendle, N., Kiernicka-Allavena, J., Wildman, A., Heyder, M., Gresset, S., Diaz, A., Castañeda, M., Ancelle, A., Johansson, H., Titley, R., Minoz, Å., & Holmberg, L. (2022). *Report on city needs, drivers and barriers towards climate neutrality* (Deliverable D13.1, Work Package 13). NetZeroCities, H2020 Research and Innovation Programme, Grant Agreement No. 101036519.

existing governance gaps[5].

II. Implementation Practices: Most cities focus on a small portion of investment under their direct control (5–10%), while neglecting broader strategies to engage citizens and businesses in the remaining 90–95% of investment needs.

III. Culture, Social Innovation, and Participation: Many cities lack mechanisms for inclusive engagement, limiting the adoption and social acceptance of climate measures.

IV. Finance and Business Models: Cities struggle to estimate project costs or reflect them in budgets. Investment planning often lacks visibility, making it difficult to identify funding gaps or attract external finance.

V. Strategic Learning: Peer-to-peer learning and data-driven approaches were flagged as essential for refining investment strategies and building institutional capacity.

The findings reinforce the need for systemic change in governance, finance, and implementation strategies and have shaped the development of the NetZeroCities Mission Platform to provide targeted support.

NZC Deliverable 7.1 (November 2022) analysed the urban climate finance landscape, categorising actors into recipients, facilitators, and financiers. It highlighted technical assistance opportunities (e.g., ELENA, EUCF, EBRD Green Cities), while also noting accessibility barriers. A key insight was the disconnect between available capital and cities' readiness to absorb and deploy it. Challenges include limited municipal capacity, regulatory hurdles, and the complexity of blended finance[6].

A key finding is that while funding opportunities exist—from EU programs to innovative mechanisms like green bonds and public-private partnerships—institutional and technical barriers prevent cities from effectively leveraging these resources. Major challenges include capacity constraints within municipal teams, the complexity of funding applications, and regulatory hurdles limiting blended finance approaches.

The report also explores the long-term funding landscape, emphasising the role of national and European institutions in supporting urban climate transitions. A critical gap exists between available capital and cities' ability to absorb and deploy it effectively. Innovative financial solutions, including case studies of successful municipal climate investments leveraging blended finance and risk-sharing mechanisms, are highlighted.

NZC **Deliverable 7.1** underscores the urgent need for cities to enhance financial expertise, streamline governance structures, and develop bankable climate projects that align with investment criteria. Stronger coordination between local governments, financial institutions, and the private sector is essential to ensuring that funding translates into tangible climate action. The report serves as a foundation for future efforts within the NetZeroCities initiative to enhance financial readiness and drive systemic change in urban climate finance.

In tandem, **Deliverable SGA-NZC D2.10** – Baseline Analysis of the Current State of Climate Investment for Cities emphasised that cities face significant financial, administrative, and strategic challenges in mobilising the necessary investments for climate neutrality. The report assessed 33 Mission-Label cities, focusing on four key areas: the extent of city budgets allocated to climate action, sectoral investment priorities, barriers to climate finance, and the role of citizen engagement in climate CCC IP[7].

[5] *Working Session for CA/CFS Input on D2.2*, validation workshop, held March 15 and April 11, 2025. Unpublished internal document

[6] Bourgeois, M., Wain, H., Charliyski, A., Solé, A., Castañeda, M., Diaz, A., Mendle, R., O'Rourke-Potocki, H., Altman, N., Schneider, S., & Ingle, R. (n.d.). *City climate finance: Landscape, barriers and best practices* (**Deliverable D7.1**, Version 2). H2020 Research and Innovation Programme, Grant Agreement No. 101036519.

[7] **Deliverable SGA-NZC D2.10.** Summary of CFS learnings from feedback loops in T2.2. (consolidated findings). Project name, H2020 Research and Innovation Programme, Grant Agreement No. 101036519

A key finding is that many cities struggle with transparency and consistency in reporting climate budgets, making it difficult to determine how much municipal funding is actually allocated to net-zero initiatives. A lack of standardised methodologies across cities further complicates efforts to track investment trends and identify funding gaps. The report also highlights a significant reliance on transportation-related investments, with nearly half of climate budgets dedicated to transport, followed by buildings and heating. While this reflects cities' immediate decarbonisation priorities, it also raises concerns about imbalanced investments, particularly in underfunded areas like green infrastructure and waste management.

The report identifies several barriers to climate investment, including limited human resources within public administrations, insufficient local funding, and weak coordination between different levels of government. Many cities face regulatory restrictions on municipal debt and borrowing, preventing them from securing long-term financing for major climate projects. As highlighted in **NZC Deliverable D7.8**, national fiscal rules—including debt ceilings, balanced budget requirements, and the need for central government approval—significantly constrain cities' ability to finance capital-intensive climate investments, even when such investments are economically justified and aligned with national or EU goal. Moreover, securing private sector investment remains a challenge, as cities often lack clear strategies for attracting external capital or structuring bankable projects. The report underscores the need for greater financial autonomy, improved intergovernmental cooperation, and enhanced investment planning capacity to bridge these funding gaps[8].

Another critical insight is that citizen participation in climate investment remains weak, with most cities failing to allocate sufficient resources for public engagement and participatory budgeting. Many CCC IP position citizens as passive recipients of climate policies rather than active decision-makers, which risks limiting public buy-in and the long-term success of net-zero initiatives. The report calls for stronger participatory mechanisms and financial incentives to ensure that citizens play a central role in driving climate investments.

To address these challenges, the report recommends that cities improve climate budget transparency, diversify funding sources, and develop clearer strategies for leveraging private finance. Additionally, it highlights the importance of regional, national, and EU-level support in providing funding, regulatory frameworks, and investment incentives to accelerate urban decarbonisation efforts. These findings establish a critical baseline for refining the NetZeroCities programme's financial support mechanisms, ensuring that cities receive the necessary tools to effectively plan, fund, and implement their climate transition strategies.

Also, The **NZC Implementation Phase Analysis** provides a comprehensive overview of the progress and challenges faced by Mission Cities as they move into implementation. Conducted in mid-2024, this assessment draws on insights from City Advisors and City Support Officers to map evolving city needs and identify areas for enhanced coordination across the 112 mission cities.

A key takeaway is that cities continue to face multi-dimensional challenges in implementing climate neutrality goals. Many struggles with operational capacity due to staffing shortages, regulatory hurdles, and fragmented governance structures. Political and strategic alignment remains another significant issue, with post-election transitions and national-level barriers slowing progress in several countries. Despite ambitious Climate City Contracts cities require additional support in financial mobilisation, technical assistance, and regulatory adaptation to effectively execute their plans.

The mapping exercise highlights that while some cities are advancing in securing financial resources and deploying technical solutions, many still require targeted assistance to move from planning to tangible action. Holistic support is necessary, particularly in cities where overlapping needs create barriers to progress. Strengthening multi-level governance, increasing peer-to-peer learning, and facilitating access to financing mechanisms are identified as critical levers for accelerating climate implementation.

Additionally, political advocacy and institutional engagement emerge as priority areas, with cities calling for stronger coordination with national governments and EU bodies to ensure alignment with funding

[8] Vanhuyse, F., McManus, R., Patatouka, E., & Nath, A. (2023). *Policy recommendations based on an assessment of the barriers and opportunities for forming and deploying capital at the city level* (**Deliverable D7.8**, Work Package 7, Task 7.5). NetZeroCities, H2020 Research and Innovation Programme, Grant Agreement No. 101036519.

and policy frameworks. The findings emphasise the need for tailored support that responds to the varying stages of progress across cities while promoting knowledge exchange and collaborative approaches to overcoming implementation roadblocks.

In response to early assessments and ongoing insight, the NetZeroCities programme has sought to create a comprehensive approach to finance support, incorporating a range of existing and innovative capital structures into its toolbox, to effectively support cities in accessing and leveraging climate finance.

- Comprehensive support to cities climate investment planning during the CCC submission windows through resources from NZC WP7 and SGA-NZC WP2, providing tailored coaching as well as a range of webinars focussed on a range of specific topics in the field of finance.
- The Climate City Capital Hub combines blended finance mechanisms, project development support, and multi-stakeholder engagement to integrate public, private, and philanthropic capital. It helps cities develop pipelines and portfolios, shifting from standalone projects to integrated investment strategies, while providing market intelligence and financial expertise. The Climate City Capital Hub promotes innovative instruments like green bonds, revolving funds, and guarantees, and accelerates PPPs to scale investments. This approach ensures cities move from ambition to implementation, securing sustainable financing for net-zero projects.
    - The Climate City Capital Hub is an initiative designed to bridge the €650 billion funding gap identified for European cities aiming for net-zero emissions by 2030 under the European Commission's "100 Climate-Neutral and Smart Cities Mission." Operated by several NetZero Cities consortium partners (BwB, South Pole, TNO, Metabolic Institute, Frankfurt School, Viable Cities, UPM), the Capital Hub provides comprehensive technical and financial assistance to cities, enabling them to develop viable climate mitigation and adaptation projects. This support encompasses the co-selection of projects, development of sector-specific solutions in areas like renewable energy and mobility, and facilitation of transactions to attract both public and private investments.
- CFS play a critical role in supporting European cities on their path to climate neutrality by 2030, as part of the NetZeroCities initiative. Tasked with bridging the gap between investment planning and capital mobilisation, the CFS provides tailored financial expertise to cities, guiding them in the development and implementation of their CCC IP. Their role involves deepening local knowledge, strengthening relationships with public and private stakeholders, and mobilising financing through investor outreach and structured financial solutions. By identifying and overcoming investment barriers, the CFS ensures cities can access necessary funding, optimise project structures, and develop robust financial strategies. Ultimately, the CFS is a city-driven resource instrumental in enabling cities to build their internal capacity and secure sustainable investment pathways, aligning financial mechanisms with their climate neutrality objectives while maximising societal and environmental co-benefits.
- National dialogues on better funding are planned for 2024-2027 as part of SGA2 T2.6, aimed at promoting multi-stakeholder and multi-level discussions to drive the systemic changes needed in financing ecosystems for the net-zero transition. These dialogues will be organised at the national and regional level across EU countries and will support long-term transformation by shifting the focus towards sustainable and effective financing strategies for achieving net-zero goals

1.2 Key Trends in Investment Plan Reviews highlighted during the review process by EC and EIB

Across CCC IPs reviewed by the **European Commission** and the **European Investment Bank**, several key trends have emerged. Their feedback identifies recurring challenges and opportunities in **financing, stakeholder engagement, and implementation**, with the following standout themes:

- Private Sector Investment Integration: A recurring comment is the need for cities to enhance private sector involvement. Many CCC IPs lack clear strategies to mobilise private capital effectively, often relying heavily on public funding and EU grants (e.g., Aachen, Kalamata, Florence, Guimarães, Cluj Napoca). Some cities, such as Sonderbørg, stand out for their

exceptionally high private Capital Expenditure share, while others (e.g., Lisbon, Limassol) need to define concrete mechanisms to stimulate and attract private investment.

- Linking Finance with Emission Reduction Goals: Several cities, including Barcelona, Florence, and Aachen, were advised to strengthen the connection between their investment strategies and emission reduction targets. This involves detailing cumulative investment volumes, specifying capital allocation per field of action, and establishing clear financial roadmaps for decarbonisation.

- Risk Assessment & Financial Instruments: Cities like Aachen, Kozani, and Limassol need more structured risk assessment frameworks, including quantitative assessments of financial barriers and triggers for intervention. In parallel, exploring alternative financial instruments, such as green bonds, blended finance, and PPPs, is recommended across multiple cities to ensure sustainable funding beyond grants.

- Stakeholder Engagement & Capacity Building: Cities with strong multi-stakeholder engagement models, such as Kozani and Sonderbørg, demonstrate a participatory approach crucial for successful implementation. However, many cities (e.g., Madrid, Cluj Napoca, Limassol) were advised to expand their stakeholder engagement strategies, particularly in securing private sector buy-in. Similarly, capacity-building efforts, both within municipalities and for external actors, were highlighted as a gap in cities like Florence and Madrid.

- Monitoring, Evaluation, and Refinement: Effective monitoring frameworks are essential for tracking investment effectiveness. While Guimarães was noted for having a strong set of physical indicators, there is a general call (e.g., Florence, Ioannina, Barcelona) to improve financial monitoring tools, define quantifiable risks, and refine assessment methodologies.

- Sectoral Investment Balance & Prioritisation: Cities such as Cluj Napoca were encouraged to re-evaluate sectoral allocation, particularly when investments are not proportionally aligned with emissions contributions. This suggests a broader need for cities to ensure their financial resources target the most impactful sectors.

1.3. Positioning the Deliverable 2.2. within the NZC Knowledge Framework

The Deliverable 2.2. is part of a broader continuation of previous work within the NZC programme. It focuses mainly on the analysis of the CCC IPs, but where relevant, the findings have been triangulated with data and insights from other NZC Tasks. The deliverable comprises not only this analytical report but also a set of one-page investment profiles for 93 cities (annex 2.1), as well as a structured dataset evaluating each of the IPs (annex 2). Together, these components aim to strengthen understanding of the finance dimension across the NZC programme—particularly in support of the CFS onboarding process.

While the primary focus is on internal NZC data, this work is situated within a wider context. Numerous external reports already highlight the persistent challenges cities face in accessing finance for transformative change at the required speed and scale. Although a comprehensive literature review is beyond the scope of this report, relevant insights from such sources are referenced where they corroborate, enrich, or challenge the findings emerging from our Investment Plan analysis.

Chapter II – Exploring Sectoral Focus of the CCC IP within EU Cities Mission

This section builds on the sectoral analysis conducted as part of the review of each investment plan. It focuses on the common financing challenges identified across three key sectors that the majority of cities highlighted in their plans: sustainable transportation, energy transition, and the transformation of the built environment. These sectors are central to achieving climate neutrality in the mission cities, yet they present distinct financial barriers that require tailored approaches, innovative funding models, and strong cross-sector collaboration.

2.1. Sustainable Transportation as a Key Driver of Climate Neutrality

The CCC IP of cities within the EU Cities Mission place significant emphasis on transportation and mobility as critical areas for emissions mitigation. Out of the 93 analysed cities, 91 have identified transportation system transformation as one of the top priorities for the climate neutrality transition, incorporating comprehensive measures such as electric buses, cycling infrastructure, and walkability improvements into their CCC IP[9]. This focus is particularly relevant given that the transport sector is the largest emitter of CO2 in the European Union and the only sector that has seen an increase in emissions over the past 30 years[10]. Thus, the priority placed on transportation reflects the sector's substantial potential for emissions reduction.

In the CCC IP, the most immediate solutions focus on electrifying transportation infrastructure, particularly in mobility-related systems. This approach has been popular among many Mission cities and is frequently embedded in broader urban transformation programmes. For example, the Dutch city of The Hague has introduced comprehensive measures for improving the transportation system and deployment of electric buses is one of the central parts. This emphasis on electrification stems from the dual recognition that transport is both a highly visible sector and a major contributor to urban emissions. Furthermore, electrification aligns with policy and market trends, as governments worldwide have set ambitious targets for phasing out internal combustion engines. These targets are supported by a range of incentives, subsidies, and investments in charging infrastructure, which further promote the transition to electric mobility.

A combination of these factors — alongside the rapid development of battery technologies — makes city investment projects focused on electrifying transportation systems increasingly fundable. These initiatives often benefit from a well-defined scope, limited complexity, and manageable risks, which can attract institutional financing. However, it is important to note that while such projects may be considered *bankable* in terms of being eligible for loans or investment, they typically do not generate sufficient returns to proceed without public funding support. This is particularly true for public transport electrification. Technological advancements, particularly in battery efficiency and the expansion of EV infrastructure, lower the risks associated with these projects, reducing uncertainty for investors and making them more financially secure. Electric vehicles and charging infrastructure also tend to have lower operational and maintenance costs compared to traditional internal combustion engine systems, which leads to higher cost-efficiency and more attractive profit margins for investors. Furthermore, the initial European Battery Alliance launched in 2017[11]. Such strategies are key to maintaining and

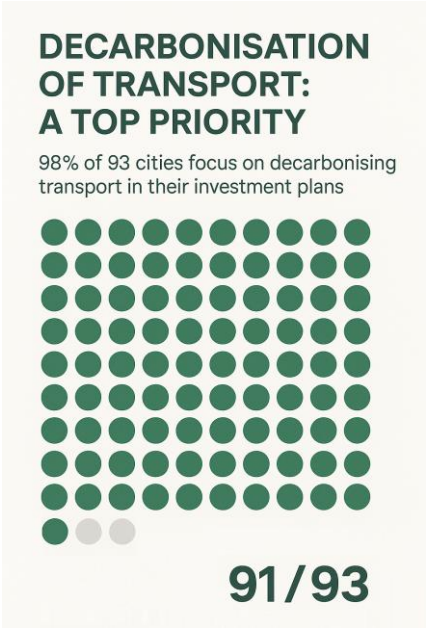
[9]The only city that placed less emphasis on transportation systems in its investment plan was Trikala, Greece.

[10] World Economic Forum. (2022, September). *EU transport greenhouse gas emissions: Key facts*. https://www.weforum.org/stories/2022/09/eu-greenhouse-gas-emissions-transport/

[11] European Commission. (2024). *European Battery Alliance*. Single Market and Industry. https://single-market-economy.ec.europa.eu/industry/industrial-alliances/european-battery-alliance_en

enhancing the EU's competitiveness in the automotive and battery markets, ensuring continued innovation and the long-term viability of electrification-focused projects[12][13].

Electric vehicles are also seen as a tangible and visible symbol of progress, offering political and social appeal. They enable individuals to engage in climate action without requiring drastic lifestyle changes, thus increasing their acceptance. Additionally, electrification offers relatively quick emissions reductions compared to other initiatives, such as the expansion of mass transit systems or urban redesigns, which are often more time-consuming and resource-intensive to implement. The potential for immediate impact in reducing emissions through electrification makes it a central focus in the transportation strategies of many cities within the EU Cities Mission.



On the other hand, larger, more complex projects—such as transportation infrastructure upgrades—often face greater challenges in securing financing. In many countries, transportation infrastructure, such as roads and transit networks, is divided across various levels of governance—ranging from local to regional to national authorities, thus, the implementation of the projects often lays beyond the city mandate. This fragmentation necessitates significant coordination efforts among different governmental entities, each with its own priorities, regulations, and political agendas. As a result, achieving alignment on infrastructure projects requires not only technical and financial coordination but also political will across differently levels of government (further discussion on this can be found in Chapter 3). The complexity of aligning these various stakeholders can slow down decision-making processes and create barriers to implementing large-scale infrastructure changes, particularly when there are competing interests or when the benefits of the proposed changes may not be immediately apparent to all involved parties. Furthermore, these projects typically involve higher upfront capital costs, longer payback periods, and more intricate logistical, regulatory, and political hurdles, making them harder to justify from a financial perspective. These projects require extensive collaboration between stakeholders, integration of diverse technologies and services, and often complex financing structures, which can discourage private sector involvement due to the higher perceived risks and uncertainties.

2.2. Energy Efficiency and Renewable Energy

Following closely are investments in energy efficiency and renewable energy, signalling a strong commitment to reducing the environmental impact of urban infrastructure and transitioning to greener energy sources. This finding aligns with the wider EU priorities on the energy transition that is significantly driven by renewable energy, which accounted for 43% of total EU energy production in 2022[14]. Renewable energy is also connected with a narrative of energy security in Europe[15]. Investing

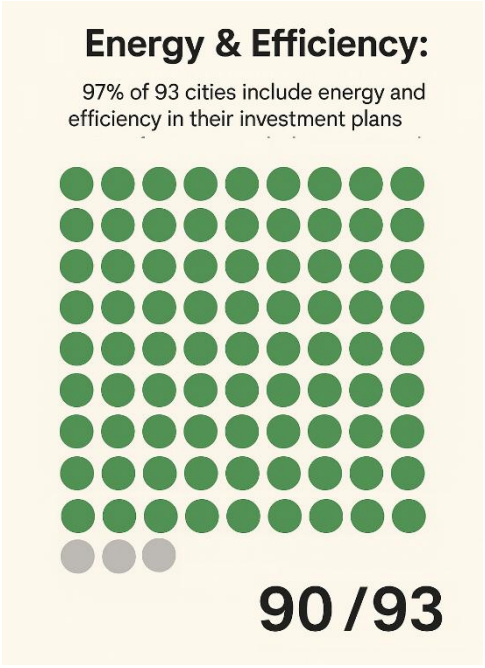
[12] Tamba, M., Krause, J., Weitzel, M., Raileanu, I., Duboz, L., Grosso, M., & Vandyck, T. (2022). Economy-wide impacts of road transport electrification in the EU. *Technological Forecasting and Social Change, 182*, 121803. https://doi.org/10.1016/j.techfore.2022.121803 Accessible here: https://www.sciencedirect.com/science/article/pii/S0040162522003274

[13] Agora Verkehrswende. (2020). *ELAB 2.0 – Wirkungen der Fahrzeugelektrifizierung auf die Beschäftigung am Standort Deutschland*. https://www.researchgate.net/publication/344726984_ELAB_20_-_Wirkungen_der_Fahrzeugelektrifizierung_auf_die_Beschaftigung_am_Standort_Deutschland?channel=doi&linkId=5f8c2dbf299bf1b53e2f2822&showFulltext=true

[14] Nuclear energy (28%) was the second largest source, followed by solid fuels (19%), natural gas (6%) and crude oil (3%). Source of information: Eurostat. (2024). *Energy, transport and environment statistics – interactive edition*. https://ec.europa.eu/eurostat/web/interactive-publications/energy-2024

[15] Dubský, Z., & Tichý, L. (2024). The role of narratives in the discourse on energy security of the European Commission: The EU's transition in energy relations with Russia. *The Extractive Industries and Society, 17*, 101392. https://doi.org/10.1016/j.exis.2023.101392

in locally produced, decentralised renewable energy significantly enhances local energy security, especially in light of recent geopolitical events like Russia's invasion of Ukraine. The EU's high dependency on energy imports—62.5% in 2022—has made it vulnerable to supply disruptions and price volatility, as seen during the 2022 energy crisis[16]. By focusing on local renewable energy production, such as solar and wind, cities can reduce reliance on external sources, improving resilience against global energy market fluctuations. This decentralisation not only strengthens energy security but also supports the EU's transition to a sustainable, low-carbon energy system, helping mitigate risks associated with geopolitical tensions and fostering greater energy independence[17].



While all cities in the sample emphasise the need to upgrade energy systems in pursuit of climate neutrality by 2030, it is important to recognise that some countries, such as Sweden, Finland, and Latvia, have already achieved a high level of electricity decarbonisation and have less projects in their IPs on the renewable energy. In contrast, others like Belgium, Ireland, and Luxembourg lag, falling below the EU average in renewable energy adoption[18].

Renewable energy projects are often considered fundable due to technological advancements and significant cost reductions in wind and solar energy over recent years, making them easier to fund. However, a key challenge is that cities often lack control over the electrical grid, which is typically managed by national or regional authorities, or by private energy companies. This limits their ability to implement or scale up renewable energy projects independently.

In some cases, this challenge is compounded by grid congestion, as seen in the Netherlands. Dutch cities are currently in a holding pattern as they await the long-anticipated new energy law. This has created an impasse in the sector, with little progress being made, even preparatory work has largely come to a halt until the new legislation is in place[19].

Grid operators, as monopoly actors with little competitive pressure, are often risk-averse and slow to adapt, making them a potential bottleneck in the energy transition. Grid congestion not only hinders the integration of renewable energy but also affects the heat transition, as both depend on sufficient capacity and reliable infrastructure. Such challenges are particularly relevant for cities in Italy, where the grid is managed by national operators like Terna; in Spain, where it is overseen by private companies such as Red Eléctrica de España; and in Hungary, where MVM Group controls the infrastructure.

While cities can advocate for change and promote local renewable energy initiatives, decarbonising the national grid remains beyond their direct control, requiring coordinated action with higher-level authorities and energy providers. In this context, Spain has made building energy efficiency a national priority, with clear EU-aligned targets set for 2026, a shift that could support city-level action even amid structural constraints[20].

[16] European Parliament. (2024). *EU green bond standard: A new voluntary standard to boost private investment in sustainable projects* (Briefing No. 762410). European Parliamentary Research Service. https://www.europarl.europa.eu/thinktank/en/document/EPRS_BRI(2024)762410

[17] Dulian, M. (2024, September). *Security of energy supply* (EPRS Briefing No. PE 762.410). European Parliamentary Research Service. https://www.europarl.europa.eu/thinktank/en/document/EPRS_BRI(2024)762410

[18] European Parliament. (2023). *The Net-Zero Industry Act* (Briefing No. 754623). European Parliamentary Research Service. https://www.europarl.europa.eu/RegData/etudes/BRIE/2023/754623/EPRS_BRI(2023)754623_EN.pdf

[19] Strategic Energy. (2025, March 28). *The Netherlands' grid congestion challenge*. https://strategicenergy.eu/the-netherlands-grid-congestion/

[20] Enerdata. (2024, September 25). Spain's updated NECP targets 81% of renewable power generation by 2030. https://www.enerdata.net/publications/daily-energy-news/spain-target-2030-power-renewable.html

In contrast, energy efficiency measures vary greatly in complexity. For example, simpler projects like street lighting upgrades with efficient lighting and appliances in cities like Barcelona or Vitoria-Gasteiz, or the introduction of energy efficiency measures in municipal buildings like in Florence, are less capital-intensive and more straightforward to finance. These projects are easier to fund because they typically involve existing infrastructure owned by the municipality, which is fully mandated to act on such initiatives. This ownership simplifies the financing process, as the city can directly implement improvements without needing external co-funding or significant private sector involvement.

However, when energy efficiency is integrated into changes to the built environment—especially in private residential properties—larger capital investments are required. This is partially because energy is seen as a more viable path to tackle, as opposed to water and waste management, mainly because the return on investment is more predictable and attractive. These projects often depend on co-funding from private individuals and other stakeholders. To overcome this challenge, cities need to develop alternative financing schemes and implement awareness campaigns that encourage citizen participation and engage businesses in modernising their properties. For example, some Mission Cities have explored co-funding schemes to stimulate the installation of solar panels or energy efficiency renovations in private homes. In Leuven, Belgium, energy renovations are closely linked to improving residential quality. One initiative from Flanders proposes a straightforward co-funding scheme where households invest additional [21]. Similarly, Porto, Portugal, has emphasised renewable energy projects, including photovoltaics and renewable generation in private buildings, with incentives such as tax reductions for renewable installations reinforcing this focus. These efforts reflect the need for cities to not only secure financing but also actively involve residents and businesses in the climate transition by making them aware of available incentives and opportunities. Part of the reason energy receives this level of focus is that it is seen as a more viable and investable pathway compared to sectors like water or waste management, where returns are often less predictable or slower to materialise[22].

2.3. Built Environment and Housing

Sustainable housing and the built environment also stand out, reflecting a concerted effort to embed sustainability into urban development through energy-efficient buildings and environmentally friendly construction methods. With buildings contributing over 30% of the EU's environmental footprint, this sector is one of the largest contributors to the Union's environmental impact[23].

Across the cities' CCC IP, two key areas emerge within the sustainable housing and built environment sector: first, the renovation of existing homes (retrofitting), and second, the construction of new housing using green-certified technologies. Both areas, however, face certain limitations. Retrofitting existing housing, as discussed in section 2.2, has its challenges, particularly in countries with a high proportion of privatised properties, where securing financing and motivating private owners to invest in sustainability can be difficult. On the other hand, new housing built with green-certified, near-zero-emissions technologies is gaining prominence in city CCC IP, as seen in The Hague and the Spanish

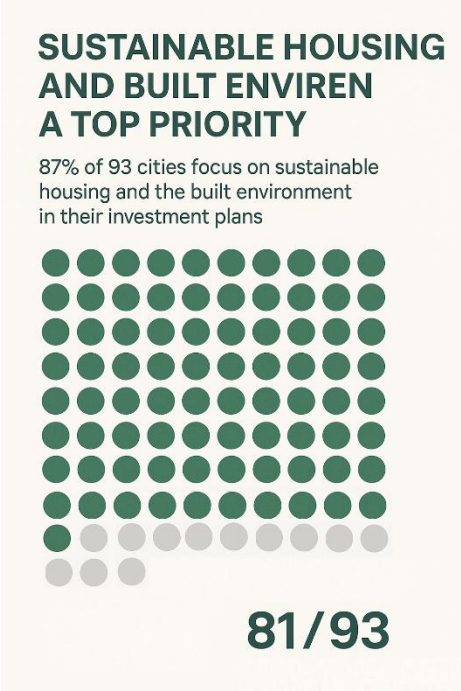
[21] Vlaanderen.be. (n.d.). *Lokaal Energie- en Klimaatpact*. https://www.vlaanderen.be/lokaal-energie-en-klimaatpact

[22] *Working Session for CA/CFS Input on D2.2*, validation workshop, held March 15 and April 11, 2025. Unpublished internal document

[23] European Environment Agency. (2024, September 30). *Addressing the environmental and climate footprint of buildings*. https://www.eea.europa.eu/en/analysis/publications/addressing-the-environmental-and-climate-footprint-of-buildings

Mission Cities. Nevertheless, cities must carefully balance the affordability of newly constructed homes with their ecological impact.

In the context of greening the built environment, the ease of investment varies notably depending on project type, ownership, and scale. Energy efficiency retrofits in city-owned buildings and the construction of new, green-certified housing within public or publicly supported developments are generally easier to finance, as these benefit from public ownership, clearer governance pathways, and access to financial incentives such as tax breaks or subsidies. In contrast, retrofitting privately owned residential buildings presents more significant challenges due to fragmented ownership, limited financial capacity of homeowners, and slower returns on investment. Similarly, the development of affordable, environmentally sustainable housing, particularly at scale, requires complex coordination and substantial upfront capital, making such projects more difficult to fund. Greening projects aren't revenue-generating and are generally unattractive to investors. Even when cities can fund capital costs (CAPEX), limited operational budgets (OPEX) often prevent implementation. Securing private sector involvement in large-scale urban greening efforts is also harder, given the extended timelines and high capital requirements that often conflict with investor preferences for quicker returns. However, bundling such infrastructure projects can sometimes enhance their bankability.



2.4. Other sectors

The CCC IP highlight waste management, port transformation, and urban green spaces as key priorities, reflecting cities' commitment to public health and environmental quality. In contrast, sectors such as smart city technologies and water and sanitation receive comparatively less attention. While these areas remain important, they are not as central to current investment strategies as climate-related initiatives and large-scale infrastructure improvements across cities. This pattern underscores a sectoral emphasis on tackling immediate environmental challenges while strategically preparing for long-term urban sustainability.

2.5 Reflection

Across the sectoral needs, a clear set of reflections emerge:

- There is a division between emission domain sectors where climate neutrality pathways tend to have value cases or business cases that are broadly bankable, and domains where this is not the case. Many renewable electricity business cases tend to be bankable, as are some heat transition business cases; Built environment value cases already tend to be harder, and this is often highly dependent on national policy regimes. In mobility, some simple ‘product replacement’ business cases, like replacing ICE-powered buses with electrical ones, tend to be fundable but more holistic approaches, e.g. to achieve a model shift, tend not to be.
- Complicating this picture is that in many cases, bankable business cases may exist but affordability to the consumer is in question. Heat networks are a case in point, leading to extensive debates and delays e.g. in The Netherlands.
- Beyond sector-specific viability, cities also face challenges in developing integrated solutions, especially when immediate crises divert attention and funding from long-term goals. A related issue is the lack of adequate proposition development for cross-cutting, integrated solutions, despite the availability of various funding options.
    - Many cities prioritise immediate crises such as regional conflicts or economic instability over long-term climate investments, which often results in the reallocation of limited

financial resources. For example, Izmir and several Finnish cities have faced setbacks in their climate goals due to competing financial pressures.

- Moreover, CCC IP often assume strong citizen buy-in and fiscal participation in net-zero initiatives, yet real-world behaviour frequently contradicts these expectations. Declining adoption rates of heat pumps and electric vehicles in cities like Sønderborg, Heidelberg, Aachen, and Helsinki highlight the gap between policy ambition and actual public engagement. This disconnect is further exacerbated by a lack of financial expertise, operational capacity, and coordination within city administrations, creating bottlenecks in accelerating the transition.

- It is important to highlight that, according to recent analysis, 61% of all green investment needed in the EU and by 2030 do not have a "bankable" business case[24]. This requires us to reflect further on the deep need for the Mission to focus not just on linking viable business cases to sources of capital (blended or otherwise) but on creating viable business cases. The Climate City Capital Hub, City Finance Specialists, and other finance support offers are already working to support project concept and business case development. At the same time, there appears to be a continued need to , where value cases can be combined, bankable and less bankable business cases can be brought together to avoid 'cherry-picking' (a widely recognised risk), and where actor coalitions can be created that can together strengthen portfolio synergies, enhance co-benefits and assess and reduce risk. Often this is as much about governance and process innovation as it is about advancing a technical business case. This is complex work; partnership with aligned resources, but also cohort-based and peer-based capacity building based on successful interventions, seems required.
- More generally, the sectoral focus in CCC IPs and CCCs sometimes underplays the need for connected, integrated value models and business cases across emission domains, i.e. integrated area-based or city-wide approaches to heat transition, renewables and grid infrastructure, holistic mobility solutions and resilience / climate adaptation measures. The absence of integrated concepts like Positive Energy Districts has also been noted by the JRC in their CCC review. This reinforces the need for early-stage concept development support to enable cities to identify and create synergies across their climate pathways.
- It must be noted that viability and feasibility of projects is often strongly dependent on national policy frameworks. The EU has a role to play here in working proactively with cities and national governments to ensure alignment of national policy frameworks to shared climate neutrality goals and the Mission Cities' ambitions.
- What this means for the next stage of finance implementation support to the Mission, given the fact that resources are limited vis-a-vis the need:
    - Further emphasis should be placed on early-stage value model development and business case support through both general, integrated City Support and the Climate City Capital Hub. This includes strategic use of the City Expert Support Facility (CESF) to provide contextual specialist input where necessary. However, this support should increasingly prioritise the development and dissemination of standardised methodologies that can be replicated across Mission Cities, accelerating implementation timelines and enabling peer learning. A strong example is the CESF support provided to Leuven, which helped refine an approach to modelling, measuring, and monetising co-benefits work that is now informing broader efforts to create standard frameworks for embedding social value into business cases and attracting socially driven investors. This shift towards replicable solutions mirrors successful standardisation trends in other sectors, such as onshore wind development, where common project models and financing structures have enabled faster, more scalable deployment across Europe.
    - Within this focus on early-stage value model and business case support, a need to emphasise innovation and implementation capacity in creating integrated propositions with multiple co-benefits.
    - Further emphasis on Partnerships with aligned programmes like the EUCF to enable integrated, seamlessly aligned support offers to cities.

[24] McKinsey & Company. (2020). *How the European Union could achieve net zero emissions at net zero cost*. https://www.mckinsey.com/~/media/mckinsey/business%20functions/sustainability/our%20insights/how%20the%20european%20union%20could%20achieve%20net%20zero%20emissions%20at%20net%20zero%20cost/net-zero-europe-vf.pdf

- Further integration with Policy innovation tasks to ensure alignment between finance innovation needs and policy.

Chapter III – The People Driving the Mission: City Teams, Decision-Making and Coordinating Efforts for Implementation

Developing and implementing a CCC and CCC IP demands substantial manpower, time, funding, and effort, especially when coordinating between multiple decision-makers. This chapter explores the common challenges city teams encounter, as revealed through the analysis of CCC IP. These include staffing limitations both in terms of capacity and capabilities, efficient management, and communication across different levels of governance.

3.1. Building Team Capacity for Effective Implementation

For cities to implement climate mitigation efforts successfully, a skilled workforce, specialised knowledge, and effective organisation are essential. However, staffing shortages are a systemic issue, with smaller municipalities particularly affected, and even larger cities often not fully able to make connections between their Transition Teams and their finance departments. Many lack dedicated personnel to navigate funding mechanisms and must rely on national or regional agencies for support. This dependence exposes a deeper structural challenge, without the autonomy or resources to build internal expertise, cities remain trapped in a cycle of limited capacity and constrained investment. This challenge is not hypothetical. In cities such as Valladolid, Ioannina, Kozani, Trikala, and Thessaloniki, climate-related teams often consist of just one or two overstretched staff. Without dedicated capacity, projects are frequently delayed, deprioritised, or unable to fully engage with external support[25].

Beyond staffing numbers, municipal teams often lack the technical expertise needed to plan and manage climate investments effectively – this is mentioned as a key barrier by 80% of cities (74 put of 93 cities). Without sufficient expertise, cities struggle to integrate cross-sectoral projects, missing key opportunities to align efforts around mitigation and adaptation. This further weakens municipal capacity, leading to delays in project rollouts, cost overruns and misaligned funding streams that hinder long-term planning. This issue is not theoretical; concrete examples from CCC IP illustrate its impact. In Lisbon, for instance, a shortage of specialised talent in finance and resource attraction has hindered the city's ability to build financial literacy and secure climate funding. This pattern of uneven capacity is not limited to Southern Europe. Across the Nordics, distinct capacity challenges emerge while all Finnish cities report structural limitations in resourcing climate work, cities in Denmark, Norway, and Iceland face fewer basic resource constraints but struggle more with specialist skills and delivery capacity. These differences highlight how capacity challenges can vary from lack of foundational support to gaps in technical expertise, depending on national context[26].

Even in contexts where staffing capacity exists, many city teams still face gaps in the skills and experience required to deliver complex climate projects, particularly around private sector financing and implementation. This has been especially noted in Denmark, Norway, and Iceland, where technical capacity does not always translate into delivery-ready expertise[27].

National and regional funding mechanisms often overlook the importance of human resource development, leaving cities without adequate means to invest in staff training, upskilling, or the recruitment of specialised personnel. While wealthier cities may be able to fund their own capacity-building efforts, many others depend on external grants and technical assistance programmes — support that is frequently inconsistent, competitive, or short-term. However, this is not universally the case. For example, the city of Guimarães has taken a proactive approach by establishing a dedicated

[25] *Working Session for CA/CFS Input on D2.2*, validation workshop, held March 15 and April 11, 2025. Unpublished internal document

[26] *Ibid.*

[27] *Ibid.*

climate finance team, representing a concrete step toward institutionalising climate finance capacity within the municipality. Similarly, in Finland, some cities are using development companies linked to municipalities to bypass rigid public sector hiring rules. This model offers an adaptive approach to capacity-building without being constrained by public sector HR limitations. By leveraging these flexible institutional arrangements, cities are able to bring in the necessary skills and expertise more efficiently, supporting project implementation and accelerating climate action despite structural constraints[28].

Additionally, interest and ability to absorb capacity-building measures varies across cities. Some prioritise prestige projects that align with political goals, focusing more on large-scale infrastructure rather than the behind-the-scenes investment in human capital. However, without strengthening their technical and administrative workforce, cities risk failing to meet their climate goals, as funding alone cannot compensate for a lack of institutional knowledge and expertise.

Even when cities secure funding, limited internal capacity and fragmented governance structures hinder their ability to effectively allocate resources and develop and execute viable projects. In the CCC IP it is frequently reported that municipal teams struggle with inefficiencies in project execution, difficulties in securing and managing financing, and challenges in navigating policy frameworks. The lack of integrated decision-making results in reactive rather than proactive planning, making it difficult to align city investments with long-term sustainability goals.

3.2. Political Tensions and Coordination Challenges Across Levels of Governance

Political tensions between local and central governments may present a significant challenge to climate investment and policy implementation, particularly in regions where opposition parties control different levels of decision-making. This is evident in Izmir, where friction with the central government in Ankara creates uncertainty around securing financial support for critical infrastructure projects.

Similarly, across the European Union, political polarisation between left- and right-wing administrations can obstruct the implementation of net-zero initiatives, as many EU funds are distributed through central governments. This centralised distribution can leave cities vulnerable to political bias in funding allocation, as seen in Hungary, where budget conditionality mechanisms have stalled funding due to unmet national-level reform requirements[29].

Beyond these systemic political challenges, frequent political shifts further complicate policy formation and regulatory stability, creating financial barriers for cities striving to achieve net-zero goals. Bologna, for example, has struggled to access EU funds controlled by a national administration, slowing its progress on climate action[30]. Such political gridlocks force cities to navigate bureaucratic hurdles instead of focusing on implementation, delaying much-needed investments. Many smaller cities face additional challenges due to insufficient national support, making collaboration with central governments essential. However, in some cases, funding allocation becomes politicised, with cities receiving preferential or delayed access based on their political alignment with governing authorities[31]

To overcome these financial barriers, cities must move beyond their own budgets and traditional funding mechanisms. Expanding partnerships with regional, national, and international stakeholders is essential to securing alternative financing and breaking free from political funding constraints. Adopting flexible,

[28] *Ibid*.

[29] Eurocities. (2023, November 3). Budapest report calls for cities to directly access EU funds. https://eurocities.eu/latest/budapest-report-calls-for-cities-to-directly-access-eu-funds/?utm_source=chatgpt.com

and EU News. (2024, January 15). Hungary gets last tranche of REPowerEU pre-financing; plenary debate in EU Parliament. https://www.eunews.it/en/2024/01/15/hungary-gets-last-tranche-of-repowereu-pre-financing-plenary-debate-in-eu-parliament/

[30] Eurocities. (2023, November 3). Budapest report calls for cities to directly access EU funds. https://eurocities.eu/latest/budapest-report-calls-for-cities-to-directly-access-eu-funds/?utm_source=chatgpt.com

[31] Ibid and Eurocities. (2024, January 26). *EU recovery plan fails to deliver cities' investment needs*. https://eurocities.eu/latest/eu-recovery-plan-fails-to-deliver-cities-investment-needs/?utm_source=chatgpt.com

cross-jurisdictional strategies can help ensure climate action remains resilient, regardless of shifting political landscapes at the national level.

Yet even when cities succeed in diversifying funding and building new partnerships, deep-rooted structural and conceptual challenges persist. CCC IP present significant difficulties—particularly when adopting a 'whole city' approach that often extends beyond conventional funding structures. Cities frequently struggle to internalise and operationalise the 'whole place' concept, which demands policy innovation, market-shaping mechanisms like procurement, and integrated portfolio thinking. Despite economic models that assign costs and benefits to such approaches, implementation remains highly complex. Many cities fall back on compiling project longlists, rather than presenting a true, synergistic whole-city investment portfolio.

3.3. Reflections

- There is a need for continued and strengthened integration of municipal finance expertise within Transition Teams, a focus area for upcoming WP2 City Support activities during the remainder of SGA1 and SGA2. Ensuring these teams have cross-departmental mandates and the active involvement of municipal finance departments is critical, as finance teams are often insufficiently engaged in transition planning. CFSs play a key role in bridging this gap, supporting cities in embedding financial perspectives into climate strategies and facilitating alignment between technical planning and financial decision-making. Dedicated workstreams on this theme are currently being developed.
- The investment in national-level dialogues and Mission platforms happening in SGA2 is crucial to overcome deep and persistent barriers to cities' financial powers rooted at national level. The support provided by the consortium through national-level Mission platform support should be strongly focussed on this. The EU has a role to play in assertively working with National governments on this critical aspect of Mission success.

- More broadly, SGA1 and SGA2 should emphasise public finance innovation that supports standardised, replicable approaches. This will help cities access funding, build capacity, and adopt portfolio-based strategies. Shifting from overly bespoke solutions to tested, modular models will accelerate progress across Mission Cities. As with onshore wind, standardisation has been key to scaling investment and reducing complexity—offering a strong precedent for city-level climate finance.

- There is an opportunity to ensure maximum linkage of emerging work strands on Pre-Commercial Procurement and Strategic Procurement Policies to City Support as key lever of change and capability building

Chapter IV – Navigating the Framework: The Impact of Policies and Regulations on Investment Plan Implementation

While implementing the CCC IP, cities must navigate the often complex and limiting ecosystem of national and pan-European regulations that affect their ability to use financial tools. This given chapter delves into the need to adapt priorities on the national political agendas and finance regulations, such as the debt ceiling.

4.1. Placing Climate as a Secondary Focus

Although many cities highlight climate action as a priority in their CCC IP, it often and understandably takes a secondary position when urgent crises arise, shifting investment priorities and redirecting funding. This is evident in Izmir, where the devastating earthquakes demanded immediate attention and financial resources, understandably pushing climate initiatives lower on the agenda as the city focused on rebuilding critical infrastructure and addressing humanitarian needs. Similarly, the Russia-Ukraine war is consistently cited in CCC IP as a major concern, contributing to instability and unpredictability in long-term climate agendas. As governments grapple with energy security, economic disruption, and geopolitical uncertainty, climate investments are frequently delayed or deprioritised in response to these pressing challenges[32].

Even in cities where climate remains a priority, shifting threats and uncertainties influence how resources are allocated. In Finnish cities, for example, climate commitments remain strong, however, cities recognise the potential security threats as a long-term risk for the CCC IP implementation. Additionally, climate is often challenged by a topic of economic development and need to balance between the more climate-friendlier options and keeping the prices affordable. Thus, other imminent risks and security concerns force constant reassessments of priorities. As a result, climate action, though central to long-term planning, is sometimes adjusted or scaled back in response to emerging threats.

Despite these challenges, CCC IP analysis and Pilot City Programme engagement indicate a shift from isolated climate projects toward more strategic, long-term investments, recognising climate finance as a public responsibility rather than a niche concern. However, engaging the private sector remains a challenge, particularly in balancing profitability with social sustainability and ensuring that investments contribute to a just transition. If climate finance is to remain stable amid external pressures, cities must adopt more resilient investment strategies, integrate climate goals into broader policy frameworks, and create financial mechanisms that withstand political and economic fluctuations.

4.2. Debt Ceilings - Balancing Fiscal Responsibility and Investment Constraints

Debt ceilings serve as a mechanism to limit the amount of debt that national and municipal governments can accumulate, ensuring fiscal stability and preventing excessive borrowing. At the national level, they function as a safeguard against macroeconomic instability; at the municipal level, they are intended to maintain responsible local financial management. However, their rigid application can significantly hinder cities' ability to finance long-term climate investments — a concern echoed in nearly every investment plan reviewed.

[32] Bellona Europa. (2024, September 24). *Balancing competitiveness and climate objectives: Bellona Europa's insights on the Draghi report*. https://eu.bellona.org/2024/09/24/balancing-competitiveness-and-climate-objectives-bellona-europas-insights-on-the-draghi-report/

In practice, normal municipal operations in many cities already consume the available fiscal space allowed under debt and expenditure rules, leaving little to no room for new investments in climate and adaptation infrastructure. This is particularly acute in Spain and Portugal, where virtually all mission cities have reported being close to, or already at, their expenditure and debt ceilings. These ceilings are reinforced by national-level regulation that often requires prior authorisation from higher authorities for new borrowing or ties municipal spending limits to national GDP growth or revenue thresholds[33].

Although many cities are perceived as creditworthy and have good relationships with local and national banks, they report no difficulties in accessing capital at competitive rates. The barrier is not financial market trust, but regulatory. Grants, therefore, become one of the few instruments exempt from fiscal constraints, which explains the overreliance on grants observed in some cities, particularly in Spain. This creates a structural dependency that limits flexibility and innovation in financing models.

4.2.1. The Ripple Effect of Debt Ceilings on Key Investment Levers

Debt ceilings not only restrict a city's capacity to borrow but also have broader implications for urban investment and climate action. These constraints affect not just direct borrowing but also influence the use of financial instruments such as bonds and public-private partnerships (PPPs). Their impact extends beyond direct financing, influencing public-private partnerships (PPPs), procurement processes, staffing, and the use of alternative debt instruments like green bonds.

One significant consequence is the limitation on PPPs. While public-private partnerships are often seen as a solution to financing gaps, strict debt ceilings can discourage private investors from engaging with municipalities that lack financial flexibility. Cities unable to commit to long-term financial agreements or provide sufficient guarantees struggle to attract private sector participation, resulting in lost opportunities for shared investment. For example, in Dijon, progress on financial innovation only advanced when external actors helped overcome internal inertia and push for the adoption of new tools.

Procurement processes are similarly constrained. While not always reflected on the balance sheet, procurement decisions require cities to carefully manage operational expenditures within tight fiscal rules, often favouring short-term, lower-cost solutions at the expense of long-term sustainability. This creates an inherent tension between financial feasibility and climate ambition.

Staffing is another area indirectly impacted by debt ceilings. Though operational expenditures are not always financed through debt, a restrictive fiscal environment limits cities' ability to invest in workforce development, such as hiring skilled personnel or funding upskilling initiatives needed to navigate complex financing structures. This limits cities' ability to apply for competitive funding or design innovative financing vehicles — especially for complex climate projects.

Debt ceilings also constrain the use of alternative financing mechanisms such as green bonds. Although these can offer cost-effective terms, cities subject to borrowing caps may not be able to issue them at scale. This is particularly challenging in Eastern and Southern Europe, where cities often rely on public subsidies and may lack the internal capacity to develop bankable projects. Cities have indicated that these constraints limit their ability to benefit from additional EIB loans.

To circumvent these barriers, some cities are exploring off-balance sheet mechanisms such as Energy Service Companies (ESCOs), Special Purpose Vehicles (SPVs), or working through municipal companies whose finances are not consolidated with municipal budgets and thus are not restricted by debt ceilings. Coordinating private-sector–led investments, such as Positive Energy Districts, or involving regional/metropolitan governments are also emerging as viable strategies.

On a broader scale, there is growing momentum among cities to advocate for an EU-level solution. For instance, the Treasury Department in Valladolid has informally proposed a special fiscal regime that would exempt Mission Cities from national debt and expenditure limits for climate-resilient infrastructure investment — as long as broader EU deficit targets remain intact. Barcelona, along with 14 other

[33] *Working Session for CA/CFS Input on D2.2*, validation workshop, held March 15 and April 11, 2025. Unpublished internal document

European cities, is leading a similar request to exclude affordable housing investments from EU debt rules. These efforts indicate an appetite for structural change to unlock the scale of investment required for climate neutrality.

4.3. Reflections

- Integrated workstreams on public finance policy should explore the national-local dynamic in municipal finance and how municipalities can more effectively re-direct spending within their existing financial powers.
- Cities should focus on building their own revenue streams — such as revolving funds or off-balance sheet instruments — to enhance financial discretion. The CFS and the Climate City Capital Hub are working with cities to help structure these solutions.
- Many cities articulate climate action as a strategic priority, but urgent crises — such as natural disasters or geopolitical shocks — often derail long-term planning. As seen in Izmir and in response to the Russia-Ukraine war, climate initiatives can quickly become secondary to immediate humanitarian or economic needs. CCC IP must be resilient to such political and crisis-driven reprioritisation.
- Though not always the most visible barrier, debt ceilings shape nearly every aspect of climate investment — from staffing and procurement to PPPs and access to green bonds. Their indirect effects on capital mobilisation, investor confidence, and institutional capacity must receive greater attention at both the national and EU level.
- In cities with limited fiscal flexibility, innovation frequently depends on external “infiltration” — whether by private firms, NGOs, or third-party actors. Cities may only begin experimenting with new financial tools when external collaborators help disrupt institutional inertia. Formal mechanisms for enabling this kind of engagement, while maintaining public accountability, are needed.
- Debt ceilings and tight budgets also inhibit cities’ ability to recruit and retain the skilled personnel needed to execute complex projects. Climate finance strategies must address both financial structures and human capital needs.
- Cities cannot succeed alone. The friction between national fiscal rules and local climate goals — particularly around debt limits, procurement, and co-financing — underscores the need for vertical policy coherence. Stronger alignment between municipal investment planning and national regulatory frameworks, as emphasised in SGA1 D7.5, is essential for unlocking financing and embedding climate ambition into long-term governance.

Chapter V – Getting People Onboard for the Mission: Stakeholder Engagement in Implementing the CCC IPs

The EU Cities Mission requires an estimated €650 billion in combined public and private investment to achieve its goal of transforming 100 European cities into climate-neutral hubs by 2030[34]. The required investment significantly exceeds the available public funds. It is clear that, to reach the goal, engaging additional non-public actors to fund the transition is crucial. You don't pursue the ambitious mission alone. A mission approach means mobilising everyone—city departments, central governments, businesses, investors, and the community—towards a common goal. In the following chapter, we will delve into the efforts made by the cities to broaden the investment landscape, attracting private capital as well as individuals and households

5.1. Focus on the City Budgets in CCC IPs

There is a noticeable tendency for many cities to focus on projects within the limits of their control. While this may seem logical at first glance, as it allows for easier management and accountability, this approach may fall short of achieving a tangible decrease in CO2 emissions. Often, CCC IP are primarily based on projects that the city can fund solely from its own budget and inter-budget transfers, neglecting the use of available funds as a stimulus to generate multiplying effects. Another potential reason may lie in the shared management of specific systems, such as electricity grid management, as discussed in Chapter 2. These projects require greater collaboration and coordination, which can become problematic in cases of conflicts between different levels of governance. Additionally, many cities face limitations in staffing capacity and expertise, as highlighted in Chapter 3.

This inward-looking tendency may also be partly explained by how CCC IPs are developed. In some cases, CCC IPs are prepared by external consultants and remain disconnected from internal city processes, limiting ownership and internal buy-in. In Greece, for example, that the separation of CCC IP development from municipal teams has not delivered the intended outcomes. As a result, there is growing recognition that CCC IPs need to be designed in ways that allow cities to take ownership and lead their implementation. This lack of integration may also contribute to the emphasis on city-funded projects, as internal teams default to what they can manage directly[35].

When cities overfocus on projects that can be funded from the city budget, they often neglect broader, systemic changes that require collaboration beyond city borders, such as regional or national policies, and private sector involvement. In such cases, the focus shifts to what is feasible rather than zooming out to identify what is crucial for decarbonisation.

To overcome this bias, cities need to reframe their role—not merely as implementers of isolated projects, but as enablers of systemic transformation. This involves establishing a strategic vision for decarbonisation and positioning the city as a facilitator of broad-based collaboration. Many cities, as noted in their CCC IP, have already acknowledged the importance of involving both private businesses and individual citizens in achieving climate goals. However, to translate this recognition into action, cities must design effective incentives that encourage these groups to participate—particularly in financing the transition. Mobilising private capital and aligning it with public objectives will be essential to scaling up decarbonisation efforts. In this paper, we focus specifically on the financial dimensions of stakeholder

[34] ESG News. (2024, June 26). *EU launches €650 billion Climate City Capital Hub to help 112 cities reach net zero by 2030*. https://esgnews.com/eu-launches-650-billion-climate-city-capital-hub-to-help-112-cities-to-reach-net-zero-by-2030/?utm_source=chatgpt.com

[35] *Working Session for CA/CFS Input on D2.2*, validation workshop, held March 15 and April 11, 2025. Unpublished internal document

engagement, exploring how cities can attract and structure private and citizen investment to support their climate action plans.

5.2. The Challenge of Private Sector Engagement

The amount of funding needed to achieve climate neutrality far exceeds the financial capacities of public authorities alone. As cities advance their climate agendas, they increasingly recognise the importance of mobilising non-public actors—particularly private sector partners and citizens—to co-invest in decarbonisation projects. However, the path toward effective collaboration with private capital is uneven across Europe, shaped not only by financial or technical constraints but also by deep-rooted cultural attitudes and institutional legacies. For example, in Nordic cities, there is a historical hesitance towards involving private capital in public good projects, and public-private partnerships have a strong negative association with privatisation and loss of control over public assets. While in Romanian cities, public authorities have historically been more open to involving private funds for the maintenance of public assets and underwent a major privatisation reform in the 1990s after the fall of the communist regime, there is still a negative connotation surrounding how privatisation was implemented. Romanian cities also mentioned that even after the development of the new laws regulating PPPs, they still lack practical guidance and methodological support for effectively implementing such partnerships. Similar concerns were raised in Miskolc, Hungary, where limited city capacities and a lack of previous experience create obstacles to implementing PPPs[36].

Such tension in the desire and prejudices regarding engagement with the private sector reflects the need for greater emphasis on support in the field of private sector engagement and PPPs within the EU Cities Mission. This should involve not only working with investors and preparing city projects but also addressing issues from a multilevel governance perspective. It is crucial to identify the bottlenecks in the existing financial ecosystem and work to close these gaps at the respective levels. Furthermore, fostering trust and creating opportunities for dialogue between the private and public sectors are essential for successful collaboration.

5.3. The Need for Citizen Engagement

Another emerging trend in cities' CCC IP is the increasing emphasis on engaging citizens not only in planning decarbonisation measures but also in co-financing the transition to climate neutrality. Private individuals, as owners of significant assets—particularly housing (see more in chapter 2-3)—are vital actors in this process. Their investments in sustainable upgrades, especially in the built environment, can deliver both climate benefits and long-term economic returns.

This dynamic is particularly evident in countries with a high degree of housing privatisation, such as the Baltic States. Mission cities like Liepaja, Riga, Vilnius, and Tauragė have identified the transformation of Soviet-era residential buildings as a cornerstone of their decarbonisation strategies. In Latvia, for instance, the homeownership rate in 2022 exceeded the EU-27 average, reaching over 83%, or approximately 687,000 dwellings[37]. Given this high level of private ownership, achieving energy efficiency targets in the housing sector depends heavily on individual homeowners' willingness and capacity to invest in renovations. While national and local governments can provide regulatory

[36] This topic was also the focus of the first national dialogue in Romania, held in October 2024, which centred on public-private partnerships (PPPs). As a follow-up, an exchange between Polish cities with experience in implementing PPPs and Romanian cities participating in the M100 Romanian National Platform was organised in March 2025.

[37] Council of Europe Development Bank. (n.d.). *Technical assistance CEB market study of pipeline and stakeholders – Latvia final report*. https://coebank.org/documents/1598/TechnicalAssistanceCEBMarketStudyofPipelineandStakeholdersLatviaFinalreport.pdf?utm_source=chatgpt.com

frameworks and financial incentives, the success of these initiatives ultimately relies on securing citizen buy-in and co-investment[38].

Similar approaches are being explored beyond the EU, especially where access to large-scale public funding is limited. The city of Eilat in Israel offers a notable example through its Eilat Solar initiative—a digital platform designed to empower residents and businesses to adopt solar PV systems. By providing detailed rooftop solar potential data, financial feasibility analyses, and a vetted database of contractors and financing options, the platform simplifies the installation process and reduces barriers to entry. Rather than issuing municipal bonds, Eilat supports its energy transition by facilitating informed decisions and enabling easier access to funding and technical assistance. This participatory and technology-driven model strengthens local ownership of the transition and improves the financial sustainability of municipal climate action[39].

Beyond the narrative of citizen co-financing—through investments in energy efficiency, housing renovation, or the installation of solar panels—public engagement is also essential in driving behavioural changes that support decarbonisation. As highlighted in Chapter 2, many transition measures, particularly in the mobility sector, rely on the assumption that citizens are willing to shift their commuting habits toward more sustainable modes such as public transport, cycling, or walking. However, the willingness to adopt such changes—and the understanding of their climate impact—often varies widely, especially outside of sustainability-minded circles. This reinforces the need for proactive engagement with citizens, framing climate action in terms of concrete, relatable co-benefits such as improved health, reduced congestion, and enhanced urban quality of life.

Importantly, climate neutrality messaging can be made more effective when integrated with broader societal concerns. As illustrated in Chapter 2.2, connecting the energy transition to issues of energy security can significantly increase public support—especially in the context of recent geopolitical disruptions that have exposed the vulnerabilities of fossil fuel dependence. Similarly, framing climate measures as part of a wider effort to modernise infrastructure and improve economic competitiveness can resonate strongly with both citizens and the private sector. For example, initiatives that promote the adoption of smart grid technologies or the development of green innovation districts not only contribute to emission reductions but also position cities as leaders in technological advancement and job creation. By aligning the climate neutrality narrative with these broader priorities, cities can foster a more inclusive and motivating vision of the transition—one that invites citizens to participate not only as beneficiaries but as active contributors to a more secure, modern, and competitive future[40].

In summary, whether in the EU or beyond, citizen engagement—both financial and behavioural—is emerging as a cornerstone of successful climate strategies. Cities must not only create mechanisms to attract private co-investment but also frame climate action in ways that resonate with broader public concerns, such as health, energy security, and economic modernisation.

5.4. Reflections

- Real capacity building is needed to strengthen public value considerations in the cooperation between private and public actors, for example in Public-Private Partnerships (PPPs). This will enable cities to act with greater confidence, especially given that in many cases, trust in PPPs has diminished due to negative past experiences or a historical preference for publicly owned assets and infrastructure, as seen in Scandinavia. Achieving climate neutrality requires substantial investment, and without the involvement of private actors and private capital, the path to decarbonisation would take significantly longer.

[38] This topic was the focus of the first dialogue on better funding, conducted for Lithuania, Latvia, and Estonia during the Cities Mission conference on 6 May 2025 in Vilnius. The insights from this dialogue are available in Deliverable 2.17.

[39] Urban Agenda Partnership on Sustainable Use of Land and Nature-Based Solutions. (n.d.). Eilat Solar. Urban Agenda Platform. https://ec.europa.eu/futurium/en/system/files/ged/urban_agenda_eilat_solar_2021.pdf

[40] Bellona Europa. (2024, September 24). *Balancing competitiveness and climate objectives: Bellona Europa's insights on the Draghi report*. https://eu.bellona.org/2024/09/24/balancing-competitiveness-and-climate-objectives-bellona-europas-insights-on-the-draghi-report/

- A crucial shift is needed in collaborative governance: from seeing municipalities as mere implementers constrained by limited city budgets, to positioning them as catalysts and visionaries for urban development. This transformation is essential to unlocking broader financing opportunities and enabling more ambitious, sustainable strategies. Cities, in their investment planning, should strategically consider how and where private investment is needed—identifying which municipal projects could be made bankable and how to effectively bundle them with less bankable ones to enhance attractiveness. Exploring manageable financing and delivery models, such as ESCOs, can serve as a practical starting point.

- Moreover, with limited public funds available, it is vital at all levels of governance to focus on how to de-risk investments and make smarter use of existing funding. Designing financial instruments and mechanisms—such as guarantees, blended finance structures, or first-loss capital—can help attract additional private capital and scale investment. Strategic use of public funding to crowd in and leverage private investment is not just beneficial, but necessary to accelerate progress toward climate goals and resilient urban transformation.

- Reflecting on the role of private individuals in financing decarbonisation projects, it becomes clear that their engagement is not only possible but essential. As outlined earlier, household-level investments and citizen-driven initiatives can collectively make a substantial contribution. What emerges as a key factor is the quality of communication—transparent, targeted, and relatable messaging is crucial to foster trust and motivate action. Yet, beyond the immediate financial rationale, long-term thinking must guide this engagement. Emphasising co-benefits such as healthier living environments, reduced energy costs, and local economic resilience can strengthen commitment. Equally important is a focus on place-based impact—showing people how their investments will shape and improve their own communities. Ultimately, enabling individuals to become part of the solution not only diversifies funding sources but also grounds the transition in shared values and local relevance.

Conclusion

Achieving climate neutrality by 2030 requires cities to transition from ambition to implementation at unprecedented speed and scale. Investment planning is central to this transformation—not only as a financial exercise, but as a means of governance innovation, systems thinking, and cross-sector coordination. This analysis of 93 Mission Cities' CCC IPs provides a valuable snapshot of current progress, challenges, and emerging opportunities in climate finance planning at the local level.

The findings reveal a growing maturity in how cities conceptualise and structure their climate investments, with clear prioritisation in sectors such as sustainable transport, energy efficiency and renewable energy. However, the path to bankable, implementable portfolios remains uneven. While some cities demonstrate strong alignment between investment logic and climate goals, many still face persistent barriers, including limited internal capacity, lack of integrated planning, outdated financial frameworks and insufficient engagement with the private sector and citizens. The result is a finance landscape that is often fragmented, risk-averse, and unable to meet the scale of the climate challenge.

What emerges from this analysis is not only a diagnostic of the current state, but also a roadmap for future intervention. The Climate City Capital Hub, City Finance Specialists, and related NetZero Cities support mechanisms are well-positioned to help cities move from isolated project planning toward integrated, fundable portfolios. To do so effectively, support must extend further upstream—focusing on early-stage value model development, standardisation of business cases, and governance innovation that unlocks blended finance opportunities. Equally, greater coordination is needed at the national and EU levels to align fiscal policy, regulatory frameworks, and capacity-building initiatives with the realities cities face on the ground. These challenges are being addressed through the **Better Funding Dialogues (BFD)** approach, which fosters structured, multi-level dialogue around urban climate finance needs and solutions (see more in D2.17)[41].

[41] Bakhcheva, I., Crudi, F., Lewandowska, N., & Odigbo, N. (2025). *Interim Better Funding white paper* (**Deliverable D2.17**). ICLEI Europe.

In the final analysis, climate finance is not only about capital—it is about capability, confidence, and collaboration. As cities navigate complex funding ecosystems and systemic obstacles, the EU Cities Mission must remain steadfast in its commitment to providing flexible, strategic, and context-sensitive support. Only by addressing structural constraints and enabling cities to act as full financial actors can we close the €650 billion investment gap and deliver a just, accelerated transition to climate neutrality.

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ANNEXES

Annex 1 - List of cities CCC IP analysed for D2.2

1. Klagenfurt
2. Leuven
3. Brussels
4. Antwerpen
5. La Louviere
6. Gabrovo
7. Sofia
8. Limassol
9. Lieberec
10. Sønderborg
11. Aarhus
12. Copenhagen
13. Espoo
14. Helsinki
15. Lahti

16. Lappeenranta
17. Tampere
18. Turku
19. Lyon
20. Marseille
21. Angers Loire Metropole
22. Bordeaux Metropole
23. Dijon Metropole
24. Dunkerque
25. Grenoble Alpes
26. Nantes
27. Paris
28. Heidelberg
29. Münster
30. Aachen
31. Dresden
32. Leipzig
33. Mannheim
34. Ioannina
35. Kalamata
36. Kozani
37. Thessaloniki
38. Trikala
39. Athens
40. Pécs
41. Miscolc
42. Budapest
43. Reykjavik
44. Dublin
45. Eilat
46. Florence
47. Parma
48. Prato
49. Milan
50. Bergamo
51. Turin
52. Bologna
53. Padova
54. Liepaja
55. Riga
56. Vilnius
57. Taurage
58. Differdange
59. The Hague
60. Eindhoven & Helmond
61. Amsterdam
62. Oslo
63. Stavanger
64. Trondheim
65. Łódź
66. Rzeszow
67. Guimarães
68. Lisbon
69. Porto
70. Cluj-Napoca
71. Bucharest
72. Sucheava
73. Bratislava
74. Kosice
75. Kranj
76. Ljublana
77. Barcelona
78. Madrid
79. Seville
80. Valencia
81. Zaragoza
82. Valladolid
83. Vitoria-Gasteiz
84. Malmö
85. Stockholm
86. Helsingborg
87. Götenborg
88. Gälve
89. Umea
90. Lund
91. Izmir
92. Istanbul
93. Bristol

Annex 2.1 - City Finance Assessment Reports

As part of Deliverable 2.2, supporting activities have been completed, including the compilation of a structured dataset covering 93 cities (available as a separate file in Annex 2). Additionally, individual City Finance Assessment Reports have been prepared for each of the 93 cities. These reports are based on IP analyses and provide insights into the national context, intended financial instruments, prioritised fields of financing, key stakeholders, and identified barriers for each city.

The reports are accessible via **a secure link:** https://www.notion.so/darkmatterlabs/f258297c63c84854a5a00b93bb896e9a?v=82e2b879e6104d1f931de0d737f00946 in the Notion database provided. Please note that this link contains sensitive information and should **not** be shared externally.