



NET ZERO CITIES SGA-NZC

Baseline Analysis of the Current State of Climate Investment for Cities

Deliverable D2.10

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Abbreviations and acronyms

Acronym	Description
CCC	Climate City Contract
CIP	Climate Investment Plan
EU	European Union

Summary

This document analyses the current state of the climate investment plans of 33 Mission-Label cities on 4 topics: the existing climate budget, their municipal sectoral budget, the key barriers to climate investment and the foreseen climate participation budget.

Keywords

Climate Adaptation, Climate Transition, Climate Investment, Barriers, Climate Finance.

1 Introduction

1.1 Context

Cities within the *100 climate-neutral and smart cities mission* must make systemic and transformational changes to implement the ambitious portfolio of policies, projects, and programs and projects and programs to meet their climate neutrality targets.

To achieve these systemic transformations, cities need to develop a Climate Investment Plan that aims to mobilise and align public, private and civic capital to finance climate neutrality. The Plan includes three parts: (1) An analysis of existing climate action within the city, including the development and maintenance of a climate budget and an analysis of the existing funding and financing landscape of the municipality. (2) The plans for reaching Net Zero goals – outlining the cost and effectiveness of each project, as well as which stakeholders will finance each action (and any funding gaps that have been identified). (3) The enabling conditions for implementing the plan – a viable risk management framework, any policies that may support implementation and the identification of key stakeholders that may fill both resource and funding gaps.

Building on the work from Deliverable 1.1 (Edmondson et al., 2024), which examined 10 Mission Label cities, this deliverable will focus on a more specific topic but expand the analysis to 33 cities. One key conclusion from Deliverable 1.1 was the need to improve budget allocation transparency, as a crucial information for building trust and ensuring accountability. Clearly documenting and communicating how funds are allocated and spent enables stakeholders to understand the financial commitment to climate action and how resources are being utilised. The objective of this document is to assess whether there have been improvements in this area, focusing on analysing part 1 and three of 33 cities Investment Plan.

1.2 Purpose

The purpose of this document is to analyse the current state of Climate Investment Plans, answering four main questions. First, how much of each city's budget is dedicated to the climate budget? Second, which are the sectors that cities are investing in most heavily at the present time (e.g. transportation, buildings and heating, energy, waste or green infrastructure). Third, what are the key barriers to Climate Investment. And finally if citizen engagement and participation are included on the Climate Budget.

This information can be leveraged to interpret the existing scenarios across Mission Cities, as well as identifying key barriers that the Net Zero Cities programme can provide support for. This will provide a baseline understanding of the challenges for investment in the 100 Climate-Neutral and Smart Cities Mission as well as helping to fine-tune support to Mission-Oriented Cities in the future (part of SGA2-NZC WP1).

2 Methodology/Background Research

The methodology for analysing climate investment across the 33 cities involved a structured approach that combined document analysis, sectoral budget review, and comparative case studies. The identification of financial and administrative challenges was conducted using a qualitative, inductive categorisation approach, resulting in 10 distinct categories.

The primary methodology involves a detailed examination of Module IP-A1, "Existing Climate Action Funding," from each city's Investment Plan. This analysis focuses on how cities report their climate action budgets. We systematically reviewed each city's document to assess the clarity and completeness of budget reporting. This is summarised in section 3.1.

In section 3.2, we analysed the allocation of climate investments across five key sectors: transportation, buildings and heating, energy, waste, and green infrastructure. This involved reviewing sectoral budget data provided by 23 out of the 33 cities. For cities that did not provide segmented data, their budgets were evaluated based on available information. The analysis quantified the proportion of investments in each sector to understand investment priorities and distribution. This section provides insights into how different sectors are funded and the relative emphasis placed on various aspects of climate action.

In Section 3.3, a comparative case study analysis was conducted, focusing on a city in northern Europe and another in Southern Europe to investigate their climate investment strategies and barriers. The methodology involved a thorough review of each city's climate investment documents, followed by a comparative analysis of their strategies and implementations. This approach allows for an in-depth comparison of investment strategies, reporting practices, and sectoral allocations, highlighting differences and similarities in their climate investment approaches.

The study also aimed to identify and analyse key barriers to effective climate investment, as detailed in section 3.4. By reviewing the investment plans of the 33 cities, we identified common challenges, including difficulties in securing funding, a shortage of specialised human resources, and constraints from national legislation. We employed an inductive categorisation approach to assess these issues qualitatively, organising them into ten main categories. This categorisation provided the foundation for developing solutions and recommendations to help cities address these challenges and enhance their climate investment strategies.

In addition, the report includes a focused analysis of how resources are allocated for participation and engagement processes. This involves a review of the IPs to evaluate the extent and adequacy of funding dedicated to participatory activities, as seen in section 3.4. We examined whether the investment plans allocate sufficient resources for citizen engagement. This review aims to identify trends and gaps in participatory investment, highlighting instances where funding for participatory processes is insufficient or inadequately detailed.

By employing these methodologies, the study provides a comprehensive assessment of climate investment practices, identifies key challenges, and offers insights into how cities can enhance their climate action strategies.

To not disclose private city data, we have changed the names of the 33 cities for letters and numbers and we have multiplied the original numbers for a random number.

3 Climate Investment Analysis

3.1 Level of City Budget in Climate Action

The analysis of Module IP-A1, titled “Existing Climate Action Funding,” across the 33 cities reveals a significant issue: the cities are not clearly articulating the extent of their budgets allocated to climate action.

Twelve cities fail to provide all the information required to analyse their climate budgets comprehensively. This lack of specificity indicates that the reporting guidelines were insufficient, resulting in an inability to draw conclusions regarding the percentage of climate investment made by these cities.

The primary issue identified in the Investment Plans (IPs) that requires clarification in future iterations is as follows:

- Several cities fail to disclose their total budgets, which obstructs any meaningful analysis of the relationship between their overall budget and the climate budget. This information must be explicitly requested in future reports.
- Additionally, the investments classified as part of the climate budget are not clearly defined, resulting in some cities including expenditures that are not directly related to climate change. Examples of such expenditures include traffic management, gas purchases, and waste management.

The diversity of data presented complicates the assessment of the average proportion of each city's budget dedicated to climate action. Due to the varying methodologies employed by cities in calculating their investments, some report allocations of less than 10% (City A, City M, City S, City 1, City 2 and City 6), while others claim allocations above 60% (City B and City Q).

City	Total City Budget (M€)	Climate budget (M€)	Percentage	Year
City A	6588	364.8654	5.54	2023
City B	1060.668	636.4008	60	2023
City C	3175.05	762.012	24	
City D	1647	741.15	45	2022
City E	61.6527	17.8791	29	2022
City F		42.0168	-	2022
City G	152.5671	39.6744	26	2022-2023
City H	6771	2065.155	30.5	2023
City I	-	3734.1516	-	-
City J	-	62.3115	-	2021
City K	-	-	-	-
City L	1065.5724	128.283	12	-
City M	982.527	48.678	4.95	2023
City N	549	71.37	13	median 2020-2022
City O	307.0923	100.3572	32.68	2023
City P	2335.9767	587.8692	25.17	2023
City Q	1632.36	1396.7658	85.57	2023
City R	9925.92	-	-	-
City S	-	-	-	

City T	3105.327	121.9329	3.93	-
City U	3403.8	-	-	-
City V	-	141.825	-	2022
City W	258.762	-	-	2023
City X	2119.14	505.9035	23.87	2023
City Y	3019.5	676.368	22.4	2023
City Z	-	-	-	-
City 1	3660	29.28	0.8	2022
City 2	750.3	16.9824	2.26	2020
City 3	-	574.803	-	2023
City 4	1861.11	570.228	30.64	2023
City 5	624.6522	181.1517	29	2023
City 6	795.3363	72.2301	9.08	2023
City 7	1729.4964	249.9048	14.45	2023

Table 1. Level of City Budget in Climate Action

3.2 Analysis of Sectoral Climate Budget

Ten cities did not provide their current budgets segmented into the five required sectors: transportation, buildings and heating, energy, waste, and green infrastructure.

Among the 23 cities that submitted their sectoral budgets for analysis, it is evident that transportation represents the most significant area of investment, averaging 46.11% of their climate budgets. This is followed by buildings and heating, which account for 19.38% of the total investment. Green infrastructure constitutes 12.92%, while waste management and energy receive 9.28% and 6.39%, respectively.

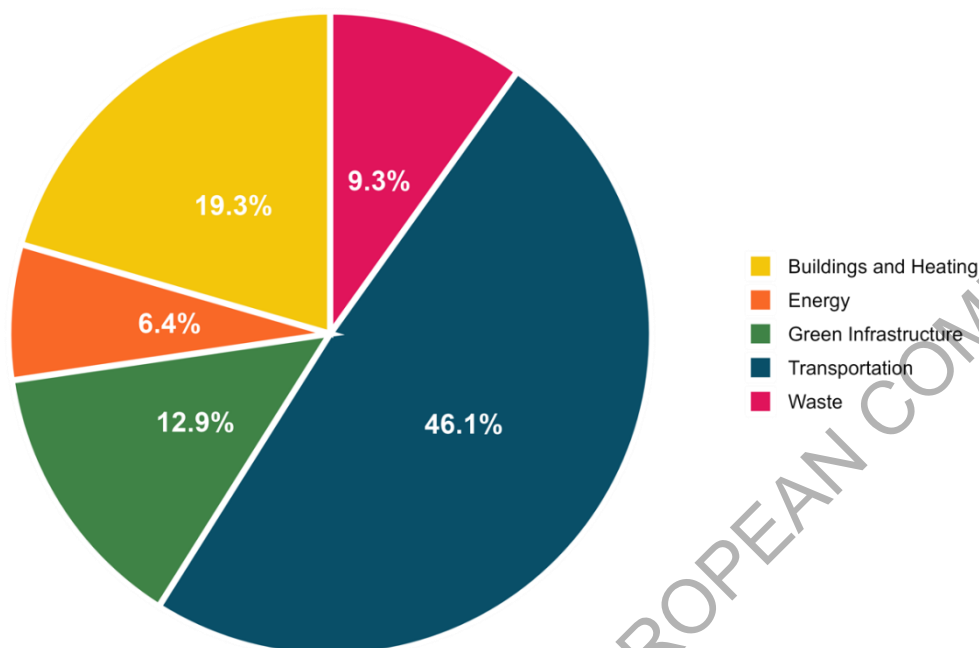


Figure 1. Sectoral Climate Budget

In the initial years of the transition towards achieving climate neutrality, transportation constitutes nearly half of the cities' investments in climate action. This significant allocation is attributed to new investments in bike lanes, electric buses, and the development of new tramways or metro lines. Additionally, the high maintenance costs associated with public transportation systems, which fall under the purview of local councils, contribute to this substantial investment.

Buildings and heating also represent a significant portion of climate investments, accounting for almost 20%. This is a result of local councils' efforts to equip public buildings with renewable energy sources, as well as the subsidies provided to private households to facilitate similar upgrades.

3.3 Two Investment Plan Analysis

To gain a comprehensive understanding of the climate investment approaches in European cities, we have conducted an in-depth analysis of two cities: City C and City 6. This analysis aims to illustrate how different cities, with varying national contexts and economic conditions, approach climate-related investments and the challenges they face.

Why these two cities?

These two cities were selected based on several factors that make them ideal case studies. Both have well-established climate policies and have developed exemplary Investment Plans, showcasing their commitment to addressing climate challenges. Additionally, they share a relatively similar population size, with City 6 around 250,000 residents and City C around 300,000, making them comparable in scale.

However, their differing geographic and economic contexts offer an opportunity to explore how regional and national factors influence climate investment strategies. City 6 is located in Southern Europe, operates within a national context that is often associated with more stringent financial regulations, while City C is in Northern Europe and enjoys a relatively higher degree of fiscal autonomy. This is further reflected in their annual budgets: City 6 operates with a budget of around 400 million euros, while City C's budget is significantly larger, around 1.500 million euros. This contrast provides a unique lens to understand how varying economic capacities impact climate investment.

Overview of Climate Investments

One of the key aspects of this analysis is examining how both cities present their Current State of Climate Investment. City C reports that 24.3% of its total budget is allocated to climate-related investments, while City 6 indicates that 40% of its sector-specific investments (e.g., Transport, Buildings, Heating) are climate-related. If we were to standardise the reporting method and express City 6's climate investment as a percentage of its total budget, the figure would be 9.08%.

This observation highlights a critical challenge: the lack of standardised reporting metrics across cities. Standardising such information would significantly enhance the ability to compare investment strategies, identify best practices, and establish city-level climate action benchmarks. This comparison serves as a reminder of the importance of adopting consistent methodologies to ensure that insights gained are truly comparable.

Sectoral Analysis of Climate Investments

In terms of sector-specific investments, we observe contrasting priorities. City 6 allocates a larger portion of its climate investment to Buildings and Heating (43.98%), which is indicative of a strategy to enhance energy efficiency and reduce emissions in these sectors. Conversely, City C prioritises Transport, with 84.74% of its climate investments directed toward this sector, suggesting a focus on reducing emissions through sustainable mobility solutions. This difference underscores how geographic, climatic, and urban planning considerations influence each city's investment areas.

Sector and sub-sector	Specific sector	Total budget	Climate neutrality investments	% current budget allocation
Transport	Public space and mobility management	16,607,438.58	11,437,500.00	3,09 %
	Active mobility: pedestrianisation, bicycles (parking, lanes, safety, security)	1,191,330.00	947,940.00	0,22 %
	Electrification of vehicles	2,818,200.00	2,818,200.00	0,52 %
	Public transport	18,856,948.26	3,444,813.92	3,51 %
	Logistics	1,540,860.00	1,540,860.00	0,29 %
	Municipal vehicle fleet	770,430.00	770,430.00	0,14 %
	Municipal buildings	53,879,059.47	21,663,739.47	10,03 %

Buildings and heating	Housing	10,156,500.00	10,110,750.00	1,89 %
Energy	Switching to renewable energies	3,459,249.00	3,459,249.00	0,64 %
	Streetlighting	14,248,380.00	1,235,250.00	2,65 %
Waste	Waste management	52,135,537.95	4,887,523.74	9,71 %
	Water cycle management	21,509,454.00	3,843,000.00	4,01 %
Green infrastructure	Green infrastructure	12,995,514.42	1,446,031.23	2,42 %
	Environmental protection	1,023,447.63	812,997.63	0,19 %
Other	Primary sector	732,000.00	622,200.00	0,14 %
	Industry/companies	3,665,773.65	475,800.00	0,68 %
	Governance and social innovation	2,745,000.00	2,745,000.00	0,51 %
Total		218,335,122.85	72,261,284.99	40,66 %

Table 2. Sources of Funding in City 6

Fields of Action	Sector Subsection name	Sector Subsection 1000 EUR including investments and operational costs allocated to city budget 2024	% Current Budget Allocation 2024
Energy systems	E1: Clean Heat - replacing fossil fuels in district heating	153.72	0.005
	E2: Reducing emissions in electricity consumption, oil heating and industrial fuels of housing, industry, and services	4069.92	0.129
	E3: Energy optimization and energy savings in city-owned buildings	1934.31	0.061
	E4: Enabling the increased electrification		
	All Energy systems actions	1233.42	0.039

Energy systems total		7391.37	0.235
Mobility & transport	M1: Promoting walking and cycling	6313.50	0.2
	M2: Promoting the shift to and reducing emissions of public transport	623265.06	19.776
	M3: Reducing emissions of car traffic	14605.23	0.463
	All Mobility and Transport actions	1542.69	0.049
Mobility & transport total		645726.48	20.489
Built environment	B1a: Steering construction to existing centres and good public transport links	640.50	0.02
	B1b : Developing city districts as innovation hubs for low-carbon and smart solutions		
	B2a: Promoting low-carbon construction	93860.70	2.978
	B2b: Emission-free work sites		
	All Built Environment Actions	631.35	0.02
Built environment total		95132.55	3.019
Waste and circular economy	W1: Reducing emissions from waste treatment		
	W2: Promoting circular solutions		
	All Waste and Circular Economy Actions	828.99	0.026
Waste and circular economy total		828.99	0.026

Green infrastructure & nature-based solutions	G1: Directing city growth to built-up areas and preserving carbon sinks	2452.20	
	G2a: Nature-wise and nature conservation measures	1339.56	0.043
	G2b: Fostering biodiversity and nature-based solutions in urban development	9150.00	0.29
Green infrastructure & nature-based solutions total		12941.76	0.411
TOTAL		762021.15	24.179

Table 3. Sources of funding in City C

Financial Structures and Autonomy

A crucial aspect of understanding a city's capacity for climate investment is examining its revenue sources and financial autonomy. City 6 relies heavily on external funding, with 53.55% of its income originating from current transfers from other regional and national administrations. In contrast, City C benefits from a more diversified revenue stream, with 47.3% derived from local tax collection and only 30% from state transfers. This greater financial autonomy allows City C to control its climate investment strategies more.

Challenges Related to State Administration

Both cities face challenges stemming from state-level policies. City 6 is subject to legal restrictions that limit its ability to incur deficits and exceed a debt ceiling based on national legislation enacted in 2012. On the other hand, City C faces uncertainties due to recent changes in state financing following the well-being service county reform in 2023, which has increased its reliance on central government transfers.

Key Challenge: Inadequate Financial Resources

The overarching challenge for both cities is the limited availability of financial resources for climate investments. City 6 faces this issue due to the necessity of fulfilling basic municipal obligations such as sanitation, lighting, and public transport maintenance. City C challenge arises from its status as the most indebted city in their country due to rapid population growth and the subsequent demand for new infrastructure and services. This indebtedness directly impacts City C capacity to invest in climate-related projects.

By analysing these two cities, we gain valuable insights into European cities' complexities and challenges in advancing their climate investment agendas. This analysis is a microcosm of broader trends and challenges in urban climate finance, highlighting the need for tailored strategies, financial autonomy, and consistent reporting to effectively address climate goals across different regional contexts.

3.4 Key Barriers to Climate Investment

Cities within the Mission frequently encounter a range of issues and barriers that hinder their climate transition efforts. Understanding these problems is crucial for developing better European and national policies to support cities.

The 33 Mission Cities identified key barriers in their investment plans, and we have categorised these barriers into 13 distinct categories. All 33 Investment Plans highlighted the major challenges, which we have thoroughly analysed. The most significant issues they face include a lack of human resources within public administration (including insufficient specialisation and poor inter-departmental coordination), the high cost of climate measures combined with inadequate local funding, and a lack of coordination across different levels of government. Notably, 23 out of 33 cities (70%) identified these three challenges as critical. It is evident that cities will require targeted support to address these obstacles if they are to achieve the EU's goal of Climate Neutrality by 2030. Below, we present an analysis of each category along with proposed solutions.

1. Lack of Human Resources in Public Administration

Cities identified three main problems related to human resources:

Specialised Staff and Training: There is a shortage of specialised staff and a need for additional formal training on climate-change policies. To overcome this, European programmes should:

- Provide Specialized Training Programs: Fund and develop training programs focused on climate policies and related skills.
- Create Knowledge Exchange Platforms: Establish platforms for cities to share best practices and experiences in climate action, fostering a collaborative learning environment.

Capacity to Absorb Funds: Cities struggle to absorb available funds due to a lack of resources and capacities. Solutions include:

- Facilitate Grant Specialists: The creation of the City Finance Specialist and the Capital Hub is a first step toward overcoming the cities' need to identify and apply for EU funding and other financial opportunities.
- Simplify Application Processes: Streamline the funding application processes at European and national levels to make them more accessible to cities with limited resources.
- Integrated Planning Tools: Facilitate using integrated planning and management tools that align climate goals with broader city policies.

2. High Cost of Climate Measures and Insufficient Local Funding

Cities face significant financial challenges, with competing priorities and substantial investments needed for climate neutrality. To address this:

- **Increase Financial Support:** European and national governments should provide more grants, low-interest loans, and financial incentives specifically for climate-related projects.
- **Mandate Climate Investments:** Make ecological transition projects a mandatory part of city planning, similar to social and health services, ensuring they receive the necessary funding and attention.

3. Lack of Coordination Between Administrations

Cities demand closer coordination and collaboration with regional and national governments. To facilitate this:

- **Enhance Communication Channels:** Establish regular forums and working groups that include representatives from all levels of government to ensure alignment of climate policies and strategies.
- **Standardise Data and Legal Frameworks:** Develop standardised data-sharing protocols and align legal frameworks to support cohesive climate action plans across different administrative levels.

Following these three key barriers, 60% of cities list two more problems: difficulty on access to funding and the risk of investment on climate-related projects.

4. Difficulty of Finding Funding for the Public Sector

Cities highlight the complications in involving the private financial sector and the intense competition to access European, national, and regional funding. This issue is exacerbated by the multiplicity of schemes, each with different terms and conditions. Additionally, the problem is closely linked to the lack of subsidy seekers and the high cost of measures mentioned earlier. To facilitate this:

- **Public-Private Partnerships:** The Consortium needs to facilitate the development of public-private partnerships by offering incentives and creating platforms for collaboration between cities and private investors.
- **Streamline Funding Schemes:** Create a portal where cities can check all the available funding in Europe and simplify and harmonise the terms and conditions of various funding schemes to make it easier for cities to navigate and apply for funds.
- **Capacity Building:** One of the tasks of the City Finance Specialist will be providing formal training for city staff on identifying and applying for funding opportunities.

5. Risk of Investment in Climate-Related Projects

Cities state that certain investments aimed at ecological transition are not profitable, which deters private partners from participating. Investors often prioritise short-term gains over long-term environmental and social benefits. Moreover, some necessary climate actions do not generate the level of profitability that interests private actors. Changes in government policies related to climate and renewable energy also create uncertainty for investors, making them reluctant to commit capital to long-term projects. To address this challenge, that goes beyond cities:

- **Policy Stability:** Ensure consistent and stable government policies related to climate and renewable energy to build investor confidence.
- **Blended Finance Models:** Promote blended finance models that combine public and private funding, leveraging public funds to attract private investment.
- **Profitability Enhancements:** European institutions should consider offering tax incentives or subsidies to make these investments more attractive to private partners.

Following these barriers, between 40 and 45% of cities stress on the one hand that to achieve climate neutrality, investment from citizens (housing renovation, electric vehicles...) is required and on the other that there's a lack of specialised technological infrastructure.

6. Required investment from citizens

Many climate investments, such as purchasing electric cars or bikes, making residential buildings more energy-efficient, or switching to climate-friendly heating systems, require significant initial capital that many citizens cannot afford despite the long-term profitability. To make it easier for citizens to make these investments, it is required to:

- **Financial Assistance Programs:** Introduce low-interest loans, grants, or subsidies to help citizens cover the initial costs of climate-friendly investments.
- **Public Awareness Campaigns:** Educate citizens on the long-term financial benefits and available financial assistance options to encourage participation.
- **Pay-As-You-Save Models:** Implement models where savings from reduced energy costs are used to repay the initial investment, making it more affordable for citizens.

7. Lack of technology related to climate neutrality

Cities are facing shortages of specialised contractors and trained personnel to implement climate-neutral technologies. The scarcity of local companies manufacturing necessary materials is leading to increased imports and high demand is causing shortages of new technologies or materials, such as solar panels. To improve this situation, it is necessary to develop:

- **Skills Development Programs:** Invest in training programs to develop a workforce skilled in climate-neutral technologies, ensuring a steady supply of specialised contractors and technicians.
- **Local Manufacturing Incentives:** Provide incentives for local companies to start manufacturing climate-related materials and technologies, reducing reliance on imports and supporting local economies.
- **Streamlined Import Processes:** Simplify and expedite import processes for critical technologies and materials to ensure cities have timely access to necessary resources.
- **Research and Development Funding:** Support R&D initiatives focused on developing and scaling up new technologies, ensuring a continuous supply of innovative solutions to meet demand.

Following these barriers, between 35 and 40% of cities express problems related to limits on debt accumulation and a lack of incentives to develop climate policies.

8. Limits on debt accumulation

Cities face challenges with reducing their debt or adhering to national legislation that limits their ability to generate deficits or exceed a debt ceiling for local governments. To overcome this situation, there's a need for more flexible fiscal policies:

- **Flexible Fiscal Policies:** European directives need to advocate for more flexible fiscal policies that allow cities to exceed debt ceilings, specifically for climate-related investments, with stringent criteria and oversight to ensure responsible borrowing.
- **Debt Relief Programs:** Implement national or international debt relief programs that provide financial assistance to cities in exchange for commitments to invest in climate-neutral projects.
- **Municipal Green Bonds:** Encourage the issuance of municipal green bonds, which can attract investors interested in financing sustainable projects while allowing cities to raise capital without increasing traditional debt burdens.

9. Lack of incentives to develop climate policies

Cities report insufficient financial incentives, such as tax credits, subsidies, and grants, coupled with bureaucratic burdens that make clean energy and sustainable technologies economically unattractive. To overcome this situation, there's the need for:

- **Enhanced Financial Incentives:** Increase the availability and accessibility of financial incentives, including tax credits, subsidies, and grants, to make clean energy and sustainable technologies more economically attractive for cities.

- **Streamlined Bureaucratic Processes:** Simplify and streamline bureaucratic processes to reduce the administrative burden on cities seeking to implement climate policies and adopt sustainable technologies.
- **Performance-Based Rewards:** Introduce performance-based rewards where cities that achieve specific climate targets receive additional funding or tax breaks, motivating local governments to develop and implement effective climate policies.

Four additional barriers exist, and 25% to 30% of cities identify them as obstacles: the current economic situation of uncertainty, the lack of data and knowledge about measurement standards and the impacts of climate change, the difficulty in creating public-private partnerships, and political decisions and changes that are not aligned with the objectives of climate neutrality.

10. Uncertainty of the current economic situation

High interest rates and inflation impact the feasibility of climate investments, affecting all actors' willingness to invest in or pay for sustainable alternatives. As mentioned before, developing beneficial policies for climate investments could help mitigate this situation:

- **Subsidised Loan Programs:** Introduce subsidised loan programs specifically for climate projects to offset high interest rates and make sustainable investments more feasible.
- **Incentivising Sustainable Choices:** Provide financial incentives for choosing sustainable alternatives, such as tax breaks or rebates, to encourage investment despite economic uncertainty.

11. Lack of data and knowledge about measurement standards and impacts of climate change

Cities struggle to measure and monitor the cost savings and impacts of climate investments, hindering the ability to identify financeable projects and integrate risk assessments. There's a need to facilitate more data to municipalities:

- **Develop Standardised Measurement Tools:** Create and disseminate standardised tools and methodologies for measuring and monitoring the impacts and cost savings of climate investments.
- **Capacity Building Programs:** Offer training and support to city officials and stakeholders to enhance their understanding and ability to use measurement standards and data effectively.
- **Collaborative Data Platforms:** Establish collaborative platforms for data sharing and best practices among cities to improve knowledge and measurement capabilities.

12. Difficulty in creating public-private partnerships

Cities assess that a lack of experience or regulatory restrictions hinder structural collaboration between public administration and the private sector. To overcome this situation:

- **Experience Sharing and Mentorship:** Inside Net Zero Cities, there's the possibility of establishing programs where experienced cities can mentor those with less experience in forming and managing public-private partnerships.
- **Partnership Frameworks:** Develop clear frameworks and guidelines for creating and managing public-private partnerships, providing a roadmap for successful collaboration.

13. Political decisions and changes not aligned with the objectives of climate neutrality

Political decisions and changes that are not aligned with climate neutrality objectives can deprioritise climate investment. To overcome this situation:

- **Institutionalise Climate Goals:** Net Zero Cities needs to work on embedding climate goals into city charters or long-term strategic plans to ensure continuity regardless of political changes.
- **Stakeholder Engagement:** Engage a broad range of stakeholders, including businesses, NGOs, and the public, to build a strong consensus and support for climate initiatives that can withstand political changes.

3.4 Investment in Participation and Citizen Engagement

This section analyses the state of investment in participation and engagement across the Mission Cities. Quality participatory processes require substantial resources and investment. Dedicating funds for these processes in the Investment Plans (IP) can be seen as a crucial indicator for the success of citizen participation and the overall mission.

A review of the 33 Investment Plans of the Mission Cities reveals a clear trend: investment in participation is lacking in many IPs. Most Investment Plans do not allocate adequate resources for participatory processes, undermining the potential for meaningful citizen engagement and the effectiveness of the mission's objectives. Additionally, it appears that many Investment Plans frame citizens' roles in a passive manner, focusing on information dissemination and behaviour change efforts rather than fostering active involvement. While this approach may stem from a need to guide citizen behaviour toward mission goals, it significantly limits the potential for citizens to contribute meaningfully to decision-making processes and points towards a potential democratic deficit.

Given the significant role that citizens are expected to play in achieving the cities' goals and addressing major challenges, their participation and engagement should be more prominently featured and robustly funded in the Investment Plans. The current trend indicates a misalignment between the strategic importance of citizen engagement and the resources allocated for it. This discrepancy is particularly concerning because while the success of the mission heavily relies on citizen participation, there is insufficient investment in creating opportunities for citizens to voice their concerns and opinions.

Furthermore, few cities have implemented or plan to implement Participatory Budgeting, a democratic process that allows citizens to have a direct say in how public funds are allocated and spent. Participatory Budgeting is a powerful tool for fostering greater transparency, accountability, and public trust in local governance. By adopting a more systemic approach and involving transition teams, cities can create a participatory budgeting system that allows citizens to participate meaningfully, is legitimate, and is closely tied to decision-making and tangible actions. This integration with the city's operations would reduce the risk of participatory budgeting being seen as a minor or low-impact effort.

The absence of Participatory Budgeting highlights the limited role of genuine citizen involvement in financial decision-making within these cities, without mechanisms like Participatory Budgeting, the budgeting process tends to be more top-down, with decisions primarily made by a select few rather than through a fully democratic, inclusive process. This can lead to a disconnect between municipal spending and the actual needs and preferences of the community, potentially resulting in inefficient use of resources and reduced public satisfaction with local government.

Consequently, this highlights a tension between the cities' goals and the need to create legitimate, inclusive decisions regarding their actions. The disparity between the importance of citizen engagement and the investments allocated for this purpose calls into question the commitment to achieving truly

participatory governance. To better align investments with the mission's goals, cities should ensure that participatory processes are given appropriate funding, ensuring that citizen engagement is robust, meaningful, and capable of driving legitimate and effective decision-making.

4 Key Outcomes

The analysis of climate action investment across 33 cities highlights several critical challenges and opportunities. This section outlines the main findings, focusing on the transparency of climate budgets, sectoral investment trends, and the key barriers hindering cities' progress toward climate neutrality. Addressing these issues is essential to ensure effective climate action and meaningful progress toward the 2030 goals.

1. **Lack of Budget Transparency and Standardisation:**
 - Out of the 33 cities analysed, 12 failed to provide enough detailed information about their climate-related budgets. Many cities lacked clarity on how much of their budget was allocated to climate action, making it difficult to assess and compare investments.
 - The absence of a standardised definition of "climate-related expenditure" across cities further complicates the analysis, highlighting the need for common reporting standards.
2. **Sectoral Investment Disparities:**
 - Transportation was the sector receiving the largest share of climate investment, comprising almost half of the budgets in cities that submitted data. However, this focus may be limiting the broader scope of climate action needed, as other sectors like energy and green infrastructure appear to receive less funding.
3. **Key Barriers to Climate Action:**
 - Cities cited several barriers to implementing climate measures: lack of sufficient human resources, the high cost of initiatives, and inadequate local funding.
 - Coordination issues between various levels of government exacerbate these problems, making it harder for cities to access available funding and integrate climate policies.
 - Additionally, many cities struggle to attract private sector investments and face constraints due to national debt restrictions, which limit their ability to raise capital for large-scale climate projects.
4. **Limited Support for Citizen Participation:**
 - Despite the emphasis on public engagement in climate initiatives, cities allocate insufficient resources to support participatory budgeting and citizen involvement in planning. This creates a disconnect between local governments and communities, which could hinder long-term climate neutrality efforts.

5 Next Steps

Achieving climate neutrality by 2030 will require substantial improvements in the following aspects: funding transparency, coordination among different levels of government, and the availability of financial and human resources. Cities face numerous challenges, including inconsistent reporting on climate action budgets, limited funding, and inadequate capacity to implement necessary measures. Strengthening these areas is crucial for cities to overcome barriers and make meaningful progress toward their climate goals.

Enhance Funding Transparency: There is a critical need for cities to adopt standardised methods for reporting their climate-related expenditures. This will improve accountability, facilitate comparisons, and enable better decision-making on climate action.

Strengthen Government Coordination and Funding Processes: Cities must streamline their coordination with regional, national, and European governments to access and align available funds for climate projects. Improved intergovernmental cooperation can also help eliminate bureaucratic bottlenecks and increase efficiency.

Leverage External Support: Mission-labelled cities should utilise resources such as the Capital Hub and the European Investment Bank to bridge financial gaps, overcome high project costs, and strengthen human resources. The impact of this external support must be closely monitored to ensure that cities are overcoming the key barriers they previously identified.

Continuous Evaluation: As cities continue to adapt their investment plans and strategies, ongoing analysis will be essential to track improvements and identify areas that require further intervention. This evaluation should focus on how effectively cities are addressing the challenges highlighted in their earlier assessments, such as funding, human resources, and the involvement of citizens in decision-making.

6 Conclusion

Cities are responsible for a disproportionate share of global energy consumption (60-80%) and carbon emissions (75%), which makes their role in mitigating climate change critical. However, their mandates and budgets are not aligned with the scale of this responsibility. Unlike mandatory tasks such as waste management or public safety, climate change action is often voluntary, leaving cities without the necessary financial resources to make meaningful progress.

European institutions need to provide increased support to cities committed to achieving climate neutrality by 2030. Through initiatives such as the Capital Hub, European Investment Bank, and specific climate financing, these cities can overcome the barriers they face, including limited budgets and a lack of coordination across governance levels. Ensuring that cities have the tools and resources they need will be essential to meeting both local and global climate goals.

7 Bibliography

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AWAITING APPROVAL BY THE EUROPEAN COMMISSION