

CCC HIGHLIGHTS

BARRIERS TO CLIMATE NEUTRALITY

SUMMARY

The EU Mission Label has been awarded to 33 cities as of October 2024 — with 10 cities receiving the Label in October 2023 and another 23 in March 2024. The Label recognises each city’s commitment to achieve climate neutrality by 2030, as set out in their respective Climate City Contracts (CCCs). This factsheet, as part of a wider series titled “CCC Highlights”, explores the types of barriers that the labelled cities identified as major obstacles to the implementation of their path to climate neutrality and, in particular, to the success of the planned measures set out in their action plans.

Main takeaways:

- **Institutional barriers** are the most significant obstacles cities face in achieving climate neutrality. The primary institutional barriers consist of **regulatory challenges and fragmentation of responsibilities** across different government levels.
- **Behavioural barriers** account for 18% of all mapped challenges. Within this category, different types can be identified, such as **lack of awareness, opposition** to climate action, and **lack of participation** of society in climate actions.
- **Infrastructural barriers**, namely those which are inherently linked to the infrastructure and technologies necessary to reach climate neutrality, were also identified by the cities. The high **upfront costs** of climate mitigation infrastructure were most often mentioned for this category.

First Cohort of Mission Label Cities (Label awarded in October 2023)	Second Cohort of Mission Label Cities (Label awarded in March 2024)
<ul style="list-style-type: none"> • Sønderborg • Cluj-Napoca • Klagenfurt • Mannheim • Valladolid • Vitoria-Gasteiz • Madrid • Stockholm • Valencia • Zaragoza 	<ul style="list-style-type: none"> • Ioannina • Kalamata • Kozani • Thessaloniki • Heidelberg • Leuven • Espoo • Lahti • Lappeenranta • Tampere • Turku • Barcelona • Seville • Pecs • Malmö • Guimaraes • Lisbon • Florence • Parma • Marseille • Lyon • Limassol • Izmir



WHAT IS THE MISSION LABEL?

The Mission Label is the European Commission's recognition of cities' successful development of their CCCs, which outline the overall vision for climate neutrality and contain an action plan and investment strategy.

A DIVERSE RANGE OF BARRIERS

In their CCCs, and specifically in their Action Plans, the 33 Mission-labelled cities mapped existing or foreseen barriers that might hinder their journey to climate neutrality. The cities reported a total of **590 barriers**. On average, cities mapped 18 barriers, though some cities identified as many as 56 distinct obstacles. Barriers to implementing climate-mitigation actions were categorised into **institutional, infrastructural, behavioural, and other barriers**. Considering the aggregated data, **institutional barriers emerged as the most prevalent**, representing 57% of the total, while **behavioural and infrastructural** barriers each accounted for 18% (Figure 1). The remaining 7% did not fit into any predefined categories and were classified as "other barriers".

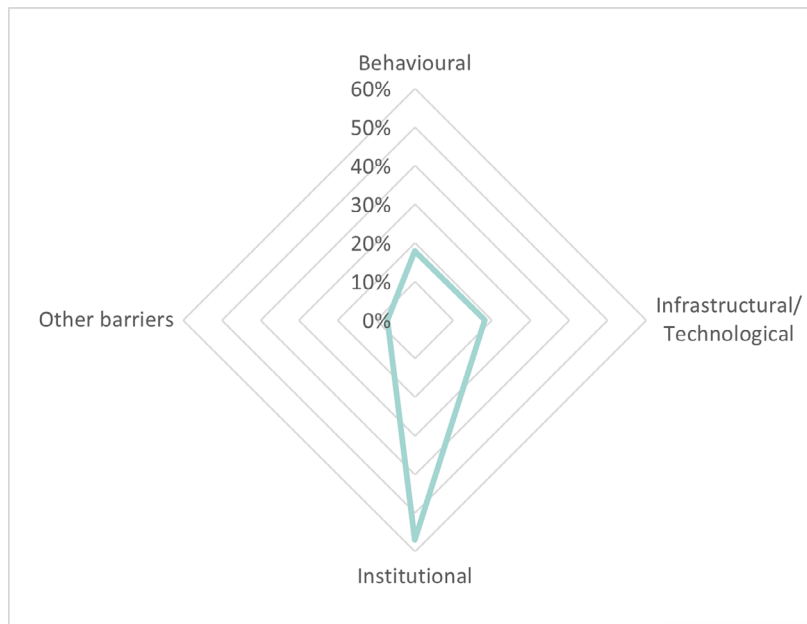


Figure 1. Types of barriers



Even when examining data on a city-by-city basis, the pattern holds: all cities report that the most significant obstacles to achieving climate neutrality are institutional in nature, such as capacity constraints, challenges with multi-level governance integration, and regulatory red tape. This underscores institutional frameworks' critical role in shaping cities' climate actions. The following section delves deeper into the definition of these barrier types, offering a closer look at their subcategories and specific examples from the cities.

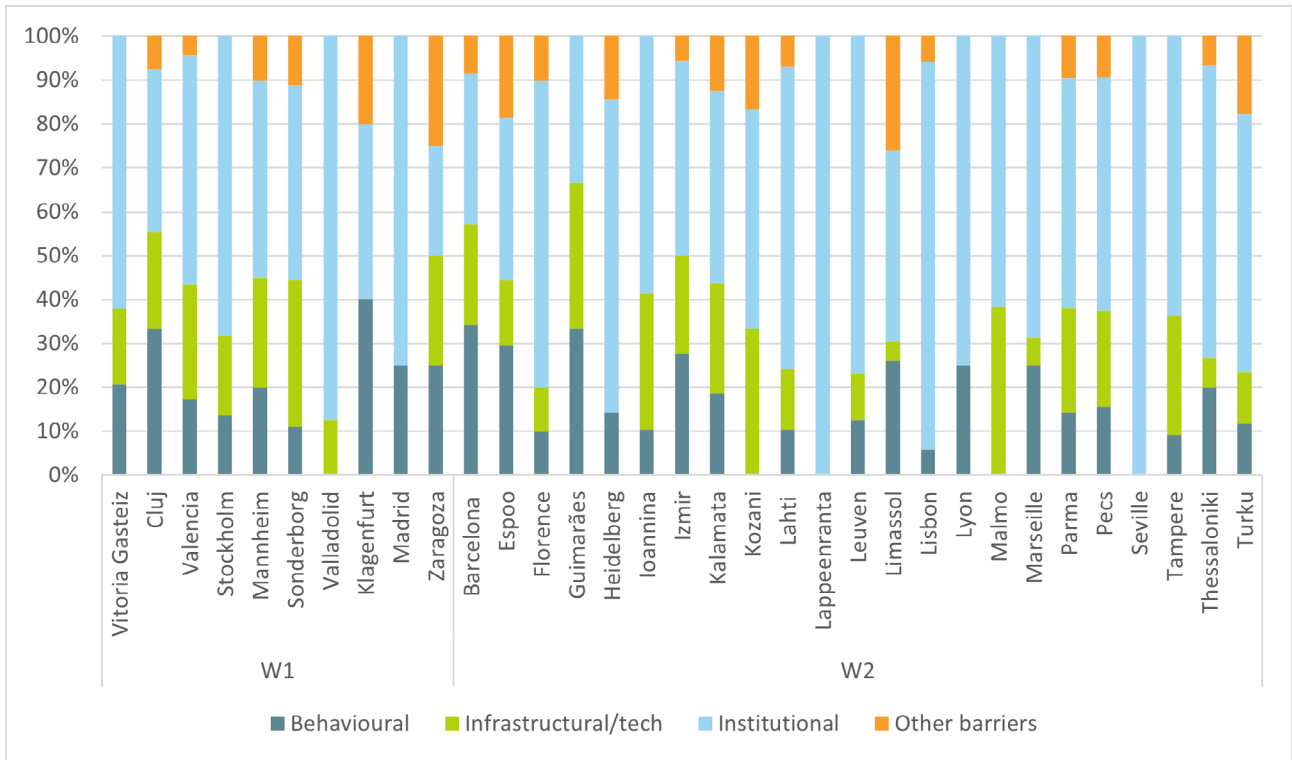


Figure 2. Types of barriers by city

INSTITUTIONAL BARRIERS

Institutional barriers were categorised by subtype and analysed according to the level of government responsible for them, as identified by cities in their CCCs. The bar chart below (Figure 3) illustrates the distribution of these barriers across various governance levels — local, metropolitan/regional, national, and EU/international. Barriers not explicitly attributed to a specific governance level in the CCCs are marked as “no data”.

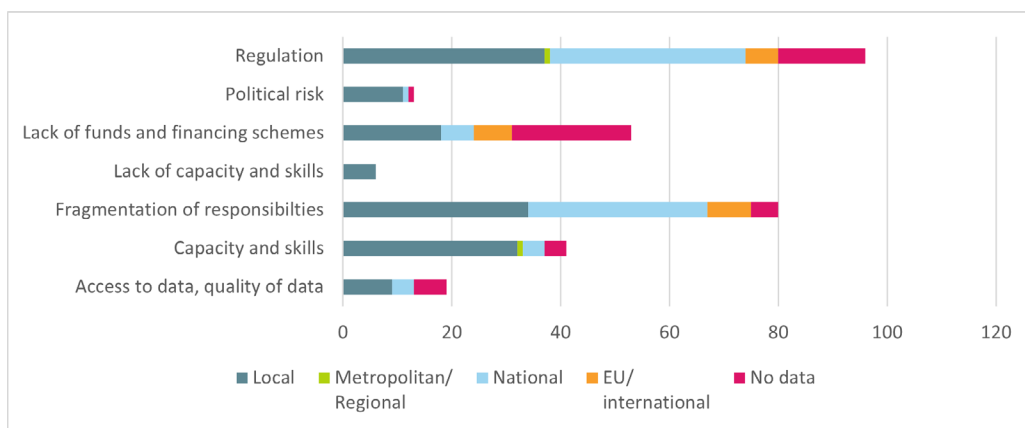


Figure 3. Subtypes of institutional barriers according to level of government



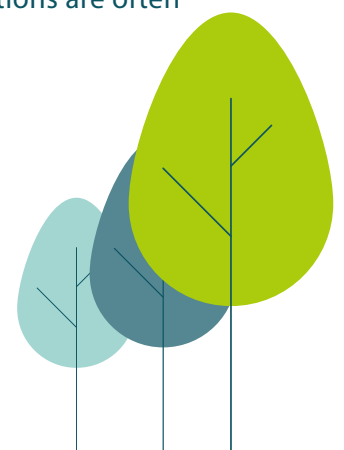
Among the different types of institutional barriers, **regulatory challenges and fragmentation of responsibilities across different government levels account for 57% of all the mapped institutional barriers.** Lack of funds and financing schemes, and capacity and skills represent 17% and 14%, respectively, of the total mapped barriers. Only a few cities referred to political risks and access to data.

As illustrated in Figure 3, **regulatory obstacles** are referred to problems caused or to be addressed at local, national, and European levels. Cities frequently cite issues such as excessive regulations, bureaucratic complexity, and red tape. Common examples include difficulties with **public procurement rules** and frameworks for establishing **public-private partnerships**. At the local level, these barriers often arise from a need for more capacity within public administrations to navigate complex and rapidly changing legal frameworks across different government levels. At the national level, however, these barriers typically refer to misalignments between existing legal frameworks and the implementation procedures required at the local level to achieve climate neutrality. Examples include issues related to land management for parking regulation, energy policies for renewable infrastructure development, and taxation or incentives for specific sustainable practices.

“A factor influencing traffic volumes is the taxation on work travel. The (national) government has suggested to return to a former system benefiting long work travels by car.”
City of Stockholm

“The public-private collaboration that is essential for the joint construction of new urban models and imaginaries is not sufficiently developed. There are few mechanisms that explore formulas for collaboration beyond contracting and sponsorship. There is a lack of formulas that allow for a systemic and continuous participation of all the agents involved in the areas of action. In terms of urban management procedures, the conventional formulas of sponsorship and patronage, combined with the limitations of public procurement, do not allow for the flexible public-private management of investments required for the transition to carbon neutrality.”
City of Madrid

Fragmentation of responsibilities, considering both horizontal and vertical governance integration, emerged as another key obstacle for cities when implementing climate actions. Horizontally, cities report a lack of coordination among local entities — such as agencies, service providers, citizens, and private actors — as well as within their own administrations, where departments often work in silos rather than collaboratively toward shared goals. Vertically, cities point to poor integration with metropolitan, national, and EU institutions, whose policies and actions are often misaligned with local needs. While these barriers sometimes overlap with regulatory challenges, the distinction lies in their nature: regulatory barriers refer to specific issues within existing legal frameworks that hinder action, while fragmentation of responsibilities reflects cities' perspectives on the misalignment of climate-related jurisdictions. In the latter case, cities report that the responsibility for implementing certain actions lies outside of their boundaries, leaving the city administration with no leverage to ensure that all needed actors engage in the journey to climate neutrality.





“Another already described systemic barrier is that only one third of the measures are under the influence of the City and the Mannheim Group. One third are influenced by the framework conditions at EU, National and State Level. And one third is dependent from the private capital, companies and citizens”. **City of Mannheim**

Within the broad category of institutional barriers, the **lack of funding and financial schemes** significantly limit cities' ability to achieve climate neutrality. This challenge often stems from the constrained financial resources of local governments, both in terms of available funds and the capacity needed to navigate diverse financial opportunities across governance levels. In many cases, the cities that mentioned this barrier in their CCCs do not link it specifically to the local government. Rather, they refer to it as a general limitation, not tied to any specific entity. It often reflects the uncertainty cities face when planning the financial coverage for their Action Plans, especially in a multi-actor context where responsibilities are fragmented and unclear.

“Subsidy procedures based on calls for proposals are not appropriate. They are often top-down and can sometimes be out of step with the projects' ambitions and resources. In addition, some criteria can appear to be restrictive and unsuitable for projects. Also such call for proposals require a huge amount of time to respond, and in some cases there is strong competition between local authorities.” **City of Lyon**

Behavioural barriers

Behavioural barriers to climate action, as identified in the cities' Action Plans, account for 18% of all mapped challenges. Due to the broad nature of this category, further classification was used to assess different types of behavioural barriers.

- **Lack of awareness:** Cities highlighted a lack of awareness or shared knowledge among society, which can hinder both the acceptance of climate actions and the engagement of citizens in taking ownership of climate action efforts. This often manifests in low levels of public understanding about the urgency or benefits of proposed climate measures.

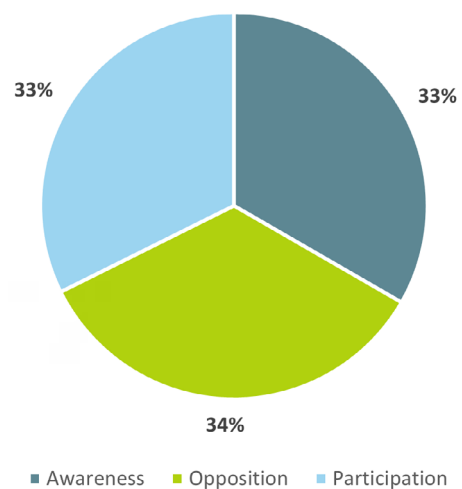


Figure 4 Behavioural barriers by subtypes

“Awareness and education: a challenge is the lack of public awareness and understanding of the importance of energy efficient buildings and their role in reducing carbon emissions, with the effect of limited support for sustainable building practices and slow adoption of energy efficient technologies.” **City of Pécs**





"There is a need for greater awareness of the real and noticeable impacts of climate change among the population, such as those resulting from heat or the concentration of potentially harmful gases in the air. To overcome this barrier, the city of Zaragoza will seek to work on public information activities, as well as improving communication and early warning systems for potential health hazards." **City of Zaragoza**

• **Opposition to climate action:** Cities anticipate resistance to changes that challenge the status quo. This opposition often stems from sectors where significant transformations are required, such as mobility or the building industry.

"Ambitious interventions such as the elimination of parking spaces in favour of natural infrastructure can meet with resistance from the public." **City of Leuven**

"Climate action is not seen as a top priority in the eyes of all our citizens, particularly when we refer to the communities that are prone to poverty and have a reduced ability of understanding such matters. Thus, we expect that some residents will oppose to the massive financial investments needed in order to achieve the proposed climate neutrality interventions." **City of Cluj-Napoca**

"Industry resistance to change: the traditional construction and real estate industry may be resistant to adopting new technologies and practices that are energy efficient but require upfront investment, which may lead to slow uptake of energy efficient building methods and technologies." **City of Pécs**

• **Lack of participation:** Cities noted difficulties in engaging broader society in climate policies, with a common perception that there is a disconnect between communities and the institutions responsible for implementing climate actions. Many cities identified the absence of deliberative platforms close to local communities as a barrier, preventing citizens from being empowered and involved in decision-making processes.

"In the case of waste management, the main barrier is the insufficient participation of citizens and businesses in selection and separation of waste at source, which leads, on the one hand, to insufficient waste separation, and on the other hand, to low quality separated waste, which makes recycling processes inefficient and leads to downcycling. In addition, some waste prevention actions are ineffective due to low reuse rates." **City of Vitoria-Gasteiz**





These subcategories are often overlap. For instance, a lack of awareness can lead to lower levels of ownership and participation. However, these distinctions allow for grasping the different ways in which cities frame the problem. Whether the issue is perceived as a knowledge gap or opposition to change, the expected action to address the root causes might change. A comparative analysis of cities' planned actions could provide deeper insights into how they intend to overcome these behavioural challenges.

INFRASTRUCTURAL BARRIERS

Beyond institutional and behavioural barriers, cities highlight challenges inherently linked to the infrastructure and technologies necessary to reach climate neutrality. The most common issue with climate mitigation infrastructure is their **high upfront costs**.

“New technologies, new solutions for climate action require very high and sometimes prohibitive costs.”
City of Vitoria-Gasteiz

“The high costs of cleaner technology both for private vehicles and commercial ones, negatively impacts its adoption not just by citizens but also by enterprises.” **City of Guimarães**

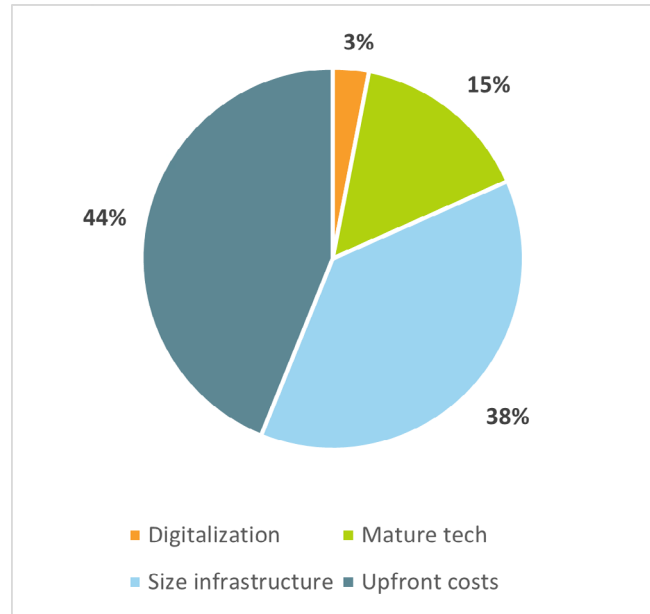


Figure 5 Infrastructural barriers by type

While there may be overlaps, it's important to distinguish between the institutional barrier referred to before as *lack of funds and financing schemes* and the *upfront infrastructure costs*. Concerning the former, cities refer to the fact that achieving climate neutrality is hindered by the absence of adequate financing mechanisms or available funds from public or private sources to support the duration of projects. In contrast, in the case of upfront costs, cities simply refer to the immediate capital required to implement specific infrastructure.

The *size of the infrastructure* represents 44% of the infrastructural barriers identified. This refers to the capacity and scale of existing infrastructure, whose continued use due to its technological lifespan will impact cities' journey to climate neutrality. A common example is the limited availability of charging infrastructure for electric vehicles (EVs) and the challenges of expanding it due to space constraints and land-use conflicts. Another frequent issue is the existing transportation networks or heating systems that were developed without flexibility for easy transformation into more sustainable alternatives.

“The production and use of biogas from biomass and biodegradable waste components is of interest to the municipality, especially as energy source to the waste collection vehicles. The region's waste treatment plant (Resinorte) does not currently have the necessary infrastructure for this type of action, nevertheless, investments are being made to make this possible.” **City of Guimarães**



“Charging infrastructure is a bottle neck in shift to e-mobility.” **City of Espoo**

OTHER BARRIERS

Although they represent only 7% of the barriers cited by the 33 cities, what has been categorised as "other barriers" reflects a broader way in which cities frame their position relative to the ambitious goal of achieving climate neutrality. While designing detailed action and investment plans with specific measures, milestones, and timelines, some cities acknowledge the possibility of external factors impacting their climate journey beyond their control. These external factors include:

- **Market uncertainty**, such as inflation, financial instability, or supply chain disruptions caused by geopolitical events or public health crises.
- **Climate-related unforeseen and extreme events**, including heatwaves, droughts, or heavy rainfall.
- **Territorial morphology and contextual factors**, such as harsh winters, can complicate the shift from private car use to sustainable mobility options.

While not directly within a city's control, these external influences emphasise the importance of flexibility and resilience when it comes to climate strategies, as cities must adapt to evolving conditions that could derail or delay their progress toward climate neutrality.

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