MISSION CITIES' POLICY BRIEF
INDUSTRY DECARBONISATION

This policy brief presents a contribution to ongoing dialogues for Europe's Clean Industrial Deal through city-industry collaboration for EU decision-makers and European national authorities.

NetZeroCities is a consortium consisting of 33 partners from 27 European countries, managing the EU Cities Mission platform. The project supports the 112 European cities known as the Mission Cities in drastically reducing their greenhouse gas emissions to achieve climate neutrality. The EU Cities Mission supports the European Green Deal in building a low-carbon, climate-resilient future through research and innovation.

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EXECUTIVE SUMMARY

In the second quarter of 2024, industry accounted for 22.7% of the EU's total emissions. Cities play a key role in driving decarbonisation by fostering innovation and serving as hubs for economic activity. While the European Climate Law enshrines in legislation the goal set out in the European Green Deal for the European Union to become climate-neutral by 2050, urban areas are key to helping lead the transformation of energy-intensive industries through their capacity to balance economic growth and sustainability. However, cities face great challenges, such as the high costs of ensuring the transformation of energy-intensive industries, restricted budgets and a lack of access to EU funds, and fragmented governance that caps their authority to regulate emissions of key industrial players.

This Policy Brief summarises the observations and discussions from the NetZeroCities Policy Lab on Industry Decarbonisation and contributes to the ongoing dialogues facilitated by the European Commission between Mission Cities, the industry, and national governments for Europe's Clean Industrial Deal. It outlines the EU industrial policy landscape and the current industrial decarbonisation scenario within European cities. It highlights exemplary cases in three Mission Cities that are heavily impacted by emissions from the industrial sector: Dunkirk, Differdange, and Košice, illustrating the complexities between local sustainability ambitions, national economic priorities, and global market pressures. Their experiences underline the urgent need for stronger multilevel collaboration, clearer governance frameworks, and increased financial and technical support.

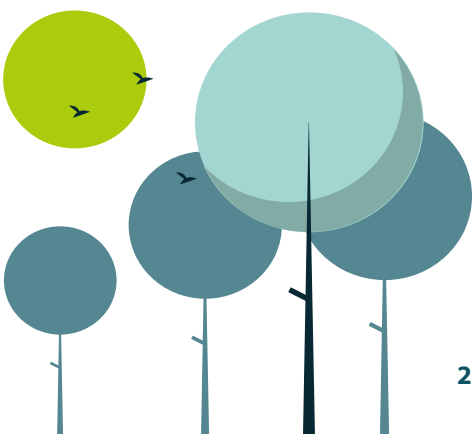
The key recommendations developed in this Policy Brief advocate for:

- **Enhanced financing mechanisms** to support cities, their local industries and innovation ecosystems.

- **Strengthened multilevel governance and dialogue platforms**, such as the Clean Industrial Dialogues, that align local and national priorities while integrating private sector participation.

- **Simplification of bureaucratic barriers** to enable more effective access to funding and capacity-building initiatives for cities, their local industries and innovation ecosystems.

- **Standardised frameworks for sustainable public procurement** to empower cities to embed decarbonisation criteria into their processes.



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INTRODUCTION

NetZeroCities Policy Labs are designed to empower Mission Cities' representatives to raise their climate-related policy needs to EU decision-makers. The labs focus on both informing participants about the latest developments in EU climate policy impacting the Mission Cities' path towards climate neutrality and diving into cities' challenges. By shining a light on the above-mentioned, the labs aim to extract policy recommendations to advocate for the needs of our cities at the EU level.

Through these sessions, NetZeroCities supports Mission Cities in identifying gaps that must be addressed at the EU level and promotes a space (online or in-person) for knowledge exchange with peer cities. Policy labs allow cities to learn from one another on similar policy challenges, formulate policy recommendations, and ensure that the needs of cities are effectively communicated to EU representatives via the dissemination of the final output: the Policy Brief.

After successfully organising six Policy Labs since December 2023 on topics ranging from Circular Economy to Nature-Based Solutions and Built Environment, this policy lab tackles the decarbonisation of industry in Mission Cities.

As the new term of the European Commission began, with Ursula von der Leyen continuing as its president, the NetZeroCities' policy lab on industrial decarbonisation provided a timely and valuable opportunity for European cities. The representatives of the Mission Cities presented the challenges they face in their efforts towards decarbonisation with the hope of contributing to the upcoming EU policies that will shape the future of the EU industry. This new beginning for the European Commission opens the door for cities to remain central actors in the EU decarbonisation strategy and the achievement of the Union's climate neutrality goals. By addressing systemic barriers and fostering innovative partnerships, cities can lead the transition to a sustainable, low-carbon industrial future, ensuring the EU meets its ambitious climate and industrial objectives.

The following policy brief analyses the current EU Industrial Policy Framework and the challenges European cities face in decarbonising the European industry sector. As a result, this document compiles recommendations based on the discussions during the NetZeroCities Policy Lab on Industry Decarbonisation, which brought together representatives of local authorities, the European Commission, and industrial partners.

EU POLICY FRAMEWORK ON INDUSTRIAL DECARBONISATION

EU actions have aimed to speed up the adjustment of industry to structural changes, such as the transition to climate neutrality, through initiatives like the Green Deal Industrial Plan, the Fit for 55 package, and the Just Transition Mechanism.

The creation of a policy area focusing on the Single Market and Monetary Union came when Europe needed to find a solution to its rapid de-industrialisation and limited growth while competition was growing in emerging markets. To enhance competitiveness and address the challenges posed by the financial crisis of 2008, the EU published the "**Integrated Industrial Policy for the Globalisation Era**". It was the first time the EU sought to actively position itself as a leader in the global economy while promoting sustainable growth, innovation, and the modernisation of European industries. Promoting sustainability through integrating environmental considerations, addressing structural challenges such as energy costs, access to raw materials, and improving the regulatory environment while enhancing EU industry competitiveness are the three pillars of the 2010 industrial strategy.

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In 2019, the EU launched **the EU Green Deal.** This holistic strategy laid the foundation for a transformative growth strategy by embedding sustainability and decarbonisation at the core of Europe's economic and industrial policies. It dramatically intensified the push to align industrial goals with environmental goals. It emphasised the need for a systemic transformation of energy-intensive industries like steel, cement, chemicals, and transport to reach climate neutrality by 2050.

The EU Green Deal helped further develop cleaner technologies to lead in global green innovation. This contributed to promoting even more renewable energy production while pushing for sustainable product policies that affected electronics, textiles, and battery manufacturing. Stricter emission standards were imposed to some sectors.

In 2024, the Commission published the **NetZero Industry Act** to promote the EU as the home of cleantech industries and in response to the US Inflation Reduction Act. It fostered the promotion of sustainable public procurement in clean technologies, the creation of Net Zero Acceleration Valleys and the Net Zero Industry Academies to train 100,000 workers within three years and increase economic growth.

The EU has the capacity and the means to propose a coherent and integrated industry policy. The 2024 re-elected European Commission President Ursula von der Leyen has announced the continuation of the climate agenda and the bolstering of competition through the forthcoming **Clean Industrial Deal**, which will shine a light on one of the key political guidelines of the new Commission – the promotion of Prosperity and Competitiveness for the EU. However, this goal must not come free of climate and environmental obligations, as the new Commission still aims at reaching climate neutrality by 2050. According to the political guidelines of Ursula von der Leyen, the Mission Letters to the commissioners and their confirmation hearings, the Clean Industrial Deal would include:

- **An Action Plan on Affordable Energy**
- **An Industrial Decarbonisation Accelerator Act**
- **A European Competitiveness Fund**
- **A Circular Economy Act**

To gather as many insights and recommendations from stakeholders as possible, prior to the publication of this strategy, the Commission held 9 Clean Transition Dialogues (2023) focused on hydrogen, energy-intensives industries, clean tech, energy infrastructure, critical raw materials, forest-based bioeconomy, cities, clean mobility, and steel with the aim to transform Europe into a clean, resource-efficient, fair and competitive economy. Cities were invited to one of these.

It is feared that the upcoming strategy will feed into the same narrative that has been presented up until now, adding it to the already existing and unclear strategy that has been presented by the EU over the years. As part of the political priorities of the re-elected European Commission 2024-2029, the **Industrial Decarbonisation Accelerator Act** will also be put forward. This act aims to channel investment in infrastructure and industry for energy-intensive sectors and speed up planning, tendering, and permitting processes for clean technologies. It will be joining an updated Circular Economy Act, an Action Plan for Affordable Energy Prices, and the revision of the EU Public Procurement Directive, all these proposals being part of the Clean Industrial Deal for competitiveness and industrial decarbonisation.

The lack of clear continuity between the different strategies has created a patchy industrial policy framework. There is a need to make available a clear mechanism that ensures the streamlining of EU funds for local authorities to allocate to the development of innovative business models and improve market conditions for cleantech demand and manufacturing through a revision of the public procurement directive. But most of all, it is important to build this strategy from a strategic governance perspective by allowing a structured dialogue with industry, local governments, and civil society.

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Therefore, during this mandate, the EU should recognise cities' central role in the implementation of the Green Deal Industrial Plan (the EU's plan to decarbonise industry by 2050) and the design of the Clean Industrial Deal and all its legislative components, encourage cities partnerships with local industries, support cities as shareholders in strategic net-zero projects, and invest in local utility companies to ensure good employment opportunities. In this context, the EU should empower cities to use public procurement more strategically and shape public markets toward sustainability and social responsibility.

PRESENTING THE CHALLENGE OWNERS

DUNKIRK

Dunkirk's challenge lies in balancing ambitious economic growth plans and the imperative for sustainable development. The city anticipates a significant influx of new industries in the coming years, including a gigafactory for batteries, which promises to boost the local economy. However, this growth comes with the potential for increased emissions, posing a significant hurdle for Dunkirk's objective to achieve carbon neutrality in its industrial zone by 2050.

As one of France's largest industrial greenhouse gas emitters, Dunkirk faces challenges in meeting its climate targets. The city's Climate City Contract focuses on reducing emissions within the urban area but does not directly address those generated by its industrial sector. This focus makes meeting the ambitious 80% reduction target more difficult.

Dunkirk's approach to overcoming these challenges involves a four-pillar strategy: adopting a bottom-up approach to engage with local stakeholders and understand their needs, aligning with broader regional, national, and European policies, developing tools to track decarbonisation progress, and analysing potential risks related to climate and economic factors. This strategy aims to create a framework supporting economic development and long-term sustainability.

DIFFERDANGE

As a city with a long history in steel production, Differdange's transition to a low-carbon future is particularly complex. Despite adopting electric arc furnaces in the 1990s, considered a more environmentally friendly technology than traditional blast furnaces, the local steel plant remains responsible for 90% of the city's total emissions. This highlights a potential challenge in balancing Differdange's ambition to improve residents' quality of life through emissions reductions with the national government's focus on economic priorities. The steel plant is recognised as a key national asset, and the Ministry of Economy emphasises its role in supporting economic stability, which may at times differ from the city's decarbonisation goals.

The city's limited authority over the plant's operations is a further challenge. Most decisions are made at the national level, leaving Differdange unable to regulate emissions directly. Collaboration is generally restricted to smaller projects, such as using waste heat from the plant for the city's heating system, while significant decisions regarding technological upgrades are outside the city's control.

Additionally, the steel plant must remain competitive in the face of international competition, particularly from countries with less stringent environmental regulations. The expiring patents that previously protected the plant's position of Differdange in the market now pose a significant risk as the company seeks to invest in decarbonisation technologies while remaining competitive. These factors illustrate the complexity of aligning local sustainability ambitions with broader economic and competitive realities.

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KOŠICE

Košice faces the challenge of reducing its dependence on a carbon-intensive steel industry while maintaining economic stability. Since the 1960s, the steel plant has been a central part of the city's economy, providing 8,000 direct jobs and contributing 5% to Slovakia's GDP. However, the plant is also responsible for one-third of the country's CO_2 emissions, placing it among the European Union's top 20 emitters.

Decarbonising the steel plant is essential for environmental sustainability but must be carefully managed to avoid negative impacts on the local economy. The plant also operates under pressure from international competition, particularly in countries with less stringent environmental and labour regulations.

Like Differdange, Košice operates within a governance framework where key decisions about the steel plant's future are made at the national level, limiting the city's ability to influence the decarbonisation process. This governance structure poses a challenge for the city in effectively managing the social and economic impacts of decarbonisation while shaping a transition that prioritises the well-being of its citizens and the broader regional economy.

OVERALL OBSERVATION

In their presentation, Differdange, Dunkirk, and Košice highlighted the complex relationship between local sustainability objectives, national economic priorities, and global market pressures. Addressing these challenges requires stronger coordination between different levels of governance, policies that align economic growth with decarbonisation goals, and frameworks that give cities a more active role in shaping their sustainable futures. This is what this Policy Brief tries to address through its recommendations.

POLICY RECOMMENDATIONS

The decarbonisation of industry is one of the most significant challenges —and opportunities— European cities face. By supporting innovation, reducing bureaucratic barriers, and ensuring adequate financing, the EU can help local governments foster sustainable, competitive industries while ensuring SMEs and people are not left behind. The recommendations outlined below have been extracted from the discussions held during the NetZeroCities Industry Decarbonisation Policy Lab on 13 November 2024. These provide a framework for multilevel collaboration and targeted support to accelerate industrial decarbonisation and achieve climate goals. Cities are key partners in this transition, and their engagement is crucial for the EU to meet its industrial and climate objectives.

STRENGTHENING MULTILEVEL GOVERNANCE AND CROSS-SECTOR DIALOGUE

• The EU should foster the implementation of continuous dialogue mechanisms between local governments, private sector stakeholders, national governments, and EU institutions to ensure that resources, including funding, are strategically used to support long-term industrial transformation. This approach will encourage collaboration across the different levels, and prevent over-reliance on state support. Establishing clear sector-specific strategies to support industrial transitions is key to addressing the specific pressures of the market per sector.

• Throughout 2024, the European Commission has been hosting **Clean Transition Dialogues** with the aim of consulting with stakeholders on how to approach industrial decarbonisation in the EU. As the next steps, dialogues and working

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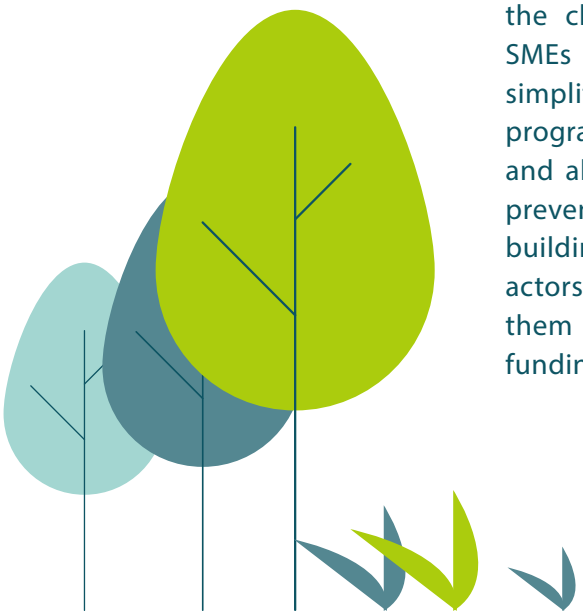
groups in each Member State will be organised to promote a systematic dialogue and co-design process to create lead market conditions. The Clean Industrial Dialogues are a key tool where cities should be included to bring forward their experiences, expertise, and challenges. The current European Commission should leverage the Clean Transition Dialogues as a multilevel governance platform, engaging existing city networks or a select group of cities to drive collaboration and impact. To ensure a meaningful forum for discussing industrial decarbonisation pathways at the EU level, these dialogues should continue under the leadership of a commissioner overseeing the Mission.

• The EU should encourage member states to create dialogues with national, regional, and local governments for the proper definition of industry decarbonisation targets and the clear communication of cities' needs to achieve such decarbonisation goals. These dialogues should also be useful to understand how much budget can be allocated to accomplish the set goals. The Clean Transition Dialogues can be an optimal starting point for local and national authorities to come together to discuss the topic of industrial decarbonisation.

• The EU should showcase, promote, and streamline the development of Climate City Contracts in cities across Europe as a tool to engage private sector companies, research institutions, and local governments in collaborative efforts. These pacts should include sector-specific targets, tailored approaches, and shared best practices to guide cities through their decarbonisation pathways.



FINANCING THE INDUSTRIAL DECARBONISATION

• A key priority is to ensure a **robust alignment between decarbonisation efforts and industry needs**. It is imperative to recognise the importance of providing a clear and predictable pathway for industrial decarbonisation. In this context, the publication of the Clean Industrial Deal should be closely coordinated with the adoption of the EU's 2040 climate mitigation target. This dual approach will firmly position Europe on the path to climate neutrality while delivering precise and consistent signals to both markets and industrial stakeholders.

• The EU should ensure that funding mechanisms empower cities as drivers of innovation in the transition to climate neutrality. EU funds should support urban-led R&D initiatives (i.e., involving collaboration between local governments, research institutions, universities, and the private sector) and developing new business models that align with decarbonisation goals. This can be achieved by directing funding to research and academia, and local governments, enabling them to allocate resources effectively to SMEs that are pioneering climate-neutral solutions.

• EU funding for industry decarbonisation should be made available for cities to set up consulting branches to advise the private sector on the development of new economic models, sustainable energy solutions and advice on funding mechanisms. Example: Landscape Laboratory of Guimaraes.

REDUCTION OF BARRIERS FOR LOCAL ACTORS

• Bureaucracy should be simplified to reduce the challenges faced by local authorities and SMEs when accessing funding. Implementing simplified application processes for EU funding programs and ensuring the support is timely and aligns with SMEs' cash flow needs is key to preventing them from incurring debt. Capacity-building initiatives for local authorities and local actors such as SMEs should be provided to help them understand decarbonisation strategies and funding opportunities.

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ENCOURAGE INNOVATION THROUGH RESEARCH-BASED SOLUTIONS

• The EU and national governments should offer targeted incentives to research centres, encouraging the development and testing of innovative solutions, particularly in key plummeting sectors such as automotive, steel, and textile – industries that are vital to local employment and economic resilience in many cities.

• The EU should champion research into circular economy models, such as steel recycling, to reduce Europe's dependency on non-EU sources. This will enhance the EU's competitiveness in the face of decarbonisation and stimulate local economies by fostering sustainable, homegrown solutions.

• The EU should support secondary material markets in cities, encouraging local industries – such as textile – to repurpose waste and end-of-life products into valuable secondary materials, boosting circular economy models.

SUSTAINABLE PUBLIC PROCUREMENT

• Establish clear guidelines and incentives for **green public procurement**, ensuring that public contracts prioritise products and services with lower carbon footprints and those that meet stringent environmental standards. This could include the inclusion of sustainability criteria alongside the obligation for member states to provide capacity building for cities to acquire the expertise to implement it.

• Additionally, cities should be encouraged to set ambitious targets for their own public procurement processes. As cities often lack the expertise or resources to navigate complex green procurement processes, the EU should promote a clear, standardised framework for sustainable public procurement, including specific guidelines on integrating environmental criteria into procurement processes.

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