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NET ZERO CITIES

EU MISSION PLATFORM | CLIMATE NEUTRAL AND SMART CITIES

ONLINE RESOURCES OF THE MISSION PORTAL FOR MISSION-MINDED CITIES

NZC-SGA2 D1.6 SUMMARY REPORT ON NEW PORTAL CONTENT FOR WP1 NON-MISSION CITIES



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PART OF THE EU MISSIONS

CLIMATE-NEUTRAL & SMART CITIES

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SUMMARY

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The EU Cities Mission offers cities striving to achieve climate neutrality a set of tools, resources, and services accessible through the Mission Portal. This guidebook provides an overview of online opportunities for cities to learn, connect, and act[1].

The Mission Portal aims to support your city's ambitious climate action, regardless of whether you are just starting or are more advanced. The Mission Portal offers a selection of tools and resources, allowing you to:

- Get inspired by other cities, including Mission Cities (with interviews, case studies, and Climate City Contracts).
- Learn about specific sectoral or transversal topics related to a city's climate transition (e.g., Positive Energy Districts, multi-modal mobility, latest retrofitting technologies, or social innovation) with factsheets, research articles, and expert webinars.
- Advance your own journey with the Climate Transition Map and practical tools that help you develop your portfolio of actions (Solution Outliner), assess and monitor your action plan (NetZeroPlanner), and much more.

The Mission Portal also serves as a one-stop shop for other support provided by the EU Cities Mission, ranging from peer learning programmes to online courses and events.

All cities aiming to progress towards climate neutrality can freely access the Mission Portal. Log in and accelerate your climate journey with the EU Cities Mission!

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[1] *as of December 2025*

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1. THE EU CITIES MISSION AND NETZEROCITIES

In 2019, the European Commission launched the EU Mission: Climate-Neutral and Smart Cities (the "Cities Mission"), selecting 112 Mission Cities with the objective of achieving climate neutrality by 2030. The second objective of the Cities Mission is to enable all European cities to follow suit and reach climate neutrality by 2050.

In support of these objectives, the EU Cities Mission Platform, managed by NetZeroCities, has been supporting 112 Mission Cities, selected by the European Commission, as they strive to achieve climate neutrality by 2030. Building on this work, part of the support now extends to all cities in Europe and Horizon-associated countries aiming to advance towards climate neutrality.

Mission-minded cities, referring to cities with ambitious climate action plans, are eligible to benefit from the Mission's support, including access to the Mission portal, which offers a broad portfolio of online resources that support cities' climate ambitions.

The Mission Portal provides you with tools and online learning resources, serving as your entry point to extensive support offered by the Cities Mission, which is described in more detail below.

The Mission Portal and its content are being maintained and continuously developed by NetZeroCities to meet Mission cities' and Mission-minded cities' evolving and emerging capacity-building needs.

Is your city aligned with the EU Cities Mission mindset?

The EU Cities Mission Platform offers:

- A free helpdesk offering advice, technical assistance, and support for monitoring, evaluation and learning (MEL)
- Peer learning opportunities with Mission Cities
- Online tools & resources on the Mission Portal
- Capacity building programmes
- Opportunities to connect with Mission Cities & like-minded peers

What's in it for your city?

- Discussion Groups
- Study Visits to Mission Cities
- Twinning Learning Programme
- National Events
- Online Planning Lab
- Tool Training Series on financing, citizen engagement, and more

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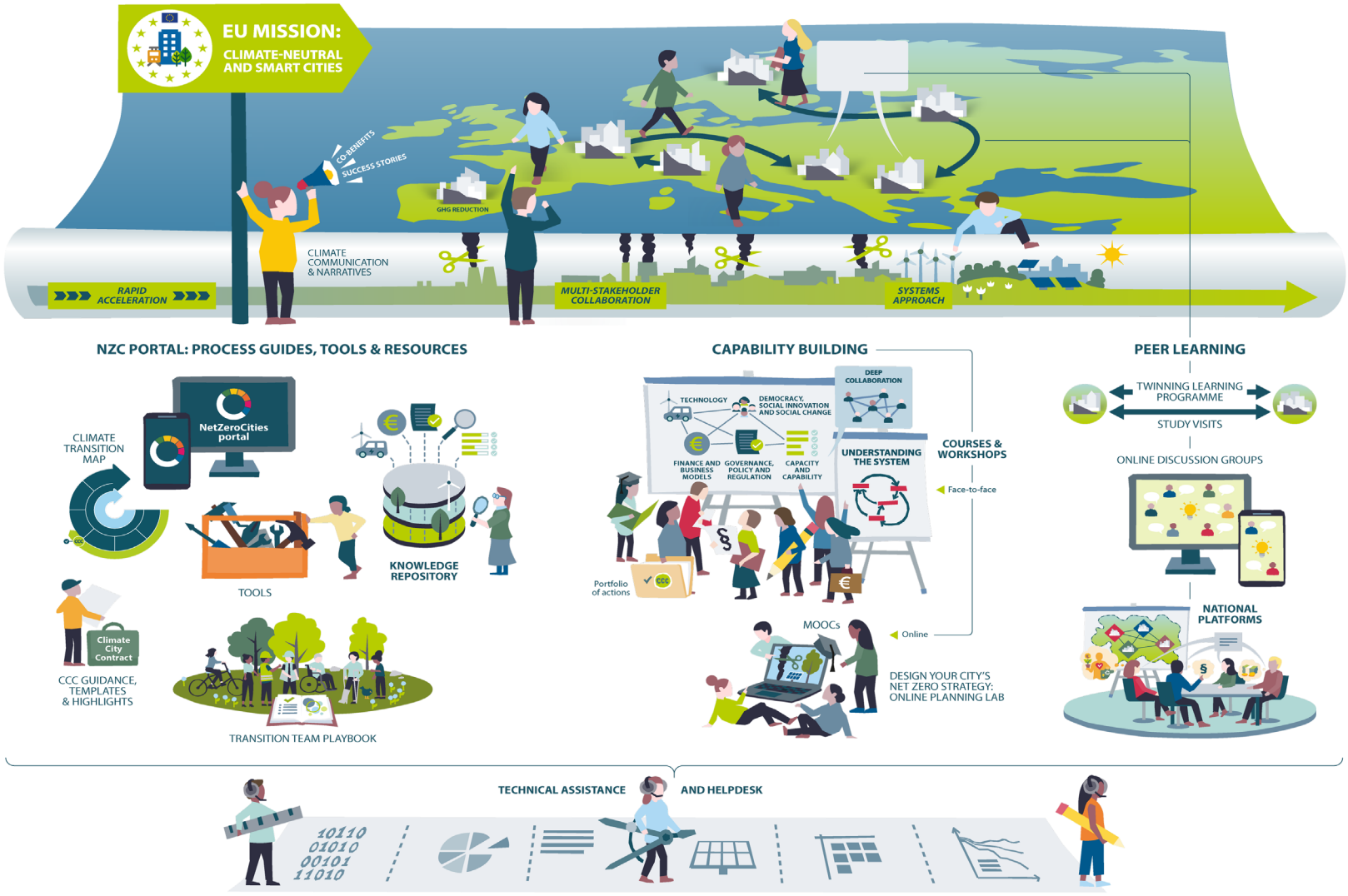


Figure 1. Opportunities accessible to Mission-minded cities through the EU Mission Portal. Visualisation by the Centre for Systems Solutions (CRS).

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2. MISSION PORTAL SUPPORTING MISSION-MINDED CITIES

Access the Mission Portal

1. Create your profile.
2. Join the Orientation Group for Mission-Minded Cities on the portal to start your journey.
3. Participate in Portal Discovery Tours, organised for times per year and found at the Events page.

The Mission Portal serves as your gateway to online learning resources, tools, services, and communities, designed to accelerate your journey toward climate neutrality.

The portal menu provides a single entry point to a broad range of opportunities – from peer learning to technical guidelines, and from tools to capacity-building programs.

ONBOARD AND LEARN ABOUT THE CITIES MISSION – ABOUT

Learn about the opportunities for Mission-minded cities and your step-by-step onboarding guide to get started.

Under the menu tab 'About', you will find information about the Cities Mission and learn about the 112 Mission Cities. Read about the Twinning Learning Programme, which facilitates mutual learning between Mission Cities and Mission-minded cities through a 12-month programme.

PLAN YOUR CITY'S CLIMATE JOURNEY – CLIMATE TRANSITION MAP

The Climate Transition Map offers you a journey to climate neutrality, supporting your city every step of the way with your climate transition.

LEVERAGE ONLINE LEARNING OPPORTUNITIES – LEARN

The portal's extensive knowledge repository provides access to Climate City Contracts, best practices, case studies, technical fact sheets, and other key resources to support ambitious action in your city. The Online Planning Lab is a free online course designed to support municipalities in Europe in utilising NetZeroCities tools and resources, collaborating, exchanging experiences, and developing their climate action plans through digital learning modules and interactive live sessions.

LEARN FROM AND WITH PEER CITIES - CONNECT

You can **connect** with peers and experts via interactive feeds and thematic or geographic groups. Discover all cities registered in the portal, find events, and connect with peers and other users through chat, events, and groups of common interest.

EXPLORE THE SUITE OF ONLINE TOOLS – ACT

To act, the portal provides a suite of online **tools** that empower cities to plan, implement, and track progress.

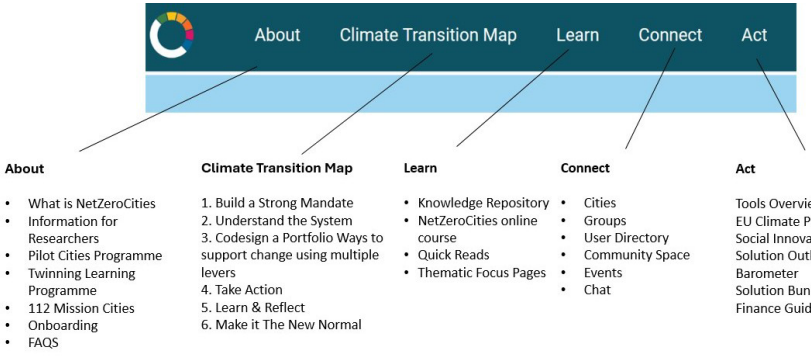


Figure 2: Accessing the Mission offering through the portal menu

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GET INSPIRED

- The Solution Bundles service allows you to explore dynamic and interactive visualisations of city systems, inspiring you to consider possible climate actions.
- The NetZeroCities Barometer is a data-driven dashboard that explores how Mission Cities planned their journey to climate neutrality and how they are progressing.

DEVELOP YOUR ACTION PLAN

- Solution Outliner helps you develop your climate action plan by identifying and prioritising decarbonisation solutions for your city.
- NetZeroPlanner allows you to analyse the financial and emissions impact of your city's climate action plan and improve it to ensure you reach your decarbonisation goals.

IMPLEMENT

- Engagement Strategy tools help you identify your city's top stakeholder engagement needs and find tailored strategies to engage citizens and stakeholders effectively.
- Social Innovation tool is an interactive visualisation of social innovation and stakeholder-led solutions to climate neutrality.
- Finance Guidance tool helps you define your financing needs and identify the most appropriate types of funding.

The Tool Training Series is a set of sessions providing context and training on the tools available on the Mission Portal. These sessions take place several times a year.

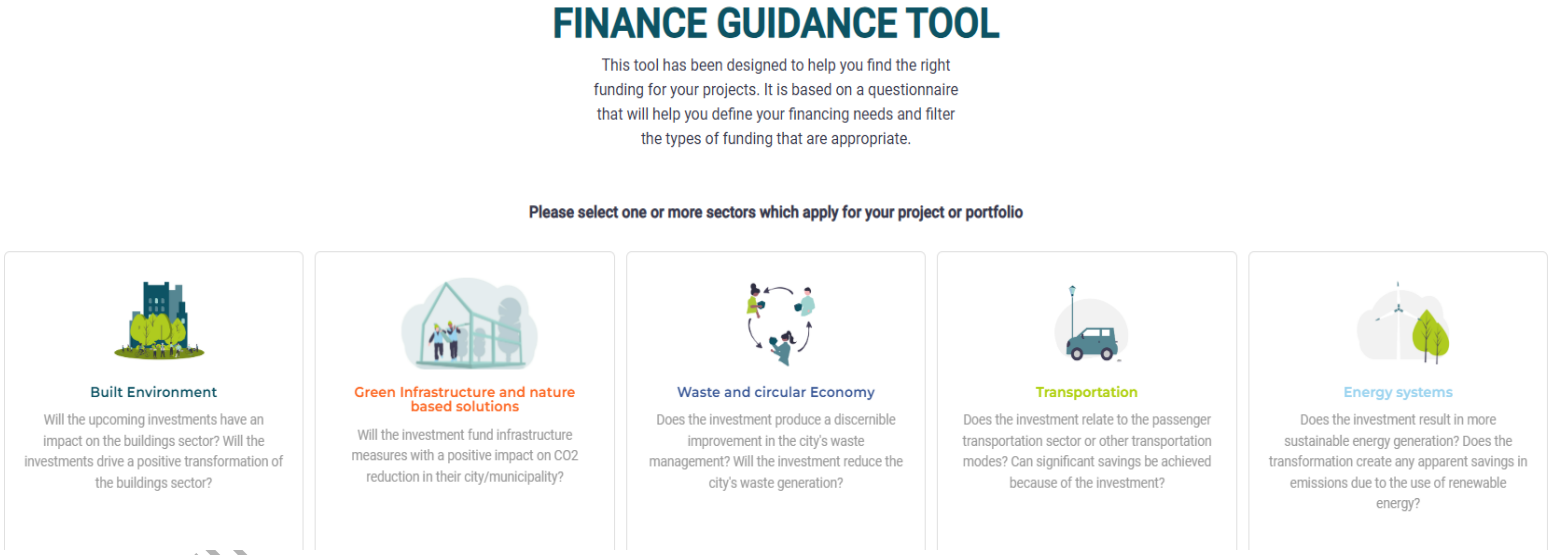


Figure 3. The finance guidance tool is one of the online tools available for Mission-minded cities.

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3. LEARNING OPPORTUNITIES BY THEME

The portal includes online learning resources on a variety of topics critical to reach climate neutrality – accessible via the 'Learn' tab of the portal menu.

To achieve climate neutrality, cities, as complex systems, must activate systemic levers, including social innovation, stakeholder engagement, policy, and financing. Systemic levers will ensure the effective and long-lasting uptake of technical solutions.

3.1 SYSTEMIC APPROACHES TO CLIMATE NEUTRALITY

The path to climate neutrality requires more than isolated interventions; it demands a systemic approach that considers the complex, interconnected systems within our cities. Systems innovation laid the groundwork by emphasising the need to act across multiple sectors, scales and actors. The complexity of today's challenges requires an advanced approach — one that integrates portfolio making and embraces distributed governance to manage and steer this complexity effectively.

This requires building and managing portfolios of actions, actors, and assets, and allows for more resilient and scalable solutions that can adapt to emerging challenges and opportunities. At the same time, this approach enables a more flexible and responsive system, capable of steering collective action towards climate neutrality.

Key resources

- Quick read on Systems Innovation
- Focus page Systemic Innovation for Cities: full collection of resources
- Climate Transition Map

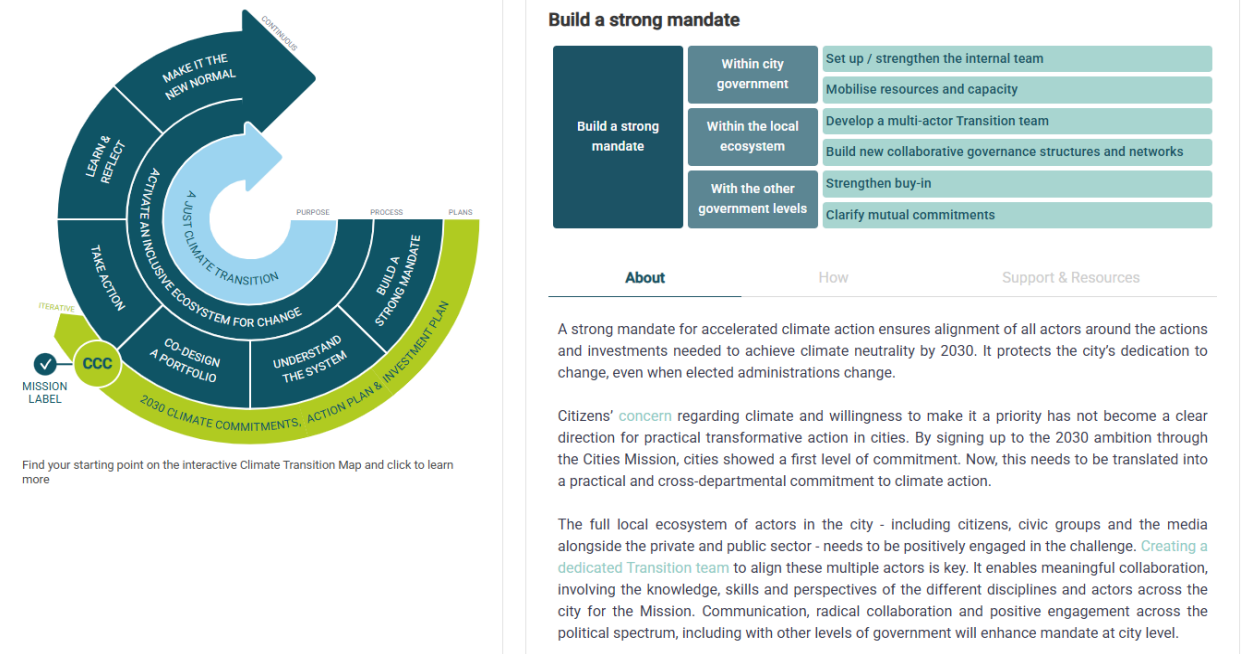


Figure 4. The Climate Transition Map provides a journey to climate neutrality, supporting you every step of the way through your climate transition.

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3.2 CLIMATE CITY CONTRACTS

The Climate City Contracts of over 100 mission cities are now publicly available for all cities to access.

As part of their engagement, each Mission City developed a Climate City Contract ('CCC'). This document is the result of a collaborative process with local, regional, and national partners, which outlines how the city plans to achieve climate neutrality by 2030. The CCC includes three main parts: a commitment to climate neutrality, an action plan, and an investment plan.

The CCC is both a plan and a way of working. As a plan, it serves as a shared framework between the city government and local partners, outlining the actions to be taken and how they will be funded. As a way of working, it guides cities on how to develop these plans together with their partners and how to ensure that all organisations involved agree to support and carry out the planned actions.

Explore CCC's, developed by Mission cities, to learn how frontrunner cities have developed their overarching plans reach climate neutrality.

Key resources

- Quick read on Climate City Contracts
- CCC highlights from Mission Cities, providing insights into how cities are addressing critical challenges to achieve climate neutrality.

3.3 IMPACT PATHWAYS AND MONITORING

Mission-minded cities have **free access to a monitoring, evaluation and learning expert**.

Contact infocities@netzerocities.eu to plan your meeting.

[For cities in EU Member States and Horizon-associated countries]

Effective monitoring, evaluation, and learning are essential components of cities' decarbonisation efforts, as they quantify progress, strengthen transparency and legitimacy, and reveal the effectiveness of implemented solutions. Understanding the big picture requires both qualitative and quantitative data. By monitoring progress, cities can evaluate their actions, learn from experiences, and make course corrections to accelerate their journey toward climate neutrality. Sharing data with stakeholders also contributes to establishing a culture of trust and transparency among partners, including citizens.

The Mission Portal provides resources to help you understand the relevant impact pathways and monitoring tools applicable to your city.

Key resources

- The Quick read presents available support for cities wanting to improve and expand their existing monitoring and learning capabilities.
- The impact pathways diagram outlines how systemic transformation is expected to unfold.
- The NetZeroCities Comprehensive Indicators Framework proposes a set of indicators for monitoring Climate City Contracts, covering direct GHG emission impacts and indirect co-benefits or risks.
- The NetZeroCities Barometer highlights the climate ambitions of Mission Cities, their progress toward neutrality, and the path forward.
- Access the complete collection of resources via the 'Impact Pathways and Monitoring' focus page.

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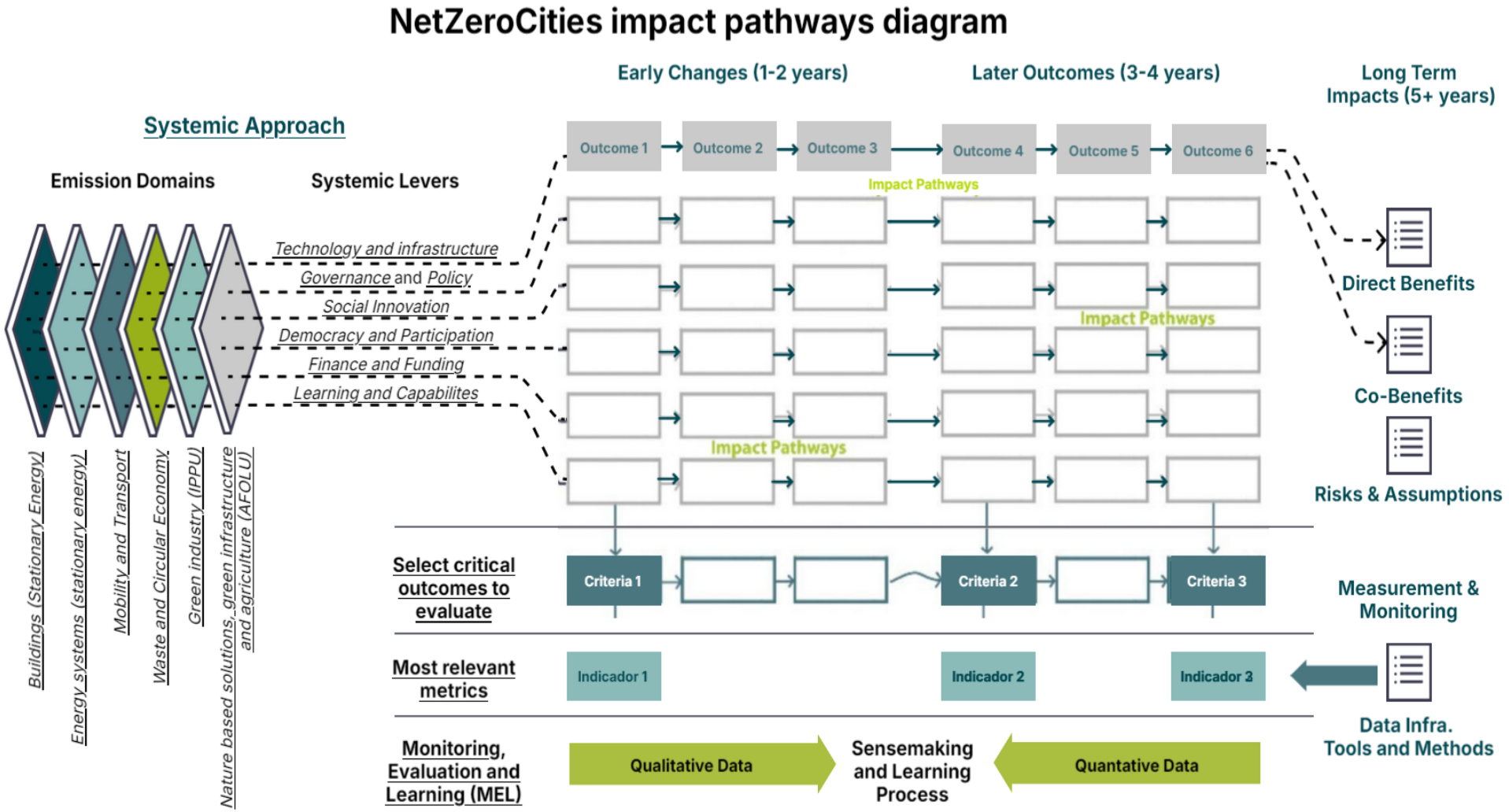


Figure 5. Impact pathways diagram

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3.4 TECHNICAL SOLUTIONS

Achieving climate neutrality demands systemic change across all sectors. A wide range of technologies and innovative solutions are available to reduce greenhouse gas emissions[2].

Key resources

- Quick read on technical solutions
- The focus page features a comprehensive list of all technical and infrastructure-related online resources, organised by category. On this page, you can find a list of all NZC resources related to technical solutions for achieving climate neutrality.

Tools

- Solutions outliner
- Solutions bundle

Mission-minded cities have **have free access to technical experts** for assistance on their challenge(s).

Contact infocities@netzerocities.eu to plan your meeting.

[For cities in EU Member States and Horizon-associated countries]

BUILDINGS (STATIONARY ENERGY)

Cities face significant challenges in reducing emissions from buildings, which stem from both energy use and construction materials. The ageing and diverse building stocks make retrofits costly and complex, while incentives, regulations, and skilled labour often fall short. Data gaps hinder cities' ability to measure full life-cycle emissions, and policies still focus primarily on energy use rather than materials.

It remains cheaper to demolish than to retrofit, and circular practices, such as material reuse, are not yet widespread. Beyond the building scale, it is crucial to maintain comprehensive urban renewal and regeneration at the neighbourhood or district level, recognising that buildings do not perform in isolation but within a built environment with environmental and quality-of-life implications.

The Mission Portal provides you with nearly 150 resources to help cities address these challenges, including technical fact sheets, case studies, and policy recommendations.

These include:

- Policy brief for EU decision-makers on the built environment formulated by cities
- Factsheets on several key topics, including Positive Energy Buildings (PEBs), Positive / Near-Zero Energy Districts (PEDs) (see also MOOC on PEDs), Deep energy renovation, Building Renovation Passports, and many more.
- Expert guidance on Open standards and Open data models interoperability.
- Cities' Best Practice Online session on Energetic Renovation
- Case studies, including how Mission City Barcelona developed a Retrofit Playbook for housing or Mission-minded city Galway engaged with homeowners for retrofitting.

Read more:

- Buildings (Stationary energy)
- Positive energy buildings

[2]*The technical solutions presented in the Mission Portal are classified according to the Greenhouse Gas Protocol for cities.*

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ENERGY SYSTEMS (STATIONARY ENERGY)

The energy transition replaces fossil-based electricity, heating, and cooling with low-carbon alternatives. Renewable technologies, such as solar energy, geothermal energy, waste-heat recovery, and bio-based options, support this change. Energy communities can organise local action and encourage shared decision-making.

Upgrading district heating and cooling networks is a long-term task that requires systematic planning. Heat pumps and recovered heat can play a central role in modernising systems. Smart energy management, flexibility solutions, and storage technologies help match demand with variable renewable output. Seasonal storage makes it possible to save summer heat for winter use.

Electrification also reduces emissions in transport and industry.

Read more about energy creation and find portal resources through the technical solutions focus page.

MOBILITY AND TRANSPORT

Urban transport is one of the major contributors to CO_2 emissions and local pollution, and mobility and transport are a central lever for urban climate neutrality, integrating behavioural change, infrastructure design, digital systems, freight logistics flows, and multimodal options. The challenge for cities is to transform their transport systems to achieve climate neutrality.

This emphasises the shift from fossil-fuel-based vehicles towards walking, cycling, public transport and other sustainable modes, as well as embracing technological innovations such as electrification, automated/connected mobility and shared services.

The Mission Portal provides you with a set of resources to help embed sustainable mobility and transport within a profound transformation of the city system, including:

- Factsheets: Sustainable Urban Mobility Plans (SUMPs), Mobility hubs, Collective passenger transport, C-ITS, Zero emission electric buses, and Micromobility.
- Mobility Policy Brief
- Case studies: Mobility as a Service (MaaS) - Kranj; Driving sustainable commuting in Lahti

Read more: Mobility and Transport

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WASTE AND CIRCULAR ECONOMY

European cities play a key role as major consumers of resources. By rethinking their urban systems and transforming unused materials into new products, cities can significantly reduce waste. The traditional "take–make–dispose" model causes severe environmental damage, while the circular economy aims to promote the use of new raw materials and design systems that are restorative.

Join the portal groups on the Circular economy in cities.

The portal supports this transition by offering guidance, data, and examples of circular practices, helping cities extend the life of products, minimise waste, and lower emissions.

NetZeroCities has mapped a total of 32 Circular Economy solutions, encompassing 24 technical solutions and eight instruments. Four main categories for technical solutions have been defined: **Waste, Water, Energy, and Food**, along with various sub-categories to encompass the wide range of resources related to the circular economy.

Through the Mission Portal, you can access key online resources, including:

- Plastic Waste Management: Learn how plastic waste is managed and why it matters for a cleaner and more circular economy.
- Policy and financial instruments: Explore the barriers cities face in moving towards a circular economy, and the EU policy recommendations that cities are proposing to help Europe speed up its transition.

Read more:

- Circular economy (including waste)
- Mission Cities' policy brief: Circular Economy

GREEN INDUSTRY (INDUSTRIAL PROCESSES AND PRODUCT USE; IPPU)

Industry is one of the most significant contributors to global greenhouse gas emissions. Key solutions to decarbonise the sector include **carbon capture, utilisation and storage (CCUS), material efficiency, electrification of processes, and fuel shifts** towards hydrogen and bioenergy.

Green Industry aims to make industrial production more resource-efficient and low-carbon, creating jobs while protecting ecosystems. This approach aligns industrial development with global sustainability goals, reducing risks to people and the environment.

Join the portal groups on (Green and greening) Industry in Cities.

The Mission Portal provides you with a set of resources mapped across eight Green Industry solutions, organised under two main categories: **Energy Efficiency in Industrial Processes and Renewable Generation for Industrial Processes**.

These include:

- Energy Management Systems Learn how Energy Management Systems help coordinate renewable energy, storage and consumption, and what cities need, the benefits, and the main barriers to make these systems work
- Green Hydrogen Technologies in green industry: Discover what green hydrogen is, how it can be used in industry and energy, and what conditions, benefits and barriers exist for making it a real clean alternative.

Read more: Green Industry

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NATURE-BASED SOLUTIONS, GREEN INFRASTRUCTURE AND AGRICULTURE (AFOLU)

Nature-based solutions (NBS) are actions that protect, restore, and sustainably manage ecosystems. European cities are experiencing multiple interconnected crises, including climate change, pollution, and biodiversity loss. NBS in urban areas can lower heat island effects, clean the air, and retain rainwater to prevent flooding, among other benefits.

Join the portal groups on Nature in Cities (NBS, biodiversity and natural resources).

Approximately 60% of Mission Cities are already implementing or planning NBS actions, including urban forests, green roofs, sustainable drainage systems, and floodable parks. These initiatives have restored more than 45 million square metres of green areas and reduced building energy use by 10–20% thanks to natural cooling.

The Mission Portal provides guidance, data, and examples of 20 Nature-Based Solutions, divided into two main categories: **Urban carbon storage** and **green infrastructure,** and **Water interventions.** These initiatives help cities restore ecosystems, manage climate risks, and accelerate their progress towards climate neutrality.

The key resources include:

- Tree planting, parks and natural urban green areas: This resource explains, in simple terms, how planting trees and creating urban green areas help cities stay cooler, healthier and more resilient, and outlines what is needed, the benefits, and the barriers to make these green spaces work well
- Green corridors for active and cooler mobility: This resource shows how green corridors make walking and cycling cooler, healthier and fairer, and describes their key benefits and challenges.
- Floodable Park: This resource explains how floodable parks use nature to safely absorb excess rainwater, reduce flood risk and create green public spaces, highlighting their benefits, needs and key challenges

Read more: Nature-based Solutions and Carbon Sinks

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3.5 FINANCING

While many cities have advanced in defining systemic actions through their climate action plans, a persistent challenge remains in converting these actions into bankable investment portfolios. Financing has therefore emerged as a core learning need among cities.

The Mission Portal addresses this challenge by offering a structured collection of learning materials, templates and guidance tools to help cities identify, combine and operationalise financial instruments throughout the project development cycle. It provides an entry point for cities to build the economic dimension of their climate transition, moving from strategy to implementation, in the framework of the Cities Mission.

The portal features articles, case studies, and webinars that showcase financing approaches from Mission and other cities. These cover a broad range of range of funding and financing instruments, including topics like:

- Debt financing (e.g., Commercial loan, Climate bond)
- Municipal own source revenue (OSR) and policy steering instruments (e.g., Tax-line financing, Charges and pricing for actions and services)
- Public-private partnerships, PPP (e.g., Power purchase agreements (PPA) for clean energy, Energy performance contract (EPC))
- Leasing and asset finance models (e.g., Operating lease finance, Hybrid models for purchase and lease of assets)

Key resources

- Focus page on Climate Financing: Overview of financing concepts, instruments, and pathways for cities' climate-neutral transition.
- NetZeroPlanner: A tool to guide your city's decarbonisation journey.
- Finance Guidance Tool: Decision-support tool linking instruments to project maturity stages; guidance on combining funding sources.
- Glossary of climate finance

3.6 CITIZEN AND STAKEHOLDER ENGAGEMENT

Achieving climate neutrality by 2030 demands an unprecedented societal transformation - one that places citizens and urban stakeholders at the centre of change. The resources available through the Mission Portal support cities in developing inclusive, participatory approaches to accelerate this transition. They offer inspiration, guidance and practical tools to help cities design, implement, and sustain meaningful engagement processes that strengthen democratic infrastructure and build trust.

Within this theme, cities can explore more than 57 case studies and 48 methods illustrating how European and international cities are engaging residents, communities, and organisations as partners in the climate transition. Complementing these examples, a set of six NetZeroCities tools and canvases provides cities with practical frameworks to embed participation within projects and strategies systematically. These tools enable local teams to address concrete challenges, such as mapping civic ecosystems, identifying engagement priorities, and fostering long-term networks for change.

The resources include, for example:

- An article on Building Long-Term Citizen Engagement for Climate Action
- 8 Tips for Building Trust and Driving Change

Key resources

- Quick read on citizen participation and stakeholder engagement
- Focus page on Citizen and urban stakeholder engagement
- Engagement strategy tools

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3.7 SOCIAL INNOVATION

Social innovation addresses the challenge of achieving climate neutrality with a collaborative, bottom-up, holistic, and people-centred approach. In doing so, it effectively accelerates the pace of change by onboarding diverse communities to the Mission. It utilises prototyping and quick experimentation to create new products or services, or to implement innovative systemic solutions and business models that enhance community well-being and promote behavioural change by responding to local needs and acting within a cultural context.

This approach complements technical innovation, ensuring economic development and overall well-being while reinforcing the co-benefits of climate mitigation, such as public health, job creation, and public budget savings.

In the Mission Portal, you will find an extensive selection of resources and tools related to this topic, including the Social Innovation Toolkit, 50 case studies from cities, 40 methods, recordings of webinars, and interactive visualisations of the Actionable Pathways Map and methods. These include, for example:

- Case studies, e.g., Local Energy Communities in the City of Valencia and SONNET Bristol City Lab
- User-centric tools and methods, e.g., Personas tool and Customer Journey Map

Key resources

- Quick read on Social Innovation
- Focus page on Social innovation
- The NetZeroCities Social Innovation Toolkit
- Social Innovation Actionable Pathways: An interactive tool to support public administrations and policymakers in creating favourable ecosystems of social innovation.
- Book: Social Innovation Projects for Climate Neutral Cities - Making Municipalities Sustainable with People-Based Solutions

3.8 POLICY AND GOVERNANCE

Policy and governance innovations enhance the capacity of cities to reach climate neutrality. The better we govern collective action, the faster and fairer the required transformation will be achieved. Governance refers to both the "hard" (e.g., regulations, strategies, policies) and "soft" (skills, mindset, forms of collaboration) elements that enable or hinder societal transformation. Climate governance refers to the various ways that cities, other levels of government, and societal actors use to steer towards climate neutrality through holistic thinking and collaboration. Instead of one-off, sticking-plaster solutions, climate governance focuses on how the various strategies, actions, technical and social tools, and other elements work together as a whole.

The portal includes online resources on different modalities of climate governance, covering topics like domain-specific governance, cultural change, ecosystem leadership, and multilevel governance.

Key resources

- Quick read on Climate governance
- Focus page on climate governance
- Foresight and Anticipatory Governance in Cities' Climate Action

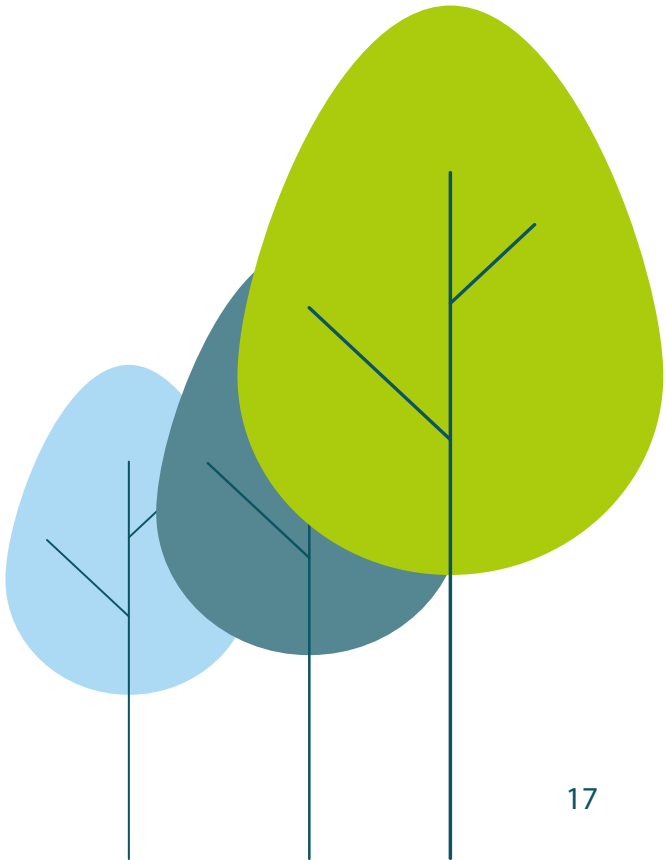
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ANNEXES

Access annexes here.

- **Annex 1.** Full description of opportunities for Mission-minded cities, accessible through the Mission Portal
- **Annex 2.** Identification of Mission-minded cities' learning needs
- **Annex 3.** Online resource impact assessment checklist
- **Annex 4.** List of added and updated online resources for Mission-minded cities
- **Annex 5.** Thematic categorisation of online resources

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Summary report on new portal content for WP1 Non-Mission Cities

NZC-SGA2 D1.6 Annexes

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Summary

This report includes the annexes of the NetZeroCities SGA2-NZC deliverable D1.6 *Summary report on new portal content for WP1 Non-Mission Cities*. The annexes included in this report complement the actual deliverable report, which is a public deliverable intended for Mission-minded cities.

Annex 1 describes opportunities for Mission-minded cities, accessible through the Mission Portal. Annex 2 describes the learning needs of Mission-minded cities, as identified by NetZeroCities for the purpose of the development of online portal resources. Annex 3 presents the impact assessment checklist, developed and used by NetZeroCities to ensure online resources are impactful, relevant, and accessible. Annex 4 includes the list of online resources that have been added or edited to meet the needs of Mission-minded cities (as of 1 December 2025). Annex 5 describes the rationale behind the categories of the resources produced.

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Annex 1. Full description of opportunities for Mission-minded cities, accessible through the Mission Portal

The Mission Portal serves as a gateway for Mission-minded cities to tools, services, and communities, designed to accelerate your journey toward climate neutrality.

Resources developed for Mission cities to Mission-minded cities accessible through the portal, offering a single entry point to a broad range of opportunities – from peer learning to technical guidelines and from tools to capacity building programmes.

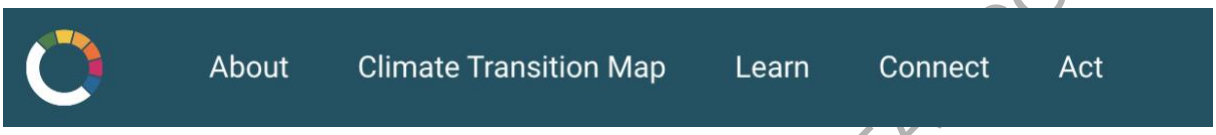


Figure1: Accessing the mission offering through the portal menu

The portal menu serves as the entry point to the complete Mission Portal offering for Mission-minded cities.

About - Onboard and read about the Cities Mission

Learn about the opportunities for Mission-minded cities and onboard to get started. Under the menu tab 'About', you will find information about the Cities Mission and learn about the 112 Mission Cities and pilot and twinning programmes.

Climate Transition Map - Plan your city's climate journey

The Climate Transition Map guides you on your journey to climate neutrality, supporting your city every step of the way. Access it through the menu tab 'The Climate Transition Map'.

Learn - Capability building

Cities can learn through the portal's extensive knowledge repository, which provides access to Climate City Contracts, best practices, case studies, technical fact sheets, and other key resources. A highlight of this component is the Online Planning Lab.

Online planning Lab

Through the Online Planning Lab, all Mission-minded cities can be part of a project-based Lab where cities are guided to develop their systemic action plan, based on the experience of Mission cities. The online course has been designed to support municipalities in Europe in utilising NetZeroCities tools and resources, collaborating, exchanging experiences, and co-developing solutions through digital learning modules and interactive live sessions.

The Online Planning Lab is free of charge. Its first edition, reported in D1.13, comprises 26 sessions across six modules. It covers multiple topics such as the European Union Cities Mission's strategic vision by offering insights into the essential competencies, while exploring practical tools and strategies to cultivate cross-departmental collaboration to build internal legitimacy, and to identify high-impact solutions across sectors, learning to apply a Just Transition perspective to avoid actions which can deepen inequalities.

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Connect

You can connect with peers and experts via interactive feeds and thematic or geographic groups.

Peer learning at the EU-level

Mission-minded cities are also offered peer-to-peer learning opportunities at the EU level through Mission Cities, with structured learning formats offering different time commitments. These exchanges are designed to enable the replication of successful approaches and to foster long-term collaboration among cities.

Online Discussion Groups provide an online space where all cities can learn from Mission Cities' practical experience and receive technical support from experts across sectors. The six-month programme is structured around key thematic areas essential for decarbonisation and offers cities the opportunity to explore innovative climate-neutral solutions.

Group Study Visits foster hands-on learning between Mission Cities and Mission-minded cities through a 2.5-day study visit hosted by a Mission City. They offer any city a chance to see real-world climate actions in Mission Cities, gaining practical insights and transferable solutions. Through site visits, workshops, and action planning, the programme supports mutual learning, local adaptation of solutions, and stronger collaboration toward climate neutrality.

Mutual learning between Mission Cities and Mission-minded cities is fostered through a 12-month Twinning Learning Programme. This programme guides Twin Cities in their learning and replication efforts, emphasising the practical replication of best practices, systemic transformation methodologies, and innovative approaches implemented by Mission Cities on their journey toward climate neutrality.

Peer learning at the national level

National platforms offer tailored services to help you achieve climate-neutrality objectives aligned with the Cities Mission. Acting as multi-stakeholder collaboration spaces, they provide a range of services tailored to national contexts, including political and policy support, convening power, innovation and breakthrough interventions, financial and tooling support, and learning and EU liaison support. Facilitated by national partners, these platforms help cities access relevant expertise, coordinate with different levels of government, and connect with peers through dedicated national groups and events available via the NetZeroCities Portal. Their structure and operations vary, but their shared aim is to foster ambition, trust, and collaboration for systemic transformation at local and national levels.

Join the Orientation Group for Mission-Minded Cities.

Act - Tools and Training Series

To act, the portal offers a suite of online tools that empower cities to plan, implement, and monitor progress. These include:

- The NetZeroCities Barometer is a data-driven dashboard that shows how the 112 Mission Cities are progressing on their journey towards climate neutrality.
- Engagement Strategy tools help you to identify your city's top engagement needs and find tailored strategies to engage citizens and stakeholders effectively.
- Finance Guidance tool has been designed to help you find the right funding for your projects. It is based on a questionnaire that will help you define your financing needs and filter the types of funding that are appropriate.
- NetZeroPlanner allows you to analyse the impact of your city's Climate Action Plans and improve them to ensure you reach your decarbonisation goals.
- Social Innovation Actionable Pathways is an interactive visualisation of social innovation and stakeholder-led solutions to climate neutrality.
- Solution Bundles allow you to explore dynamic, interactive visualisations of city systems.

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- Solution Outliner helps you develop your climate action plan by identifying and prioritising decarbonisation solutions for your city.

The Tool Training Series is a set of sessions providing in-depth training on the tools available on the Mission Portal. Each session includes a comprehensive introduction to the overall scope and the challenges tackled by the tool(s), a presentation of the tool(s), a live demonstration with hands-on guidance (where relevant), interactive discussion and Q&A opportunities, and real-world insights from Mission Cities, where relevant. These sessions occur four times per year.

Helpdesk for Mission-minded cities

The Helpdesk supports Mission-minded cities in navigating the full range of services and resources available through the Mission Platform. It provides personalised guidance and structured onboarding through the following activities:

- **Onboarding support:** The Helpdesk guides cities through the Mission-Minded Cities Onboarding Guide, which introduces the Cities Mission, its methodology, and the available services. The support includes:
  - Step 1: Orientation – an overview of the Mission approach, service offer, and key concepts.
  - Step 2: Registration – assistance with registering on the NetZeroCities Portal.
  - Step 3: Exploration – support in identifying relevant support pathways, peer learning opportunities, and capability-building programmes.
- **One-to-one consultations**: Tailored calls are offered to help cities align the Mission Platform's services with their local context, needs, and ambitions.
- **Bi-monthly orientation sessions:** A recurring series of two-part events that introduce the service offer, demonstrate how to navigate the portal, and share practical examples from Mission Cities.

The Helpdesk remains available throughout the onboarding process to ensure cities can make informed and strategic use of the resources at their disposal.

Technical support for Mission-minded cities

The primary aim of the technical support by the Mission-minded cities helpdesk is to provide cities with personalised support to address specific technical challenges locally. This includes offering guidance on the resources available through the Mission Portal and leveraging the specialised expertise of the NetZeroCities consortium partners.

In addition, after submitting the technical challenge via the form, one-to-one sessions with NetZeroCities technical experts are available, allowing Mission-minded cities to present their requests in detail and receive tailored assistance during these sessions.

Find the Technical Support Request Form here.

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Annex 2: Identification of Mission-minded cities' learning needs

The Mission Portal is developed to meet cities' learning needs in their journey toward climate neutrality.

The new content developed for Mission-minded cities builds on themes prioritised by Mission-minded cities' learning needs. The NetZeroCities project conducted a *Capability building gap analysis of Mission-minded cities*, resulting in recommendations for developing online learning content for these cities, both in terms of content and formats.

The analysis identified six core support pathways needed by cities: building a strong mandate, understanding systems, embedding climate goals in daily operations, fostering collaboration and capacity, strengthening financing strategies, and improving learning and evaluation. The analysis outlined key skill areas for city practitioners, including systems thinking, multi-level governance, cross-departmental collaboration, citizen and public-private engagement, narrative building, financial planning, and the application of technical solutions.

In terms of learning formats, the analysis identified a need for a hybrid learning programme in which city representatives can partly complete an (asynchronous) self-paced online process, using a variety of formats, including case studies, webinars, workshops, dedicated training sessions, and multimedia resources.

The analysis revealed a strong preference for in-person learning and real-life exchange through challenge-based, peer-to-peer learning sessions, in which cities collaboratively work on real-world problems, learn from each other's practical examples, and establish a transnational peer network.

The analysis served as a guideline for developing portal content. The guiding principles for adapting content to Mission-minded cities have been: focusing on Mission-minded cities' learning needs, enhancing accessibility (e.g., via new thematic focus pages, improved menu and search function), and prioritising preferred learning formats (e.g. Online Planning Lab, short documents, making online resources helpful beyond Mission cities).

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Annex 3. Online resource impact assessment checklist

To ensure the accessibility and relevance of the online resources developed as part of SGA2-NZC, Task 1.3.2, the project partners developed an impact checklist. This checklist was created and shared with the project partners responsible for producing online learning resources for the knowledge repository. The checklist is below.

Online resource impact assessment checklist

What can we do to ensure our online learning materials and formats are effective in achieving their intended outcomes and address the concrete challenges and constraints faced by city practitioners?

If you can answer yes to the questions below, your portal resource will likely be found, used, and have an impact. If not, your resource may not be used to its full potential, and you should aim to answer these questions before proceeding - individually and with support.

- *Can you describe who the resource is for in a precise manner? (It can be for more than one audience)*
- *Can you specify which city practitioners' challenge(s) this resource addresses? (Can you write it in a language they would use and relate to?)*
- *Have you made sure there are no other resources that fulfil these challenges that can be repurposed or iterated on instead of starting new? (Search the NZC knowledge repository as if you are a city – can you already find a useful resource? Can you find useful resources in alternatives to NZC?)*
- *Can you describe the intended (learning) outcome of a city practitioner using this resource? (What do you hope they do, change, feel, as a result?)*
- *Does the resource content of the support achieving the expected outcomes?*
- *Does the content of the resource format support achieving the expected outcomes?*
- *Do you have a plan for where the resource should be placed so that it can be found?*
- *Do you have a plan to promote the resource to your audience? (e.g., links in the portal, other NZC channels, via City Advisors and venues)*

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Annex 4: List of added and updated online resources for Mission-minded cities

The project partners contributing to the development of the Mission Portal's online resources and the content of the deliverable include the following: EuC, LGI, CARTIF, DML BV, Demos, DemSoc, EIT-UM, FS, Tecnalia, TNO, UPM, VC/KTH, VTT, and CRS.

The following list includes all online resources added and updated in the Mission portal as part of SGA2-NZC Work Package 1, task T1.3.2 (as of December 2025).

Table 1. List of added and revised online resources for Mission-minded cities

#	Title	Link	Revised or added	Typology
1	Quick read social innovation	https://netzerocities.app/QR-Social	Revised	Quick Read
2	Quick read MEL	https://netzerocities.app/QR-Monitoring	Revised	Quick Read
3	Quick read finance	https://netzerocities.app/QR-Finance	Revised	Quick Read
4	Quick read CCC	https://netzerocities.app/QR-CCC	Revised	Quick Read
5	Quick read on national platforms	https://netzerocities.app/resource-casestudy-4416	Added	Quick Read
6	Quick read engagement	https://netzerocities.app/QR-Citizen&Urban	Revised	Quick Read
7	Quick read governance	https://netzerocities.app/QR-Governance	Revised	Quick Read
8	Quick read systemic change	https://netzerocities.app/QR-Systems	Revised	Quick Read
9	Quick read technical innovation	https://netzerocities.app/QR-Technological	Revised	Quick Read
10	Focus page social innovation	https://netzerocities.app/resource-4074	Revised	Focus Page
11	Focus page for researchers	https://netzerocities.app/resource-4259	Added	Focus Page
12	Focus page MEL	https://netzerocities.app/resource-4249	Added	Focus Page
13	Focus page citizen engagement	https://netzerocities.app/resource-4248	Added	Focus Page
14	Focus page financing	https://netzerocities.app/resource-4240	Added	Focus Page
15	Focus page partnership and policies	https://netzerocities.app/resource-4258	Added	Focus Page
16	Focus page systemic approach	https://netzerocities.app/resource-4226	Added	Focus Page
17	Focus page technical solutions	https://netzerocities.app/resource-4229	Added	governance
18	Article: Supporting municipalities to develop collaboration capability to facilitate urban transitions and sustainability:	https://netzerocities.app/resource-4626	Added	Governance

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	Role of transition intermediaries in Madrid			
19	Building Adaptive Climate Action in Cities: Anticipatory Climate Governance	https://netzerocities.app/resource-4617	Added	Governance
20	Climate Governance in Cities - Leading Societies Towards Climate Neutrality	https://netzerocities.app/resource-4326	Revised	Governance
21	Day to Day Lifecycle: Infrastructuring democracy	https://netzerocities.app/resource-4339	Added	Governance
22	Leveraging Foresight and Anticipatory Governance in Cities' Climate Action	https://netzerocities.app/resource-4710	Added	Governance
23	Learning interactive visual	https://netzerocities.app/resource-4334	Added	Learning
24	Accelerating Just Transitions: Insights for Cities and National Platforms	https://netzerocities.app/resource-edit-4634	Added	National Platforms
25	National Platforms to Transform Cities Using Collective Experimentation and Scale: The Case of Sweden and Spain	https://netzerocities.app/resource-4705	Added	National Platforms
26	National platforms	https://netzerocities.app/resource-casestudy-4416	Added	National Platforms
27	Economic model of the NetZeroPlanner	https://netzerocities.app/resource-4309	Added	Planning
28	Activating Ecosystems for Change by Enriching the Civic "Soil" for Social Innovation. The Wiener Klimateam Project as a Case Study	https://netzerocities.app/resource-4701	Added	Social innovation
29	Advancing Social Innovation for a Carbon–Neutral Future: A Portfolio-Based Approach for the New European Bauhaus	https://netzerocities.app/resource-4703	Added	Social innovation
30	Integrating Social Innovation in Cities' Portfolios of Action: Building Robust Ecosystems for (of) Collective Action and Social Impact	https://netzerocities.app/resource-4697	Added	Social innovation
31	Pilots Cities projects - Social Innovation Activities	https://netzerocities.app/resource-4477	Added	Social innovation
32	Published Climate City Contracts from Mission Cities	https://netzerocities.app/resource-4712	Added	Social innovation
33	Social Innovation Design Pathways and Methods Toward Net Zero	https://netzerocities.app/resource-4702	Added	Social innovation
34	Social Innovation methods	https://netzerocities.app/resource-4324	Added	Social innovation
35	Social Innovation Projects for Climate Neutral Cities: Making Municipalities Sustainable with People-Based Solutions	https://netzerocities.app/resource-4694	Added	Social innovation

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36	Social Innovation Scaling at Urban Level	https://netzerocities.app/resource-4699	Added	Social innovation
37	Strategizing for Climate Neutrality. How to Make Social Innovation Relevant in the City's Journey to Climate Neutrality	https://netzerocities.app/resource-4698	Added	Social innovation
38	Ten Social Innovation Case Studies to Address Cities' Challenges: Citizens Engagement, Energy and Behavioral Change	https://netzerocities.app/resource-4700	Added	Social innovation
39	The Role of Social Innovation in Climate Neutrality	https://netzerocities.app/resource-4696	Added	Social innovation
40	Challenge map	https://netzerocities.app/resource-1148	Revised	Stakeholder engagement
41	Context map canvas	https://netzerocities.app/resource-1118	Revised	Stakeholder engagement
42	Empathy mapping	https://netzerocities.app/resource-1138	Revised	Stakeholder engagement
43	Engagement Building Blocks	https://netzerocities.app/resource-4093	Revised	Stakeholder engagement
44	Methodology for Spaces for Encounter	https://netzerocities.eu/wp-content/uploads/2023/09/Design-of-the-Spaces-for-Encounter-Framework-Guide-230803.pdf	Revised	Stakeholder engagement
45	Multi-stakeholder collaboration for climate action in school environments	https://netzerocities.app/resource-4708	Added	Stakeholder engagement
46	NetZeroCities Tool Training Series - Kick Off: Introduction to Finance & Funding tools for EU Cities	https://netzerocities.app/resource-4482	Added	Stakeholder engagement
47	Scaffolding Emergence Canvas	https://netzerocities.app/resource-4338	Added	Stakeholder engagement
48	Schools as levers of change in urban transformation: Practical strategies to promote the sustainability of climate action educational programs	https://netzerocities.app/resource-4713	Added	Stakeholder engagement
49	Shaping Climate Narratives: 8 Tips for Building Trust and Driving Change	https://netzerocities.app/resource-4456	Added	Stakeholder engagement
50	Shaping Narratives & Activation (Canvas)	https://netzerocities.app/resource-4543	Added	Stakeholder engagement
51	Tools training overview	https://netzerocities.app/resource-4739	Added	Systemic change

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52	User Experience Iterative Flow with User Testing Methods	https://netzerocities.app/resource-4715	Added	Stakeholder engagement
53	Value Motivation Matrix	https://netzerocities.app/resource-1248	Revised	Stakeholder engagement
54	Article: Breaking Silos: A Systemic Portfolio Approach and Digital Tool for Collaborative Urban Decarbonisation	https://netzerocities.app/resource-4622	Added	Systemic change
55	Article:(Re)designing the Rules: Collaborative Planning and Institutional Innovation in Schoolyard Transformations in Madrid	https://netzerocities.app/resource-4624	Added	Systemic change
56	Backcasting methodology	https://netzerocities.app/resource-368	Revised	Systemic change
57	Futures table	https://netzerocities.app/resource-3812	Revised	Systemic change
58	Futures thinking	https://netzerocities.app/resource-2680	Revised	Systemic change
59	Instruments for Implementing Systemic Change to Foster Climate Transitions in European Cities	https://netzerocities.app/resource-4704	Added	Systemic change
60	Portfolio Mapping as a Tool	https://netzerocities.app/resource-4709	Added	Systemic change
61	Social simulation: Solevento exploration space	https://netzerocities.app/resource-4722	Added	Systemic change
62	V1 - Climate Transition Map and System Perspective interactive visualizations	https://netzerocities.app/resource-4721	Added	Systemic change
63	V2 - Climate Transition Map (CTM) and System Perspective interactive visualizations	https://netzerocities.app/resource-4720	Added	Systemic change
64	Agrivoltaics: Solar photovoltaics in agriculture	https://netzerocities.app/resource-68	Revised	Technical solutions
65	Article: (Un)Likely Connections between (Un)Likely Actors in the Art/NBS Co-Creation Process	https://netzerocities.app/resource-4628	Added	Technical solutions
66	Article: The Impact of Institutional Innovation on a Public Tender: The Case of Madrid Metropolitan Forest	https://netzerocities.app/resource-4627	Added	Technical solutions
67	Bi-directional EV charging (V2X)	https://netzerocities.app/resource-428	Revised	Technical solutions
68	Bridging the Energy Transition: Energy Communities and Combating Energy Poverty in European Cities	https://netzerocities.app/resource-4472	Added	Technical solutions

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69	Climate-smart urban agriculture	https://netzerocities.app/resource-276	Revised	Technical solutions
70	Demand management	https://netzerocities.app/resource-91	Revised	Technical solutions
71	Envelope insulation	https://netzerocities.app/resource-154	Revised	Technical solutions
72	Green walls and green façades	https://netzerocities.app/resource-174	Revised	Technical solutions
73	Joinery for low-energy houses or passive houses	https://netzerocities.app/resource-184	Revised	Technical solutions
74	Mission Cities Best Practices - Session Videos	https://netzerocities.app/resource-4303	Added	Cities testimonials
75	Mobility and Transport	https://netzerocities.app/resource-2488	Revised	Focus page
76	Natural ventilation (incl. Wind catchers)	https://netzerocities.app/resource-246	Revised	Technical solutions
77	Passive building design strategies: building orientation, passive heating and cooling	https://netzerocities.app/resource-194	Revised	Technical solutions
78	Public charging system for EVs	https://netzerocities.app/resource-448	Revised	Technical solutions
79	PV Panels	https://netzerocities.app/resource-388	Revised	Technical solutions
80	Reducing embedded emissions of buildings	https://netzerocities.app/resource-286	Revised	Technical solutions
81	Smart street lighting – Humble Lamppost	https://netzerocities.app/resource-266	Revised	Technical solutions
82	Solar Thermal panels	https://netzerocities.app/resource-438	Revised	Technical solutions
83	State-of-the art on technical solutions to achieve climate neutrality	https://netzerocities.app/resource-4229	Revised	Technical solutions
84	Stationary Energy	https://netzerocities.app/resource-327	Revised	Focus page
85	Systemic lever - Technology and infrastructure	https://netzerocities.app/resource-4723	Added	Technical solutions
86	Tech solutions: mobility and transport	https://netzerocities.app/resource-2488	Added	Focus page
87	The Wild City: collaborative practices in urban renaturing	https://netzerocities.app/resource-4711	Added	Technical solutions
88	User Experience Testing Methods	https://netzerocities.app/resource-4693	Revised	Method
89	Zero emission buses (electric and fuel cell)	https://netzerocities.app/resource-398	Revised	Technical solutions

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90	Zero emission electric cars	https://netzerocities.app/resource-408	Revised	Technical solutions
91	Types of cities in NZC	https://netzerocities.app/resource-4748	Added	Onboarding
92	Portfolio Mapping Guide	https://netzerocities.app/resource-4869	Added	Planning
93	Governance Innovation and Implementation in the Cities Mission - Multi-Actor Collaboration in Mission City Climate Action: Private Sector Engagement	https://netzerocities.app/resource-4631	Added	Engagement
94	Governing Together	https://netzerocities.app/resource-4800	Added	Governance
95	Transport focus page	https://netzerocities.app/resource-2488	Revised	Focus page
96	Beyond One-Off Participation: Building Long-Term Citizen Engagement for Climate Action	https://netzerocities.app/resource-4882	Added	Social innovation
97	Recommendations for supporting municipalities in integrating Climate Action into the urban planning system	https://netzerocities.app/resource-4868	Added	Systemic change
98	Tools for climate action planning	https://netzerocities.app/resource-4876	Added	Planning
99	Offering overview and Mmc onboarding guide	https://netzerocities.app/resource-4435	Added	Systemic change
100	Scientific publications	https://netzerocities.app/resource-4259	Revised	Systemic change
101	CTM interactive visualization	https://netzerocities.app/resource-4721	Added	Systemic change
102	A collection of 9 graphics supporting the explanation of the theory of change and the NZC approach	https://netzerocities.app/resource-4947	Added	Systemic change
103	Opportunità e risorse di NetZeroCities per tutte le città	https://netzerocities.app/resource-4476	Added	Onboarding
104	Commercial loan	https://netzerocities.app/resource-4921	Added	Finance
105	Syndicated loan	https://netzerocities.app/resource-4909	Added	Finance
106	Project level market rate debt	https://netzerocities.app/resource-4910	Added	Finance
107	Concessional finance or low-cost project debt	https://netzerocities.app/resource-4922	Added	Finance
108	Term loans	https://netzerocities.app/resource-4911	Added	Finance
109	Yieldcos (Yield Company)	https://netzerocities.app/resource-4902	Added	Finance
110	Green bond (private sector issuance)	https://netzerocities.app/resource-4926	Added	Finance
111	Green Sukuk (private sector issuance)	https://netzerocities.app/resource-4927	Added	Finance
112	Climate bond	https://netzerocities.app/resource-4928	Added	Finance

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113	Sustainability bond	https://netzerocities.app/resource-4929	Added	Finance
114	GO bond	https://netzerocities.app/resource-4903	Added	Finance
115	CAT bonds or insurance pool	https://netzerocities.app/resource-4904	Added	Finance
116	Climate adaptation notes	https://netzerocities.app/resource-4944	Added	Finance
117	Tax-line financing	https://netzerocities.app/resource-4945	Added	Finance
118	City-based emissions trading systems (ETS)	https://netzerocities.app/resource-4915	Added	Finance
119	Charges and pricing for actions and services	https://netzerocities.app/resource-4912	Added	Finance
120	Concessions build-operate-transfer (BOT) and design-build-operate (DBO) projects:	https://netzerocities.app/resource-4930	Added	Finance
121	Power purchase agreements (PPA) for clean energy:	https://netzerocities.app/resource-4918	Added	Finance
122	Energy performance contract (EPC)	https://netzerocities.app/resource-4916	Added	Finance
123	Operating lease finance	https://netzerocities.app/resource-4905	Added	Finance
124	Hybrid models for purchase and lease of assets	https://netzerocities.app/resource-4906	Added	Finance
125	Mmc newsletter	https://netzerocities.app/resource-4894	Added	Onboarding
126	National platforms	https://netzerocities.eu/national-platforms/	Added	National platforms

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Annex 5. Thematic categorisation of online resources

The categorization of the resources in the Mission Portal is based on standardized emission domains (GHG protocol for cities).

Emission domains

Technologies and solutions represented in the portal are categorised according to the emission domains:

- Stationary energy including energy sources and distribution and buildings
- Transport
- IPPU and industry
- AFOLU (including agriculture and forestry)
- Waste treatment (both solid waste and wastewater)
- Scope 3

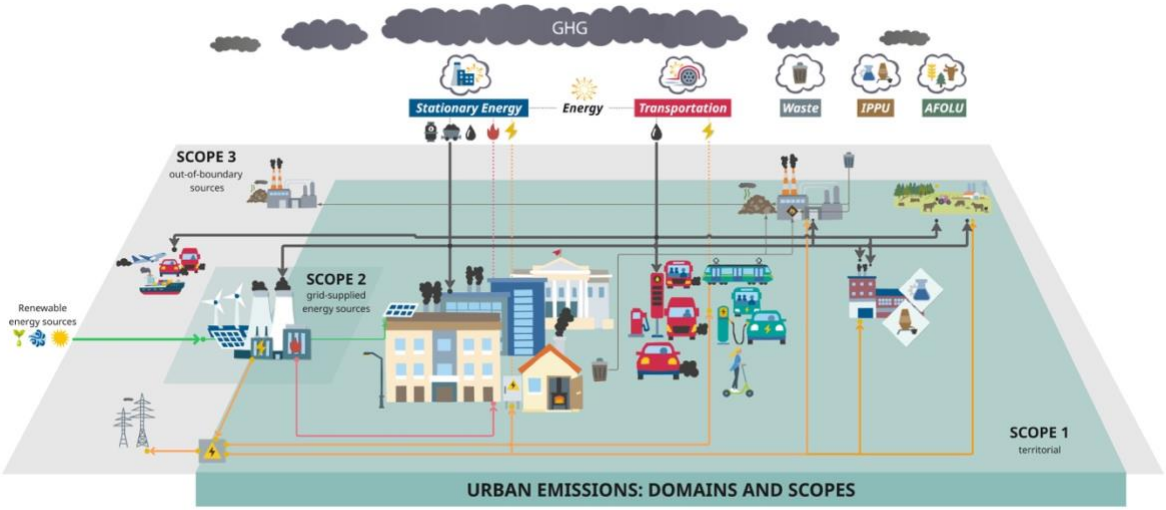


Figure 2. Emission domains.

Solution themes

In the portal, technical solutions are classified by solution themes aligned with standardized emission domains. The solution themes of the portal include technical domains and levers of change.

Technical domains are classified as:

- buildings (related to the emission domain of stationary energy),
- energy systems (related to the emission domain of stationary energy),
- mobility and transport,
- waste and circular economy,
- green industry (related to the emission domain of IPPU),
- nature-based solutions, green infrastructure and agriculture (related to the emission domain of ALOFU)

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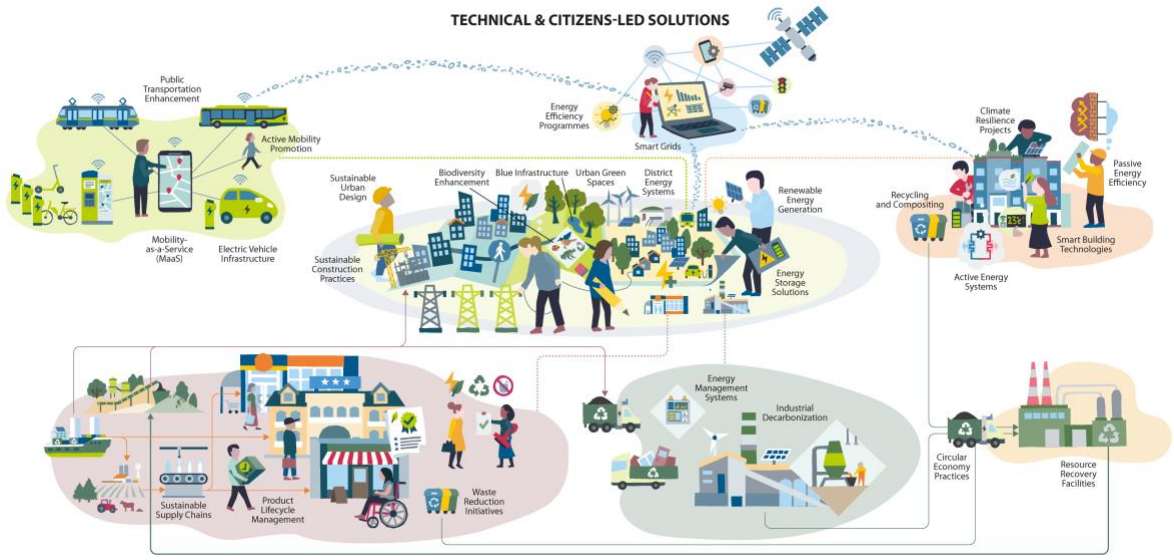


Figure 3. Solution themes.

Levers of change

While some technologies are straightforward to implement, effective uptake of solutions often requires that cities activate systemic levers. According to the Theory of Change used in NetZeroCities, the key levers of change are:

- governance
- stakeholder engagement
- social innovation
- financing mechanisms
- learning and capability building

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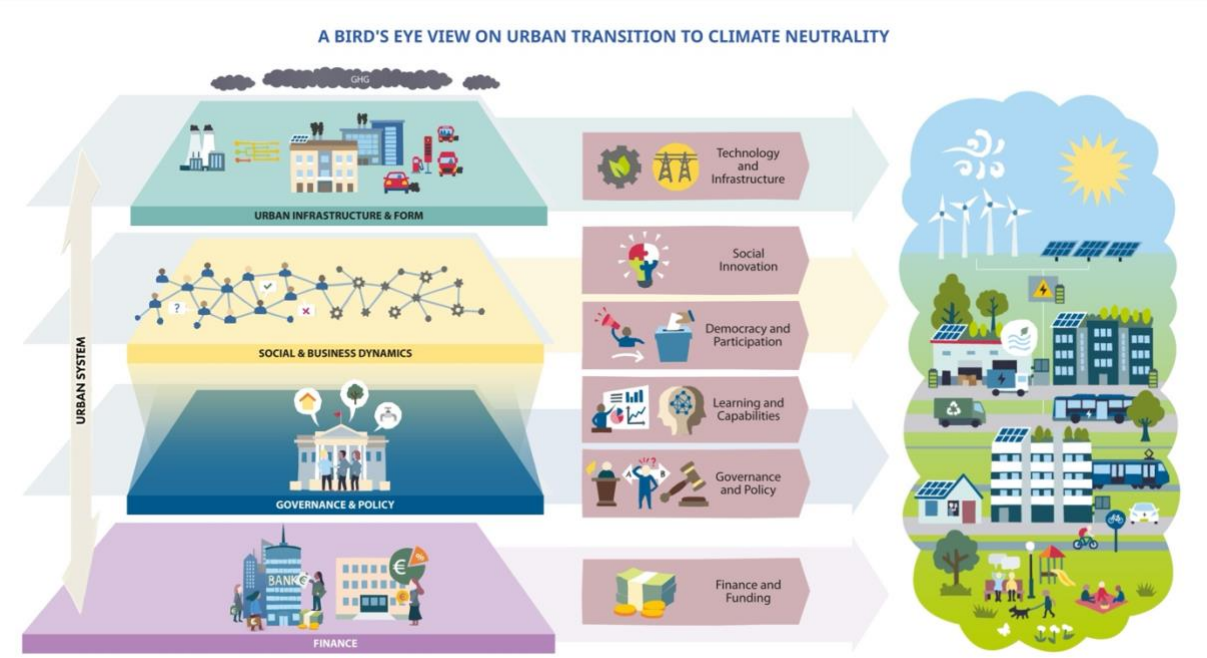


Figure 4. Systemic levers.

Visualisations by the Centre for Systems Solutions (CRS) are available at the knowledge repository.

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