

NET ZERO CITIES



EU MISSION PLATFORM

CLIMATE NEUTRAL AND SMART CITIES



Funded by
the European Union

Design Your City's Net Zero Strategy

Online Planning Lab





Faculty

Scientific Directors



Sabrina Bresciani, Ph.D.



Jaime Moreno

Executive Directors



Angelica Gomez



Beatriz Martínez

Certification and Technical Support



Hamid Yammine

Lecturers

Eugenia Mansutti



Maria Giorda



Alicia Puig



Daniela Amann



Aurora González



Francesco Palmia



Dr. Silvia Gugu



Sean Murray



Dr.-Ing. Mira Conci



Dr. Gabriella Doci



David Brito



Anette Olovborn



Metadel Mengestu



Alex Anghel



Maria Klint



Paul Barton



Nikhil Chaudhary



Carolina García Madruga



Julia Kantorovitch



Mari Hukkalainen



Marzia Mortati



Georgia Cameron



Meline González Piloyan



Nupur Prothi



Vaneshree Naidoo



Cristina Robledano



Apurva Singh



Janne Rinne



Alexandru Buftic



Marcial Silva



Ignatius But





Modules

MODULE 1

WHAT IS AN ACTION PLAN IN THE
CITIES MISSION?
(SYSTEMIC APPROACH)

MODULE 2

TRANSITION TEAM

MODULE 3

GOVERNANCE & POLICY

MODULE 4

PORTFOLIO OF ACTIONS

MODULE 5

TECHNICAL SOLUTIONS &
LEVERS OF CHANGE

MODULE 6

FINANCING THE AMBITION





Module 1: What is an Action Plan? (Systemic Approach)

The NetZeroCities programme, service offering, systemic approach, what works for Mission Cities

How can NetZeroCities support my city's climate transition goals?





Objectives for today

- Get an overview of the **Online Planning Lab** and **all its modules** and sessions.
- Understand the **EU Cities Mission** and see how Mission Cities are advancing climate neutrality.
- Learn about the **NetZeroCities offer to all cities**, available support and upcoming activities.
- **Get inspired and connect with peers** to inspire action.





Session Agenda

09:15 - 09:20	Welcome to NetZeroCities	<i>Eugenia Mansutti, Eurocities</i>
09:20 - 09:30	Welcome word	<i>Patrick Child, Mission Manager of the EU Cities Mission, Deputy Director-General of DG Environment</i>
09:30 - 09:45	Introduction to the Online Planning Lab	<i>Prof. Sabrina Bresciani, Politecnico di Milano Prof. Jaime Moreno Serna, UPM</i>
09:45 - 09:55	Introduction to the EU Missions	<i>Eugenia Mansutti, Eurocities</i>
09:55 - 10:10	Success stories from Mission Cities <i>Cities of Porto and Umeå</i>	<i>Ana Rita Barros, City of Porto Torgny Forss, City of Umeå</i>
10:10 - 10:35	Introduction to NetZeroCities offer and upcoming events	<i>Charline Mougín, Eurocities</i>
10:35 - 10:50	Q&A	<i>All</i>
10:50 - 11:00	Wrap up and next steps	<i>Eugenia Mansutti, Eurocities</i>





Lecturers



Eugenia Mansutti
Co-Head of Climate
Eurocities



Charline Mougin
Senior Project
Coordinator
Eurocities



Sabrina Bresciani
Associate Professor
Politecnico di Milano



Jaime Moreno Serna
Associate Professor
Universidad Politecnica
de Madrid





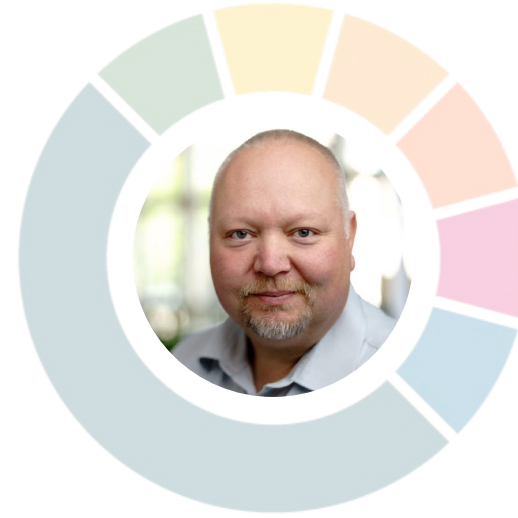
Lecturers from Mission Cities



Ana Rita Barros

Environmental Engineer at Porto's
Carbon Neutrality Department

Mission City: Porto



Torgny Forss

Energy and climate advisor

Mission City: Umea





Welcome word

Patrick Child

Deputy Director General, DG Environment, European Commission

Mission Manager of the EU Cities Mission





The five EU Missions

To direct innovation to solve the pressing global challenges of our time

Eugenia Mansutti

Co-Head of Climate, Eurocities





Five European Missions

To direct innovation to solve the pressing global challenges of our time



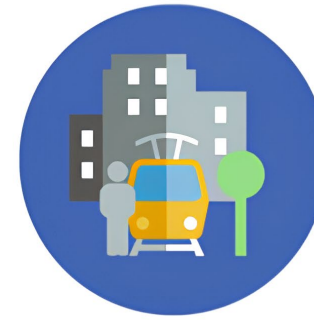
**Adaptation to
climate change,
including societal
transformation**



Cancer



**Healthy oceans,
seas, coastal &
inland waters**



**Climate-neutral
& smart cities**



**Soil health &
food**





EU Cities Mission

To direct innovation to solve the pressing global challenges of our time

- Launched by the EU in 2022, the **EU Cities Mission** is a key part of the Horizon Europe programme.
- The **EU Cities Mission** provides the overarching political mandate for 100+ European cities to achieve climate neutrality by 2030, positioning them as frontrunners for Europe's wider 2050 target.
- The **NetZeroCities** programme serves as the Mission's dedicated implementation platform, equipping cities with the technical expertise, tools, capacity-building, and funding mechanisms needed to deliver on this ambition.
- **In essence**, the Cities Mission defines the vision and objectives, while NetZeroCities provides the means and pathways to achieve them.





EU Mission “100 Climate Neutral and Smart Cities by 2030”

The EU has launched a Mission “100 Climate-Neutral and Smart Cities by 2030”.

The objectives of the Mission are

- to achieve **100 climate-neutral and smart European cities by 2030.**
- to ensure that these cities act as experimentation and innovation hubs to **enable all European cities to follow suit by 2050.**



**100 EU cities & 12 cities from
Horizon Europe Associated Countries**





Why the Mission Matters

- Cities occupy only 4% of the EU's land area but are **home to 75% of its citizens**.
- Globally, cities are responsible for over **65% of energy consumption** and **70% of CO₂ emissions**.
- The Mission is essential for achieving the **EU Green Deal's goals of a 55% emissions reduction** by 2030 and climate neutrality by 2050.
- The Mission's added value lies in its **cross-sectoral, demand-led** approach that focuses on each city's specific needs, unlike other, mostly sectoral, EU programs.





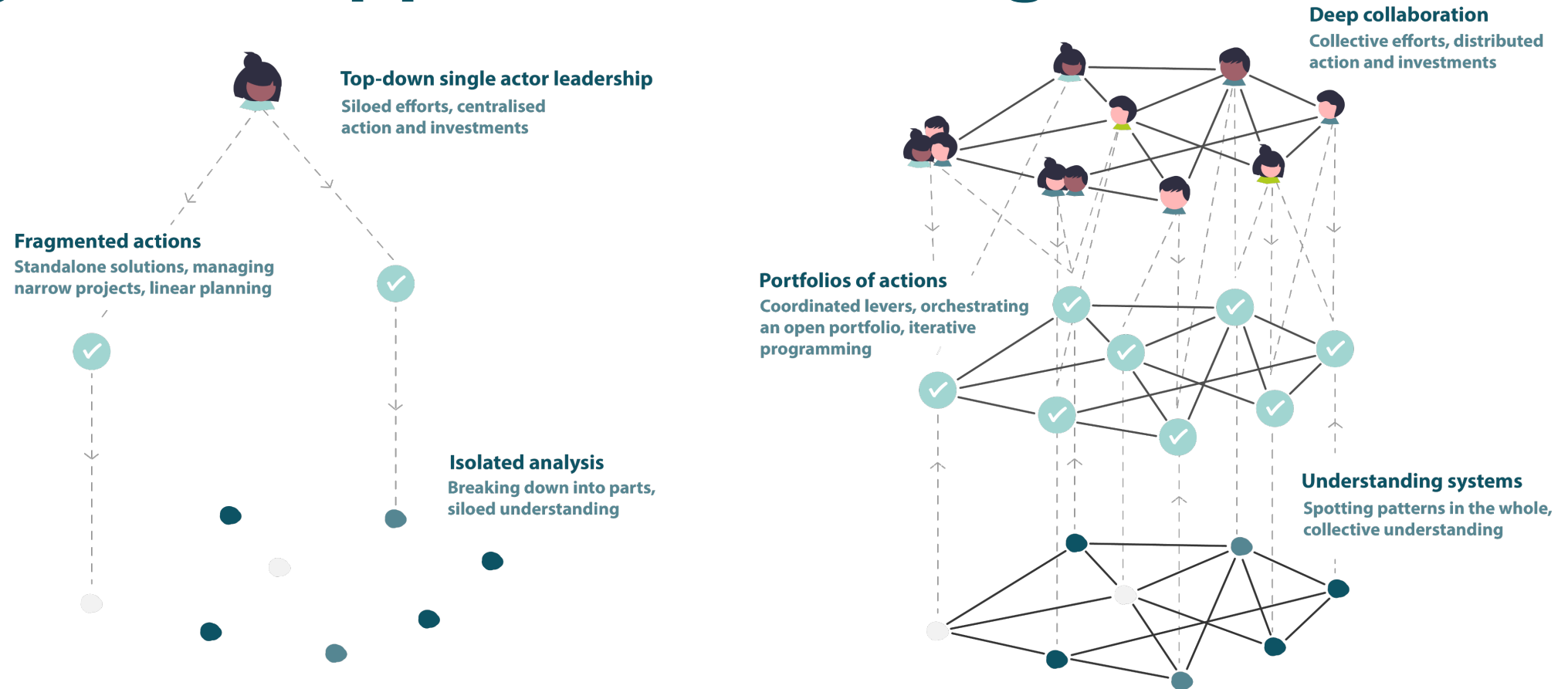
The Journey to Climate Neutrality

Systemic Change





Systems Approach to Change





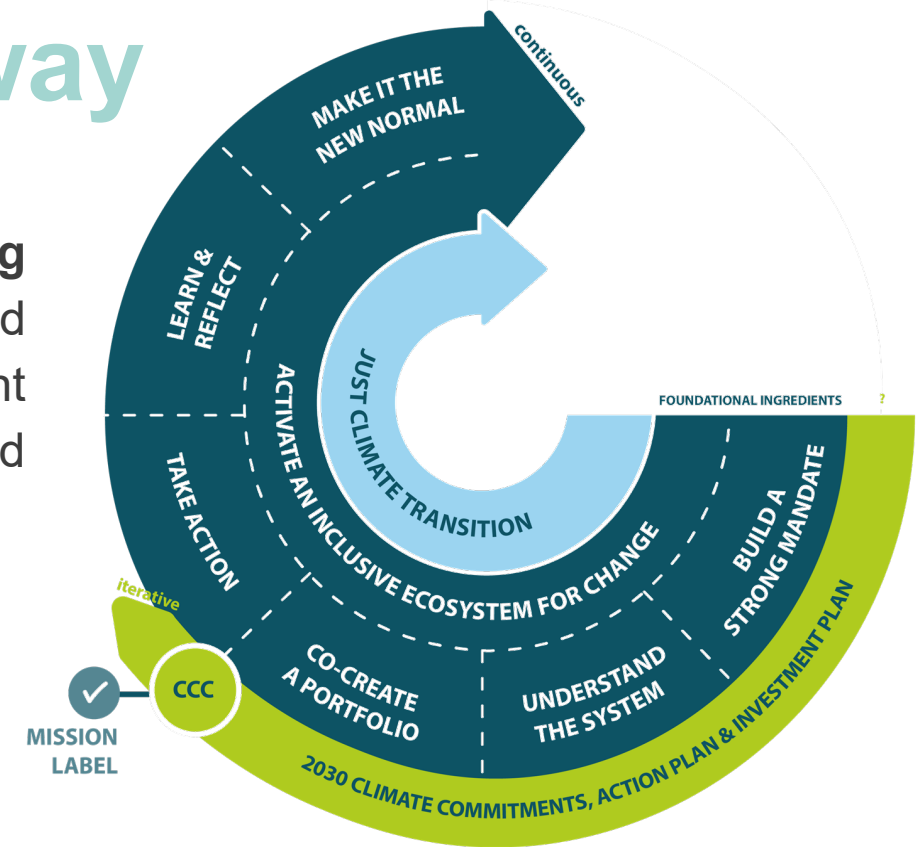
Climate Transition Map: A systemic transition pathway

Learning from the mission's approach!

The journey to change for climate-neutrality will focus on **building 7 core elements for the transition**: a strong mandate, a good understanding of the system, a strong local ecosystem, a coherent portfolio, transformative action, learning and reflection, normalised 'net zero' practice.

Important to keep in mind:

- This journey is **inclusive** and **iterative**
- **(Co-)creating and testing**
- **Quick wins and experimentation**



<https://netzerocities.app/home>





Main elements

Horizon Europe

Mission platform

- Tailor-made technical, regulatory and financial advice
- Pilot Cities Programme demonstrators
- Twinning and mutual learning
- Run by the NetZeroCities consortium

Portfolio of Pilot Cities
(R&I funded) activities

Climate City Contracts

- Including **climate action plan** and **investment strategy**
- **Innovative city governance** and **citizen engagement**
- Involvement of **European, national and regional level**

Mission Label



- Synergies with other programmes
- Help with access to funding and financing





Success stories: Mission City Porto

A journey towards climate transition

Ana Rita Barros

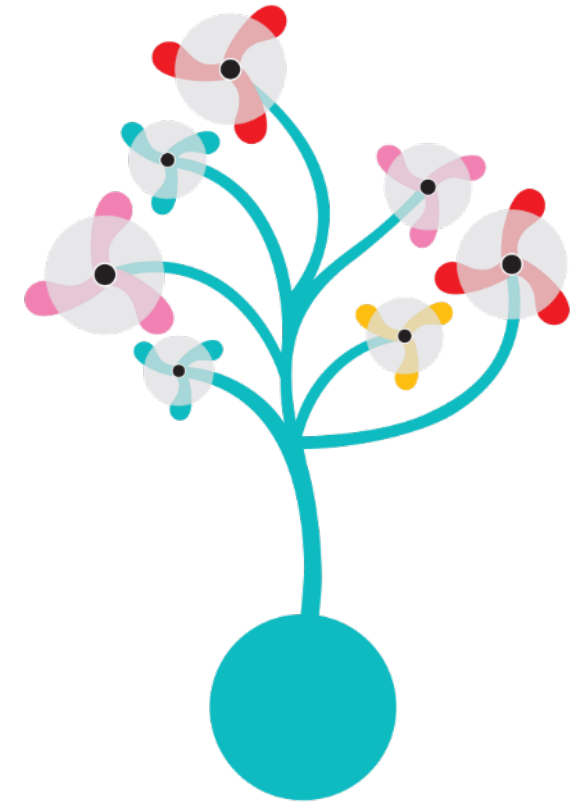
Environmental Engineer at Porto's Carbon Neutrality Department





Porto Climate Pact

- Since 2008, Porto has been monitoring Greenhouse Gas emissions
- Carbon neutrality by 2030 depends on the actions of multiple stakeholders
- The Pact aims to foster action from citizens and organizations, with the goal of creating a large community for learning, sharing, and mutual support



PACTO DO PORTO PARA O CLIMA





Big challenges

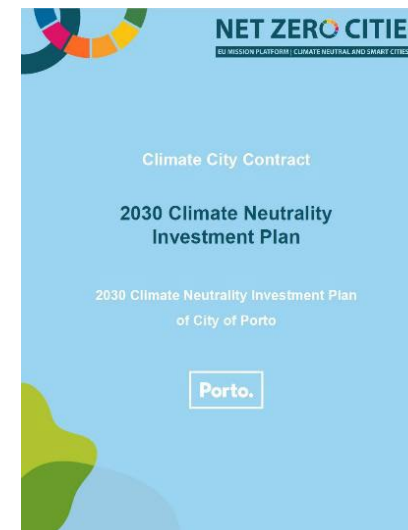
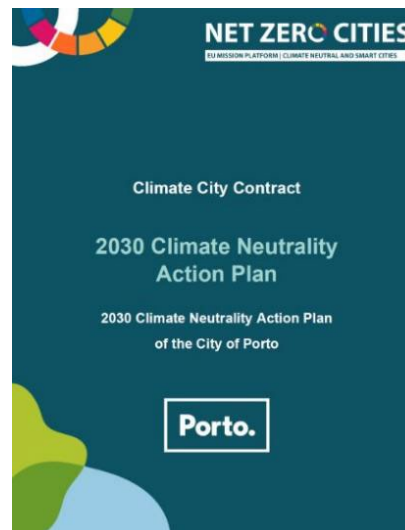
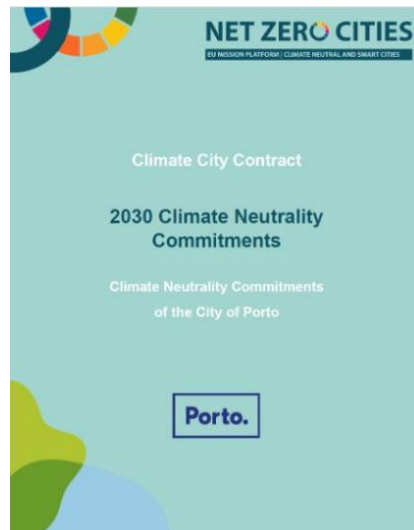
Big opportunities





Partner involvement

- 50 institutional signatories to the Pact committed to the CCC since its beginning





Partner involvement

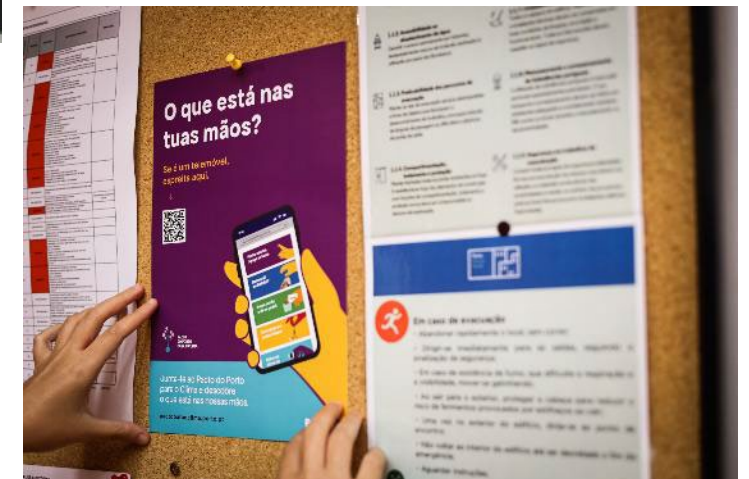
- Close contact





Partner involvement

- Awareness campaigns





Partner involvement

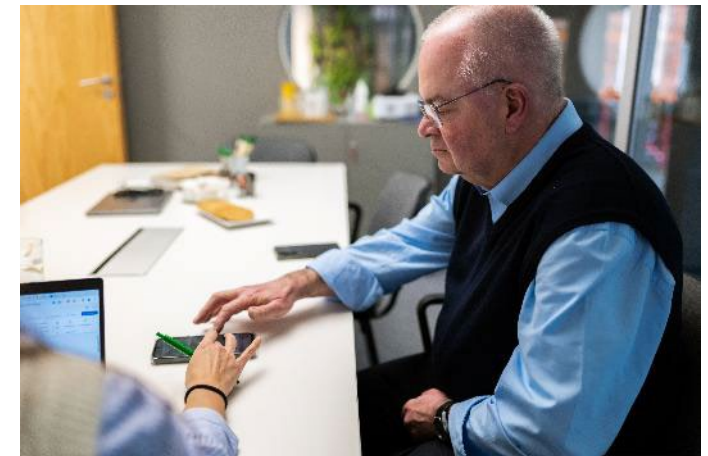
- Involvement in the city's initiatives





Partner involvement

- Moments of co-creation





Partner involvement

- National network



PORTO

HAS BEEN AWARDED WITH

EU MISSION LABEL

CLIMATE-NEUTRAL & SMART CITIES

#EUmissions
#MissionCities
#EUGreenDeal





Contacts

Porto's Carbon Neutrality Team

- Ana Rita Barros
ritabarros@portoambiente.pt



Success stories: Mission City Umeå

Umeå's Climate Transition

Torgny Forss

Energy and climate advisor





EU MISSION LABEL

CLIMATE-NEUTRAL & SMART CITIES

UMEÅ





UMEÅ

Largest city in the north of Sweden

Population: 135 000

Area: 5300km²

Average age: 39

Universities: 2

Students: 36 700

Number of nationalities: 140 Antal

Enterprises: 14 000

Pedestrians and bicycle lanes: 262 km

Excercise tracks: 160 km





Umeå's Climate Targets

- Umeå Municipality climate neutral by 2040 and Umeå City climate neutral by 2030.
- Umeå Municipality Group climate neutral by 2025
- The climate impact of transport in Umeå shall be reduced.
- Umeå's consumption-based emission reduced to 2 tons of CO₂ 2040 and 1 ton by 2050.





Highlights and Milestones in Umeå's Climate Transition

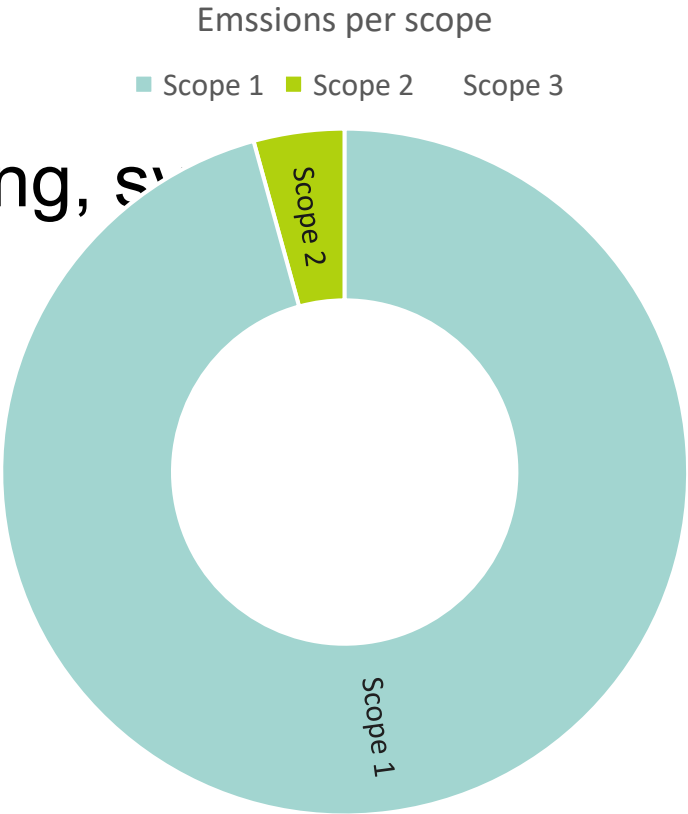
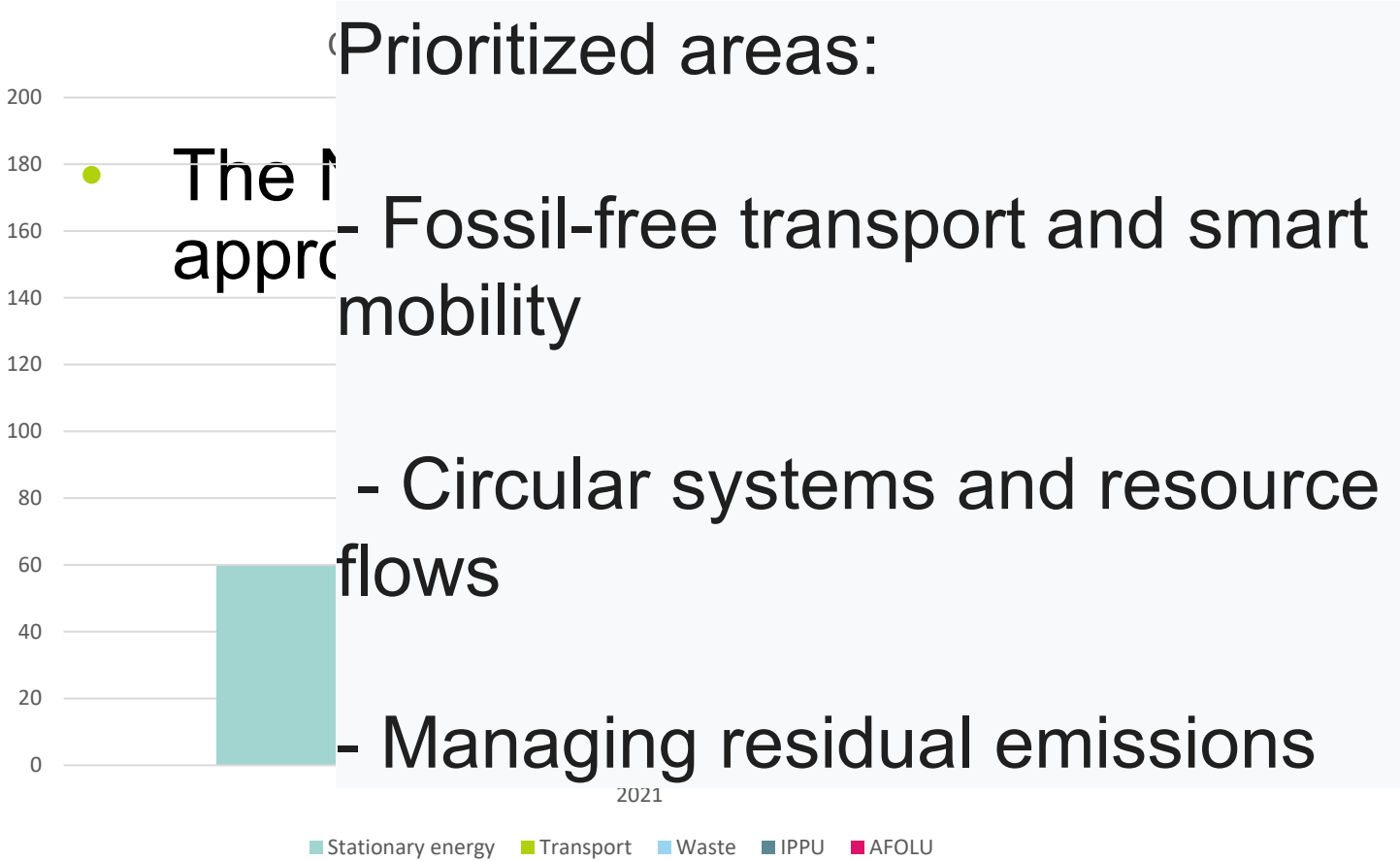
Continuous population growth is one of several key drivers of emissions and energy use in Umeå. Since 1990, the population has increased by over 40%, while emissions have decreased by approximately 27% (as of 2021). Policy and governance are the foundation of Umeå's successful climate transition, with key milestones including:

- The City Council adopted updated climate goals in February 2020 (see Chapter 2: Goals).
- The City Council adopted a climate and environmental action plan for the municipal group in November 2022: prioritized measures to reduce climate emissions, etc. The plan will be revised in 2025 to further intensify the efforts required from the municipality and municipal companies.
- The City Council adopted climate neutrality as an overarching municipal goal and connected steering mechanisms to achieve the goal (see Chapter 4: Process and Principles).
- Umeå Climate Roadmap: a framework developed by the city in 2021, adopted by the municipality and 36 other partners in 2022. Today, there are a total of 55 signatories in a strong partnership (see Chapter 4: Process and Principles).
- Annual signing of the Swedish Climate City Contract 2030 with national authorities, starting in 2020: the Swedish CCC2030 is aligned with the EU CCC, with clear commitments between Umeå and the national level.





- Total carbon emissions 2021: **313 000 tonnes**

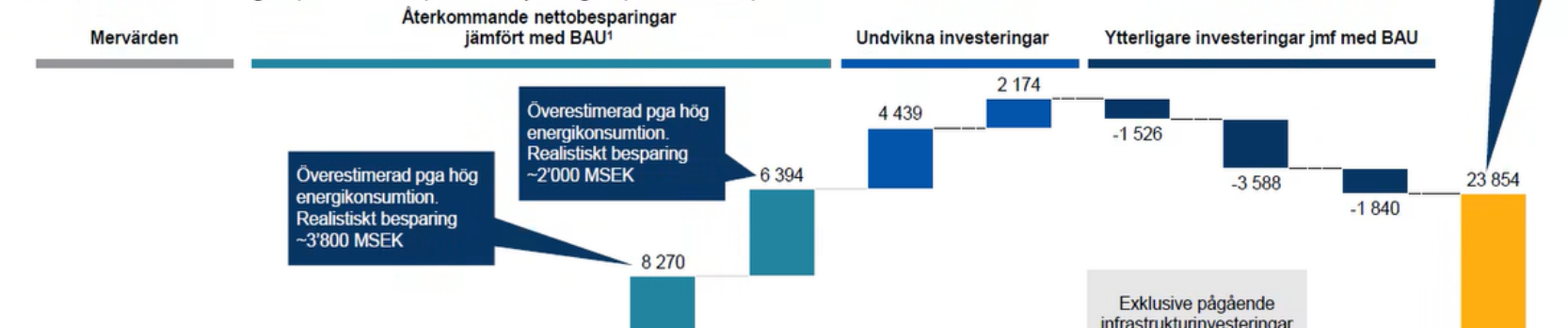




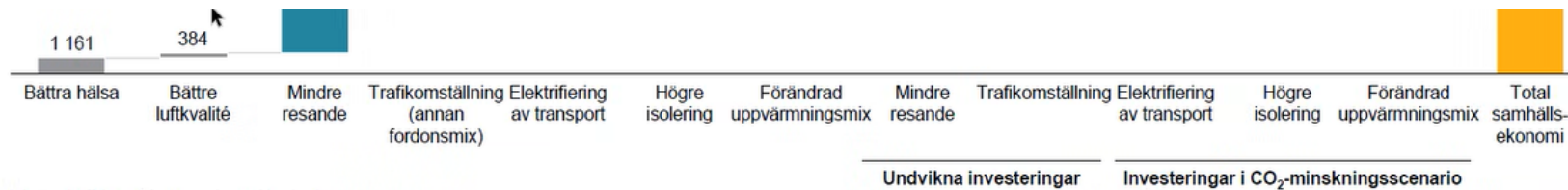
Det samhällekonomiska utfallet av Umeås omställning ger ett överskott på 23,9 miljarder SEK till 2050

Ekonomiska effekter av klimatomställning till 2040

MSEK, NPV investeringar (2022–2040) och besparingar (2022–2050)



Societal gains appr 1,4 Billions €



1. Inga priseffekter på importerad energi har beaktats
Obs: Capex = Capital expenditures (Investeringar eller undvikna investeringar)
Opex = Operational expenditures (Löpande kostnader eller kostnadsbesparingar)
NPV=Nettonuvärde (summan av allt framtida värde som skapas i dagens monetära värde)
Källa: City Decarbonization Engine, Material Economics analys

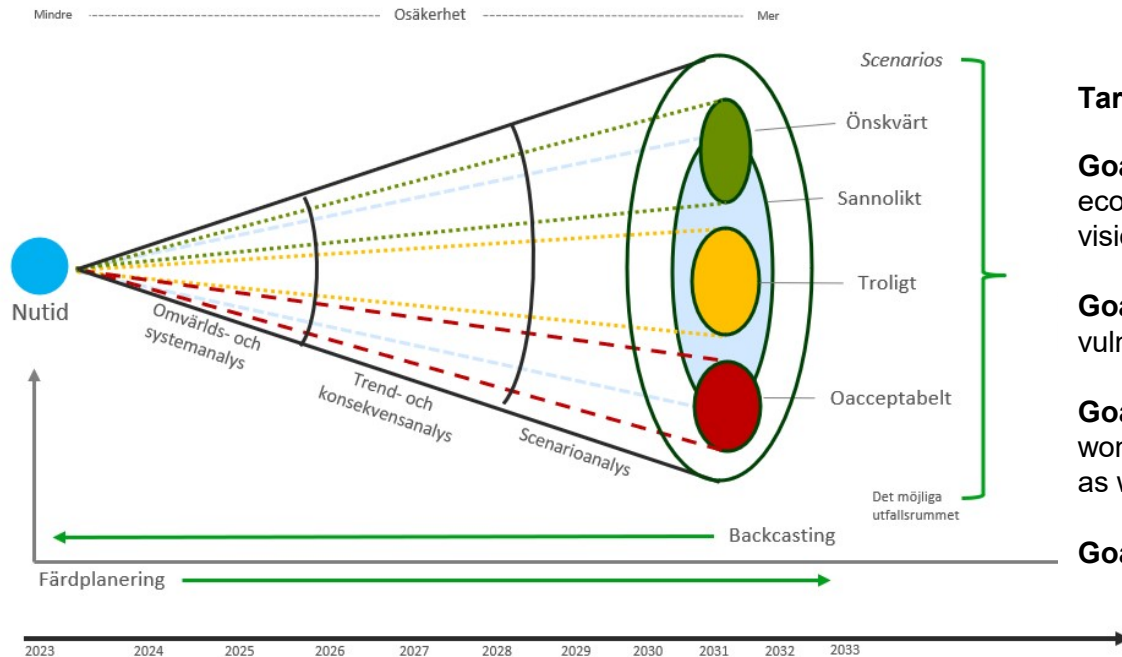
~10 MSEK/
kton CO₂





Outcomes & Learnings (so far)

Towards a scenario-based approach: to face greater uncertainty, new risks and opportunities



Target Goals

Goal 1: Umeå's growth will be managed with social, ecological, cultural and economic sustainability with the vision of 200 000 citizens by 2050.

Goal 2: Umeå will grow sustainably without any vulnerable areas.

Goal 3: Umeå municipality will create conditions for women and men to have equal power to shape society as well as their own lives.

Goal 4: Umeå will be climate neutral by 2040.

A Climate Action Plan (a Climate portfolio) which focus on:

- Our own areas of climate emissions.
- Pathways (to sustainability).
- Long-term goals.
- Previous changes





Comprehensive pathways for long-term sustainability

Dynamic and co-designed

[illegible]



Challenges of Umeå's Climate Transition

- Despite progress, there is a lack of structures and methods to quantify the effects of measures and manage economic flows in the transition.
- High emissions from transport – difficult to switch quickly, an equity issue.
- Financial challenges – The climate transition is estimated to require 1.4 billion euros.
- Lack of concretization/implementation in certain sectors.
- Behavioral changes are required but may face resistance





Key Learnings

- One have to work all levels to reach succes.
- Citizens approaches with both incentives and regulations combined with free advice.
- Buisnesses and associations need to be involved.
- Developers, utility companies and municipal plans must harmonize as well as the municipals own plan within.
- National and international rules and agreements need to harmonize and take in to account the local aspect.
- Without local public support there is no success.

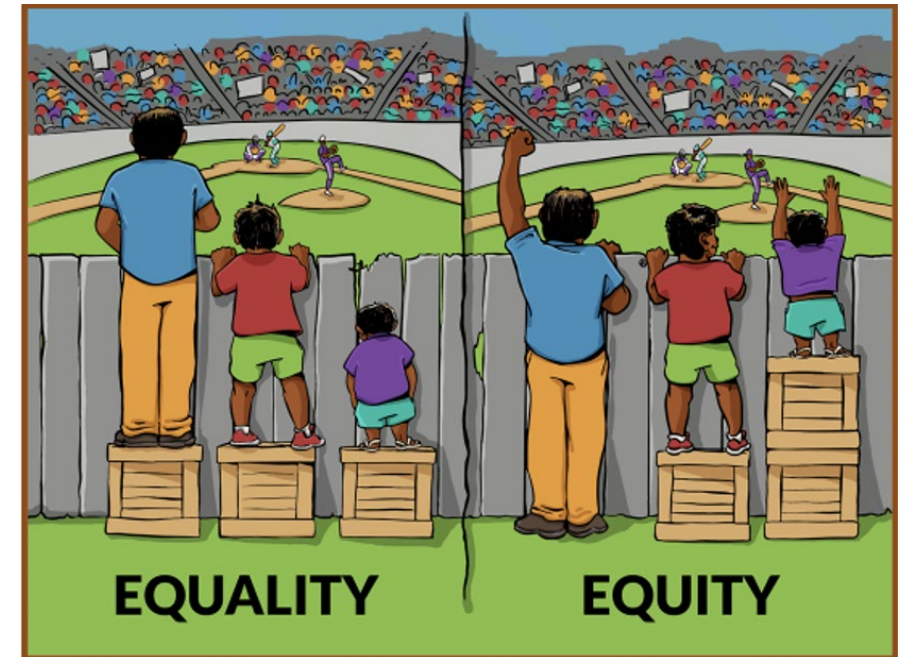




Social justice and equity

Promote a fair distribution of the costs and benefits of the energy transition:

- Who gets access to energy systems and under what conditions?
- Which households can afford the transition to more sustainable energy systems (e.g. monthly costs vs. borrowing capacity)?
- Who decides on the changes to be made in the energy system and who is expected to make the changes/understand them/live with them?
- Who is prioritised? E.g. individuals vs. companies.





Contact

Torgny Forss

- Email: torgny.forss@umea.se
- Phone: +46(0)70-369 04 11





Services and Support

What's in for your city

Charline Mougin

Senior Project Coordinator, Eurocities





Fulfilling the Second Objective of the EU Cities Mission

Helping all European cities to follow suit

Aims of the Mission

The Cities Mission will involve local authorities, citizens, businesses, investors as well as regional and national authorities to

1. Deliver 100 climate-neutral and smart cities by 2023
2. Ensure that these cities act as experimentation and innovation hubs to enable **all European cities** to follow suit by 2050







NZC PORTAL: PROCESS GUIDES, TOOLS & RESOURCES





NZC PORTAL: PROCESS GUIDES, TOOLS & RESOURCES



CAPABILITY BUILDING





NZC PORTAL: PROCESS GUIDES, TOOLS & RESOURCES



CAPABILITY BUILDING



PEER LEARNING







Mission Portal





Mission Portal

A one-stop-shop useful for any city, regardless of where it finds itself in its journey to climate neutrality.

Module 1: Core Session 1

Welcome to the NetZeroCities Portal

Here, you will find resources, community groups, tools, and information to support your city's efforts to take climate action at scale. Creating better lives for you, your community, and the planet.

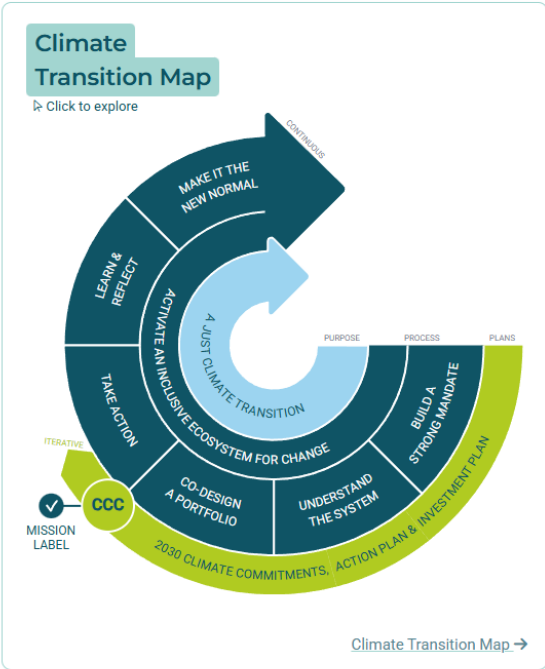
Learn
From case studies to technical approaches you can implement and adapt find resources to support your transition
[Knowledge Repository](#) →



Connect
Community and peer-to-peer learning supports sustainable climate transitions and moves us all towards our goals
[Community Space](#) →



Act
Tools to empower and track your progress, supporting you to make and maintain sustainable change
[Tools Overview](#) →



Quick Links

- [Quick Reads](#)
- [Explore Users](#)
- [See all groups](#)
- [NetZeroCities Newsletter](#)

Join our next event

23 Sep
NetZeroCities Orientation: Int...
1-2pm | Webinar
This session is designed for Mission-minded Cities. It provides an overview of ...

[Explore all events](#)

Catch up on recent posts

**Ella Morgan**
7 hrs ago
Marseille's Pilot Cities transformation: read now!
Marseille's Pilot Cities transformation and their ambition: to change how climate action happens in the city, by making re

[See more](#)

[MARSEILLE'S PILOT CITIES](#) [businesses & neighbourhoods](#)

<https://netzerocities.app>





NZC PORTAL: PROCESS GUIDES, TOOLS & RESOURCES





NZC PORTAL: PROCESS GUIDES, TOOLS & RESOURCES



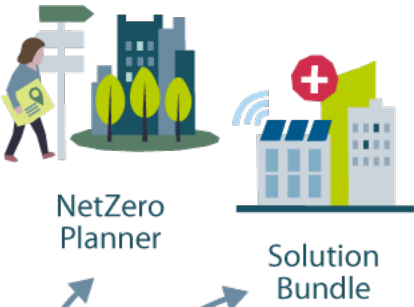
TRANSITION TEAM PLAYBOOK



Climate
Commitment

Climate
Action Plan

Climate
Investment
Plan



TOOLS

KNOWLEDGE REPOSITORY





Join the Tool Training Series!

A dedicated programme providing an overview and training on NetZeroCities tools and key partner resources.

Explore Tools

Here, you will find tools to empower and track your progress, supporting you to make and maintain sustainable change.



Barometer

The NetZeroCities Barometer is a data-based dashboard which shows how the 112 Mission Cities are progressing in their journey towards climate neutrality.

[Barometer →](#)



Engagement Strategy Tools

Use the Engagement Strategy Tools to identify your city's top engagement needs and find tailored strategies to effectively engage citizens and stakeholders.

[Engagement Strategy Tools →](#)



Finance Guidance Tool

This 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.

[Finance Guidance Tool →](#)



NetZeroPlanner

NetZeroPlanner allows you to analyse the impact of your city's Climate Action Plans and improve them to ensure you reach your decarbonisation goals.

[NetZeroPlanner →](#)



Solution Bundle

Explore dynamic and interactive visualisations of city systems. Solution Bundles currently cover:
E-Mobility & Electrification
Carbon Capture Storage & Removal

[Solution Bundle →](#)



Solution Outliner

Identify and prioritise decarbonisation solutions for your city. The Solution Outliner uses contextual parameters like ambition, barriers, enablers, and co-benefits to automatically present a list of solutions and extra information.

[Solution Outliner →](#)



Peer Learning at National Level





Why do national ecosystems advance the EU Cities Mission?

- **A community of practice** for joint collaboration
- **Multi-level governance** across local, regional and national authorities
- **Multi-stakeholder collaboration** across public authorities, industry, academia, social sector and civil society
- **Mission approach** structures the approach to climate neutrality
- **Facilitating organisation** with a strong mandate





Impressions of 2025 events



Above: Łódź – May 2025 –
Below: Gozo, MT (June 2025)



Rome, IT (June 2025)



Above: Limassol, CY (April 2025) – Below: Marseille, FR - April 2025





Upcoming national events (2025)

Contact

Rostock, Germany	15-17 September 2025	18. Bundeskongress Nationale Stadtentwicklungspolitik	Julia Rawlins julia.rawlins@iclei.org
Poland	17 September 2025	Kick-off meeting for the Community of Practice for Mission-minded Cities in Poland (online - invitation only)	Olga Krajewska olga.krajewska@iclei.org
Prague, Czechia	25 September 2025	Dialogue on financing possibilities for climate-neutral cities in Czech Republic	Olga Krajewska olga.krajewska@iclei.org
Tirana, Albania	6-10 October 2025	Conference on Walking & Livable Communities	Natalia Lewandowska natalia.lewandowska@iclei.org
Budapest, Hungary	07 October 2025	In-person meeting in Budapest	Blandine Pidoux blandine.pidoux@energy-cities.eu
Iceland	6-18 October 2025	Artic Circle Assembly	Nadine Burbar nburbar@resilientcitiesnetwork.org



Sign up for the NetZeroCities newsletter to be updated with upcoming events





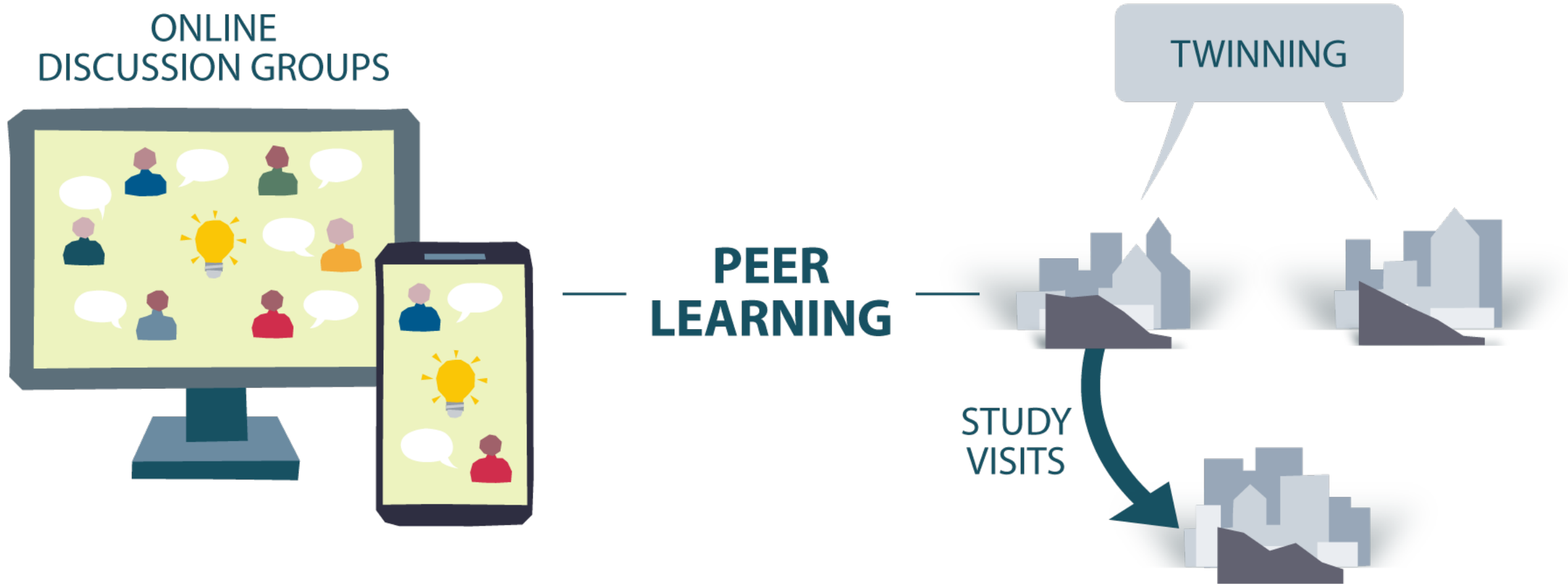
Peer Learning at EU-Level

Format: Online & In-Person





Helping Cities to collaborate and share knowledge and capacity on Climate Action





Online discussion groups

OVERVIEW & FEEDBACK FROM COHORT 1

The first cohort of Online Discussion Groups was inaugurated in September 2024 and concluded in February 2025, spanning across 3 phases:

- **PHASE 1**
Onboarding
- **PHASE 2**
Learn from actionable climate solutions from Mission Cities
- **PHASE 3**
Problem-solving technical sessions



“ Valongo, Portugal

The projects of Leuven have huge relevance in terms of learning for Valongo Municipality, especially in the following aspects:

*Sharing strategies for involving citizens in decision-making processes (Presentation of different solutions for streets);
Technical solutions for experimenting temporary changes in urban context.
These will help in implementing Valongo's Climate Action Plan*



180 Participants
in the first cohort

8 Labelled
Mission Cities led
the discussions

& Covering 5 Thematic peer-learning sessions:

- **Built Environment:** Guimarães
- **Energy:** Mannheim and Valencia
- **Circular Economy:** Aachen and Umeå
- **Sustainable mobility:** Stockholm and Aachen
- **Nature-based-Solutions:** Lahti and Leuven

[Sign up](#) for
upcoming
cohort oct
2025





Group Study Visits

2.5-day structured visits for Mission-minded cities to observe and reflect on real-world climate actions in Mission Cities



Group Study Visit in 2nd District of Bucharest, Romania

Bucharest's Green Transformation: Rethinking Mobility, Energy, and Buildings for a Sustainable City



Group Study Visit in Guimarães, Portugal

Guimarães' climate journey – a Model for a One Planet City



Group Study Visit in Mannheim, Germany

Mannheim's energy transition and urban greenery: a model to achieve climate neutrality

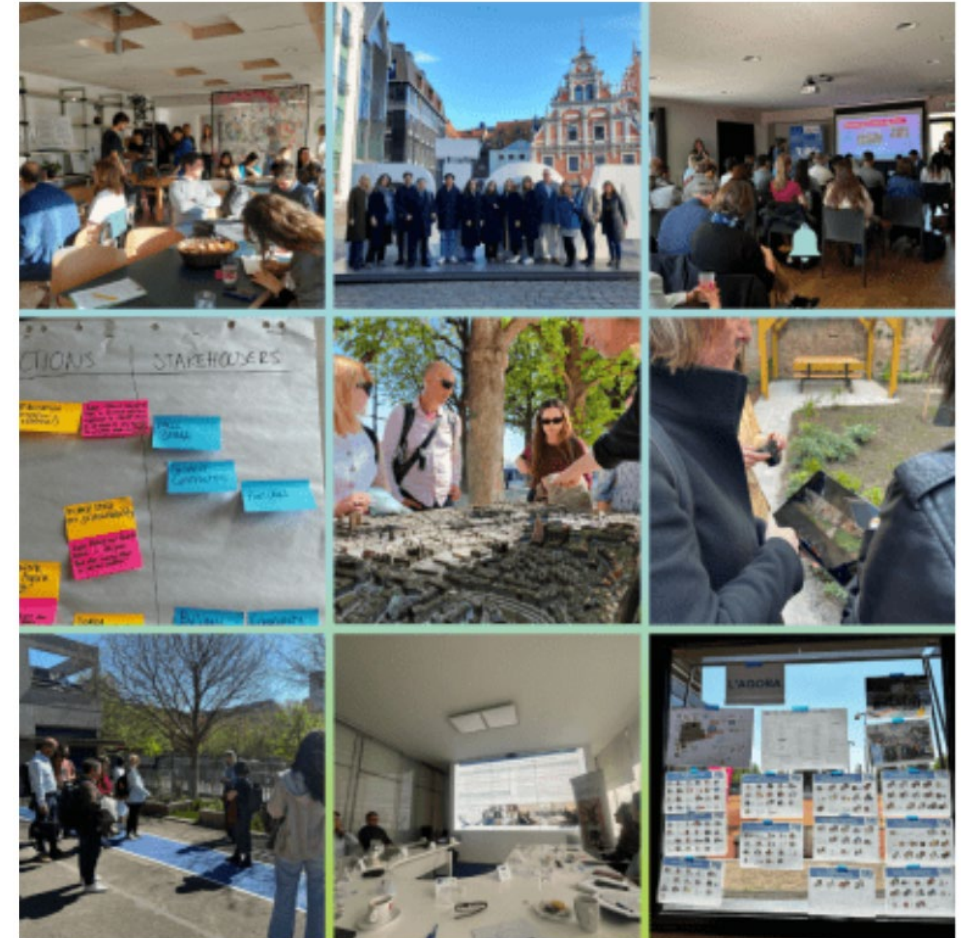
Sign up for
next cohort in
spring 2026





Twinning Programme

- Largest network of peer cities within the Cities Mission!
 - **180 cities** are now part of the NetZeroCities Twinning Learning Programme.
- 12-month deep dive knowledge exchange on climate actions
 - online workshops and two in-person site visits
- A two-way knowledge exchange between Mission Cities and Mission-minded cities
- Travel costs and facilitation covered by NetZeroCities



Impressions of twinning programme





To learn more

Join one of the next
[orientation sessions](#)

[Join the orientation
group on the Mission
Portal](#)

[Book a 1:1 with the
Helpdesk here](#)

Sign up for the
Mission-minded cities
newsletter [here](#).

More information





Any Questions?





Wrap up and next steps





Contacts

NetZeroCities Helpdesk

- Helpdesk for Mission-minded cities:
infocities@netzerocities.eu

Get in touch with NetZeroCities!



@NetZeroCitiesEU



NetZeroCities



NetZeroCitiesEU



NetZeroCities EU



www.netzerocities.eu



hello@netzerocities.eu



Funded by
the European Union

