



Catalogue of pilot cities

Deliverable D5.4

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Abbreviations and acronyms

Acronym	Description
WP	Work Package
NZC	NetZeroCities
PCP	Pilot Cities Programme

Summary

A call for Twin Cities was launched by NZC partners, two months after the Pilot Cities were selected. To maximise the learnings and replication efforts, Twin Cities' applications should be aligned with the Pilot activities, related emission domain(s) and levers of change. Therefore, an online catalogue of Pilot profiles has been developed, to inspire Twin Cities to apply for NZC Twinning programme and support NZC partners to ensure successful matching of Twin Cities to Pilot Cities, based on desired areas of learning.

This deliverable showcases the development of pilot profiles, available on the NZC website: online catalogue of Pilot activities.

Keywords

Pilot profiles, pilot activities, Pilot Cities Programme, Twin Cities, Twinning programme



Introduction

On 1 March 2023, the NZC consortium announced 25 selected pilot activities representing 53, to test and implement innovative approaches to rapid decarbonisation over a two-year NZC Pilot Cities Programme. Pilot Cities will be working across different emission domain(s) and functional silos in support of systemic transformation. The Pilot City call allowed applications from both individual or groups of cities and therefore, selected pilot activities have a two-fold approach: from the 25 pilot activities, six of them will be tested at multi-city level and 19 at individual city level.

As part of their City Learning Programme, selected Pilot Cities will engage in the mandatory NZC Twinning programme, to transfer their learnings and build capacities with their peer Twin Cities, that will be engaged in the programme.

The Twin City call was launched on 3 May until 30 June 2023, open to all Mission and non-Mission cities, from EU and Horizon2020 countries, to be paired with the successful Pilot Cities.

In parallel to the launch of the call, an <u>online catalogue of Pilot activities</u> was published on the NZC website, to inspire cities to apply for twinning, with the aim of ensuring successful matching of Twin and Pilot Cities, based on desired areas of learnings across different emission domain(s) and levers of change. The application form of Twin City call referred directly to the pilot profiles, where potential Twin City applicants were requested to rank and select preferred pilot activities based on their learning needs and exchange of good practices.

Applicant Twin City/es are the target audience of the pilot profiles, allowing them to get acquainted with the pilot activities to be paired with in the Twinning programme, to explore and gain a full understanding of the different pilot activities, to tailor their learning needs and plan to replicate concrete learnings in their city contexts. However, the deliverable will also serve Pilot Cities to be informed about their peer pilots, and is also publicly available for a wider audience of interested cities.

The deliverable offers an overview of the 25 pilot activities, showcases its main features and gathers relevant information on their learning needs and transferable aspects of their pilots, in line with the NZC Twinning programme.

Methodology

The preparation of the pilot profiles was coordinated between the deliverable task partners, PCP Team (to facilitate the information flow about the Pilot Cities) and Communication Team (for the design and launch of the online catalogue on the website). The process was equally supported through direct exchanges with selected Pilot Cities.

The first step of this task was to set up two types of templates with an input format for individual and multicity Pilots to populate their profiles. The intention of this two-fold template, was to adapt them to the unique features of multi-city Pilots working as a group (with different/common roles and objectives), while ensuring a common approach of the relevant information showcased for both individual and multi-city Pilots.

The questionnaire that was designed for the input format templates, aimed at capturing the relevant information about the different pilot activities. NZC partners stroke the balance between dropping complex questions to reduce the overall effort required from Pilot Cities to fill in the template and gathering enough information for Twin City applicants to get acquainted with the Pilot activities.

For each Pilot City profile, the following features are displayed, divided in four blocks: Information about the Pilot City/es, including the name of the city/es, the country, size (number of inhabitants), official language/s and a picture to be featured on their profile; Information about the Pilot activities, including the project title, activities description, objective/s of their systemic interventions and systems change, whether the pilot activity is building upon previous and/or existing activity in the city, its main emission domain(s) and levers of change, the type of stakeholders involved and the timeline they envisaged for the completion of their pilot activities; Alignment with the NZC Twinning Programme, including the Pilot City/es most relevant criteria when it comes to pairing them with successful Twin City/es (geographical proximity, city size, similar socio-economic context, etc.), the transferable features of their pilot activities to successful Twin City/es and narrowing down into the components of the transferable features (with concrete elements that they consider transferrable to their potential Twin City/es), the barriers that Twin City/es could



encounter when transferring their pilot activities, the learning needs of Pilot City/es from their Twin City/es as well as their city expectations for a successful Twinning experience; **Pilot City contact points** for the Twinning programme, including two contact details from the Pilot City and useful URL link to the city's website or pilot activity.

Given that most of the required information was already available in the successful Pilot Call applications, NZC task partners extracted the key aspects and prepared a first pre-populated version of the individual and multi-city Pilot templates.

After a first exchange with Pilot Cities, at the PCP Bootcamp session on 27 March 2023, Pilot Cities were familiarised with NZC Twinning programme and the key role of pilot profiles to enable the launch of the Twin City call. Given the different approach with multi-city Pilots, six dedicated calls were also held with them, to guide and explain how the information should be gathered in their tailor-made templates, addressing the complexity and interlinkages of their pilots, as opposed to the individual pilot activities (see Annex I). As a follow up to that exchanges, Pilot Cities were requested to cross-check the pre-populated versions of their pilot profiles and send them back to NZC partners within the established deadline.

NZC partners guided Pilot Cities during this exercise by giving them explicit instructions to refine or replace the existing description of their profiles to the required length and clarity.

The following procedure and timeline were followed to create and publish the online version of pilot profiles:

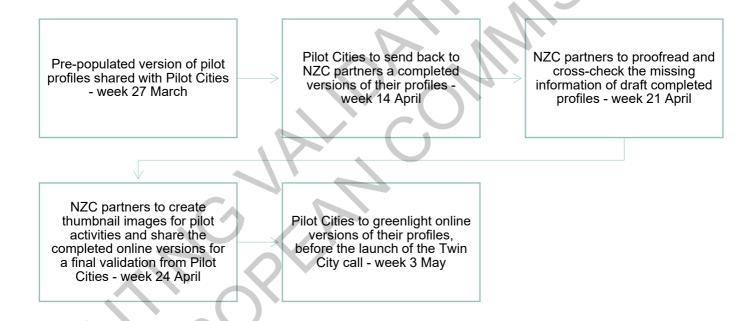


Figure 1 : Timeline to create pilot profiles

Conclusion

An online catalogue of Pilot profiles was developed before the launch of the Twin City call to present potential applicants, the key information about the different pilot activities and link them to their learning needs in the application form. Pilot profiles represent one of the main tools (together with the Call Guidelines) to open the Twin City call.

NZC partners undertook the collection of relevant information from successful Pilot City applications and drafted the input form built up to the pilot profiles, together with the support of Pilot Cities.



ANNEX I: Examples of pilot profiles (completed version)

1. Example of a multi-city Pilot

Tutoutou		-pilot cities profile	
Twinning programme pairing option	All cities together		24
	Inf	ormation about the Multi-pilot ci	ties
Country/Language	City name	Size (number of inhabitants)	Image
Italy/IT	Bologna	391.686	
	Bergamo	119.993	
	Florence	368.419	
	Milan	1.374.582	
	Padova	209.730	CHARLES OF THE PARTY OF THE PAR
	Parma	195.998	

Prato	201.410	
Rome	2.770.226	
Turin	858.205	
		5/65/

Information about the Multi-pilot activities

Project title

Let'sGOv - GOverning the Transition through Pilot Actions

Activities description Describe the main focus of your activities, the local context, etc.

Let'sGOv focuses on reducing energy system-related emissions through the exploration of enhanced governance models to agree on new forms of energy alliances, to unlock new financial sources for the energy transition, and to define the conditions for energy-enhanced multi-level governance. However, in Italy and in some of the European Countries, the co-production of energy systems is slowed down by several barriers (constraints of the regulatory framework, lack of data and agile financial resources to support decision-making and detailed monitoring, lack of skills in the public and private sectors, absence of ad hoc protocols, agreements or standardised procedures). To support systemic transformation and overcome block thinking, the 9 Italian Cities involved in the "100 Climate Neutral Cities by 2030" Mission (here referred as Mission Cities or MCs) are committed to collectively experimenting with multi-level and multi-stakeholder governance as the only way to achieve the challenging emission reduction targets. The aim is to operate at 3 levels: network, cluster and city levels:

- - The network level brings together the 9 cities in a cross-city bench learning approach through exchanges of experience and good practices, agreements and MoUs;
- - the cluster level, where cities address governance challenges through three levers:
 - the Engagement Cluster focuses on reducing energy system-related emissions through the exploration of enhanced governance models to agree on new forms of energy alliances by enhancing engagement mechanisms with particular focus on the enabling of new forms of Renewable Energy production, consumption and sharing models. The spread of these models, following the governance enhancement, will directly impact GHG emission by leveraging precise and effective interventions targeting the reduction of the energy demand and widening the access to clean and locally produced energy.
 - the Data Cluster focuses on reducing energy system-related emissions through the exploration of enhanced governance models to define the conditions for energy-enhanced multi-level governance by increasing multilevel data-sharing that generates inside and outside governance's organisational restructuring, with the aim to remove the data-related barriers (lack of data or of organised and specific database) to support decision-making and detailed monitoring. The improved energy data access and governance should directly impact GHG emission by providing grounded knowledge oriented towards precise and effective energy efficiency interventions.



- the Finance Cluster focuses on reducing energy system-related emissions through the exploration of innovative financial strategies to accelerate the energy transition. To facilitate the provision of agile financial resources to support systemic transformation and overcome block thinking, Let'sGOv is committed to collectively experimenting with multilevel and multi-stakeholder governance as the only way to achieve the challenging emission reduction targets. The experimentation of innovative financial models should directly impact GHG emission by supporting the acceleration and planning of energy efficiency interventions at city level.

Each city shall participate in all clusters to spread the knowledge and create a common baseline of knowledge and skills.

• - the city level, where specific experimentation will provide punctual solutions across the three cluster themes.

Objectives Describe what you intend to achieve with the pilot activities, i.e. key outcomes

Type your common answer here (outside the table)

The project will address common barriers to climate neutrality through the leverage of governance change that will act through the planned entry point of an internal training and capacity building programme across all municipal departments on the topic of climate transition. Empowered governance will make the energy and climate transition an objective permeating all the authority's actions, which must therefore lead to the structural inclusion of neutrality in all the municipality's policy documents and budget cycle.

This objective will be pursued thanks to the transition towards organisations that favours transversal processes and intersectoral coordination allowing to strengthen internal strategic, operational and financial planning tools functional to the achievement of the strategic Mission-oriented objective with ad-hoc monitoring indicators and targets. Empowered energy governance will be achieved through transversal (internal) capacity building and partnership building between the city network and local stakeholder ecosystems.

In particular, expected outcomes linked to the three clusters and pilot experimentations are:

- The Let'sGOv Engagement Cluster outcome is to become a driving force for other cities to bring about systemic changes in their internal governance thanks to the replicability and scalability of procedures and guidelines for the best engagement of the end users on sustainable energy matters such as Renewable Energy production, consumption and community sharing models at local level.
- The Let'sGOv Data Cluster main outcome is to strengthen the internal and multi-level governance to increase data accessibility at city level to achieve energy efficiency and lowering energy consumption.
- The Let'sGOv Finance Cluster outcome is linked to the exploration of innovative financial mechanisms finalised to boost energy efficiency and renewable energy installation at local level.

Challenges What are the challenges that you would like to address with your pilot activities Type your common answer here (outside the table)

The 9 MCs will focus on empowering internal and external governance to solve some of the main challenges to achieve carbon neutrality through shared and city-specific activities. These are the identified barriers to carbon neutrality shared by the 9 cities, that Let'sGOv will address through its actions:

- Internal silos-thinking functioning of municipalities that does not facilitate systemic and transversal processes;
- Limited transversal skills and knowledge inside municipalities and limited capacities to share best and worst cases with peers;
- Limited capacity to provide effective support and information to citizens and to involve them in strategic decision making approaches.
- External communication and involvement of relevant stakeholders at cross-cities levels (for example important energy players at regional and national level);
- External governance and involvement of key local actors and citizens at city level;
- Limited availability of qualitative energy data and limited interoperability;
- Absence of standardised pathways and shared protocols on the implementation of innovative activities on the energy sectors and high amount of bureaucracy;

In particular, 3 challenges will be addressed at Clusters level and will provide the focus of the city-level experimentations

The Let'sGOv Engagement Cluster aims at addressing internal and external governance bottlenecks in achieving carbon neutrality. In particular, the stable, long-term and effective involvement of citizens and local actors in collective energy initiatives is difficult due, in part, to the absence of stabilised alliances, shared memoranda of understanding, standardised pathways and protocols and high amount of



bureaucracy on key aspects such as energy data sharing, carbon reduction collaborations, common protocols on protected areas (e.g. constraints in the implementation of PVpanels on historic context).

The Let'sGOv <u>Data Cluster</u> aims to solve some of the main challenges to achieve carbon neutrality by tackling the lack of quality energy data, in particular, the limited availability of qualitative energy data (held by scattered and different platforms). An essential step is to share the data held by the various public and private actors.

The Let'sGOv <u>Finance Cluster</u> aims to accelerate innovative funding schemes for energy efficiency by empowering internal and external governance to achieve carbon neutrality.

Main questions to be answered for each specific cluster will be:

- 1. Engagement Cluster: how to promote citizens' and city actors' engagement, information sharing and collaborations into the energy system through solutions that support the reduction of consumption in energy systems? How to support the spread of these solutions on a multi-level perspective?
- 2. Data Cluster: how to create an integrated information sharing system to support decision-making (step-by-step calibration of policy), efficient design and continuous policy monitoring?
- 3. Finance Cluster: how to accelerate, adjust, and strengthen fundings and innovative funding schemes for energy efficiency and renewable energy installations?

Is your project building upon or part of a previous and/or existing activity in your city? If so, please, elaborate

This pilot is strongly interconnected with the 9 cities' current effort to achieve the 100 Climate neutral cities by 2030 Mission objectives. Thus mutual benefit will be developed between Let'sGOv and the ongoing actions towards climate neutrality and also other H2020 and Horizon Europe projects in the cities.

Actions to increase energy efficiency and boost the creation of energy communities to tackle energy poverty are deployed by Milan (NRG2peers), by Bologna (GRETA), the One Stop Shops in Padova(PadovaFITExpanded), Parma (FEASIBLE) and Bologna, the Energy office in Bergamo, the experimental action in Turin, aimed at orientation and awareness-raising about funding opportunities offered for the development of renewable energy communities with social impact. The implementation of structured engagement processes around energy was experimented in Padova (2ISECAP). A fertile baseline of steps towards city platforms and data agreements to overcome constraints to the energy efficiency (Data Cluster) have been undertaken by some of the cities in the last years in the CoM and SCC programs (Florence, Bologna, Milan, Parma, Padova) but must now be extended and improved to cover all districts and sectors and accelerate the path towards carbon neutrality. To fulfil these requirements, some cities have acted in a first round on their internal structure, creating interdepartmental steering task-forces and internal models to overcome silos, that should be now extended to include other levels and be more effective. Multi-governance data management and collection in policy making is also addressed through EU projects by Prato (UPSURGE), Florence (REPLICATE) and Rome (Platoon).

In the innovative finance domain (Finance Cluster) the cities have been piloting some projects, such as Milan Transition Fund, or Parma financing scheme in cooperation with a bank institute to stimulate sustainable energy investments of homeowners. At the same time Rome has been working on the preparation of large investments on energy system efficiency of public buildings, in line with the objectives of the EU Renovation Wave.

This variety of projects add up to other National and international ones like Turin<u>Cesba Med</u>, Bergamo <u>EfficienCE</u>, Bologna <u>GECO</u>, Milan EP-0).

Main emissions domain(s) your pilot activities are addressing [Text Wrapping Break]Please indicate the key emissions domains your pilot activities will focus on (for example, your activities may focus on all or most of the domains, but more heavily on one or two key ones)

⊠Consumption of electricity generated for buildings, facilities, and infrastructure

⊠Consumption of non-electricity energy for thermal uses in buildings and facilities (e.g., heating, cooking, etc.)

□Industrial process emissions

⊠Multi-sector waste management and disposal

⊠All vehicles and transport (mobile energy)

⊠Land use (including agriculture, forestry, and other land uses)



Systemic transformation – levers of change your pilot activities will exploit *Please indicate the key lever(s) your pilot activities will exploit (for example, your interventions may utilise all or most of the levers, but some more heavily that others)*

⊠Technology/infrastructure

☑Governance and policy

Social innovation

☑Democracy/participation

☑Finance & funding

Stakeholder types that you would like to engage in your pilot activities

Engagement of stakeholders at all levels is crucial within Let'sGOv, from the local to the EU level and across the thematic clusters of the project. The list of stakeholders includes: relevant Ministries; electricity and gas DSOs; universities and research centres; national associations; higher level administrations (Metropolitan cities, Regions, Cultural Heritage Authorities) which are managing services, take part in the definition of the regulatory framework and other forms of energy and climate transition collaboration agreements. The work on the three clusters will involve as main stakeholders: citizens, credit institutions banks, construction companies, stakeholders with а relevant impact on consumption/production, professional associations, local trade and industry/business associations; public housing managers and other buildings managers. At EU level cooperation with Net Zero Cities, the EU Commission and relevant networks, such as Eurocities, is already established and ongoing thanks to the Mission.

Envisaged timeline of your Pilot activities (what is the time horizon of your pilot activities, inclusive of any vision beyond the scope of the Pilot Cities Programme)

Start date - June 2023

End date - June 2025

Alignment with NZC Twinning Programme [partially public]

Please mention up to three important criteria/s when matching your Pilot activities with a Twin city/ies. These could be related to geographical proximity, city size, similar socio-economic context, etc.

Type your common answer here (outside the table)

Ideally we would like to twin with cities of similar size that have solved at least one of our challenges successfully and are willing to share their process and best practices on this, while at the same time gaining insights on other Let'sGOv challenges to which they have not found a solution yet. This would create a complementarity across the cities which will help to speed up the process to climate neutrality even further. Thus, ideal twins are cities that are consistent in size with our 9 pilot cities and are currently struggling with one or more but have successfully overcome at least one of these internal/external capacity building/governance-related issues:

- access/development of standardised pathways and shared protocols for the implementation of innovative engagement activities on the sustainable energy sector overcoming the main barriers such as engagement of stakeholders and/or citizens and considerable amount legal/administrative constraints;
- energy data sharing;
- access to funding and innovative financing opportunities in accelerating the transition.

Depending on how many cities will be twinning with us, it would be best to have examples from the small to the medium and larger size, since our consortium of cities is made of cities of various dimensions.

Transferable features of your Pilot activities to a Twin city/ies

Type your common answer here (outside the table)

Let'sGOv will produce transferable lessons learned at city-level, governance solutions at cluster level and methodological insight to work in a national network, connected to the international dimension. Its reference models can be adapted to the individual national regulations transposing European directives.

Cluster-based experience will provide concrete/usable knowledge (in terms of documents, reports, models for agreements) to accelerate energy transition solutions, working on the creation of renewable energy production and energy sharing models and more generally of multi-level stakeholders' engagement, data mining and data literacy for energy efficiency, financial models to support buildings retrofitting actions and, more generally, of multi-level stakeholders engagement.



The most interesting replicability potential lies in the shared method based on the network dimension of the Pilot, based on a cooperation model and continuous revised, network-produced knowledge community on empowered governance to accelerate energy transition.

Components of the transferable features (concrete elements from the transferability assessment eg: toolbox for innovative financing, capacity building in organising urban gardens)

Type your common answer here (outside the table)

In particular, the science-based innovative methodology applied, together with the 9 experimentations and the toolkits produced, can benefit small and medium cities currently struggling with internal and external capacity building, but still committed to implement actions toward climate neutrality.

Engagement cluster: Toolkit for multi-level stakeholder engagement. The toolkit will be implemented following a strong involvement with relevant stakeholders such as citizens and energy providers. Data cluster: Provision of a strategy and a methodology for energy data availability and sharing. Finance cluster: Provision of innovative financial models for renewable energy transition.

What potential barriers could the twin city/ies encounter when replicating your Pilot activities? These could refer to infrastructure, skills and attitudes within the local administration, governance, legal, economic contexts, etc.

Type your common answer here (outside the table)

Potential barriers concern legal, economic and bureaucratic landscape for energy efficiency and engagement, internal skills gaps within the local administration staff. The difference between the 9 Italian Mission cities involved in Let'sGOv (in relation to size, geographical location, social and economic and environmental contexts) should allow replication of the project outputs across different European cities, in addressing common issues by strengthening multi-level governance and thus adapting/updating internal governance.

Please identify what you may want to learn from your Twin city/ies. These could be related to the challenges you mentioned in your Pilot application.

Type your common answer here (outside the table)

Benchmarking, peer learning and provision of recommendations on:

- innovative internal (including innovative capacity building and cross-sectoral collaboration) and external multi-level and multi-sectoral governance (including stakeholders and citizens) on energy and climate;
- how to provide stable, long-term, effective involvement of citizens and local actors and stabilised alliances around energy and climate;
- how to create multi-level guidelines and agreements for the development of renewable energy consumption, production and energy sharing models; data sharing;
- how to access innovative funding schemes for energy efficiency and renewable energy.

What would be a successful Twinning experience for your city?

Type your common answer here (outside the table)

Ideally we would like to twin with cities that have solved at least one of our challenges successfully and are willing to share their process and best practices, while at the same time gaining insights on other common challenges where still they have not found a solution. These would create a complementarity across the cities which will help to speed up the process to climate neutrality even further. At the same time, the success of the twinning will depend on a flexible and light programme, where peer learning and exchange does not slow down the pilot implementation or hamper the urgency of the transition. To summarise, a successful twinning programme will look like a bi-directional process of peer learning and exchange between the twin cities and the pilot cities, where we can learn from each other and speed up the transition to climate neutrality, by means of effective and up-to the point exchange and sharing of concrete and practical tips, ready to use tools and processes, avoiding delays and stimulating further systemic innovation.

Relevant URL links

Pilot city contact point for the Twinning programme

Name (first, last) of Twinning programme contact person with whom we should stay in contact XX

Title/Role of above Twinning programme Contact Point

Let'sGOv Project Manager - Europe and International Department of the Municipality of Bologna

Email of Twinning programme Contact Person

XX



(OPTIONAL) ADDITIONAL CONTACT: Name (first, last) of Twinning programme contact person with whom we should stay in contact

XX

(OPTIONAL) ADDITIONAL CONTACT: Title/Role of additional Twinning programme Contact Point

(OPTIONAL) ADDITIONAL CONTACT: Email of additional Twinning programme Contact Person XX

2. Example of an individual Pilot

	Pilot city profile	7
	Information about the Pilot city	(()
City Name	Cluj-Napoca	
Country	Romania	
Size (number of inhabitants)	328,331	
Language	Local communication: Romanian International relations: English	
Image	Thematona rolations, English	





Informa	ation about the Pi activities	lot		
Project title	Blueprint Neighborhoods	for	Net-Zero	Apartment-block

Activities description Describe the main focus of your activities, the local context, challenges to be addressed, etc.

(max 250 words)

The transition to climate neutrality by 2030 in Cluj-Napoca requires integrated and comprehensive solutions for apartment block neighborhoods. Residential buildings are the largest GHG emitters and also the toughest challenge when it comes to interventions, as they require the engagement of a large number of stakeholders (citizens, civil society groups, companies, institutions local and organisations).

Ensuring the transition of apartment block neighborhoods to climate neutrality requires multi-level interventions:

- 1. Behavioural change and ecosystem instruments for climate neutrality (behavioural, perception and modelling analysis, knowledge and competence ecosystem audit, Civic Imagination & InnovationCenter (CIIC) modelling events, Net Zero urban and metropolitan caravans, Net Zero Champions, knowhow upgrading packages, framework to enhance building administrators' knowledge)
- 2. Urban planning toolkits (urban planning principles, masterplan and detailed proposal for pilot areas, ToR model for the renovation of block of flats) for enhancing Climate Neutral Communities in high density multi-apartment neighborhoods.
- 3. New local public policy tools (model for updating local urban planning regulations, model for improving



the governance of condominiums and their integration in the local climate neutrality ecosystem) to support the of high-density multiapartment neighborhoods to climate neutral districts 4. Climate Neutrality Digital Twin Our Net Zero City Coalition will undertake these efforts, by simultaneously involving multiple actors, that will activate various levers from different sectors, to address our main barriers: energy-inefficient infrastructure, lack of sociocultural awareness and competencies, improper behaviors in climate neutrality, deficient urban planning and local policies in terms of climate neutrality. insufficient data and lack of a unified collective vision. **Objectives Describe** The pilot activities proposed by Cluj-Napoca, will result one in ready-to-use tools for transforming high- density sentence what you intend to achieve with thepilot activities, i.e. neighbourhoods into climate neutral districts (eg. The Climate Neutrality Digital Twin). key outcomes It is important to mention here that the municipality has Is your project building upon or part of a previous and/or existing activity in your initiated a series of climate neutrality initiatives long before the adoption of the planning documents for city? If so, please, elaborate (max 150 words) 2021-2027 and the selection of the city to become part of the EU Mission for 100 climate-neutral and smart cities by 2030. Among the local flagshipprogrammes already drafted between 2015 and 2020, "Green Cluj" (almost 200 hectares of new / rehabilitated parks and 100,000 trees planted by 2030), "Walkable City" (a plan to implement the 15 minute-city concept in every major neighborhood of the city), the Zonal Urban Plan for the largest smart and green neighbourhood (Sopor) to be built in Romania on 250 hectares, based on a participative approach, or the policy to organise international architecture & design competitions for over 10 major urban renewal projects funded by ERDF are the most important ones. Main emissions domain(s) your □ Consumption of electricity generated for pilotactivities are addressing buildings, facilities, and infrastructure Please indicate the key emissions domains your pilot activities will focus ⊠Consumption of non-electricity energy for on (for example, your activities may thermal uses in buildings and facilities (e.g., focus on all or most of the domains, heating, cooking, etc.) butmore heavily on one or two key ones) ☐ Industrial process emissions



	and transport (mobile energy) cluding agriculture, forestry, and s)
Systemic transformation – levers of change your pilot activities will exploit Please indicate the key lever(s) your pilot activities will exploit (for example, your interventions may utilise all or most of the levers, but some more heavily that others) STechnology/infrate	policy cipation
text.	ons artnerships
Envisaged timeline of your Pilot activities (what is the time horizon of your pilot activities, inclusive of any vision beyond the scope of the Pilot Cities Programme) Start date - 2023	End date - 2030

Alignment with NZC Twinning Programme [partially public]

Please mention up to three important criteria/s when matching your Pilot activities with a Twin city/ies. These could be related to geographical proximity, city size, similar socio-economic context, etc.

1. Geographical location: In terms of geographical location, we have a preference for working with cities in Greece, the Czech Republic, or Poland due to our previous connections, which have

proven to be both efficient and successful. Based on a similar reasoning, we are also interested



in twinning with cities in Croatia, Slovakia and Hungary.

- 2. Urban peri-urban approach: Our climate neutrality approach involves transferring the knowledge generated in the urban core to the entire metropolitan area. Therefore, we aim to work with cities that represent the urban centres of European functional urban areas.
- 3. Envisioned strategy: We aim to collaborate with cities that share similar needs and challenges, particularly in terms of emission domains. Furthermore, we prefer to work with cities that have a similar approach to overcoming the climate neutrality barriers, concerning the activities foreseen to be implemented for achieving climate neutrality in their areas.

Transferable features of your Pilot activities to a Twin city/ies (Text in italic, from the Pilot application)

The transferable features of our Pilot activities that can be used to benefit other Twin cities are focused on toolkits for transforming high-density neighborhoods into climate neutral districts:

- 1. Governance model: Climate neutrality actions and the implicit pilot activities will not be implemented exclusively by the municipality. Instead, they will be carried out by a Net Zero Local Coalition comprising representatives from the local ecosystem, including the public administration, academia and RDI actors, private sector, NGOs, citizens, and civil society.
- 2. Approach: Interventions will begin with an assessment of the current state through behavioral analysis and ecosystem mapping. Based on the results of this assessment, training packages will be developed to enhance knowledge of climate neutrality. Apart from the training models for the community and the local ecosystem, we will also develop urban planning and local public policy solutions (that also include digital technologies), to advance the local and metropolitan ambition in terms of climate neutrality.

All the solutions will have the potential for replication in the localities located within the metropolitan area.

Components of the transferable features (concrete elements from the transferability assessmenteg: toolbox for innovative financing, capacity building in organizing urban gardens)

Overall, most of the components of the pilot activities are transferable, given that we aim to helpour peers use our solutions to accelerate climate neutrality in the territories they represent.

These include the methodologies for:

- Behavioral, perception and modelling analysis on the individual adaptation of residents & businesses to climate neutrality
- Knowledge & Competence audit of the local climate neutrality ecosystem
- Civic Imagination & Innovation Ceneter CIIC, the main participatory governance tool fof the Municipality modelling for climate neutrality at neighborhood level
- Net Zero Caravan, both at urban and metropolitan level
- Net Zero Champ Campaign for climate neutrality managers/champions
- Knowhow and climate neutral skills upgrading package for ecosystem representatives
- Interactive framework to enhance building administrators' knowledge on climate neutrality



- Comprehensive masterplan model for transforming high density apartment block neighborhoods into climate neutral districts
- · Detailed proposal for transforming neighborhood pilot areas into climate neutral demodistricts

To these are added the governance framework for the Net Zero Coalition and the architecture for the Climate Neutrality Digital Twin.

The transferable components also include: the set of urban planning principles for climate neutral interventions, the ToR model for the climate neutral renovation of block of flats, the model for updating local urban planning regulations/rules to promote climate neutrality in the multi- apartment housing sector, together with the model for improving the governance of condominiums and their integration in the local climate neutrality ecosystem.

Our objective through the Twinning program activities is to assist our Twin Cities in adapting the aforementioned components to their specific contexts. This will enable a customized application of these components in the Twin Cities' territories, such as to generate a tangible impact.

In addition to the above components, the project will also formulate a series of guidelines. These guidelines will enable Twin Cities, as well as other cities, to replicate the solutions developed within the pilot activities:

- Guide for conducting analysis on the individual adaptation to climate neutrality of citizens and businesses from high density multi-apartment neighborhoods
- Guide for the knowledge and competence assessment of neighborhood climate neutrality ecosystem
- Guide for applying civic imagination and innovation, respectively participatory budgeting tools for climate-neutral neighborhoods
- Guide for citizen activation and engagement in the transition process to climate neutrality at neighborhood level
- Guide for enhancing the capacity of local ecosystems to plan, implement and monitor climate neutral policies at neighborhood level

What potential barriers could the twin city/ies encounter when replicating your Pilot activities? These could refer to infrastructure, skills and attitudes within the local administration, governance, legal, economic contexts, etc.

We anticipate that the Twin Cities may encounter several obstacles while replicating our Pilot activities, including the limited implementation capacity resulting from insufficient staff and lack of extensive knowledge on climate neutrality. Additionally, the lack of specific know-how (for instance, to implement behavioral analyses through survey dissemination and properly interpret the obtained evidence) may deepen the previous challenge, if local ecosystem representatives (such as universities) will not be involved in the process. In the case of the cities that we intend to work with, citizens' reluctance might also pose a significant barrier. Furthermore, limited financial resources for implementation will be the primary impediment, due to the lack of dedicated funds for replicating our solutions. Finally, minor logistical problems such as coordination in terms of time may arise, but these should be easily resolved with the assistance

of the NZC City Advisor.

Please identify what you may want to learn from your Twin city/ies. These could be related to the challenges you mentioned in your Pilot application.

We are highly interested in understanding how we can more easily generate specific data concerning climate neutrality, and to explore methods for quickly and efficiently involving the community and private sector in achieving the climate neutrality goal. In addition, we seek to identify an optimal model of local governance that involves the entire local ecosystem, which can effectively support our climate neutrality objectives. Lastly, we need to determine mechanisms forsecuring private capital to implement climate neutrality solutions, considering the scarcity of dedicated European funds in this regard.

What would be a successful Twinning experience for your city?

The successful Twinning experience translates into a dual, mutually beneficial result. Firstly, it enables the transfer of our pilot activities' results to our Twin Cities and, furtherly, their public administrations will properly implement them, such as to accelerate their own pathways towards climate neutrality. Secondly, through the knowledge gained from our Twin Cities' experiences, we will be able to address and overcome the gaps and obstacles that hinder our own progress towards climate neutrality.

Relevant URL links

Cluj-Napoca City Hall website: https://primariaclujnapoca.ro/

CIIC - Center for Civic Innovation and Imagination: https://www.facebook.com/ciiccluj/

Pilot city contact point for the Twinning programme

Name (first, last) of Twinning programme contact person with whom we should stay in contact

XX

Title/Role of above Twinning programme Contact Point

Project Coordinator within the current project

International Project Manager within Cluj-Napoca Municipality

Email of Twinning programme Contact Person

XX

(OPTIONAL) ADDITIONAL CONTACT: Name (first, last) of Twinning programme contact personwith whom we should stay in contact

XX

(OPTIONAL) ADDITIONAL CONTACT: Title/Role of additional Twinning programme Contact Point

Project Assistant within the current project

(OPTIONAL) ADDITIONAL CONTACT: Email of additional Twinning programme Contact Person

XX





ANNEX II: Examples of pilot profiles (online version)

1. Example of a multi-city Pilot



Italy's Pilot Activity: Let's GOv - GOverning the Transition through Pilot Action



June 2023 - June 2025









Description of activities

In Italy and in some of the European Countries, the co-production of energy systems is slowed down by several barriers (constraints of the regulatory framework, lack of data and agile financial resources to support decision-making and detailed monitoring, lack of skills in the public and private sectors, absence of ad hoc protocols, agreements or standardised procedures).

To support systemic transformation and overcome block thinking, the 9 Italian Cities involved in the "100 Climate Neutral Cities by 2030" Mission Cities are committed to collectively experimenting with multi-level and multi-stakeholder governance as the only way to achieve the challenging emission reduction targets. The aim is to operate at 3 levels: network, cluster and city levels:

- The network level brings together the 9 cities in a cross-city bench learning approach through exchanges of experience and good practices, agreements and MoUs;
- The cluster level, where cities address governance challenges through three levers
 - The Engagement Cluster focuses on reducing energy system-related emissions through the exploration of enhanced governance models to agree on new forms of energy alliances by enhancing engagement mechanisms with particular focus on the enabling of new forms of Renewable Energy production, consumption and sharing models. The spread of these models, following the governance enhancement, will directly impact GHG emission by leveraging precise and effective interventions targeting the reduction of the energy demand and widening the access to clean and locally produced energy.
 - The Data Cluster focuses on reducing energy system-related emissions through the exploration of enhanced governance models to define the conditions for energy-enhanced multi-level governance by increasing multilevel data-sharing that generates inside and outside governance's organisational restructuring, with the aim to remove the data-related barriers (lack of data or of organised and specific database) to support decision-making and detailed monitoring. The improved energy data access and governance should directly impact GHG emission by providing grounded knowledge griented towards precise and effective energy efficiency interventions.
 - The Finance Cluster focuses on reducing energy system-related emissions through the exploration of innovative financial strategies to accelerate the energy transition. To facilitate the provision of agile financial resources to support systemic transformation and overcome block thinking, Let'sGOv is committed to collectively experimenting with multi-level and multi-stakeholder governance as the only way to achieve the challenging emission reduction targets. The experimentation of innovative financial models should directly impact GHG emission by supporting the acceleration and planning of energy efficiency interventions at city level. Each city shall participate in all clusters to spread the knowledge and create a common baseline of knowledge and skills.
 - The city level, where specific experimentation will provide punctual solutions across the three cluster themes.





Objectives

Reducing energy-related emissions through the exploration of enhanced governance models to agree on new forms of energy alliances, unlock financial resources and define the conditions for enhanced multi-level governance.

This will be done at three levels:

- 1. Network level where all the 9 Italian cities will work together;
- 2. At thematic cluster level on engagement, data accessibility and finance
- 3. At city level where pilot activities from thematic clusters will be tested.

In particular, expected outcomes linked to the three clusters and pilot experimentations are

- The Let's GOV Engagement Cluster outcome is to become a driving force for other cities to bring about systemic changes in their internal governance thanks to the replicability and scalability of procedures and guidelines for the best engagement of the end users on sustainable energy matters such as Renewable Energy production, consumption and community sharing models at local level.
- The Let'sGOV Data Cluster main outcome is to strengthen the internal and multi-level governance to increase data accessibility at city level to achieve energy efficiency and lowering energy consumption.
- The Let's GOV Finance Cluster outcome is linked to the exploration of innovative financial mechanisms finalised to boost energy efficiency and renewable energy installation at local level.

What are the challenges that cities would like to address with the pilot activities?

The 9 mission cities will focus on empowering internal and external governance to solve some of the main challenges to achieve carbon neutrality through shared and city-specific activities. These are the

- Internal silos-thinking functioning of municipalities that does not facilitate systemic and transversal proces
- Limited transversal skills and knowledge inside municipalities and limited capacities to share best and worst cases with peers;
- Limited capacity to provide effective support and information to citizens and to involve them in strategic decision making approaches
- External communication and involvement of relevant stakeholders at cross-cities levels (for example important energy players at regional and national level);
- External governance and involvement of key local actors and citizens at city leve
- Limited availability of qualitative energy data and limited interoperability
- Absence of standardised pathways and shared protocols on the implementation of innovative activities on the energy sectors and high amount of bureaucracy

In particular, 3 challenges will be addressed at Clusters level and will provide the focus of the city-level experimentations

- The Let's GOV Engagement. Cluster aims at addressing internal and external governance bottlenecks in achieving carbon neutrality. In particular, the stable, long-term and effective involvement of citizens and local actors in collective energy inflatives is difficult due, in part, to the absence of stabilised alliances, shared memoranda of understanding, standardised pathways and protocols and high amount of bureaucracy on key aspects such as energy data sharing, carbon reduction collaborations, common protocols on protected areas (e.g. constraints in the implementation of PVpanels on historic context).
- The LetsGQx Data Cluster aims to solve some of the main challenges to achieve carbon neutrality by tackling the lack of quality energy data, in particular, the limited availability of qualitative energy data, held by scattered and different platforms. An essential step is to share the data held by the various public and private across
- The Let's GOV Finance Cluster aims to accelerate innovative funding schemes for energy efficiency by empowering internal and external governance to achieve carbon neutrality.

Main questions to be answered for each specific cluster will be

- 1. Engagement Cluster: how to promote citizens' and city actors' engagement, information sharing and collaborations into the energy system through solutions that support the reduction of consumption irrenergy systems? How to support the spread of these solutions on a multi-level perspective?
- 2. Data Cluster: how to create an integrated information sharing system to support decision-making (step-by-step calibration of policy), efficient design and continuous policy monitoring?
- 3. Finance Cluster: how to accelerate, adjust, and strengthen fundings and innovative funding schemes for energy efficiency and renewable energy installations:





Are cities building upon or part of a previous and/or existing activity?

This pilot is strongly interconnected with the 9 cities' current effort to achieve the 100 Climate neutral cities by 2030 Mission objectives. Thus mutual benefit will be developed between Let's GOV, and the ongoing actions towards climate neutrality and also other H2020 and Horizon Europe projects in the cities.

Actions to increase energy efficiency and boost the creation of energy communities to tackle energy poverty are deployed by Milan (NRG2peers), by Bologna (GRETA), the One Stop Shops in Padova(PadovaFITExpanded), Parma (FEASIBLE) and Bologna, the Energy office in Bergamo, the experimental action in Turin, aimed at orientation and awareness-raising about funding opportunities offered for the development of renewable energy communities with social impact. The implementation of structured engagement processes around energy was experimented in Padova (2ISECAP). A fertile baseline of steps towards city platforms and data agreements to overcome constraints to the energy efficiency (Data Cluster) have been undertaken by some of the cities in the last years in the CoM and SCC programs (Florence, Bologna, Milan, Parma, Padova) but must now be extended and improved to cover all districts and sectors and accelerate the path towards carbon neutrality. To fulfil these requirements, some cities have acted in a first round on their internal structure, creating interdepartmental steering taskforces and internal models to overcome silos, that should be now extended to include other levels and be more effective. Multi-governance data management and collection in policy making is also addressed through EU projects by Prato (UPSURGE), Florence (REPLICATE) and Rome (Platron)

In the innovative finance domain (Finance Cluster) the cities have been piloting some projects, such as Milan Transition Fund, or Parma financing scheme in cooperation with a bank institute to stimulate sustainable energy investments of homeowners. At the same time Rome has been working on the preparation of large investments on energy system efficiency of public buildings, in line with the objectives of the EU Renovation Wave.

This variety of projects add up to other National and International ones like Turin Cesba Med, Bergamo EfficienCE, Bologna GECO, Milan EP-0)

Which emissions domains will the pilot activity address?

- Consumption of electricity generated for buildings, facilities, and infrastructure
- Onsumption of non-electricity energy for thermal uses in buildings and facilities (e.g., heating, cooking, etc.)
- Multi-sector waste management and disposal
- All vehicles and transport (mobile energy)
- Land use (including agriculture, forestry, and other land uses)

Systemic transformation – levers of change the pilot activities will exploit

- Technology/infrastructure
- Governance and policy
- Social innovation
- Democracy/participation
- Finance & funding
- Learning and capabilities





Stakeholder types that cities would like to engage in the pilot activities

Engagement of stakeholders at all levels is crucial within Let'sGOv, from the local to the EU level and across the thematic clusters of the project. The list of stakeholders includes:

- Relevant Ministries
- Electricity and gas DSOs
- Universities and research centres
- National associations
- Higher level administrations (Metropolitan cities, Regions, Cultural Heritage Authorities) which are managing services, take part in the definition of the regulatory framework and other forms of energy and climate transition collaboration agreements.

The work on the three clusters will involve as main stakeholders:

- Citizens
- Credit institutions and banks
- Construction companies
- Stakeholders with a relevant impact on energy consumption/production
- Professional associations, local trade and industry/business associations
- Public housing managers and other buildings managers
- At EU level cooperation with Net Zero Cities, the EU Commission and relevant networks, such as Eurocities, is already established and ongoing thanks to the Mission

Transferable features of pilot activities to a twin city/ies

- Let'sGOv will produce transferable lessons learned at city-level, governance solutions at cluster level and methodological insight to work in a national network, connected to the international dimension.
- Cluster-based experience will provide concrete/usable knowledge (in terms of documents, reports, models for agreements) to accelerate energy transition solutions, working on the creation of
 renewable energy production and energy sharing models and more generally of multi-level stakeholders' engagement, data mining and data literacy for energy efficiency, financial models to
 support buildings retrofitting actions and, more generally, of multi-level stakeholders engagement.
- The most interesting replicability potential lies in the shared method based on the network dimension of the Pilot, based on a cooperation model and continuous revised, network-produced knowledge community on empowered governance to accelerate energy transition.

This answer is not exhaustive and simply an indicative one.

Components of the transferable features

- In particular, the science-based innovative methodology applied, together with the 9 experimentations and the toolkits produced, can benefit cities that are consistent in size with our 9 Pilot Cities and currently struggling with internal and external capacity building, but still committed to implement actions toward climate neutrality.
- Engagement cluster: Toolkit for multi-level stakeholder engagement. The toolkit will be implemented following a strong involvement with relevant stakeholders such as citizens and energy providers.
- Data cluster: Provision of a strategy and a methodology for energy data availability and sharing.
- Finance cluster: Provision of innovative financial models for renewable energy transition.

This answer is not exhaustive and simply an indicative one.





What do cities want to learn from Twin City/ies?

Benchmarking, peer learning and provision of recommendations on:

- Innovative internal (including innovative capacity building and cross-sectoral collaboration) and external multi-level and multi-sectoral governance (including stakeholders and citizens) on energy and climate:
- · How to provide stable, long-term, effective involvement of citizens and local actors and stabilised alliances around energy and climate;
- How to create multi-level guidelines and agreements for the development of renewable energy consumption, production and energy sharing models; data sharing;
- How to access innovative funding schemes for energy efficiency and renewable energy.

This answer is not exhaustive and simply an indicative one.





2. Example of an individual Pilot City

Objective

Ready-to-use tools for transforming large-scale housing neighbourhoods into climate neutral districts (e.g. The Climate Neutrality Digital Twin).

Are the pilot activities building upon or part of a previous and/or existing activity?

The municipality had initiated a series of climate neutrality initiatives long before the adoption of the planning documents for 2021-2027 and the selection of the city to become part of the EU Mission for 100 climate-neutral and smart cities by 2030. Among the local flagship programmes already drafted between 2015 and 2020, "Green Cluj" (almost 200 hectares of new Archabilitated parks and 100,000 trees planted by 2030), "Walkable City" (a plan to implement the 15 minute-city concept in every major neighbourhood of the city), the Zonal Urban Plan for the largest smart and green neighbourhood (Sopor) to be built in Romania on 250 hectares, based on a participative approach, or the policy to organise international architecture & design competitions for over 10 major urban renewal projects funded by ERDF are the most important ones.

Which emissions domains will the pilot activities address?

- Consumption of electricity generated for buildings, facilities, and infrastructure
- Onsumption of non-electricity energy for thermal uses in buildings and facilities (e.g., heating, cooking, etc.)
- Multi-sector waste management and disposal
- All vehicles and transport (mobile energy)
- Land use (including agriculture, forestry, and other land uses)

Systemic transformation – levers of change the pilot activities will exploit

- Technology/infrastructure
- Governance and policy
- Social innovation
- Democracy/participation
- Finance & funding
- Learning and capabilities

Stakeholder types that you would like to engage in the pilot activities

- Academia
- Research institution:
- Citizens
- Financial institutions
- Business
- Local NGO, associations





Transferable features of your pilot activities to a Twin City/ies

The transferable features of our Pilot activities that can be used to benefit other Twin cities are focused on toolkits for transforming high-density neighbourhoods into climate neutral districts:

- 1. Governance model: Climate neutrality actions and the implicit pilot activities will not be implemented exclusively by the municipality. Instead, they will be carried out by a Net Zero Local Coalition comprising representatives from the local ecosystem, including the public administration, academia and RDI actors, private sector, NGOs, citizens, and civil society.
- 2. Approach: Interventions will begin with an assessment of the current state through behavioural analysis and ecosystem mapping. Based on the results of this assessment, training packages will be developed to enhance knowledge of climate neutrality. Apart from the training models for the community and the local ecosystem, Cluj-Napoca will also develop urban planning and focal public policy solutions (that also include digital technologies), to advance the local and metropolitan ambition in terms of climate neutrality.

All the solutions will have the potential for replication in the localities situated within the metropolitan area

This answer is not exhaustive and simply an indicative one.

Components of the transferable features

These include the methodologies for:

- Behavioural, perception and modelling analysis of the individual adaptation of residents & businesses to climate neutrality
- · Knowledge & competence audit of the local climate neutrality ecosystem
- · Civic Imagination & Innovation Center CIIC, the main participatory governance tool for the municipality that models climate neutrality at neighbourhood level
- · Net Zero Caravan, both at urban and metropolitan level
- · Net Zero Champ Campaign for climate neutrality managers/champions
- Knowhow and climate neutral skills upgrading package for ecosystem representatives
- · Interactive framework to enhance building administrators' climate neutrality expertise
- · Comprehensive master plan model for transforming high density apartment block neighbourhoods into climate neutral districts
- Detailed proposal for transforming neighbourhood pilot areas into climate neutral demo district

To these are added the governance framework for the Net Zero Coalition and the architecture for the Climate Neutrality Digital Twin.

The transferable components also include: the set of urban planning principles for climate neutral interventions, the ToR model for the climate neutral renovation of block of flats, the model for updating local urban planning regulations/rules to promote climate neutrality in the multi-apartment housing sector, together with the model for improving the governance of condominiums and their integration in the local climate neutrality ecosystem.

In addition to the above components, the project will also formulate a series of quidelines. These quidelines will enable Twin Cities, as well as other cities, to replicate the solutions developed within the pilot activities:

- · Guide for conducting analysis on the individual adaptation to elimate neutrality of citizens and businesses from high density multi-apartment neighbourhood
- Guide for the knowledge and competence assessment of neighbourhood climate neutrality ecosystem
- Guide for applying civic imagination and innovation, respectively participatory budgeting tools for climate-neutral neighbourhoods
- Guide for citizen activation and engagement in the transition process to climate neutrality at neighbourhood level
- · Guide for enhancing the capacity of local ecosystems to plan, implement and monitor climate neutral policies at neighbourhood leve

This answer is not exhaustive and simply an indicative one.





What does the city want to learn from Twin City/ies?

- · How to generate specific data on climate neutrality
- · Optimal local governance involving the entire local ecosystem
- · How to determine mechanisms for securing private capital to implement climate neutrality solutions, considering the scarcity of dedicated EU funds

This answer is not exhaustive and simply an indicative one.





