NetZeroCities

Research and Innovation Action (RIA)

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101036519

Start date : 2021-10-01 Duration : 48 Months
https://netzerocities.eu/

CCC Resource Package for One Stop Shop Platform

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NetZeroCities - Contract Number: 101036519

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Number of pages	87
Document type	Deliverable
Work Package	WP1
Document number	D1.4
Issued by	ICLEI
Date of completion	2022-09-30 18:02:10
Dissemination level	Public

Summary

The Climate City Contract (CCC) Resource Package is a living collection of useful materials that will offer overall guidance to Mission Cities to implement their CCC processes and prepare their CCC documents. It has been developed to support the implementation of the three elements of the contract (Climate Neutrality Commitments, Action Plan and Investment Plan) and the contents will be updated over time based on the shared learning and feedback from the Mission cities implementing the process. This memo is a snapshot of where we are in the development of the Resource Pack , which is currently work in process.

Approval

Date	By
2022-09-30 18:02:36	Mrs. Marina LITTEK (ICLEI)
2022-10-11 20:29:32	Mr. Thomas OSDOBA (CKIC)

CCC Resource Package for One Stop Shop Platform

Deliverable D1.4

Version N°1

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We thank Allison Wildman (ICLEI), Brooke Flanagan (Eurocities), Maria Tengvard (Viable Cities), Asa Menoz (Viable Cities), Joost Beunderman (DML), Eugenie Cartron (DML), Thomas Osdoba (Climate-KIC), Fabien Saulier (LGI), as well as WP1 project partners for their valuable input and feedback.

This project has received funding from the H2020 Research and Innovation Programme under the grant agreement n°101036519.

Disclaimer

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Document Information

Grant Agreement Number	101036519
Project Title	NetZeroCities
Project Acronym	NZC
Project Start Date	01 October 2021
Related Work Package	WP1
Related Task(s)	1.2.3
Lead Organisation	ICLEI
Submission Date	30 September 2022
Dissemination Level	Public

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1 Introduction

1.1 About the CCC Resource Package

The Climate City Contract (CCC) Resource Package is a living collection of useful materials, tools, and services from the Mission Portal (formerly "One-Stop-Shop") that offer overall guidance and support to Mission Cities as they develop their Climate City Contracts (Climate Neutrality Commitments, Action Plan and Investment Plan). The resources have been developed in collaboration with NetZeroCities partners and with guidance from the Cities Mission Team. The resources will be enhanced and updated periodically to reflect the shared learning and feedback from Mission Cities as they implement the process in their local/national contexts.

The CCC Resource Package is currently in the first stage of development (v1) and consists of a template and guidance document for each CCC component (Annexes 1 – 6 in attachment). These templates and guidance documents will be refined and updated over time, responding and adapting to Mission Cities' needs during the implementation process and updated in accordance with the evolving Mission Label verification process. Additional resources, tools, and support offers for Mission Cities will also be developed and linked through the NZC Climate Transition Map and Knowledge Repository on the Mission Portal.

This deliverable is connected to Task 1.2.3 of the NZC Grant Agreement, and D1.3 Climate City Neutral Concept (July 2022).

This CCC Resource Pack (v1) includes:

- An updated Climate City Contract Quick Read (online)
- Templates for the three CCC components: Commitments, Action Plan, and Investment Plan
- Technical guidance that explains how to use the CCC templates
- Interactive Climate Transition Map (CTM) on the Mission Portal, which will soon be supported by a CCC navigation tool, that explains how to use the CTM as a guide for the CCC process

The aim of these materials is to capture the best knowledge-to-date and to support Mission Cities as they develop their Climate City Contract for the Mission Label verification. Editable Word document templates have been prepared for Mission Cities that outline the structure of each Climate City Contract component: 2030 Climate Neutrality Commitments, 2030 Climate Neutrality Action Plan, and 2030 Climate Neutrality Investment Plan. Each template includes headings and short explanatory texts to guide the city through each section's objectives. A series of guidance documents provides pointers and suggestions for each template. Each guidance document provides information on what to include in the template and how, as well as which information is required to be submitted for Mission Label verification (using our best knowledge to date).

The templates offer proposed structures and guidance on how cities can approach each CCC component. Cities are invited to use these guidelines while working on their Climate City Contract, but they are not obligated to do so. Both the templates and guidance documents provide a structure that is aligned with the NZC Climate Transition Map and the Mission Label verification process. A well-written Climate City Contract should, at a minimum, include all sections indicated in the templates.

2 Climate City Contract

The "100 Climate Neutral and Smart Cities by 2030" Mission (the Cities Mission) was created by the European Commission and launched in November 2021 with an Expression of Interest call for European cities to join the Mission. The purpose of the Cities Mission is to focus European research funding and investments to support, promote and showcase 100 European cities in their systemic transformation towards climate neutrality by 2030 and turn these cities into innovation hubs, benefiting

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quality of life and sustainability in Europe and beyond. It is a challenging and ambitious endeavour through which cities commit to transform the way they function, accelerate the climate transition and inspire other cities to follow their lead. One hundred and twelve cities were selected as Mission Cities in April 2022 with the expectation that these cities would create a Climate City Contract with support from NetZeroCities / the Mission Platform.

The aim of the Climate City Contract is to enable cities to meet the 2030 climate neutrality target by aligning and accelerating collaborative actions at all levels - ranging from the horizontal (i.e., within the municipality itself and with key local stakeholders including citizens and civil society, businesses, and public service providers), to the vertical (i.e., the regional and national levels).

The Climate City Contract is an innovative governance instrument to help cities build on the knowledge, resources and experience they already have, and provides them with a new systemic framework to move forward as a whole city, rather than just as the city administration, to be able to make the transition to 2030 happen faster and at a larger scale. This systemic framework is illustrated in the NZC Climate Transition Map (described in more detail in Section 4).

The CCC, as conceived by and developed in collaboration with the European Commission, is a published document that is comprised of three interlinked components: **Commitments**, **Action Plan**, and **Investment Plan**. As a process, it aims to holistically align the work of cities to achieve the Mission through a co-creation process, mobilising key stakeholders, engaging citizens and aligning actions and investments for systems change and decarbonisation. As a document series, it captures the outcomes of this co-creation process, and articulates future climate action and investments as an interconnected portfolio. The document templates have been aligned with the Mission Label verification programme (currently in development by the European Commission). The CCC should be monitored and updated periodically to capture the evolving political, social, economic, and collaborative relationships that grow with the Mission.

3 Climate City Contract Components

The role of the CCC document, and the process leading up to it is to help cities accelerate their transition to climate neutrality by 2030 by bringing diverse stakeholders together around a common ambition (2030 climate neutrality) to identify and commit to concrete actions to meet the ambition.

The Climate City Contract consists of three components: a **2030 Climate Neutrality Commitment** document, and in appendix individual stakeholder commitments, plus an annexed **2030 Climate Neutrality Action Pla**n and **2030 Climate Neutrality Investment Plan**.

3.1 2030 Climate Neutrality Commitments

The 2030 Climate Neutrality Commitments captures the outcomes of a city-led co-creation process with local, regional and national stakeholders to establish new ways of working and strategic approaches to achieve climate neutrality by 2030. It includes the overarching shared ambition and strategic pathway to 2030 climate neutrality (Part A) and specific commitment(s) to action from stakeholders in the contract (Part B). The Commitments template and guidance can be found in Annex 1 and 2 and in the Mission Portal's Knowledge Repository.

The Commitments document has the following structure:

Part A

- Introduction
- Goal: Climate neutrality by 2030
- Key priorities and strategic interventions
- Principles and process

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- Signatories
- Contract with signatures

Part B

Appendix: Individual agreements between municipality and other key stakeholders

The Commitment document should be signed by the Mayor at a minimum, and ideally with as many key stakeholders as possible. The Commitment document should be reviewed and amended periodically to include new stakeholders or adjust the specificity of the actions.

3.2 2030 Climate Neutrality Action Plan

The Cities Mission 2030 Climate Neutrality Action identifies, connects, and helps strategically implement portfolios of transformative actions necessary to bridge current gaps in policy, regulation, project planning, funding, finance, social, behavioural and implementation to achieve climate neutrality by 2030.

The Action Plan is comprised of three parts, each with three modules:

Part A – Current State of Climate Action

- Module A-1 Greenhouse Gas Baseline Inventory
- Module A-2 Current Policies and Strategies Assessment
- Module A-3 Systemic Barriers to 2030 Climate Neutrality

Part B – Pathways towards Climate Neutrality by 2030

- Module B-1 Climate Neutrality Scenarios and Impact Pathways
- Module B-2 Climate Neutrality Portfolio Description
- Module B-3 Indicators for Monitoring, Evaluation and Learning

Part C – Enabling Climate Neutrality by 2030

- Module C-1 Organizational and Governance Innovation Interventions
- Module C-2 Social and Other Innovation Interventions
- Module C-3 Financing of Action Portfolio

The Action Plan template (Annex 3) and guidance document (Annex 4) explains the overall concept and process of developing the Action Plan as an integral output of the Climate City Contract process, and as an instrument for Mission Cities to navigate and operationalize their 2030 climate-neutrality ambition using a systems approach.

3.3 2030 Climate Neutrality Investment Plan

The 2030 Climate Neutral Investment Plan forms a critical part of a Mission City's journey towards climate neutrality. The overarching objective of the Plan is to help Mission Cities strategically mobilise and align public, private and civic capital at scale for funding and financing pathways to climate neutrality. The Investment Plan will be a systematic map of the costs and capital needed to reach climate neutrality by 2030, as described in the Action Plan. This work will help structure the way cities plan, organise and develop their economic and financial strategy, helping them mobilise capital from funding platforms and financial institutions. Together with the 2030 Climate Neutrality Action Plan, the Investment Plan will be considered as a precondition to receive a Mission Label from the EU Mission.

The Investment Plan is comprised of three parts, each with three modules:

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Part A – Current State of Climate Investment

- Module IP-A1 Existing Climate Action Funding and Financing
- Module IP-A2 Strategic Funding and Financing Evaluation
- Module IP-A3 Barriers to Climate Investment

Part B – Investment Pathways towards Climate Neutrality by 2030

- Module IP-B1 Cost Scenarios for Climate Neutrality
- Module IP-B2 Capital Planning for Climate Neutrality
- Module IP-B3 Climate Policies for Capital Formation and Deployment

Part C – Enabling Financial Conditions for Climate Neutrality by 2030

- Module IP-C1 Economic and Financial Indicators for Monitoring, Evaluation and Learning
- Module IP-C2 Identification and Mitigation of Risks
- Module IP-C3 Capacity Building and Stakeholder Engagement for Capital and Investment Planning

The Investment Plan template (Annex 5) and guidance document (Annex 6) provide resources for Mission Cities to develop their Investment Plan with assistance from NetZeroCities and the Mission Portal.

4 Climate Transition Map

The Climate Transition Map (CTM) is the visual representation of the NetZeroCities mindset and approach to a just climate transition (Figure 1). The Climate City Contract is an instrument to capture the outcomes of the CTM's iterative and continuous process. The CTM is the result of a co-creation process with NetZeroCities partners and City Panel participants that builds on established climate-neutrality frameworks and emphasizes a systemic and inclusive approach to reach the 2030 ambition. The CTM is presented as an interactive tool on the Mission Portal which helps Mission Cities navigate their climate neutrality journey with straight-forward information about each process, its implementation considerations, and the support and resources available.

The Climate Transition Map is organised by Purpose, Process, and Plans. The process phases illustrated in the map are not individual steps, per se, but rather capture key elements that may enable and support a systemic transition to climate neutrality. The process phases are also not intended to be prescriptive or exhaustive, nor do they have to be sequential: they are interlinked and often take place in parallel with other process phases. As with the CCC, the CTM will be further refined and improved by the experience and feedback from the Mission Cities as the project progresses.

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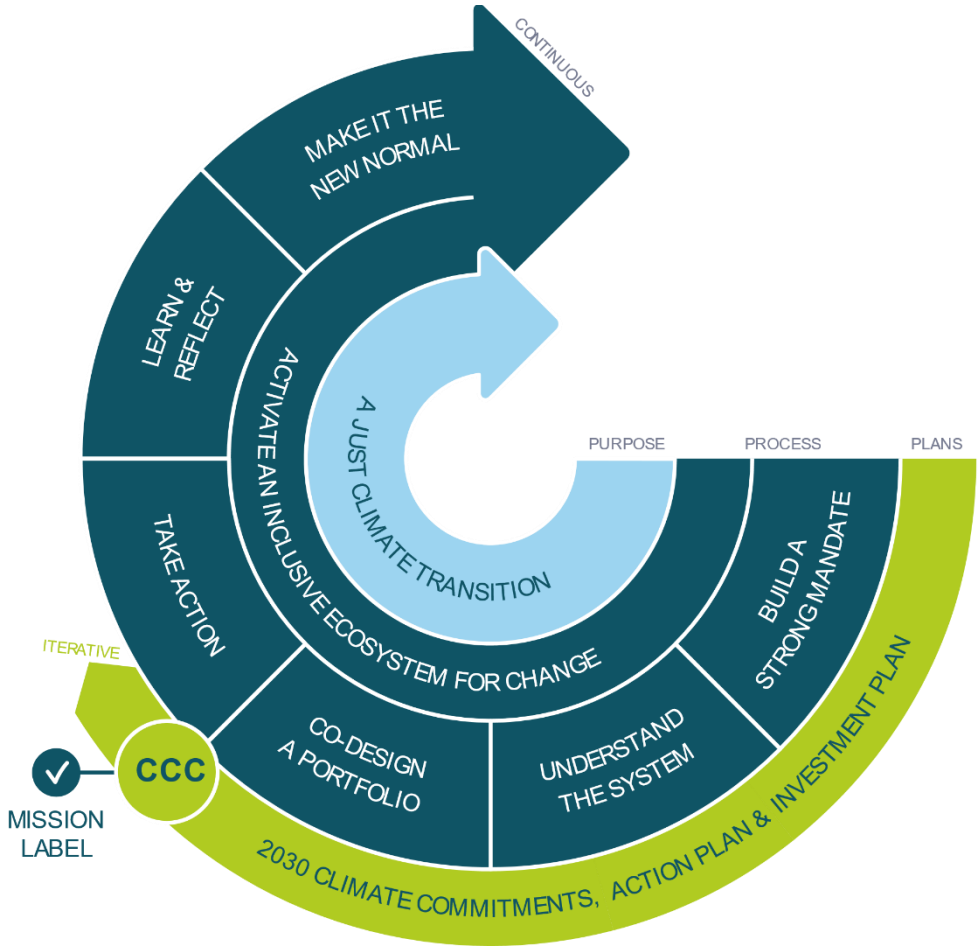

Figure 1 NetZeroCities Climate Transition Map

Many processes and activities on the CTM will be, to some extent, familiar to most cities. For instance, the importance of inclusive stakeholder and citizen engagement ("activate an inclusive ecosystem for change"), and collecting and analysing data to inform decision making ("understand the system"). The difference with these CTM phases is that they challenge cities to go deeper, more thorough and rooted in mission-oriented systemic innovation as part of the NZC climate transition work. The first three phases of the CTM (*Build a strong mandate*, *Understand the system*, and *Co-create a portfolio)*, as well as the cross-cutting process to *Activate an inclusive ecosystem for change*, are particularly relevant for the first iteration of the Climate City Contract, as they constitute the basis for building a strong foundation, ambition and effective implementation.

5 Next Steps

The Climate City Contract templates and guidance documents, as well as an updated CCC Quick Read, will be available on the Mission Portal in October 2022. The city-facing documents are, however, contingent on the complete development of the Mission Label verification process, which is currently under development by the Mission Team / European Commission. All documents in the CCC Resource Pack will be updated accordingly.

The CCC Resource Package v1 contents will be complemented by a webinar series in October 2022, that will cover the Climate Transition Map processes (i.e., "the process" or the "how") and the Climate City Contract components (i.e., the "plans" or the "what").

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In depth Q&As and bilateral engagement with the City Advisors will be offered to Mission Cities throughout Autumn 2022 to further support the CCC implementation process, to dive into specific elements and address the most immediate priorities and support needs for Mission Cities. These will further inform how and what resources and support services will be developed in conjunction with the Mission Platform and the City Advisors.

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Climate City Contract
Commitments Template

City Climate Contract of the City X

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1 Introduction

Explain your city's motivation to join the EU Mission "100 climate-neutral and smart cities by 2030" and highlight your city's present commitments to climate action.

Your text
…

2 Goal: Climate neutrality by 2030

Express your ambition to achieve climate neutrality by 2030 and emphasise the importance of meeting this goal on time. This ambition should be supported by a Council decision, as well as with a wider stakeholder group. Optionally, you can list other co-benefits you aim to achieve when working towards the climate neutrality goal, like well-being, equity, justice.

Your text
…

3 Key priorities and strategic interventions

This is the core section of the Commitments document that should summarise **at least 3 or 4 systemic priorities and strategic interventions** that need to be implemented for your city to become climate neutral by 2030. These should be meaningful changes that will have a profound impact on reducing GHG emissions in your city, like decarbonising the heating system in the city by 2030 or generating 100% energy from renewables. The individual commitments between your city and other stakeholders should address these key priorities and contribute to reaching them. The annexed 2030 Climate Neutrality Action Plan should describe the priorities and interventions in further detail and describe how your city plans to implement them.

Your text
…

4 Principles and process

Highlight the key principles that will guide your city as it implements its Climate City Contract, like accountability, transparency, or an open attitude to new approaches. The process should encompass principles like **co-creation, innovation, multi-actor and citizen engagement,** and should be **systemic and demand-driven in nature.** It should also be based on **monitoring** and **joint learning**. The Commitments Guidance document provides more specific guidance on how integrate these principles into your own process.

Your text
…

5 Signatories

Include a list of stakeholders who have committed to help your city achieve its goal to reach climate neutrality by 2030. Detailed commitments and agreements between individuals or groups of stakeholders should be appended to this Commitments document.

Name of the institution	Sector/Area	Legal form	Name of the responsible person	Position of the responsible person

6 Contract with signatures

Express joint commitment / agreement for all stakeholders who sign this 2030 Climate Neutrality Commitments document.

Example: We, the undersigned, hereby commit to help make the City X climate neutral by 2030. We agree on the joint ambition and commitments, as formulated in the City X's Climate City Contract.

Date of signature Name Signature

_____

Mayor of City X

_____

President, City X Development Agency

_____

Provost, University of City X

_____

CEO, Utility X

_____

Part B: Individual Signatory Commitments

Specific agreements that articulate the details of the climate action(s) between the municipality and other stakeholders (individual or groups) can be added to the Commitments document appendix.

Climate City Contract
Guidance for the
2030 Climate Neutrality Commitments

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1 Purpose of this Guide

This guidance has been prepared for Mission Cities' Transition Teams to provide some key pointers and background on how to create your **2030 Climate Neutrality Commitments** document. The Commitments document is a component of the City Climate Contract (CCC) and is supported by the accompanying 2030 Climate Neutrality Action Plan and 2030 Climate Neutrality Investment Plan.

The 2030 Climate Neutrality Commitments document captures the outcomes of the co-creation process with local, regional, and (where possible) national stakeholders to establish new ways of working together in order to meet the 2030 climate neutrality challenge. The overall priorities aim to bring about real systemic change in the city as a whole, including in the sectors responsible for most emissions in the city. Individual commitment(s) from contract signatories (described further below) contribute to achieving the overall priorities and ambition.

The work on the Commitments document can be supported by the four phases in the Climate Transition Map: *Build a strong Mandate, Understand the System*, and *Co-create a Portfolio*, as well as the cross-cutting process to 'Activate an inclusive ecosystem for change'.

You should use this guidance together with the **Commitments document template.** The template is a tool for you, as a Transition Team, to use to draft text, collect feedback and comments, make changes, etc. The guidance offers step-by-step options for how to work with the template and what types of information should be provided for each of the sections. It also includes *sample texts* that might serve as inspiration.

You are invited to use these guidelines while working on your Climate City Contract, but you are not obligated to do so. Both the templates and guidance documents provide a structure that is aligned with the NZC Climate Transition Map and the Mission Label verification process. A well-written Climate City Contract should, at a minimum, include all sections indicated in the templates.

2 2030 Climate Neutrality Commitments structure

2.1 Introduction

This introductory section is the place for you to describe share what motivated you to join the EU Mission on 100 Climate-Neutral and Smart Cities and your city's journey towards ambitious action, highlighting key achievements in your work on climate mitigation so far.

This section should include:

- Brief background information about the **EU Mission for the Climate-Neutral and Smart Cities** and the **City Climate Contract process (**see sample text below) as well as a short paragraph on why your city decided to apply to join the Mission.
- A reference to your **city's highlights on climate action so far**, including main developments and achievements, key local programmes, strategies and partnerships as well as relevant processes. Further details should be provided in the Action Plan.

This section should answer the following questions:

- What have been the highlights of your city's journey to achieving climate neutrality so far and why have you decided to join the EU Mission and start a CCC process as your next step?
- What is your city's 2030 Climate Neutrality Commitment, why is it being created and how can it enable your city to build on what it is already doing, what opportunities does it create? Please refer to the commitment included in your city's Expression of Interest. Goal: Climate neutrality by 2030

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The goal of the Cities Mission is set and challenges you as a Mission City to achieve climate neutrality by 2030. In this section, you are requested to summarise your city's commitment to reaching this goal. This should be strengthened by a council decision as well as wider stakeholder support.

Optional: Climate policies and measures that promote co-benefits (i.e., policies and measures that tackle emissions whilst also delivering on other priorities) can increase support from local stakeholders, funders as well as the wider public. In this section you could also include what you expect to be the measurable co-benefits of working towards climate neutrality for your city, from improved air quality and increased access to green spaces and related health/ mental health benefits to increased job opportunities, fostering local innovation, energy independence and financial savings.

This section should answer the following questions:

- What is your city´s 2030 climate neutrality goal (reference your Expression of Interest)
- What co-benefits will your city experience from increasing climate action and reducing its reliance on fossil fuels?

Sample text

The goal of the City X is to become climate neutral by 2030. To this end, the City X commits itself to deliver bold climate action that will enable it to achieve the indicated goal on time. The City X agrees to do this is in a fair and just way not leaving anyone behind…

2.2 Key priorities and strategic interventions

This is the core section of the Commitment document, in which your city's Transition Team will share at least 3 or 4 **strategic systemic priorities and interventions** that will need to be implemented for your city to become climate neutral by 2030. These should be meaningful changes that will have a profound impact on reducing GHG emissions in your city, like *decarbonising the heating system in the city by 2030* or *generating 100% energy from renewables*.

If you need guidance on how to identify your strategic systemic priorities and interventions refer to the Understand *the System* phase of the Climate Transition Map.

Sample text

Based on available data (indicate which data), the City X has analysed the state of current affairs and identified three key priorities that needs to be urgently addressed in order to achieve 2030 climate neutrality goal:

- *Decarbonising heating system in the city by 2030*
- *Generating 100% energy from renewables*
- *Building infrastructure for sustainable transport*

You are encouraged to set ambitious goals that will bring about real measurable change and radically reduce GHG emissions. You should ideally provide a concrete a timeline for achieving these changes as well as concrete targets (i.e. numbers). For example: *Our city has identified that in order to achieve the 2030 climate neutrality target it is necessary to insulate 80% of building stock in the city. We commit to insulate first 50% until 2025 and the remaining 30% by 2029.*

This section should answer the following questions:

- What are your city´s overall key climate transition priorities by 2030?
- What strategic interventions will you focus on in the next 2-3 years?

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2.3 Principles and process

Detail the key principles that will guide your city in the implementation of the Climate City Contract, like accountability, transparency and innovation. The contract should encompass **co-creation, innovation, multi-actor and citizen engagement and** should be **systemic and demand-driven in nature**. It should also be based on **thorough monitoring** and **joint learning**.

In this section, you can also describe the process you will implement in order to achieve the 2030 climate neutrality goal. You can refer to the following process phases indicated on the NetZeroCities Climate Transition Map:

- ***Build a Strong Mandate****:* How was your Transition Team (or equivalent) set up? How did you build mandate for ambitious climate action across key city departments? How did you create a multi-actor coalition of local stakeholders for climate mitigation? How did you build a shared understanding between the municipal, regional, national and EU stakeholders?
- ***Co-design a Portfolio***: How did you bring together existing polices, actions and programmes with new or accelerated interventions? How and with whom did you co-create cross-cutting systemic interventions?
- ***Take Action***: For successive iterations: What actions and interventions were implemented as a result of the contract?
- ***Learn & Reflect***: How will you structure the monitoring and review process?
- ***Make it a New Normal***: How will new approaches and innovations be embedded and inform further iterations of the Climate City Contract?

The Climate City Contract is a living document and should be updated periodically to review its effectiveness and include new stakeholders and commitments in line with budgetary and monitoring cycles and citizen engagement processes.

2.4 Signatories and stakeholder commitments

Include a list of stakeholders who committed to help the city achieve climate neutrality by 2030 and highlight their commitments and contributions to the ambition. Individual stakeholder commitments should be concrete actions that will contribute the overall climate neutrality target in line with the key priorities and strategic interventions (2.2). The commitments should be as specific as possible, for example: “the Bus Company X commits that by 2028 80% of its fleet will consist of zero emission vehicles, e.g. electric and powered by green hydrogen”.

Name of the institution	Sector/Area	Legal form	Name of the responsible person	Position of the responsible person

Reach out to relevant stakeholders who will help you significantly reduce GHG emissions in the city and bring about real systemic change. Strive to engage a rich mix of private, public and third sector actors, as well as citizens.

The signatories to the 2030 Climate City Contract are: City X Municipality, City X’s Development Agency, University of City X, company / utility provider in City X, SME in City X., civic coalition in City X, Stakeholder 4, Stakeholder 5, etc.

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Signatories of the contract can also include national and/or regional governments, including agreements made through the multi-level governance engagement processes supported by NetZeroCities, CapaCities (scheduled start in October 2022) and other emerging national-level initiatives.

2.5 Contract (Signatures)

In this section, your city's Transition Team can include a declaration of agreement between all signatories of the 2030 Climate Neutrality Commitment document.

Sample text
We, the undersigned, hereby commit to make the City of X climate neutral by 2030. We agree on the joint vision and commitments, as formulated in the City X's Climate City Contract.

The Commitments document has to be signed, at a minimum, by the City's Mayor or equivalent. However, it is strongly encouraged to engage as many actors as possible in the process.

In this final section of the Commitments document, all stakeholders (including the municipality) who agreed to joint commitments outlined in the document, are asked to sign the document or agree to be mentioned in the text.

3 Appendix: Individual Signatory Commitments

Individual signatory commitments made by stakeholders should be linked to the 2030 Action Plan (Annex 1) and the 2030 Investment Plan (Annex 2). In order to be effective, the commitments need to be as specific as possible, time bound, and measurable. There is no specific guidance on how prescriptive the individual signatory commitments should be. This is left to your discretion and how your Climate City Contract will be managed and monitored. Some cities may use a model MOU agreement; others may opt for something less formal.

Subheadings by sector or by stakeholder type can be used to structure the individual signatory commitments. This section can also include further descriptions of collaboration, partnerships, and how the city government will work together with stakeholders to achieve the 2030 climate neutrality goal.

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Climate City Contract

2030 Climate Neutrality Action Plan Template

2030 Climate Neutrality Action Plan of the City X

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Summary

An abstract **summarizes the content** of the 2030 Climate Neutrality Action Plan (Action Plan).

Textual element
…

List of figures

The list of figures **identifies the titles and locations** (page numbers) of **all visual elements:** figures, drawings, photos, maps, etc. used in the 2030 Climate Neutrality Action Plan.

Figure №	Figure title	Page №
Figure 1	…	…

List of tables

The list of tables **identifies the titles and locations** (page numbers) of **all tables** used in the 2030 Climate Neutrality Action Plan.

Table №	Table title	Page №
Table 1	…	…

Abbreviations and acronyms

The list of abbreviations and acronyms **identifies the abbreviations** (a shortened form of a word used in place of the full word) **and acronyms** (a word formed from the first letters of each of the words in a phrase of name) used in the 2030 Climate Neutrality Action Plan.

Abbreviations and acronyms	Definition
…	…

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1 Introduction

The introduction should outline the local policy context in which the 2030 Climate Neutrality Action Plan is being developed and describe the gap it is addressing in broad terms.

Introduction - textual element
(please fill out according to the Action Plan Guidance)

2 Work Process

This section should list the working steps carried out, for example along the NZC Climate Transition Map, or related steps planned as well as outline timeline and milestones for future iterations for the continuous development of the Action Plan.

Work Process - combination of textual and visual elements
(please fill out according to the Action Plan Guidance)

3 Part A – Current State of Climate Action

Part A "Current State of Climate Action" describes the point of departure of the city towards climate neutrality and informs the subsequent modules and the outlined pathways to accelerated climate action.

3.1 Module A-1 Greenhouse Gas Emissions Baseline Inventory

Module A-1 "Greenhouse Gas Emissions Baseline Inventory" should detail and describe the city's latest GHG inventory to establish the emission baseline and to establish the emissions gap to 2030 climate neutrality according to inventory format set out by the Mission Info Kit and the process outlined in the Action Plan Guidance.

A-1.1: Final energy use by source sectors				
Base year				
Unit	MWh/year			
	Scope 1	Scope 2	Scope 3	Total
Buildings				
(Fuel type/ energy used)				
Transport				
(Fuel type/ energy used)				
Waste				
(Fuel type/ energy used)				
Industrial Process and Product Use (IPPU)				
(Fuel type/ energy used)				
Agricultural, Forestry and Land Use (AFOLU)				
(Fuel type/ energy used)				

A-1.2: Emission factors applied						
(please specify for primary energy type and GHG emission factor according to methodology used)						
For calculation in t or MWh of primary energy						
(Please indicate method used, e.g. GPC, IPCC, CRF, national etc.)						
Primary energy/ energy source	Carbon Dioxide (CO_2)	Methane (CH_4)	Nitrous Oxide (N_2O)	F-gases (hydrofluorocarbons and perfluorocarbons)	Sulphur hexafluoride (SF_6)	Nitrogen trifluoride (NF_3)
…	…	…	…	…	…	….

A-1.3: Activity by source sectors			
Base year			
	Scope 1	Scope 2	Scope 3
Buildings			
(Activity)			
Transport			
(Activity)			
Waste			
(Activity)			
Industrial Process and Product Use (IPPU)			
(Activity)			
Agricultural, Forestry and Land Use (AFOLU)			
(Activity)			

A-1.4: GHG emissions by source sectors				
Base year				
Unit	CO2equivalent/year			
	Scope 1	Scope 2	Scope 3	Total
Buildings				
Transport				
Waste				
Industrial Process and Product Use (IPPU)				
Agricultural, Forestry and Land Use (AFOLU)				
Total				

A-1.5: Graphics and charts
(include visualisations of GHG emissions baseline)

A-1.6: Description and assessment of GHG baseline inventory
(Describe, assess, contextualise tables and charts above)

A-2.3: Emissions gap										
	Baseline emissions (percentage)		Residual emissions / offestting[1]		Baseline emissions reduction target[2]		Emissions reductions in existing strategies[3]		Emissions gap (to be addressed by action plan)[4]	
	(absolute)	(%)	(absolute)	(%)	(absolute)	(%)	(absolute)	(%)	(absolute)	(%)
Buildings										
Transport										
Waste										
Industrial Process and Product Use (IPPU)										
Agricultural, Forestry and Land Use (AFOLU)										
Total										

[1] Residual emissions consist of those emissions which can't be reduced through climate action and are being offset. Residual emission may amount to a maximum of 20 % as stated by the Mission Info Kit.
[2] Baseline reduction target = Baseline emissions – residual emissions.
[3] Emission reductions planned for in existing action planning and strategies should be quantified per sector.
[4] Emissions gap = Baseline emission reduction target – Emissions reduction in existing strategies.

3.2 Module A-2 Current Policies and Strategies Assessment

Module A-2 “Current Policies and Strategies” should list relevant policies, strategies, initiatives or regulation from local, regional and national level, relevant to the city’s climate neutrality transition.

A-2.1: List of relevant policies, strategies & regulations					
Type	Level	Name & Title	Description	Relevance	Need for action
(regulation/ policy/ strategy/ action plan	(local, regional, national, EU)	(Name of policy/ strategy/ plans)	(Description of policy/ strategy/ plans)	(Describe relevance/ impact on climate neutrality ambition)	(list any suggested action in relation – to be further picked in Module C-1)
…	…	…	…	…	…

A-2.2: Description & assessment of policies
(describe and assess listed policies, strategies, regulations etc. to add detail)

3.3 Module A-3 Systemic Barriers to 2030 Climate Neutrality

Module A-3 “Systemic Barriers to 2030 Climate Neutrality” should document the results of the stakeholder, systems and ecosystem mapping and identification of systemic barriers and opportunities.

A-3.1: Systems & stakeholder mapping				
(Fill out according to AP Guidance) – e.g.				
System description	Stakeholders involved	Network	Influence	Interest
…	…	…	…	…

A-3.2: Description of systemic barriers – textual elements
(Fill out according to AP Guidance)

A-3.3: Description or visualisation of participatory model for the city climate neutrality – textual and visual elements
(Fill out according to AP Guidance)

4 Part B – Pathways towards Climate Neutrality by 2030

Part B represents the core of the 2030 Climate Neutrality Action Plan, comprising of the most essential elements: scenarios, strategic objectives, impacts, action portfolios and indicators for monitoring, evaluation and learning.

4.1 Module B-1 Climate Neutrality Scenarios and Impact Pathways

Module B-1 "Climate Neutrality Scenarios and Impact Pathways" should list impact pathways, early and late outcomes and direct and indirect impacts (co-benefits) according to and adapted from the NZC Theory of Change and the AP Guidance – clustered by fields of action.

B-1.1: Impact Pathways					
Fields of action	Systemic levers	Early changes (1-2 years)	Late outcomes (3-4 years)	Direct impacts (Emission reductions	Indirect impacts (co-benefits)
Energy systems	(Lever #1)	(Early change #1)	(Late outcome #1)	(direct impact #1)	(indirect impact #1)
		(Early change #2)	(Late Outcome #2)		
		(list more changes as needed)	(list more late outcomes as needed)	(list more direct impacts as needed)	(list more indirect impacts as needed)
	(list more levers as needed)	…	…	…	…
(apply structure above for each emission domain)					
Mobility & transport					
Waste & circular economy					
Green infrastructure & nature based solutions					
Built environment					

B-1.2: Description of impact pathways– textual and visual elements
(describe, visualise and contextualise pathways listed above)

4.2 Module B-2 Climate Neutrality Portfolio Design

Module B-2 "Climate Neutrality Portfolio Design" should contain a project description for **each intervention planned**, according to the template B-2.1. Narrative analysis and comments can be provided in B-2.2.

B-2.1: Description of action portfolios - textual or visual		
Fields of action	Portfolio description	
	List of actions	Descriptions
Energy systems		
Mobility & transport		
Waste & circular economy		
Green infrastructure & nature based solutions		
Built environment		

B-2.2: Individual action outlines		
(fill out one sheet per intervention/project)		
Action outline	Action name	
	Action type	
	Action description	
Reference to impact pathway	Field of action	
	Systemic lever	
	Outcome (according to module B-1.1)	
Implementation	Responsible bodies/person for implementation	
	Action scale & addressed entities	
	Involved stakeholders	
	Comments on implementation	
Impact & cost	Generated renewable energy (if applicable)	
	Removed/substituted energy, volume or fuel type	
	GHG emissions reduction estimate (total) per emission source sector	
	Total costs and costs by CO2e unit	

B-2.3: Outline strategy for residual emissions
(Detail how residual emission will be offset, if applicable)

4.3 Module B-3 Indicators for Monitoring, Evaluation and Learning

Module B-3 “Indicators for Monitoring, Evaluation and Learning” should contain a selection of indicators taken from the Comprehensive Indicator Sets developed by NZC. The following should be provided: A overview table listing the indicators selected per outcome and impact including targets and evaluation points (B-3.1); and a metadata table for each indicator selected, as specified in the Comprehensive Indicator Sets (B-3.2).

B-3.1: Impact Pathways							
Outcomes/ impacts addressed	Action/ project	**Indicator No.** (unique identified)	Indicator name		Target values		
					2025	2027	2030
(list early changes/ late outcomes and impacts to be evaluated by indicator)	(list action/ pilot project if applicable)	(indicate unique identifier)	(Insert indicator name)		(list one value per indicator)	(list one value per indicator)	(list one value per indicator)
…	…	…	…		…	…	…

B-3.2: Indicator Metadata	
(for each indicator selected – take from Comprehensive Indicator Sets)	
Indicator Name	
Indicator Unit	
Definition	
Calculation	
Indicator Context	
Does the indicator measure direct impacts (i.e. reduction in greenhouse gas emissions?)	[yes/no]
If yes, which emission source sectors does it impact?	Fields of action according to GHG inventory format – Module A-1
Does the indicator measure indirect impacts (i.e. co-benefits)?	[yes/no]
If yes, which co-benefit does it measure?	Co-Benefits
Can the indicator be used for monitoring impact pathways?	[yes/no]
If yes, which NZC impact pathway is it relevant for?	Impact Pathways according to - according to Module B-1
Is the indicator captured by the existing CDP/ SCIS/ Covenant of Mayors platforms?	[yes/no]
Data requirements	
Expected data source	
Expected availability	
Suggested collection interval	
References	

Deliverables describing the indicator	
Other indicator systems using this indicator	

5 Part C – Enabling Climate Neutrality by 2030

Part C "Enabling Climate Neutrality by 2030" aims to outline any enabling interventions, i.e. with regard to organizational setting or governance models, or related to social innovations – designed to support and enable the climate action portfolios described in Module B-2 as well as aiming to achieve co-benefits outlined in the impact pathway (Module B-1).

5.1 Module C-1 Organisational and Governance Innovation Interventions

Module C-1 "Organisational and Governance Innovation Interventions" consists of a summary table, listing organizational and governance interventions and describing their impact (C-1.1) and a section for more detailed descriptions and comments (C-1.2).

C.1.1: Enabling organisational and governance interventions					
Intervention name	Description	Responsible entity/ dept./ person	Involved stakeholder	Enabling impact	Co-benefits
(indicate name of intervention)	(describe the substance of the intervention)	(indicate responsible)	(list all stakeholder involved and affected)	(describe how intervention enables climate neutrality)	(indicate how intervention helps achieve impact listed in Module B-1)
…	…	…	…	…	…

C-1.2: Description of organisation and governance interventions – textual and visual elements
(provide here any further detail on listed interventions)

5.2 Module C-2 Social and Other Innovation Interventions

Module C-2 "Social and Other Innovation Interventions" consists of a summary table, listing organizational and governance interventions and describing their impact (C-2.1) and a section for more detailed descriptions and comments (C-2.2).

C.2.1: Enabling social innovation interventions					
Intervention name	Description	Responsible entity/ dept./ person	Involved stakeholder	Enabling impact	Co-benefits
(indicate name of intervention)	(describe the substance of the intervention)	(indicate responsible)	(list all stakeholder involved and affected)	(describe how intervention enables climate neutrality)	(indicate how intervention helps achieve impact listed in Module B-1)
…	…	…	…	…	…

C-2.2: Description of social innovation interventions – textual and visual elements
(provide here any further detail on listed interventions)

5.3 Module C-3 Financing of Action Portfolio

Module C-3 “Financing of Action Portfolio” should contain the list of action portfolios and interventions outlined in Modules B-2, C-1 and C-2 and detail further cost related information in order to feed into and link to the Investment Plan.

C-3.1: Cost related information							
Action/ intervention name	Responsible entity and person	Start/end date	CAPEX	OPEX	Need for additional investment / funding	Estimated NPV or IRR	Funding streams intended
(list action portfolios and interventions from Modules B-2, C-1 and C-2)	(indicate responsible entity and person)	(indicate start and end date of the activity)	(indicate the capital expenditure needs in €)	(indicate the operational expenditure estimate per year in €)	(E.g. rate - % - of co-financing by city and additional funding needs)	(indicate estimate of NPV/IRR)	(list programmes and funding sources)
…	…	…	…	…	…	…	…

6 Outlook and next steps

This section should draw any necessary conclusions on the Action Plan above and highlight next steps and plans for further refining the Action Plan as part of the Climate City Contract.

Plans for next CCC and Action Plan iteration – textual elements
…

7 Annexes

Add any textual or **visual material** to the 2030 Climate Neutrality Action Plan in the ANNEX as necessary.

2030 Climate Neutrality Action Plan Guidance

Guidance for using the

2030 Climate Neutrality Action Plan Template

Procedural Guidance and Explanations

This project has received funding from the H2020 Research and Innovation Programme under the grant agreement n°101036519.

Table of Contents

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List of Figures

Glossary of Terms

Term	Acronym	Description
Emissions gap	EG	The difference between the city´s greenhouse gas emissions baseline and 2030 climate neutrality target
Greenhouse gas emissions inventory	GHG inventory	A list of greenhouse gas emissions sources and the associated emissions quantified using standardised methods

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1 Purpose of this Guide

The **objective** of the 2030 Climate Neutrality Action Plan Guidance is to provide Mission Cities with a manual to streamline the template of the Climate City Contract (CCC) – 2030 Climate Neutrality Action Plan (Action Plan). In essence, the Action Plan details how the city will address the gap between the current baseline GHG inventory of a city and all existing and planned climate action on the one hand, and the 2030 climate neutrality target on the other.

This document explains the overall concept and process for developing the Action Plan as an integral output of the Climate City Contract, and as an instrument for Mission Cities to navigate and operationalise their 2030 climate-neutrality ambition using a systems approach. The Action Plan identifies, connects, and helps strategically implement portfolios of transformative actions necessary to bridge current gaps in policy, regulation, project planning, funding, finance, social, behavioural and implementation to achieve climate neutrality by 2030.

This guidance document supports Mission Cities by offering them a methodological, modular approach on how to

- capture and understand their current practices and to address climate challenges in line with GHG emission inventories,
- identify additional actions to meet their climate neutrality target, and
- collaborate with stakeholders at multiple governance levels via innovative governance.

This guide is based on the principle that the portfolio of interventions should be cross-sectoral and actor-inclusive and designed to radically reduce greenhouse gas emissions. It further supports cities in utilising multiple “Levers of Change”, serving as enabling factors for the devised action portfolio. These levers include, but are not limited to, governance and policy, regulation, technology, culture, social innovation, citizen engagement and participation, capacity and capability development, finance, business models, and local development strategies.

The guidance further ensures that the Action Plan serves as a robust and coherent foundation for the 2030 Mission Cities 2030 Climate Neutrality Investment Plan, which will in turn identify and map out the capital needs for reaching climate neutrality by 2030 and enabling actions. Ultimately, the Action Plan – in combination with the Investment Plan – aims to mobilise public and private capital needed for a successful climate neutrality transition, developing an efficient capital deployment approach, and an integrated impact monitoring framework that translates invested Euros into measurable GHG emission reductions.

For the convenience of users, the **scope** of this document includes both a short guide as a summary, and an in-depth section-by-section guide on planning and developing of the Action Plan at the local level in the Mission Cities. This guiding document is designed as a set of the necessary climate actions helping Mission Cities develop a better understanding on key activities, documentation in the Action Plan template, and the guiding questions for each of the methodological modules of the Action Plan template.

The structure of the guidance is aligned with the Action Plan’s operationalisation process on the Mission Portal as a cloud-based document with upload functions and links to other knowledge products on the portal. The idea is that dedicated municipal staff and members of the Transition Team can access the template online at the same time to co-develop the Action Plan in a streamlined way, building on existing planning and being able to link various knowledge products hosted on the platform.

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1.1 Action Plan Concept and Approach

The work process under the MAP should both detail the actions and plans needed to **fill the climate neutrality gap to 2030**, while also detailing the **conceptual and governance strategy**, enabling and supporting measures and the **main principles** of implementing city-wide, transformative climate action. This means the MAP combines two logical approaches:

1) Measurable, reportable and verifiable (MRV) climate action planning based on a GHG emission inventory and baseline, clear projects and action descriptions for each emission domain ("portfolios") and indications around investment and capital needs as a preparatory step for the creation of investment plans.

2) Strategic approach based on a comprehensive theory of change to harness social innovation and governance innovation as enabling factors for successful, city-wide and inclusive climate neutrality transformations.

In combination, climate neutrality action planning at the local level under the EU Cities Mission should therefore be based on a **co-creation process:** mobilising key stakeholders, engaging citizens and aligning **actions for systems change and decarbonisation.**

This work process intentionally builds on existing action plans and processes, focusing on identifying and filling the gap between existing planning documents with climate relevance (e.g. SECAP, SUMP) in a city on the one hand, and the climate neutrality target as per the EU Cities Mission definition by 2030 on the other. The **re-use and incorporation of existing information** from climate inventories, GHG reporting, the Expression of Interest process for the EU Cities Mission as well as the use of existing governance structures to achieve this goal is therefore explicitly encouraged.

Furthermore, the MAP structure follows a **modular approach**. This means that cities are able to fill in the MAP template in a selective manner, focusing on one module at a time and rapidly creating early-stage or first-iteration MAPs, even if not all information is available immediately. Additionally, the modular approach allows cities to prioritise and focus on those parts of the MAP that are most impactful and beneficial for rapid action implementation. However, the more modules are completed, the higher the synergies and benefits are to be expected from the overall MAP planning exercise.

The **basic design principles** for the 2030 Climate Neutrality Action Plan include:

- **Building on existing strategies, plans and processes** to bring together all decarbonisation activity in the city into a coherent, integrated package for achieving the 2030 ambition.
- **Rooting in multi-level governance and deep stakeholder and citizen engagement**, systems understanding, and transformative innovation addressing the challenges in an integrated, collaborative, and multi-scalar way.
- **Embracing data-driven analysis, decision-making, and visualisation** of GHG inventories and MEL indicators to better inform policies, regulation, investments, assess impact in a measurable, reportable and verifiable manner and clearly communicate progress towards climate neutrality across diverse stakeholder groups.
- **Using a portfolio approach to cluster and interlink sectoral climate actions** alongside fields of action to unlock funding opportunities and financing and provide a cross-cutting perspective of climate actions as basis for social innovation and citizen participation, policy interventions and creation of co-benefits.
- **Offering a flexible and modular guide** to create a customised 2030 Climate Neutrality Action Plan that responds to each city's starting point and needs, ensuring a standard quality level for the Mission Label.

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- **Providing a solid foundation and clear direction** to support more detailed operational and financial planning in implementation phases.
- **The 2030 Climate Neutrality Action Plan is a living document**, to be adjusted (together with the 2030 Climate Neutrality Investment Plan) regularly (e.g. annually), accompanying the cities own planning cycle, responding to changes in the evolving ecosystem.

A complete Action Plan should ideally include all of the elements in the modules described below (Figure 1).

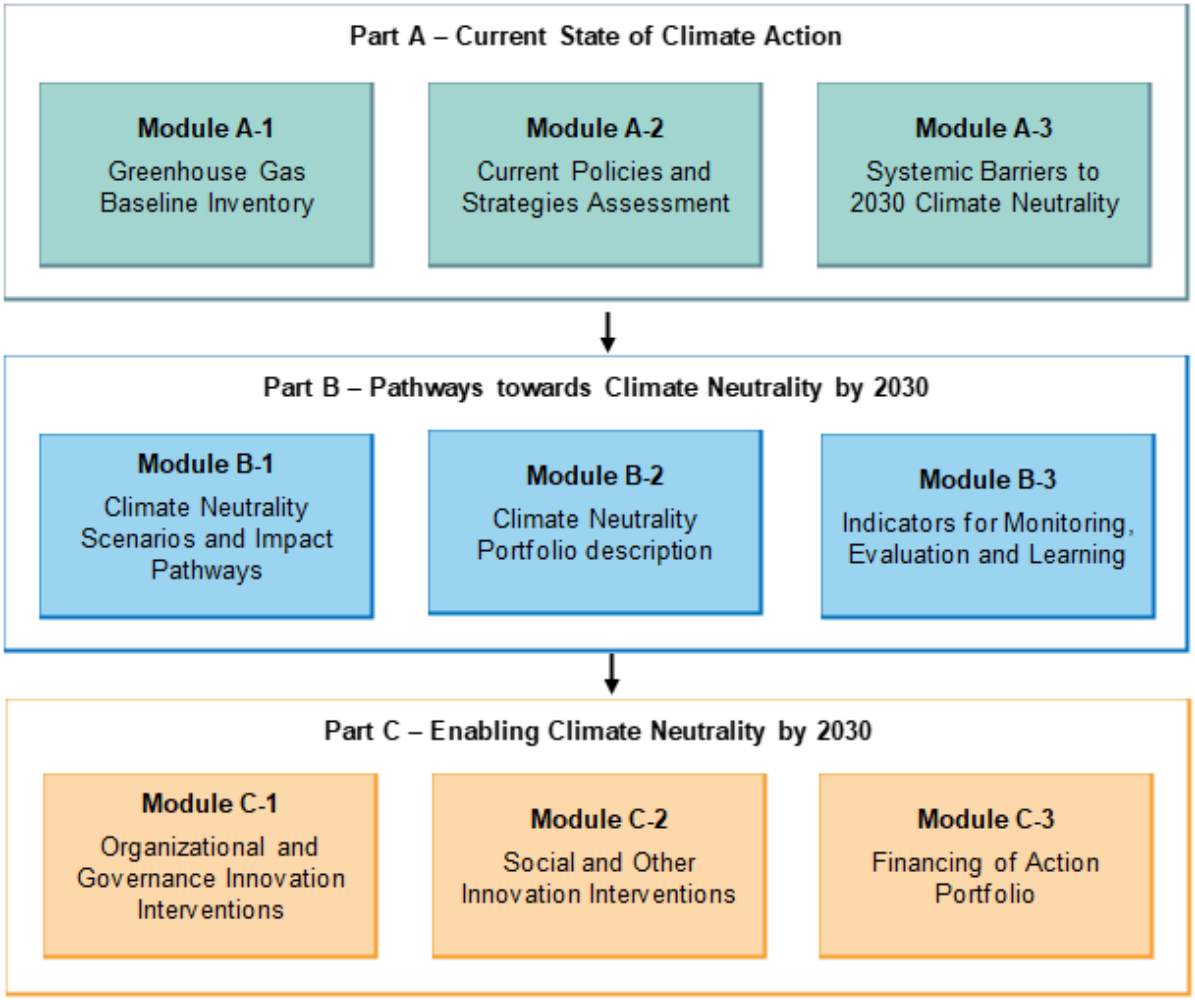

Figure 1: Modular Outline of 2030 Climate Neutrality Action Plan template

Part A helps to set and summarise the current baseline of GHG emissions, existing policies and strategies as well as systemic barriers to implementation faced by the city. Part B of the template represents the core of the Action Plan towards 2030, detailing strategic impact pathways, indicators for monitoring, evaluation and learning and, most notably, describing in detail the action portfolios across fields of action and summarising each individual action. Part C looks into enabling factors from a governance, social innovation and finance perspective as crucial prerequisites for actual action implementation.

Parts A, B and C are interlinked: Part A informs Part B and Part C through providing the evidence base (GHG emission baseline and gap analysis and systems mapping) and an understanding of the point of departure and the related conditions. Part C enables Part B (i.e., the implementation of actions towards net zero) through creating favourable systemic conditions and providing an understanding of the necessary financing (with links to the Investment Plan) – as illustrated in figure 2 below.

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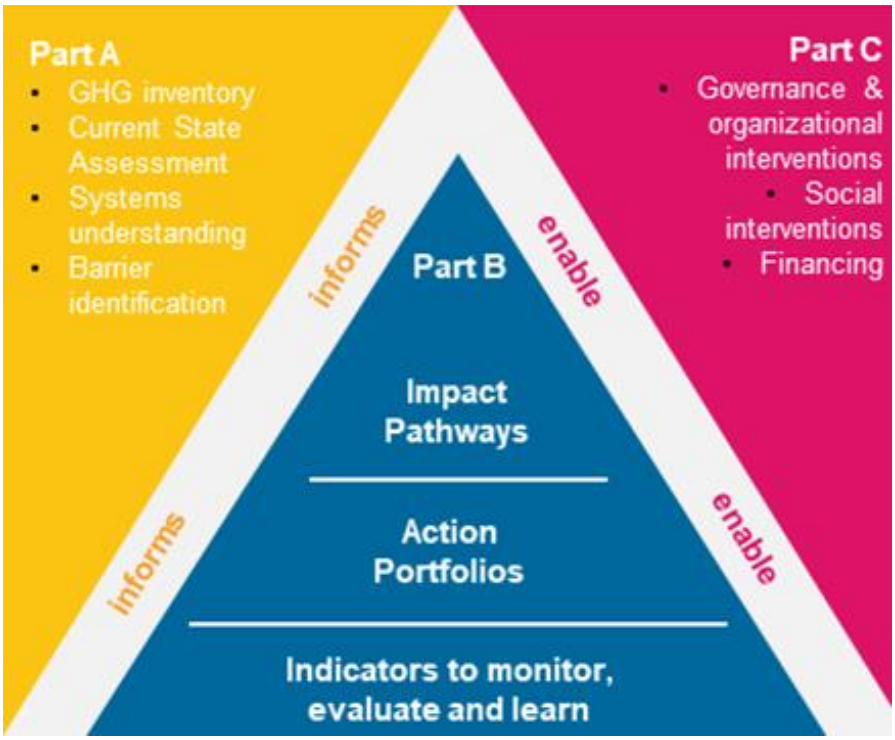

Figure 2: Schematic overview of contents and relationship of the different Parts in the Action Plan

The work process should be aligned with **the modular outline** of 2030 Climate Neutrality Action Plan template (Figure 1).

The Action Plan's design is aligned with the methodological "Climate Transition Map" depicting the overall CCCCCC process. In this, the 2030 Climate Neutrality Action Plan development corresponds to phases 1-3 of the Climate Transition Map (see figure below):

- **Build a strong mandate** within local government, within the local ecosystem/ all stakeholders, developing a transition team, build collaborative governance structures and networks and with other government levels, strengthening buy-in and mutual commitments.
- **Understand the system** that is comprised of interconnected and interdependent patterns of actions involving many components: organisations, institutions, people and their relationships, to be understood through setting a greenhouse gas emissions baseline, current state assessment and an analysis of gaps towards climate neutrality by 2030.
- **Co-creating an action portfolio,** involving the exploration of possible impact pathways and co-development of climate actions as well as selection of indicators to monitor, evaluate and learn.

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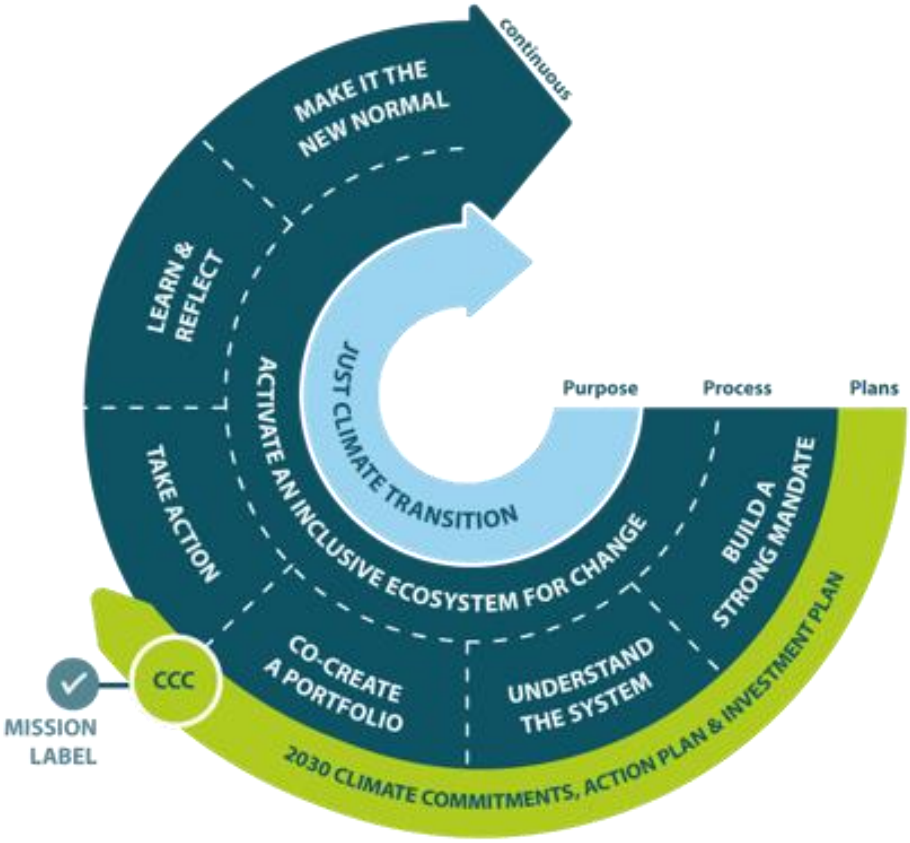

Figure 3: Climate Transition Map

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2 Short Guide

As a short summary and overview, the Action Plan template features a section for each module, which should capture the following key elements:

PART A – CURRENT STATE OF CLIMATE ACTION

Modules	Expected content
A-1 GHG emissions baseline inventory	• Key data and visualisation of latest GHG inventory, according to the inventory format specified in the Mission Info Kit to establish the emission baseline. • Descriptive assessment of current GHG inventory, including a description of the status quo of each source sector and current carbon sequestration capacity – e. g. through biomass or CCS (if applicable) • Quantification of emission gap (gap between emissions baseline and the 2030 climate neutrality target)
A-2 Current policies and strategies assessment	• Comprehensive list of relevant policies, strategies, concepts, regulations (e. g. SECAP, SEAP, SUMP, etc.) as well as of regional and national legislation that impact climate action. • Descriptive assessment of the policy context, summarising the objectives and implementation concepts, addressing spatial planning, local economy, circular/ bioeconomy, waste, transport, housing refurbishment, urban greening/ nature-based solutions). • Quantification of the implementation gap (i.e. emissions gap minus reductions already addressed through existing climate action plans / prior GHG mitigation projects).
A-3 Systemic barriers	• Mapping of the main system elements (infrastructures, capacities, processes, alliances, funds) that influence the city's journey to net zero. • Description of barriers and opportunities with regard to the system elements described • Description & visualisation of participatory model for the city climate neutrality, including stakeholder ecosystem, partnerships with stakeholders, with other levels of government, with the private sector, with citizens, with other cities, with academia or research & innovation institutions – to overcome identified systemic barriers and exploit on related opportunities.

PART B – PATHWAYS TOWARDS CLIMATE NEUTRALITY BY 2030

Modules	Expected content

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B-1 Climate neutrality scenarios and impact pathways	• List of impact pathways, selected or inspired from the NZC Theory of Change (Link), including early and late outcomes (strategic objectives) and levers for change structured along the fields of action
B-2 Climate neutrality portfolio description	• A table of a portfolio of actions on a project-by-project basis, co-designed by stakeholders, citizens, and further members of the city's ecosystem. The table must contain all information for implementation (topic, kind of intervention, emission sector, scope, allocation, responsible actors, GHG reduction by gases, costs, funding sources identified etc.). • A priority list of the most urgent and effective projects with the implementation related information and an implementation schedule. • A summary of the expected GHG reduction achievements (by gas) and costs of the 1st priority projects (by emission sector) and a table of remaining gaps to be closed.
B-3 Indicators for monitoring, evaluation and learning	• List of indicators to monitor and evaluate progress along the selected impacts pathways and fields of action (see Module B-1). (a comprehensive indicator set to select from will be provided by NZC) • Monitoring and evaluation plan, i.e. metadata on each indicator selected as well as milestones and timeline (metadata sheets on each indicator will be contained in the NZC indicator sets).

PART C – ENABLING CLIMATE NEUTRALITY BY 2030

Modules	Expected content
C-1 Organisational and governance innovation interventions	• Summary list of possible interventions, addressing systemic barriers and opportunities (see Module A-3), e.g., through improving organisational settings and governance models – horizontally within municipal administration and across local stakeholders as well as vertically at regional and national levels. • Detailed description of the intervention types, including objectives, stakeholders/ authorities involved, timeline, outcome and reference to NZC impact pathway, selected in Module B-1.
C-2 Social and other innovation interventions	• Summary list of possible social innovation topics and social interventions (past, present, future), linked to climate neutrality ambitions. • Summary list of other (e.g. urban planning-, nature-based- and technologic) interventions designed to enable and accelerate the transition to climate neutrality in the city. • Description of interventions, including description of projects/ initiatives, goals and relevance to climate neutrality in your local context as well as to the Mission Action Plan, stakeholders involved, resources planned, learnings, capacities and benefits of your plan to obtain and a reference to impact pathways, selected in Module B-1.

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C-3 Financing of action portfolios	• Summary list, including action portfolios (see Module B-2) with GHG reduction estimate, grouped by impact pathways and emission sectors (see Module B-1), related monitoring indicators (see Module B-3) and estimated costs per action. • Description of financing need for action portfolio implementation and associated impact.

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3 Section-by-section Guide

3.1 Introduction

3.1.1 Documentation in Action Plan Template

The introduction should **emphasise the importance of achieving** the climate neutrality objective of the City's Mission and **state the specific focus** of the 2030 Climate Neutrality Action Plan. An introduction should **provide background information** about the development of the 2030 Climate Neutrality Action Plan and highlight its **interconnectedness with other components** of the CCC, i.e., 2030 Climate Neutrality Commitment and 2030 Climate Neutrality Investment Plan. Furthermore, the introduction should address the action planning and policy context in the given city, i.e. describe how the Mission Action Plan builds on **existing strategies**.

INFO BOX 1

A key design principle of the 2030 Climate Neutrality Action Plan is to align with existing climate action planning and strategy processes of Mission Cities. For example, as of the formal launch of the Mission in 2022, the majority of the Mission Cities were signatories of the EU Covenant of Mayors (EUCoM), with many having submitted a Sustainable Energy Action Plan (SEAP) or Sustainable Energy and Climate Action Plan (SECAP) or have developed other types of national climate action plans or similar strategy documents. In order to build on these, the 2030 Action Plan development process is designed to integrate elements from those existing strategies with components that need to be developed specifically for the 2030 Climate Neutrality Action Plan (see figure below). This means that contents from existing action planning documents can be used in the Mission Action Plan, if not older than 2 years.

3.1.2 Guiding questions

- How does the Action Plan fit in your overall CCC development process?
- Which formal commitments are needed in the CCC Commitments document to ensure the success of the Action Plan?
- Which climate actions should be highlighted in the Action Plan with a view of investment needs and to be considered in the Investment Plan?
- How does the Action Plan fit in your existing climate action planning?
- Are there any other specific circumstances relevant to the Action Plan development, such as formal procedures or planning frameworks in your city which the Action Plan should align to?
- What can you take up from your existing documents or how to adapt your existing documents to conduct the Action Plan?
- Which additional information needs to be created or sourced for the Action Plan that is not yet covered in existing plans or documents?

4 Part A – Current State of Climate Action

Part A "Current State of Climate Action" describes the point of departure of the city towards climate neutrality. **Part A informs Part B** "Pathways towards Climate Neutrality by 2030" **and Part C** "Pathways towards Climate Neutrality by 2030" through providing **the evidence base** (e.g. greenhouse gas emission baseline, gap analysis, and systems mapping) and **an understanding of the starting point**

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for climate action planning at the local level and the related conditions. Part A consists of three core modules:

- **Module A-1** "Greenhouse Gas Emissions Baseline Inventory".
- **Module A-2** "Current Policies and Strategies Assessment".
- **Module A-3** "Systemic Barriers to 2030 Climate Neutrality".

4.1 Module A-1 Greenhouse Gas Emissions Baseline Inventory

4.1.1 Key activities

Understanding current greenhouse gas inventory practice patterns and gaps in the city: GHG emissions inventories take measured emissions or, if not possible as emissions come from very distributed activities which cannot be measured, they are calculated using a set of equations. Various approaches to emission inventories exist. While accepting in principle all types of inventory accounting approaches (such as e.g. Global Protocol for Community-Scale Greenhouse Gas Inventories (GPC) - Link), the Cities Mission foresees a specific inventory format as well as scopes to be reported by Mission Cities. These, along with many useful definitions, are outlined in the Mission Info Kit (Link) sent out by the EC prior to launching the open call for Expression of Interests. Mission Cities shall consult the Mission Info Kit on questions related to the emissions inventory and specific climate neutrality definition, alongside the content provided in this Guide.

Mission **Cities will not directly report** GHG inventories **to the Mission Platform** – neither for the GHG baseline inventory nor the subsequent monitoring inventories to be submitted along the way. Mission Cities rather continue to report as they have done within either MyCovenant or DCP/ICLEI. The Mission Platform will work with both platforms to obtain the inventory data reported by cities (see Info Box 2 for more details). Considering the above, Mission Cities should first engage in the following tasks:

- Check how old the latest GHG inventory reported on either MyCovenant or CDP/ICLEI is. No new inventory needs to be submitted if the data is less of than two years (2020). If the latest inventory is older than 2020 (and/or if the base year is older than 2018), a new GHG baseline inventory should be submitted using either MyCovenant or the CDP/ICLEI reporting platform.
- Make sure the differences between the submitted GHG inventory and the required format and scopes outlined in by Mission are understood to either align as much as possible in case a new baseline inventory is being calculated, or to get a feeling on the needed improvements to the existing baseline inventory.
- Fill in gaps in existing inventory to match Mission inventory requirements, working on the Mission Platform.

4.1.2 Documentation in Action Plan Template

Given the specified columns in the Action Plan template, Module A-1 should be filled in by documenting the outputs of the steps described above, i.e. current GHG accounting and reporting practices as well as relevant analysis (charts) on energy consumption and GHG emissions in the base year for the given sectors and sub-sectors. Sub-modules in template A-1.1 to A-1.5 relate to listing the basic GHG inventory categories such as fuel use, emission factors, fuel use by source sector, and emissions by source sector. Section A-1.6 is dedicated to a narrative assessment and description of the inventory to highlight any outstanding facts behind the numbers. Section A-1.7, should – based on the set baseline – identify the *emissions gap* between the baseline and the climate neutrality target. The *emissions gap* is defined as the amount of emissions to be addressed by this Action Plan and is composed of the emissions baseline minus the residual emissions being offset minus the emission reductions already

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planned solidly in existing planning frameworks. This approach on the emission gap ensures that the Mission Action Plan actually addresses the gap between existing planning frameworks and the 2030 climate neutrality target. Climate neutrality definition as well as other useful conceptual elements can be found in the two info boxes below.

INFO BOX 2	**Elements of climate neutrality definition as outlined in Mission Info Kit**
ETS plants	Any large-scale energy generation or industrial facilities located within the city boundary which are registered under the EU Emissions Trading Scheme (EU ETS) will be exempt from the Mission on the basis that municipalities have very limited influence over their operation and there is a dedicated EU process to reduce emissions from these sources. It is optional for cities to include them if measures are foreseen.
Local energy generation measures	Reflect local energy generation measures through the local emission factor (Scope 2 emissions), splitting on-site consumption and what is provided to the grid.
Share of residual emissions	Residual emissions should be reduced to the minimum possible, with a recommended maximum level of residual emissions (20%) and mandatory compensation of residual emissions and rules for compensation (see next 4 lines).
Offsetting – type and location	Offsetting is only possible for emissions which are very difficult or impossible to mitigate (i.e., for residual emissions). Limited eligibility depending on project types (i.e., projects within the country/EU, and with high additionally, high co-benefits).
GHG emission removal (within the territory)	Pilot projects on carbon capture and storage (CCS) allowed, i.e., to account for negative emissions through GHG removal to address residual emissions. Only applications which result in permanent sequestration of the CO_2 (i.e., injected into geological structures) will be allowable.
Sinks	Allowed to account for negative emissions through the enlargement or enhancement of natural sinks within the territory (= within the city boundaries) to address residual emissions (considering all changes in the carbon stock).
Certified renewable energy purchases (Renewable energy credits)	Allowed for the reflection of certified renewable energy purchases in the calculation of the local emission factor to address Scope 2 emissions.
Local Emission Factors (see Box 8 in Part II of the Mission Info Kit)	Allowed to use of locally estimated Emission Factors (EF) for electricity and heat (double-counting through dynamic national/regional EF has to be avoided).
Reflect grid decarbonisation	Change Emission Factor over the years (reflecting changes in the national/regional/local mix) (double-counting through locally weighted EF has to be avoided).
Other methodological considerations	Biomass: Zero emission factor only if sustainability criteria are respected (a principle). No negative emissions allowed for biomass energy.

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INFO BOX 3

The source sectors, scope and greenhouse gases to be covered by the GHG inventory are outlined in the Mission Info Kit (Link). The NZC Consortium will cooperate with MyCovenant and the CDP/ICLEI Tracker to get the latest GHG inventory data from Mission Cities. The data will then be uploaded by the NZC Consortium onto the Mission Platform in the required format specified. Remaining gaps in the inventory will need to be filled by Mission Cities, working directly on the Platform (with support from City Advisors). The baseline inventory should not be older than 2 years.

Emission sources and sectors that should be covered

	Direct Emissions (Scope1)	Indirect Emissions (Scope 2)	Out-of-boundary emissions (Scope3)
Building	**x**	**x**	
Transport	**x**	**x**	**Recommended by 2030**
Waste	**x**		**x**
IPPU	**x**		
AFOLU	**x**		

GHG gases that should be covered

Carbon Dioxide (CO_2)
Methane (CH_4)
Nitrous Oxide (N_2O)
F-gases (hydrofluorocarbons and perfluorocarbons
Sulphur hexafluoride (SF_6)
Nitrogen trifluoride (NF_3)

4.1.3 Guiding Questions

- Has my city reported a GHG emission inventory in MyCovenant or CDO/ICLEI Tracker in the last two years?
- Does the available GHG emission inventory meet the requirements set forth by the Mission Info Kit?
- If my city is lacking emission data: have activities started to conduct a GHG-emission inventory? (see link for advice)
- Which is the emissions gap of my city between the GHG emissions baseline and 2030 climate neutrality target?

4.2 Module A-2 Current Policies and Strategies Assessment

4.2.1 Key activities

Implement current state assessment of climate policies and strategies: city's current climate ambition and policies, details on existing greenhouse gas emissions reduction target, existing cross-sectorial or sectoral strategies or action plans relevant to climate change mitigation/greenhouse gas emissions reduction, current climate action sectoral policies (energy, transport, waste/wastewater management, digitalisation & smart city elements), etc.

- Collect and map relevant policies, strategies and regulations.
- Analyse existing targets and their action plans to determine overlaps with Mission Action Plan and opportunities for synergies.

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- Identify 'implementation gap' by assessing emission reductions accounted for in existing climate action plans in order to determine the actual emission gap to be addressed given the 2030 climate neutrality target.

4.2.2 Documentation in Action Plan Template

According to the steps described above, this section of the Action Plan Template should map relevant existing strategies covering a wide range of sectors. Using the specified columns in the Action Plan Template, listed strategies and policies should be briefly described and their impact on climate action assessed as well as improvement needs identified.

4.2.3 Guiding Questions

- Which are the existing policies, strategies, programmes and regulations that impact (directly or indirectly) the 2030 climate neutrality ambition?
- Are there any improvement needs of relevant policies, strategies and regulations in order to support and enable the climate neutrality journey towards 2030?
- Which is my city's current implementation gap towards 2030 climate neutrality?

4.3 Module A-3 Systemic Opportunities and Barriers to 2030 Climate Neutrality

4.3.1 Key activities

Analyse systemic barriers and challenges to the city climate neutrality: critical gaps, barriers and challenges the city faces to achieve climate neutrality by 2030; sector-specific gaps, barriers and assistance needs, across sectors gaps, barriers and assistance needs; risks that could impact the achievement of the city´s climate neutrality target by 2030; local specificities of climate policy development and implementation, etc.

- **Barriers, critical gaps and challenges:** understand and map the main elements (infrastructures, capacities, processes, resource flows, alliances, funds) that might hinder the transition to climate neutrality
- **Opportunities**: understand and map the main elements spatial structure (land use / function distribution and density), infrastructures, capacities, processes, resource flows, alliances, funds) that might enable the transition to climate neutrality
- **Create the participatory model for the city climate neutrality:** climate stakeholder ecosystem, partnerships with stakeholders, with other levels of government, with the private sector, with citizens, with other cities, with academia or research & innovation institutions; stakeholder participation and contribution into the city's climate policy development and implementation, etc.
- **Connect:** detect existing connections and links with the actors that populate the system (all urban stakeholders) and the main interests around which they collaborate together
- **Contrast**: compare opportunities and barriers with your strategic goals to understand how to set the most favourable conditions (i.e., prepare the local system) for the implementation of your journey to climate neutrality
- **Learning by doing:** enable a process of designing-testing-redesigning the system to implement the local journey toward climate neutrality

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4.3.2 Documentation in Action Plan Template

In the transition to climate neutrality, understanding the system provides the evidence base (e.g. greenhouse gas emissions baseline, gap analysis, and systemic barriers) and an understanding of the starting point for the transition to climate neutrality at the local level. This includes having evidence of the local conditions as well as the lacks and barriers to be addressed.

This section in the Action Plan Template should thus aim at establishing a baseline to understand links between previous and current initiatives, resources available and gaps identified, focusing on creating a clear connection with the goals and priorities of your local transition to climate neutrality. The existing links with the stakeholders that populate the system should be understood and reported across sectors to report on the conditions that might prepare the ground for collaboration.

Special focus should be placed on at least three areas: (1) understanding the system linked to the greenhouse gas emissions (patterns and gaps in the city) to build collaborations with the relevant stakeholders and organisations to monitor/reduce their environmental impact; (2) understanding the system linked to policies and strategies to involve all relevant departments and organisations; (3) analyse systemic barriers to the city climate neutrality, making sense of the data collected in A1-3 and extracting gaps and priorities.

4.3.3 Guiding Questions

- What's out there and why is it relevant for my city?
- What is missing, what kind of infrastructures, capacities, processes, alliances, funds does the city need to get to set the most favourable conditions (i.e., prepare the local system) for the implementation of my city's journey?
- How can assets and resources be harnessed to achieve a common strategy in my city's local system?
- How can understanding be gained collectively to account for different perspectives?
- How can the system be monitored? What kind of data does my city need to collect and how can it be analysed?

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5 Part B – Pathways towards Climate Neutrality by 2030

Part B "Pathways towards Climate Neutrality by 2030" is the **structural element** of the climate neutrality action planning **modular framework** for the development of 2030 Climate Neutrality Action Plan. **Part B represents the core** of the 2030 Climate Neutrality Action Plan, **comprising of the most essential elements**: scenarios, strategic objectives, impacts, action portfolios and indicators for monitoring, evaluation and learning. Part B consists of three core modules:

- **Module B-1** "Climate Neutrality Scenarios and Impact Pathways".
- **Module B-2** "Climate Neutrality Portfolio Design".
- **Module B-3** "Indicators for Monitoring, Evaluation and Learning".

5.1 Module B-1 Climate Neutrality Scenarios and Impact Pathways

5.1.1 Key activities

Build scenarios and develop strategic pathways to climate neutrality by 2030: turning system analysis into tools for decision-making by identifying possible points in the system for transformation and developing the associated scenarios. The development and assessment of the integrated climate change mitigation pathways for the city's progress towards climate neutrality by 2030.

- Undertake scenario modelling exercise using the NZC Theory of Change to better understand and identify levers of change leading to climate neutrality by 2030.
- Based on the fields of action and systemic levers provided by the NZC Theory of Change, specific outcomes/ strategic objectives and targets need to be identified.

5.1.2 Documentation in Action Plan Template

Module B-1 of the Mission Action Plan Template should document the results of the city's internal scenario modelling exercise by outlining the selected impact pathways per emission domain. In this, the impact pathways provided by the NZC Theory of Change serve as inspiration and tool for Mission Cities to better understand how climate neutrality can be reached, including all types technological and non-technological trajectories. The impact pathways selected by the city should then be broken down into short-term and long-term outcomes (strategic objectives) that lead to the desired impact with regard to the fields of action and the associated co-benefits. The impact pathways provided by the NZC Theory of Change may also be adapted by the city to tailor it to the local context or to existing strategic objectives. All of the above should be documented in a log-frame as specified in the Action Plan Template and shall form the basis for an overview table including impact pathways, fields of action, action portfolios and indicators (see guidance on Modules B-2 and B-3 below).

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INFO BOX 3

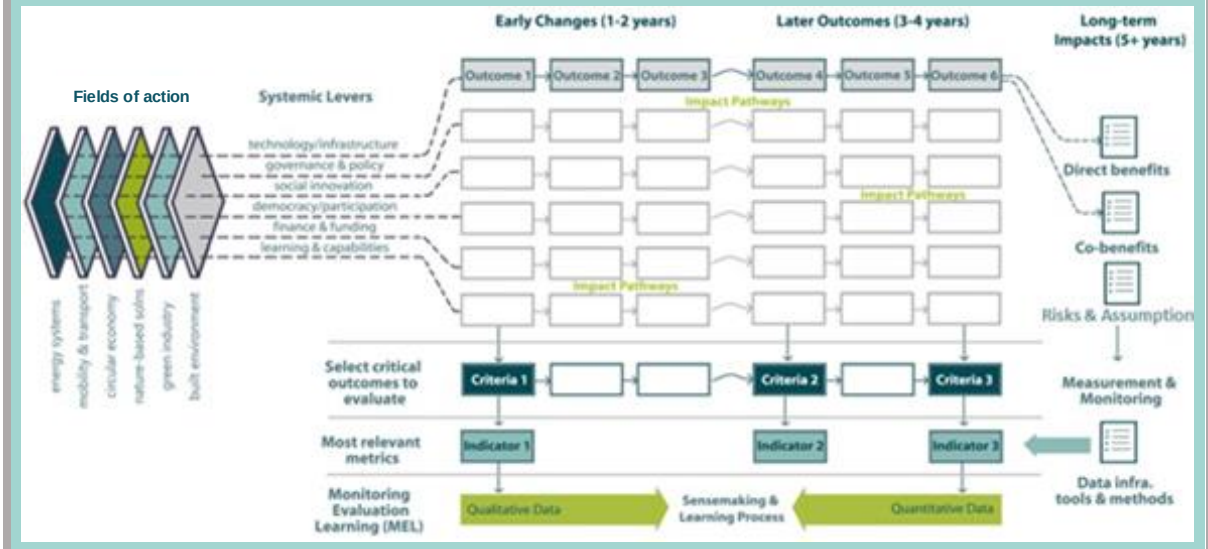

Figure 4 : NZC Theory of Change (ToC) impact pathway framework, linking fields of action with systemic levers, early and later outcomes and long term impact (emissions and co-benefits)

The NZC Theory of Change (NZC ToC) is the key action planning framework that defines impact pathways and links them with fields of action. It describes how action portfolios will lead to short-term and long-term outcomes over time and ultimately to the desired direct (climate neutrality) and indirect impact (co-benefits) by 2030. There are six impact pathways defined by the NZC ToC, each spanning across all fields of action and co-benefits. The impact pathways described by the ToC are the most important NZC framework to cluster actions and indicators within the Mission 2030 Action Plan, responding to a multi-dimensional understanding of climate transitions, driven by systemic changes.

5.1.3 Guiding Questions

- Which are the strategic objectives, targets or intended outcomes with regard to emissions and co-benefits in the city's existing climate strategies and action plans?
- Which of the existing strategic objectives, targets or intended outcomes can also be found in the NZC Theory of Change (same of similar)?
- Should some of the existing strategic objectives, targets or intended outcomes be adapted to the NZC Theory of Change? And are there strategic objectives, targets or intended outcomes from the NZC Theory of Change that need to complement the ones existing already the city's climate action plans?
- Does my city need other, additional strategic objectives, targets or intended outcomes to describe the city's 2030 climate neutrality pathway, which can neither be found among the existing ones nor in the NZC Theory of Change?

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5.2 Module B-2 Climate Neutrality Portfolio Description

5.2.1 Key activities

Create portfolios of actions across fields of action for achieving city climate neutrality: Portfolios are clusters of interventions to achieve the target GHG emission reduction in each emission domain. A well-developed, comprehensive and coherent portfolio is providing holistic framework of a variety of interventions, from investments to strategic experiments on the city's pathway to climate neutrality. In order for portfolios to be realistic for implementation, all relevant stakeholders should be included in the design of each action (e.g. GHG emitters, citizens, interest groups, local government departments, utilities, financiers, decision-makers etc.).

Portfolio co-design is the most important step of the Action Plan to achieve net-zero emissions by 2030, which requires to eliminate all GHG emissions in the city as far as possible and compensate or sequester any residual emissions (max 20% of baseline emission gap). This means all actions in a portfolio need to, in sum, lead to the total desired reductions in GHG emissions by 2030.

5.2.2 Required results:

Portfolios have a coherent description for each emission domain on how the portfolio, as a whole, leverages synergies between individual interventions to achieve the overall emission reduction target. This information is filled in Action Plan table B-2.1.

Additionally, individual interventions are described in detail on a project-by-project basis (Action Plan template B-2.2). Each project must contain all information for implementation (e. g. topic, emission sector, scope, allocation, responsible actors, GHG emissions reduction, costs). To ensure the measurability, reportability and verification of the action, the action development must refer to basic information gathering conducted in Part A of the Action Plan template, in particularly the identified emissions gap. All interventions to remove GHG emissions (avoid, cut, reduce) must be included in the portfolios (see Modules C-1 and C-2).

5.2.3 The process:

For developing comprehensive portfolios, intensive collaboration with stakeholders is necessary. This may include citizens, interest groups, experts, political leaders, representatives from universities, and those required for implementation, such as private companies, utilities, local government departments, energy suppliers, investors and financial institutions etc. For comprehensive guidance on how to coherently organise such processes city-wide in a transformative manner, cities can refer to the Climate Transition Map.

The portfolio co-design can be organised as a series of events or sessions, each related to a certain emission domain or cross-cutting topic, from a finance and investment perspective, per intervention type etc., involving general and specialised stakeholder groups suitable to each session. If larger numbers of citizens are affected, portfolio co-design events may be extended to public hearings and innovative participatory models. Social innovation events like Hackathons could serve as alternatives to conventional consultations, which may lead to a change in perspectives, governance, co-creation dynamics and outcomes. Digital tools and online information sharing are also available to facilitate such processes and allow knowledge transfer and co-design involvement of citizens via alternative, less labour-intensive avenues.

It is recommended to support any of these processes with clear and user-friendly communication of key figures, data and information on carbon emissions, cost, behavioural requirements etc. in order to ensure stakeholder awareness and a high quality of dialogues. For example, easy-to understand cost-benefit assessments, considering costs and GHG emission reduction, financial or regulatory burdens affecting citizens, as well as tangible and subtle co-benefits of proposed interventions should be shared with stakeholders. Alternative narratives speaking to interests outside the climate mitigation purpose

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and the climate neutrality may have to be defined and developed in order to include special interest group perspectives.

5.2.4 Documentation in Action Plan Template

The portfolio table must contain all actions on a project-by-project basis with all information which is required for implementation. Information on synergies shall be added to the table as annex, to recognise clusters for coordinated implementation.

The following catalogue gives an overview of the required information for implementation, documentation and monitoring:

INFO BOX 5

1. Project name

2. Action type (see Modules C-1, C-2)

3. Action description

4. GHG emission (sub-) section addressed, (see Module A-1)

4. Removed/ substituted energy, volume of fuel/ energy carrier, energy equiv.

5. Generated renewable energy

6. GHG reduction volume by gas and CO_2e (see Module A-1)

7. Project implementation (reference to a map, narrative comments (e. g. district my))

8. Action extent, addressed entities (e. g. area, buildings, flats, bus network-length, etc.)

9. Affected citizens, households, workplaces, etc.

10. Responsible bodies/ persons for action implementation

11. Costs: total and by CO_2e unit) (see Module A-1)

12. Further efforts, if any

(2) A priority list of urgent and most effective projects - which also bring synergies – shall be provided. 1st priority projects shall be listed and an implementation schedule shall be drafted.

(3) A summary of the expected GHG emissions reduction achievements (by gas) and costs of the 1st priority projects (by emission sector) and a final table of remaining gaps (by emission sector and gas) should be added. Commitments to 1st priority actions and who will take over responsibility should be documented.

5.2.5 Guiding Questions

- Which are the largest GHG emitters in the city and who is responsible for?
- Which actions must be designed (on a project-by-project basis) to remove these GHG emissions?
- How can these actions be implemented, what will be the GHG reduction achievements and what are the key barriers to overcome?
- Who will take over responsibility for project implementation and financing?

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5.3 Module B-3 Indicators for Monitoring, Evaluation and Learning

5.3.1 Key activities

Define climate action indicators for monitoring, evaluation and learning: cities need to be able to measure, monitor and evaluate the implementation of the 2030 Climate Neutrality Action Plan. A set of measurable, reportable and verifiable key performance indicators (KPIs) is an important precondition for the monitoring and evaluation as well as the continuous analysis of the city's achievements.

- Select indicators from the NZC Comprehensive Indicator Sets, pertinent to the fields of action and impact pathways selected in Module B-1.
- Adapt indicator metadata tables provided in the Indicator Sets to develop a city specific evaluation plan to monitor and evaluate actions/ projects (B-2), progress on identified outcomes and direct and indirect impacts (B-1).

5.3.2 Documentation in Action Plan Template

Module B-3 of the template should contain a selection of indicators taken from the Comprehensive Indicator Sets developed by NZC. As specified by the template (B-3.1), the indicators should be clustered along the impact pathways and the associated outcomes and impacts. Further, the table should include specific targets and a time plan for evaluation of the progress. Additionally, the metadata on each indicator selected should be inserted into the template (B-3.2) and adapted to the specific context of the city. The metadata tables include for instance a description on the indicator, its scale/ scope, the formula for calculation, the data needed, the data owner and references to the fields of action, co-benefits and impact pathways. Metadata tables on each indicator can be taken from the Comprehensive Indicator Sets (still work in progress).

INFO BOX 4 **Monitoring and reporting of Action Plan progress**	
Purpose	Evaluate overall progress of Action Plan implementation and transition towards climate neutrality 2030.
Scope & scale	• City-wide (Mission Action Plan) • Project specific (pilot)
Use of findings	• Verification and validation of impact towards financiers • Accountability towards local stakeholders and citizens • Project controlling • Accountability and transparency in international initiatives and frameworks, UNFCCC and city networks • Evidence for evaluation of impact and potential refinement of actions, projects and interventions
Focus	• Specific pilot projects, actions and interventions (documenting) • Outcomes (progress) • GHG emissions (impact) • Co-benefits (impact)
Execution	Mission Cities on Mission Platform
Operation	Mission Platform
Basis for reporting	Indicators selected and documented in Action Plan
Timeline & reporting frequency	Bi-annually (city-specific, depending on launch of first-iteration Action Plan)

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Data	• GHG emissions inventory (imported from MyCovenant and CDP/ ICLEI platforms) • Data for calculation of indicators on outcomes (including co-benefits)
Important NZC reference documents	• D2.4.1/2 Monitoring, Evaluation and Learning Framework • D2.14 Theory of Change
Dissemination level	• Mission City • NZC consortium • Others (at discretion of Mission City)

5.3.3 Guiding Questions

- Which are indicators pertaining to the outcomes selected in the impact pathway?
- Is there a need for additional indicators (e.g. from existing planning frameworks)?
- Do the indicator metadata sheets need to be adapted?
- Is the required data for the calculation of selected indicators available, or is it necessary to involve additional stakeholders?

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6 Part C – Enabling Climate Neutrality by 2030

Part C "Enabling Climate Neutrality by 2030" is the **structural element** of the climate neutrality action planning **modular framework** for the development of 2030 Climate Neutrality Action Plan. **Part C enables Part B** (i.e. the implementation of actions towards climate neutrality) through **creating favourable systemic conditions** and providing an **understanding of the necessary financing** (link to the 2030 Climate Neutrality Investment Plan). Part C consists of three core modules:

- **Module C-1** "Organisational and Governance Innovation Interventions".
- **Module C-2** "Social and other Innovation Interventions".
- **Module C-3** "Financing of Action Portfolio".

6.1 Module C-1 Organisational and Governance Innovation Interventions

6.1.1 Key activities

Plan for the necessary organisational and governance innovation: Define the governance, policy and regulation areas that have the potential to address greenhouse gas emissions sectors/ domains and enable city's climate neutrality by 2030. Explore opportunities and solutions for the interventions of the innovative organisational and governance methods for achieving city climate neutrality by 2030. These should include the involvement of local key stakeholders such as civil society platforms to engage with citizens and actively involve them to develop, implement and monitor progress of the CCCs. The aim is to reduce "silo mentality" that causes fragmentation and to build inclusiveness, trust and legitimacy of the necessary actions. In particular by linking local actions for climate neutrality with some of their co-benefits such as better air quality, reduction of energy bills and road safety, it should also help develop "ownership" of the overall climate neutrality objective and thereby induce stronger local commitment and behaviour change, e.g. in mobility behaviour.

Organisational and governance innovations/ interventions refer to various topics which shape framework conditions and trigger (social) behaviour by increasing attractiveness of framework conditions, by decreasing barriers, by defining barriers and further to reduce emission-causing activities:

- Deepen understanding of systemic barriers specified in Module A-2 and A-3, e.g. by desk research and through co-creation and stakeholder events.
- Undertake activities for validation of designed interventions and discuss implementation plans with lead stakeholders.
- Develop an understanding of where these interventions fit into the impact pathways specified in Module B-1, before documenting them in the Action Plan Template.

6.1.2 Documentation in Action Plan Template

In the Module C-1 cities should outline how the climate agenda and specifically actions to move towards climate neutrality are dealt with within their administration, by describing the structures in place or planned and the human resources allocated or planned to be allocated in the next phase. Furthermore, it should focus on the wider governance framework that impacts on climate action, including multi-level governance as well as no government actors. In this, the policies and systemic barriers outlined in Modules A-2 and A-3 should form the basis for interventions in this section. Cities are asked to describe the entity/ entities with primary responsibilities for climate mitigation policies and cross-sectoral coordination of the climate agenda and the working modality. This could include a dedicated department/ unit, a committee, a dedicated person, external body/ person or an arms-length organisation working in

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close collaboration with the municipality in the fields in which the city has the legal powers to act/make policy decisions.

Organisational and governance interventions should for example include:

- Interventions targeted at improving the horizontal governance of climate neutrality, i.e. the organisational set-up within municipal administrations or the relationship and co-creation with non-government actors within the ecosystem of stakeholders.
- Interventions targeted at improving the effectiveness and efficiency of multi-level governance for climate neutrality, i.e. with regional, national and EU level.
- Other innovation interventions, e.g. on tools and procedures used for planning, implementation or financing of climate neutrality.

6.1.3 Guiding Questions

- What is the city's existing climate action governance and which partnerships (horizontal and vertical, sectoral and cross-sectoral) are in place? How are these partnerships contributing to advance your city's climate policy development and implementation?
- What are the main factors that cause governance fragmentation at cross-sectoral level and in all sectors relevant to climate neutrality?
- Which types of support does your city currently receive from other levels of government (regional/ national) to formulate and implement its climate change mitigation policies?

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6.2 Module C-2 Social and Other Innovation Interventions

6.2.1 Key activities

Plan for the necessary social and other innovation: define the culture, participation and civil society action areas that have the potential to contribute to building inclusiveness, trust and legitimacy of the necessary climate actions, in particular by linking local actions for climate neutrality with some of their co-benefits. Explore opportunities and solutions for the interventions of social and other innovations for the stronger local commitment and behaviour change. When working on this part of the Action Plan, consider the implementation of projects/ initiatives in the following areas:

- **Empowerment and inclusion** - plan for the direct involvement of citizens and urban stakeholders in the governmental processes that will lead to climate neutrality, empowering them through active engagement. This might be done by creating a shared mission and shared ownership of this mission. The goal is to help boost the acceptance of (sometimes radical) policy decisions and new regulations, reinforce the awareness of citizens' needs in public administrations, and increase the citizens' sense of belonging and inclusion (i.e. creating a collectively owned body to represent/ involve all parts of society). Work on improving the engagement strategies of urban stakeholders and citizens and on strengthening the link with public, private and third sectors bodies.

- **Regulation and support** - using parts A1-A3 as starting point, plan for specific support to community-led initiatives and small-scale pilots/ experimentations (i.e. build a roadmap to support and emphasise past and present initiatives that provide innovative responses to the needs and challenges of the society linked to climate neutrality, focusing for instance on strengthening social entrepreneurship locally); plan for supporting the scale-up of past and present social innovation initiatives beyond pilots and individual experimentations; plan for testing and prototyping new funding mechanisms that might enhance these initiatives.

- **Top-down and bottom-up systemic initiatives/ projects** - plan for local innovations that will help you tackle climate neutrality systemically. This might include top-down systemic solutions implemented at the level of urban planning and resource circularity (e.g. the 15-minute city). It might also include the creation of local bodies (e.g. NGOs, hubs for social entrepreneurship) that help create the most favourable conditions locally (infrastructure, citizen empowerment, public engagement, etc.).

- **Skills and capacity building** - plan to support the development of capacities related to social and other innovations. This might be addressed at public officials, as well as citizens and other urban stakeholders. Striving for climate neutrality should be done collaboratively. Training public officials and policy-makers regarding human centric approaches is thus also very important in this process, for instance through a pilot city demonstrator carried out at inter-departmental city group (involving the administration as well as private and third sectors organisations and citizen) to co-create and co-deliver new solutions (e.g. public-private-social urban regeneration programme involving mobility, nature-based solutions, and retrofit buildings actions).

- **Change in social behaviour** as a mutual reaction on changing framework conditions (and changing life styles), partly as effect of physical, technical, organisational, governance and regulatory interventions: e.g. avoidance of electrical appliances-use in peak load times, adapting diet habits towards less consumption of food causing high GHG emissions, increased use of public transport due to more attractive tariff models, due to denser networks and higher frequencies, increased use of non-motorised transport modes (e.g. more walking due to more attractive foot paths or more cycling due to more cycling lanes or shorter travel time compared to the use of cars, or closer places fulfilling certain urban functions – e.g. the '15-minutes city' (quite some interventions require legal and technical interventions as trigger).

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Other interventions include physical/ spatial interventions, nature-based solutions as well as technical interventions leading to change in behaviour and thus GHG emissions reduction (regarding transport, production and housing). Interventions in agriculture and forestry (e. g. fertilizer reduction having impact on CH4 and N2O emissions) will not be discussed here, as they aren't specific urban interventions.

- **Physical/ spatial interventions** focus on re-organising urban function allocation (also known as compact urban development (CUD)) and transport network layout for different transport modes (foot paths, cycling lanes, local and transit roads) through new land use-zoning and investing in new public transport networks (bus, BRT, tram, metro, train)
- **Nature-based solutions** contribute on the one hand to climate adaptation – serving as a cooling feature, supporting shading and accelerating evapotranspiration and (in case of greening of roofs) insulating against heat and cold. On the other hand they contribute to climate change mitigation, serving as a CO_2 sink. Examples are
    - green roofs and facades,
    - tree lines along streets, parks, water bodies,
    - unsealing and greening of paved areas (also supporting mitigation of flooding).
- **Technical interventions** refer to
    - improving efficiency of energy use (effective combustion technology use, use of renewables (heat pumps),
    - change in using energy carriers (substituting fossil fuels by bio-fuels or renewable energy (electrified transport, substitute car-based mobility by public transport (requiring physical, spatial interventions), changes in production processes),
    - reduce energy use through efficient building layout and advanced heating/ cooling systems (building design and insulation, heating system change),
    - enhance effectivity and increase of renewable energy generation and storage (hydro-power, wind-power, solar energy, renewable heat extraction (heat pumps), green hydrogen, pump-storage hydropower plants, etc.).

6.2.2 Documentation in Action Plan Template

This part of the Action Plan Template is aimed at depicting the innovation actions needed to reach climate neutrality, including all the types of innovations needed (technical, social, governance, climate innovations). This is relevant to ensure that considerations of economic development and the overall well-being of people and the planet are intertwined at every step of the transition to net zero; to reinforce the co-benefits of climate mitigation such as improved public health, job creation, and public budget savings among others. Special focus should be put on ways to create new business models and build the local capacity to address decarbonisation challenges; ways to allow for multiple actors to co-design and co-produce solutions contributing to decarbonisation; ways to support positive behavioural changes by responding to local needs and acting within the cultural context.

As part of your Action Plan, please list the different innovation projects/ initiatives (past, present, future) that you intend to develop/ link to your net zero goals. You might distinguish these activities into several innovation categories: (1) technical innovation, (2) social innovation, (3) governance innovation, (4) climate innovation or list the activities and indicate their link to one or multiple innovation types. Innovations reported don't need to be all new activities, but you can build on activities you are already conducting, explaining how these will link to and reinforce your goals for 2030.

When describing each innovation project/ initiative, please make sure you include:

- A brief description of the project/ initiative, including its goals and relevance for climate neutrality in your local context,
- The links of the project/ initiative with the specific climate neutrality goals of this Action Plan, and the types of innovation the project involves,

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- The stakeholders involved possibly divided in main/ direct beneficiaries and indirect beneficiaries,
- The resources you plan to use to implement the project/ initiative,
- The learning and benefits you plan to obtain with this project/ initiative (if possible, please connect also to the specific area of GHG emissions reduction and co-benefits),
- The skills and capacities that will be created or reinforced by implementing the initiative.

6.2.3 Guiding Questions

- How can you empower and actively include your local ecosystem through specific innovation projects to join the journey towards climate neutrality?
- How can you improve your engagement strategies of urban stakeholders and citizens through specific innovation projects? How best can you bring stakeholders on-board also enabling them to contribute through specific innovation projects? How can you use innovation projects to strengthen the link with public, private and third sectors bodies?
- Can you build a list of the foreseen innovation activities (top-down and bottom-up), detailing the resources needed, the stakeholders involved, and their expected results? How can you link these all together, looking back at your specific objectives for climate neutrality?
- How can you ensure long-term impact and scale up of existing/ planned innovation activities?

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6.3 Module C-3 Financing of Action Portfolios

6.3.1 Key activities

Define the financial breakdown for the city climate action: Based on the developed action portfolios, this section provides an overall estimation of the resources and capital required to implement the individual actions towards climate neutrality. While a detailed examination of finance, capital and investment aspects of the city across the portfolios will be developed in the accompanying Investment Plan, this section will provide a summary of key financial information on each action or project included in the portfolios above.

This requires the identification of appropriate funding and financing schemes, a clear responsible organisation or project owner, and some basic financial estimates and data such as capital expenditure needs, operational expenditure needs or potential Net Present Value or Internal Rate of Return for each action or project that requires additional financing.

The purpose of this section is to provide at least rough estimates and indications of such figures in order to allow for further in-depth development of each action as a potential investment project. Cities and stakeholders will have to take these estimates into account while developing the action portfolio (B-2). Stakeholder communication around these basic financial data points for each action are highly recommended as part of the action plan development, wherever appropriate. Identifying possibilities to avoid cost and investment requirements to achieve the same reduction in GHG emissions, e.g. via alternative solutions, technologies, nature-based solutions, or innovative business models should be part of the initial action and project design. Similarly, local business development or opening investment and economic opportunities in each city for the wider public (e.g. community investments) should be considered, alongside co-benefits such as the creation of local green jobs and employment in the climate neutrality sector.

The emphasis of this action plan on social innovation in accordance with the Climate Transition Map, co-benefits that support the local buy-in to the climate transition and the alignment with the EU Taxonomy should be considered during portfolio creation and financial estimations.

6.3.2 Documentation in Action Plan Template

The documentation needed in the Action Plan template for this step should cover, as a summary, the outcomes of portfolio design and pre-empt additional financial needs, project-by-project. Actions and projects that are part of the portfolio but can cover 100% of all required capital and investment needs via existing sources and commitments should be listed here as well, in order to provide a full picture of how each portfolio is financed. Projects or actions that still seek to cover part of their capital needs via unidentified sources should indicate the remaining finance gap as part of the action plan in the Action Plan template, via the table under Module C-3.

6.3.3 Guiding Questions

- Which projects and actions should be further developed and considered under the investment plan?
- What is the basic capital and investment needs of each action or project?
- What are the existing resources already available for each action or project (e.g. public contributions, existing funding or investments secured)?
- Which entity or organization is responsible for each action or project (project owner) and who is the main contact within the organisation?

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- Which potential financing or funding streams are the projects or actions potentially to be developed for?

7 Outlook and next steps

This section should summarise any open methodological issues or issues related to implementation of the Action Plan as well as specific comments relevant for the development of the Investment Plan. Furthermore, it should outline milestones for the implementation process as well as needs for further improvement to be tackled in coming iterations of the CCC. The Action Plan is meant to be an iterative document, meaning that cities will be able to update it over time until 2030. Local processes such as existing planning cycles, may be indicated in this section to clarify if and how iterations of the Action Plan may be developed over time.

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Summary

This template is designed to give cities' administration a reference structure for the development of the Investment Plan (IP). This will include potential constituent parts, such as tables and textual elements. This document is designed to adapt to cities' needs and goals, mantianing a certain level of flexibility and adaptability to the way individual administrations operate. This document is accompanied by an IP guidance, which will provide information to cities on how to develop each activity enlisted in the template.

Glossary of Terms

Acronym	Description
AP	Action Plan
IP	Investment Plan
KPI	Key Performance Indicator
MEL	Monitoring Evaluation & Learning
MRV	Monitoring Reporting Verification
WP	Work Package

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1 Part A – Current State of Climate Investment

Part A "Current State of Climate Investment" is the **structural element** of the climate neutrality investment plan, putting the basis for the development of the plan through a detailed-oriented evaluation and assessment of the existing city's financial policies and funding/financing activities.

1.1 Module IP-A1: Existing Climate Action Funding and Financing

This section represents the initial step of the Climate Neutrality Investment Plan, and will require you to evaluate and assess previous and existing funding and financing for climate activities by field of action.

A-1.1: Textual element
…

Fields of Action	Sector Subsection	% Current Budget Allocation
Transportation	*Cars*	
	Trucks	
	Buses	
	Alternative vehicles (motorbikes etc.)	
Built Environment	*Residential*	
	Commercial	
	Public	
Energy Systems	*Solar*	
	Oil	
	Gas	
	Carbon	
	Wind	
	Hydro	
Green Infrastructure and Nature Based Solutions	*Urban Forestation*	
Waste and Circular Economy	*...*	

Table 1: Finance Sources By Field of Actions

1.2 Module IP-A2: Strategic Funding and Financing Evaluation

Cities will evaluate their existing financial policies to understand how they are currently managing the capital allocation towards net zero. This will include strategies in place and what the city has at its disposal to facilitate the transition. The city should identify the forms of capital it has access to and which are specific to their net zero targets.

A-2.1: Textual element
…

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Income Category	City income	% of city budget
Source of City Incomes	…	…
…	…	…

Table 2: List of income sources for the city

Type	Size Range	Level	Description
Source of Capital	*Quantum of Capital Accessible to the city through this source*	*Private or Public*	*(Description of capital source e.g. cost & provider)*
…		…	…

Table 3: List of capital sources for the city

1.3 Module IP-A3: Barriers to Climate Investment

You will need to evaluate and identify the range of structural, policy, economic, and financial barriers for capital deployment in support of climate action.

A-3.1: Textual element
…

Financial Barriers to achieving Climate Neutrality	Typology of Barrier	Description	Sector and stakeholders involved
…	…	…	…

Table 4: Barriers to Climate Investment

2 Part B – Investment Pathways towards Climate Neutrality by 2030

Part B "Investment Pathways towards Climate Neutrality by 2030" is in place to capture the actions and needs for mobilising and delivering the funding and financing needed for climate neutrality. This Part of the Investment Plan will be aligned with and build upon the Action Plan. In addition, each of these Plans are likely to entail multiple iterations over the course of the path to climate neutrality.

2.1 Module IP-B1: Cost Scenarios for Climate Neutrality

These are the actions and measures which make up the Climate Neutrality Action Plan then need to be costed. Given the Investment Plan needs to be practical, the measures defined within the Action Plan need to be tagged by how much they will cost for the city, considering implementation and operational costs, so the city budget can be adapted to include them.

Cities have the option to provide cost estimates at their own discretion on the measures disclosed in the Action Plan template as per table B-2.2 and in the Investment Plan template as per table B1.2. Given these cost estimates for the actions, cities can then include non-sectorial costs (the cost of the levers to implement these actions) these should be considered alongside the concrete actions.

B-1.1: Textual element
…

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Fields of Action	Action / Indicator	Implementation Costs/Capex	Operational Costs	Direct impacts (Emission reductions)*	Indirect impacts (co-benefits)*
Transportation	*Electrification of Cars*	*...*	*…*	*Impacts in terms of monetary savings***	*Job Creation***
	Electrification of Trucks	*...*	*…*	*(list more direct impacts as needed)*	*(list more indirect impacts as needed)*
	Electrification of Buses	*…*	*…*	*…*	*…*
	Shift to public & non-motorized transport	*…*	*…*	*…*	*…*
Built Environment	*Major renovations1 (excluding district heating)*	*…*	*…*	*…*	*…*
	Low CO2 heat generation including district heating	*…*	*…*	*…*	*…*
	Efficient lighting & appliances	*…*	*…*	*…*	*…*
	New nearly zero-energy buildings (NZEB)2	*…*	*…*	*…*	*…*
Energy Systems	*Low CO2 electricity generation*	*…*	*…*	*…*	*…*
Green Infrastructure & Nature Based Solutions	*…*	*…*	*…*	*…*	*…*
Waste and Circular Economy	*…*	*…*	*…*	*…*	*…*
Cross Cutting Costs	These can include - citizen engagement, and communication with relevant stakeholders				

**Referring to the Action Plan*

***Indicative indicators*

Table 5: Sectorial Costing

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2.2 Module IP-B2: Capital Planning for Climate Neutrality

The city needs to definite its capital goals and how to achieve it. As the city implements its programme the below sources of capital can be laid out as a starting point. These should be aligned with the city's goals and relevant to the actions selected. Ideally this will be a target and the you will optimise towards.

Textual element
…

Capital need	Possible Sources of Capital	Sector allocation
…	…	…
…	…	…

Table 6: Capital Planning

2.3 Module IP-B3: Climate Policies for Capital Formation and Deployment

The city will need to optimise the allocation of capital between both public and private sources across the portfolio outlined in the Action Plan to meet the cost of the actions identified for reaching Net Zero over time.

Textual element
…

Climate Policy	Description of the policy (sector, targeted audience, etc.)	Intended Outcome for Capital Formation
…	…	

Table 7: List of climate policies to enable capital deployment

3 Part C – Enabling Financial Conditions for Climate Neutrality by 2030

Part C "**Enabling Conditions for Climate Neutrality by 2030**" is the third section of the Investment Plan and is intended to identify other enabling factors the city needs to consider in the implementation of the Investment Plan.

3.1 Module IP-C1: Economic and Financial Indicators for Monitoring, Evaluation and Learning

A range of financial policies need to be considered to execute the actions laid out in the Climate Neutrality Action. The city should align the financial policies with their current process and capital allocation. This will depend on the actions selected and be drawn from possible financial tools to assist the transition.

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C-1.1: Textual element
…

Fields of Action	Indicator	Indicator Unit	Indicator Baseline*	Indicator Target 2030*
Transportation	*Electrification of Cars*	*% of total vehicle kms electrified (alternatively % of fleet of electric vehicles*	*1%**	*30%**
	Electrification of Trucks		*0%**	*25%**
	Electrification of Buses		*5%**	*50%**
	Shift to public & non-motorized transport	*% of passenger-kilometers as public transport or walking/cycling*	…	…
Built Environment	*Major renovations1 (excluding district heating)*	*% of building stock deep energy retrofitted between 2020-2030*	…	…
	Low CO2 heat generation including district heating	*% of total heating demand supplied by renewables*	…	…
	Efficient lighting & appliances	*% of building stock retrofitted*	…	…
	New nearly zero-energy buildings (NZEB)2	*% of building stock composed of new NZEB2 2020-2030*	…	…
Energy Systems	*Low CO2 electricity generation*	*% of total electricity production coming from renewables*	…	…
Green Infrastructure and Nature Based Solutions	…	…	…	…
Waste and Circular Economy	…	…	…	…

***Indicative indicators*

Table 8: : Economic indicators by sector

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Fields of Action	Indicator	Indicator Unit
Transportation	*Capital Investment*	*% of capital invested in green transportation (over the all-city budget)*
	Private to Public Capital	*% private capital to public capital ratio in green transportation*
	Carbon x Capital Invested	*Unit of carbon abated per unit of currency spent in green transportation*
The above structure applies to the below sectors		
Built Environment		
Energy Systems		
Green Infrastructure and Nature Based Solutions		
Waste and Circular Economy		

Table 9: Financial indicators by sector

3.2 Module IP-C2: Identification and Mitigation of Risks

The city should consider the risks relevant to the implementation of an Investment Plan, which may impact their ambition to achieve climate neutrality, mitigation techniques should be identified where necessary and where possible, these should align with the financial policies selected.

C-2.1: Textual element
…

Fields of Action	Sectoral Project	Risks Identified	Description of Risk	Mitigation of Risk
Transportation				
Built Environment				
Energy Generation				
Green infrastructure and Nature Based Solutions				
Waste and Circular Economy				
City Wide Risks (Cross Cutting)				

Table 10: List of Project level Risks

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3.3 Module IP-C3: Capacity Building and Stakeholder Engagement for Capital and Investment Planning

The city should work to develop internal capacity and capabilities, working with both internal and external stakeholders to accelerate the transition to climate neutrality by 2030.

C-3.1: Textual element
…

Stakeholders involved	Network	Influence	Interest	Level and type of Engagement
…	…	…	…	

Table 11: Stakeholder Engagement Mapping

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2030 Climate Neutrality Investment Plan Guidance

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Summary

This guidance document is designed to accompany the Investment Plan Template to give cities a reference point when developing their Investment Plans. The city will build this off the back of the actions outlined within their Action Plans, and the content here should inform the way the cities engage with template documents. The Investment Plan is relatively new for cities and as such this process will be iterative and we encourage the cities to communicate knowledge gaps with the commission.

Glossary of Terms

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Introduction

The 2030 Climate Neutral Investment Plan forms a critical part of a city's journey towards climate neutrality. The overarching objective of the Plan is to help Mission cities strategically mobilise and align public, private and civic capital at scale for funding and financing pathways to climate neutrality. Together with the 2030 Climate Neutrality Action Plan, the Investment Plan will be considered as a precondition to receive a "Mission Label" from the EU Mission.

This document has been developed to provide you, Mission cities, with guidance on the development of the plan. The structure of the document mirrors the template, providing guidance on the content for each section. The template has been designed as a tool to guide your planning and is not a fixed structure. You may find it useful to adapt the structure to align with local context. The content and robustness of the plan are what you will need in mapping out the projected capital needs, capacity and capability building, and the design and delivery of capital for funding and financing your path to climate neutrality by 2030.

The Investment Plan

Whilst many cities have experience of developing climate action plans, and many cities have undertaken advanced and innovative efforts to direct capital to support those actions, the concept of a city Investment Plan is new. The Investment Plan will be a systematic map of the costs and capital needed to reach climate neutrality by 2030, as described the Action Plan. This work will help structure the way cities plan, organise and develop their economic and financial strategy, helping them mobilise capital from funding platforms and financial institutions. There are several characteristics which define the Investment Plan:

Figure 1: Investment Plan's key characteristics

Alignment with the Climate Neutrality Action Plan

The Investment Plan and the Action Plan will be closely aligned. The Investment Plan will build upon the portfolio of actions cities have committed to take within their Action Plan and look to quantify the capital needs and sources to deliver on these actions. Some actions will directly impact the Investment Plan (for example increased levy on diesel cars in the city centre), whilst others will act as enabling actions for the implementation of the plan (improve internal capacity for dedicated funding & finance for decarbonisation). We anticipate that most cities will want or need to iterate across these two plans, linking actions to impact and then identifying the costs of these actions and sources of capital to

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implement the actions. In turn, initial work to determine costs and potential for those capital needs will provide feedback to refine and further clarify specific actions and their implementation.

Multi-Stakeholder Involvement

As with the Action Plan, development and implementation of the Investment Plan will require active, sustained involvement of diverse **city stakeholders**. Whilst the municipality will take ownership for developing the plan, stakeholders with necessary capacity and expertise will need to participate in the process. Such external stakeholders can be from both local and EU-based financial institutions, academia, utility companies, energy service providers, and housing associations. Cities can draw upon advice and guidance from Net Zero Cities.

City-Wide Approach

The Investment Plan will encompass both the **public and private sectors**. The public sector usually owns only a fraction of the assets within a city, and a city-wide Investment Plan needs to address all relevant assets and operations, as will be identified as part of the Action Plan. The municipalities will not have direct control over the actions of the corporate and residential sectors, however, city government (along with regional and national governments) can act as a facilitator, through various policy and financial mechanisms, to shape market conditions to support the development and implementation of new business models for climate neutrality.

Captures All Sectors

The Investment Plan needs to take an **integrated approach**, capturing all emitting sectors/assets across the entire city, including buildings, waste, energy, transport and others. The segmentation of sectors and selected actions as outlined in the Action Plan need to be aligned with the Investment Plan. A city-wide top-down cost and capital planning approach should be complemented with a bottom-up approach, where cities create and implement a portfolio of projects over time.

Long-Term Planning

An Investment Plan is a **planning exercise for the longer-term** that maps costs and capital deployment over time. One of its starting points will be to draw upon existing budgets and capital structures, and to identify the gaps to address all actions needed to reach climate neutrality by 2030. As part of the planning process, it will be important to analyse the opportunity of redirecting existing resource flows to better align with actions needed for climate neutrality. Examples could include energy charges and taxes, parking revenues, or other cash flows circulating in the local capital system. These cash flows could form the foundations for early public capital formation, which will be critical to effective engagement of private capital needed for implementing all the actions needed to achieve climate neutrality. These mechanisms need to be closely aligned with other policy mechanisms, such as the use of procurement and regulatory powers, in order to fully fund and finance actions towards climate neutrality.

Economic & Financial Planning

The Investment Plan will focus particularly on **the economic and financial planning** of the city becoming climate neutral until 2030. The Investment Plan needs to provide a breakdown of the costs and needed capital to implement the portfolio of actions outlined in the Action Plan. An estimate of the capital needed can be developed across each sector. This estimate will help to determine what type of capital is needed, drawing upon the full spectrum of public and private sources and noting what actions can be financed as opposed to needing funding that may not provide returns sufficient to enable finance. This level of economic and financial planning is needed to identify and begin to design suitable financial instruments and funding mechanisms that can be utilised. While you identify needs that will require innovative tools and mechanisms, many actions can be implemented with well-established funding and financing instruments given the right policy and deployment context. With the whole community of cities

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pursuing the Mission working together, you will be able to draw upon the work of other cities and the expertise developed in supporting their efforts to deliver on climate neutrality targets.

Learning Process

Given the extraordinary amounts of capital needed for each city seeking to achieve climate neutrality, this process embraces the associated needs for learning through action. As a result, the Investment Plan is designed to be iterative. Early steps to identify the full economic costs and benefits of climate action will inform discussions about what kind of citizen and stakeholder engagement is needed to advance policies to shape market conditions for investment in climate neutrality. These discussions will provide direct feedback about the viability and precise capacity needs to develop and execute on such planned actions. Each city "transition team" will develop and tailor individual plans to local circumstances and this process will require adjustments and changes on a regular basis. The development of the first version will be of particular importance, as it will give early direction and open up those areas where the most learning is needed in order to pursue climate neutrality. The Investment Plan will also incorporate a set of indicators as part of a monitoring framework to support this learning and to track progress over time.

Investment Plan Structure

As per the proposed template, the plan is divided into three main sections:

- **Part A "Current State of Climate Funding and Finance"**
- **Part B "Investment Pathways towards Climate Neutrality by 2030"**
- **Part C "Enabling Conditions for Climate Neutrality"**

1 Part A – Current State of Climate Investment

Part A "Current State of Climate Funding and Finance" will summarise current actions and activities related to the funding and financing of your climate actions. This summary should create a foundation on which to build future work to identify and utilise various capital sources for climate actions.

Part A is divided into three separate modules:

1. **Module IP-A1: Existing Climate Action Funding and Financing**: this part will describe all funding and financing activities based on your current climate action priorities and objectives.

2. **Module IP-A2: Strategic Funding & Financing Evaluation**: in this module, you will assess the city's climate neutrality funding programmes, together with financing mechanisms and planning, including current sources of funding and financial instruments. This part also will seek to identify critical areas of policy or regulatory action that would need attention to pursue climate neutrality.

3. **Module IP-A3: Barriers to Climate Investment**: this module should focus on the identification of possible barriers that impact capital formation and deployment, helping you identify how the policy landscape could change to facilitate greater access to climate funding and finance.

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1.1 Module IP-A1: Existing Climate Action Funding and Financing

This section represents the initial step of the Climate Neutrality Investment Plan, and will require cities to evaluate and assess previous and existing funding and financing for climate activities. You will need to map out the current landscape of funding sources and current capacity (including public and private sources) across the emissions sectors that make up the city. A starting point for cities can be their current budgeting strategies and the extent to which dedicated resource is allocated towards decarbonisation. An initial classification will identify both city-wide funding (capital not yet allocated towards Net Zero) and project-based capital (capital that is already allocated to projects that are sufficiently developed) that is now being directed to implementing climate actions.

1.2 Module IP-A2: Strategic Funding and Financing Evaluation

A city is able to fund climate action through its own income sources and off its balance sheet, or through raising additional capital. This section should be used to evaluate these three funding (longer horizon) and financing (shorter horizon) sources.

The city should consider the following elements:

- Operational funding currently available for climate action, and a relative scaling of current resources as compared to city needs;
- How the city raises and manages capital, both operational funding and private financing, and what is within their remit;
- Consider needs assessment for capacity and capabilities for Mission-level capital, linked to the Action Plan and building upon estimated total capital needs.
- The city should include current or project deficit/surplus when evaluating the choices made later in the investment plan (if a city has a high surplus for example, they may choose to fund more programmes through their budget, and this may influence policy decisions and capital allocation when making decisions on climate action).

In this section, you should:

1. Assess the city's climate neutrality funding programmes, together with financing mechanisms and planning, including current sources of funding and financial instruments for climate action, sector specific or across sectors. This assessment should look into both city-wide funding and project-based capital that is now being directed to implementing climate actions.

2. Identify and analyse critical areas of policy or regulatory action, assessing their impact on your administration's financial goals as set out in the Action Plan. You should analyse enabling policies and international regulations (i.e., EU Taxonomy) currently in place, including national, regional, and city level policies, these multi-level policies are frequently connected.

3. Take advantage of this review to assess cities' needs in term of capacity/capabilities to receive and deploy capital from the different sources available to them. These may include procurement and municipal budgeting policies, incentive schemes that direct resources to households and businesses, public sector finance instruments, and more.

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1.3 Module IP-A3: Barriers to Climate Investment

Building upon the city strategic assessment in A2, the city will need to evaluate and identify the range of structural, policy, economic, and financial barriers for capital deployment in support of climate action. This module is focused on the city's current situation and experiences to date, as a foundation for looking ahead at cities' issues in allocating capital for climate neutrality.

Some barriers may be related to the ability of the municipality to source capital – e.g., lack of capacity and needed financing skills, cumbersome and uncoordinated mechanisms for existing funds, and regulatory constraints such as city budget. Other barriers could relate to finance access or the involvement of financial institutions and their willingness to provide capital – e.g., availability of data, risk issues, limited scale, measurement of co-benefits, internal governance, reaching the debt ceiling organization between departments, and more.

2 Part B – Investment Pathways towards Climate Neutrality by 2030

Part B "Investment Pathways towards Climate Neutrality by 2030" is in place to capture the actions and needs for mobilising and delivering the funding and financing needed for climate neutrality. This Part of the Investment Plan will be aligned with and build upon the Action Plan. In addition, each of these Plans are likely to entail multiple iterations over the course of the path to climate neutrality.

Part B incorporates the following modules:

1. **Module IP-B1: Cost Scenarios for Climate Neutrality**: this module focuses on efforts to estimate and analyse the overall costs to achieve climate neutrality broadly, and to implement the activities described in the Action Plan.

2. **Module IP-B2: Capital Planning for Climate Neutrality:** Based on estimated capital needs and associated policy actions that would be critical to implementing the Action Plan, this module focuses on capital planning and design of specific funding and financing mechanisms and instruments.

3. **Module IP-B3: Climate Policies for Capital Formation and Deployment:** in this part, the city will need to reference the range of climate-related policies, which should be identified and described in the Action Plan, to support effective capital formation and deployment.

2.1 Module IP-B1: Cost Scenarios for Climate Neutrality

In alignment with the Mission Action Plan to identify the portfolio of initiatives and their ability to reveal pathways towards climate neutrality, the city will provide more granular estimation of the costs to reach net zero. This section is essential to understand the amount of capital required, and the appropriate funding and financing schemes, tools and solutions for the implementation of climate actions. The cost analysis will be aligned with the structure of the Action Plan allowing for a cost/benefit(impact) analysis of the portfolio of actions proposed.

Supporting tools are available to each Mission City to help in this regard, if the complexity of cost estimation work will require it. The idea of this module is to start with an initial estimate of total capital needed, in order to help shape early actions to identify and mobilise capital from various sources.

The outputs analysis will incorporate direct impacts such as cost saving, carbon abatement and co-benefits such as green job creation – we understand this is a difficult process, but the Net Zero Cities consortium partners are available to provide support through this process. Effectively monitoring actions can be achieved by outlining key milestones as well as putting in place the evaluation process to measure the level of impact achieved within the Investment Plan. This will be done through the

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developing of metrics and indicators necessary to compare actual delivery to projected impact in Module C1.

Cities have the option to provide cost estimates at their own discretion on the measures disclosed in the Action Plan as per table B-2.2 in the action plan template and B1.2 in the investment plan template.

2.2 Module IP-B2: Capital Planning for Climate Neutrality

This module builds up on the previous two modules and provides breakdown by funding and financial sources for the city to reach net zero. This work will focus on the identified portfolio of actions and measures from the Action Plan, providing a breakdown between funding and financial sources. Where design of new structures or instruments is needed, this module will lay out the processes through which the City and its key stakeholders will advance the design and deployment. Building needed capital structures and mobilising sources of capital identified above will take time and effective work with key funding and finance stakeholders. This capital planning should make explicit the full scope of capital needs and the steps to address them and thus enable implementation of actions outlined in the Action Plan. Effective governance and transparency for capital structures also should be considered. Execution of the steps in this plan will take several years and establishing a preliminary timeline for actions to mobilise needed capital will be a key part of this planning process.

2.3 Module IP-B3: Climate Policies for Capital Formation and Deployment

Bearing in mind barriers identified in A3, and targets identified in the Action Plan. In this section, you will need to identify relevant policies that could support deployment of both public funding and private investment capital at scale. Such policies will enhance directing existing revenue streams or fee mechanisms to Mission work as described in the Action Plan, or policies that change market conditions that enable more effective actions by non-city actors to implement actions critical to climate neutrality. Examples may include market-based instruments, enabling building and planning regulations and standards, green tax incentives, green budgeting and procurement, and others. Identification and discussion of these policies will help to uncover those actions that will best support identifying and mobilising capital. In identifying these policies, please note that they may take significant time and effort to develop and enact, and so having those identified and captured here is extremely important. In addition, this module will have a high degree of overlap with the two other modules in this section, and so cross-referencing those effectively is critical.

These enabling policies will include green budgeting & green procurement, amongst other options which will enable capital deployment. This should consider the capital that is moved as a result of procurement rather than the procurement processes themselves.

3 Part C – Enabling Conditions for Climate Neutrality

Part C "**Enabling Conditions for Climate Neutrality**" is the third section of the Investment Plan and is intended to identify other enabling factors the city needs to consider in the implementation of the Investment Plan. Part C is divided into three separate modules:

1. **Module IP-C1: Economic & Financial Indicators for Monitoring, Evaluation and Learning**: This module will provide a monitoring and evaluation framework for the city to track progress of the implementation of the Investment Plan.

2. **Module IP-C2: Identification and Mitigation of Risks:** This module should define the risks which may affect implementation efforts and propose mitigation measures to address these risks.

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3. **Module IP-C3: Capacity Building and Stakeholders Engagement**: This module, will provide a clear path and structure to enhancing the city's internal capacity for the implementation of the Investment Plan and identify the relevant stakeholders to be involved.

3.1 Module IP-C1: Economic & Financial Indicators for Monitoring, Evaluation and Learning

This section of the Investment Plan will provide the monitoring and evaluation framework to be implemented for the city to track progress for the implementation of the plan. A set of economic and financial indicators should be aligned with the city's climate neutrality commitment and aligned with the actions in the Action Plan. Effective indicators will enable cities to track progress of implementation, compare actual delivery to projected impact, and assess effectiveness and develop adjustments over time.

A Monitoring, Reporting and Verification (MRV) system can be developed to assess progress and successful execution over time. The MRV system will help assess, evaluate, and verify the level of impact each investment has achieved -- for example, reduction in health costs due to reduced air pollution. This system will likely be a key element in securing private capital for deployment, and may be identified as part of your capital planning in Module B3 above.

3.2 Module IP-C2: Identification and Mitigation of Risks

It is important for cities to analyse and understand the risks relevant for the implementation of the Investment Plan and how those risks could impact their path to neutrality. Mitigation techniques should be identified where necessary and aligned with the specific capital structures and deployment plans.

Several risk categories can be identified. Example include policy related risks, capacity and capability risks, technical risks (such as impact on supply chain), institutional adaptation risks, regulatory risks and asset transition risks.

The city should need to consider a range of mitigation actions that will address these risks. Some of these mitigation measures may be within the direct control of the municipality, others may require involvement of other stakeholders. The city should provide a path for the engagement with such stakeholders in order to provide comprehensive analysis of the risks involved and mitigation measures proposed.

3.3 Module IP-C3: Capacity Building and Stakeholder Engagement for Capital and Investment Planning

The city needs to consider available internal capacity for the implementation of the Investment Plan. Development of skills and capabilities related to capital planning and finance of initiatives critical to achieving climate neutrality. It is essential for the city needs to identify necessary funding and financial stakeholders to engage with for the successful implementation of the plan. Some cities may have already developed close relationships with relevant partners, and others may be at an earlier stage in their engagement process. Stakeholders can be engaged based on their specific characteristics and potential involvement in the mobilisation and deployment of capital described in Module B.

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