

**Developed within M100 HUB** 

# PARTICIPATORY PROCESS FOR MONITORING THE TRANSITION TO CLIMATE NEUTRALITY



Inspired by the EU Mission for Climate-Neutral and Smart Cities

Aligned with the NetZeroCities approach

FRAMEWORK	3
AIM	3
OBJECTIVES	4
TIMELINE  MEL INDICATORS  GHG EMISSION INVENTORY	<b>4</b> 4
DELIVERABLES  REPORTS ON MEL INDICATORS STATUS  UPDATED GHG INVENTORIES  UPDATED CLIMATE NEUTRALITY ACTION PLAN  COMMUNICATION MATERIALS FOR THE GENERAL PUBLIC	<b>5</b> 5 5 5 5
SUPPORT DOCUMENTS	6
TOOLS	7
EXPERTS  PUBLIC ADMINISTRATION – CITY HALL PERSONNEL  ENERGY MANAGER  REPRESENTATIVES OF PUBLIC SERVICE AND / OR UTILITY	<b>8</b> 8 9
OPERATORS STAKEHOLDERS	9
INTERNAL INSTITUTIONAL SETTING	11
EXTERNAL GOVERNANCE  EXAMPLES OF TASKS WHICH COULD BE UNDERTAKEN BY THE LOCAL STAKEHOLDERS IN THE MONITORING PROCES 16	<b>13</b>

**17** 

**ADDITIONAL RECOMMENDATIONS** 

#### **FRAMEWORK**

The transition of a city towards climate neutrality involves not only the development and implementation of the Climate City Contract (CCC) but also the monitoring of its impact (reduction and capture of GHG emissions, co-benefits, cost-benefit ratio).

In order to be effective, the monitoring process should not only track the progress of the transition but also focus on identifying potential obstacles and risks in a timely manner to facilitate their swift resolution. Additionally, it should highlight key achievements, analyze how they were accomplished and communicate these successes to the public. Moreover, the insights gained from the evaluations conducted throughout the monitoring process should serve key learnings to enhance capacity and by extension, optimize the overall transition to climate neutrality.

Accordingly, the implementation of the actions outlined in the Climate Neutrality Action Plan (CNAP) and their interventions needs to be accompanied by the continuous monitoring and evaluation of their related indicators, throughout the entire implementation period.

However, since the transition to climate neutrality transcends the sole responsibility of the local public administration (which acts as the coordinating authority) and represents a collective effort involving the entire local community and ecosystem, the monitoring process should likewise adopt a participatory approach: engaging the key local stakeholders across various levels and sectors, (private enterprises, academia, research institutions, non-governmental organizations, citizens) to actively contribute during its critical phases.

#### **AIM**

To employ a participatory monitoring process, by using a multi-level approach to evaluate both the direct and indirect effects of the actions implemented under the Climate Neutrality Action Plan, including their early changes and long-term outcomes (in line with the Theory of Change).

The process will enable the assessment of the Climate City Contract's impact and the enhancement of the overall transition process through evidence-based decision-making, continuous learning and active, multi-stakeholder engagement.

#### **OBJECTIVES**

- 1. MONITORING THE DIRECT IMPACT: assessing the direct effects of implementing the CNAP actions, specifically regarding the GHG emission reductions and the carbon capture within the area covered by the CCC.
- 2. MONITORING THE INDIRECT IMPACT: evaluating the broader co-benefits of the CNAP actions, including the improvements in environmental conditions, public health and safety, quality of life and well-being, urban aesthetics and smart city advancements, financial health and administrative efficiency, within the area covered by the CCC.
- 3. EVALUATING THE COST-BENEFIT RATIO: analyzing the cost-effectiveness of the CNAP actions, by correlating the allocated funds (sourced from public/private, internal/external and reimbursable/non-reimbursable channels) with their corresponding direct and indirect impacts, both individually (per action) and collectively (by fields of action, emission sectors and systemic levers).
- **4. ADDRESSING THE BOTTLENECKS:** identifying the obstacles encountered during the transition to climate neutrality and formulating and implementing targeted solutions to overcome the mapped barriers.
- 5. MITIGATING THE RISKS: detecting the potential risks which could hinder the climate neutrality transition and proposing and applying effective measures to mitigate them.
- 6. DEVELOPING KNOW-HOW: extracting key learnings (lessons) based on the monitoring results, to enhance the capability and efficiency of the transition process, ensuring its smooth progress within the designated time frame.

#### **TIMELINE**

#### **MEL INDICATORS**

The status of the Monitoring, Evaluation and Learning (MEL) indicators should be reported biannually, based on the prior monitoring activities.

#### **GHG EMISSION INVENTORY**

The GHG emission inventory should be updated every 2 years; the CNAP will be revised accordingly, by incorporating the latest emission inventory and the outcomes of the MEL indicators reporting.

#### **DELIVERABLES**

#### **REPORTS ON MEL INDICATORS STATUS**

- Produced bi-annually.
- Including key data and information about:
  - MEL INDICATOR VALUES: clear statistical data, enabling evidence-based decision-making rooted in the realities on the ground
  - COMPREHENSIVE OVERVIEW OF CURRENT STATE: information helping the public to clearly understand the context behind the values obtained in the MEL indicators
    - barriers and risks encountered during the transition
    - corrective and mitigation measures implemented
    - key achievements
    - other factors influencing the indicator values
    - key learnings and proposed methods for their application to further enhance the CNAP's implementation.

#### **UPDATED GHG INVENTORIES**

Produced every 2 years.

#### **UPDATED CLIMATE NEUTRALITY ACTION PLAN**

- Revised every 2 years in line with the GHG inventory updates.
- Can also be updated more frequently as needed, depending on the MEL indicator monitoring results and the changes in the actions' implementation (e.g., the completion of multiple actions / the introduction of a significant number of new actions).

#### COMMUNICATION MATERIALS FOR THE GENERAL PUBLIC

- Short, accessible and engaging information.
- Highlights of the key findings from the reports on MEL indicators and the updates on GHG emissions.
- Distributed through multiple, diverse channels (key focus on online platforms).

### **SUPPORT DOCUMENTS**

The monitoring process can be supported and streamlined by various documents already available within public administration or the partner entities, as outlined in the table below.

DOCUMENTS RELATED TO CLIMATE NEUTRALITY TRANSITION	<ul> <li>Climate Neutrality Action Plan</li> <li>Climate Neutrality Investment Plan</li> <li>Comprehensive set of Monitoring, Evaluation and Learning (MEL) indicators</li> <li>Methodology for data collection, processing, visualisation, interpretation and public dissemination</li> </ul>			
FINANCIAL DOCUMENTS	<ul><li>Annual local budget sheets</li><li>Annual public investment programs</li></ul>			
TECHNICAL DOCUMENTS	<ul> <li>Technical sheets (financing applications, feasibility studies) for each implemented implemented investment / programme</li> <li>Monitoring reports for each implemented investment / programme</li> <li>Statistical data / information reports from relevant institutions / organizations (e.g., Environmental Protection Agency)</li> </ul>			

## TOOLS

The monitoring process can be streamlined through the use of various tools, as detailed in the table below.

TECHNOLOGICAL MONITORING TOOLS	<ul> <li>Centralised digital repository for the collected data</li> <li>Climate Neutrality Digital Dashboard</li> <li>Mobile reporting applications</li> <li>GIS databases / platforms</li> <li>Air quality monitoring sensors</li> <li>Other technological / digital solutions owned by the CCC stakeholders (e.g., universities, research organizations, private companies)</li> </ul>	Their purpose and utility are comprehensively detailed in the Methodology for Data Collection.  Processing, Visualization, Interpretation, and Public Dissemination.
DIGITAL COMMUNICATION AND ENGAGEMENT TOOLS	<ul> <li>Internal communication channels (e.g., intranets, shared drives, collaborative software tools)</li> <li>Stakeholder communication channels (e.g., e-mail, mobile application groups)</li> <li>Websites (e.g., official websites of the City Hall and key stakeholders - particularly the CCC signatories)</li> <li>Social media platforms (e.g., social media pages of the City Hall and CCC signatories - Facebook, Instagram, X, LinkedIn etc.)</li> <li>Dedicated public communication channels (e.g., dedicated interactive platforms for CCC-related communication - if available)</li> </ul>	To be used for the information flows between the City Hall departments.  To be used for communication with the key stakeholders involved in the monitoring process.  To be used for disseminating information and updates.  To be used for engaging with the public and providing real-time updates on the progress and the relevant initiatives.  To be used for encouraging participatory involvement in the transition process.

#### **EXPERTS**

As part of the CNAP monitoring process, the active participation of the following categories is recommended:

#### **PUBLIC ADMINISTRATION - CITY HALL PERSONNEL**

#### **CNAP DEVELOPMENT TEAM**

If the team has the technical skills required to monitor the MEL indicators (including those related to the GHG emissions), they should also be responsible for monitoring the indicators.

//

If the team lacks the technical skills required to monitor the MEL indicators (including those related to the GHG emissions), their responsibility could be limited to updating the CNAP in accordance with the MEL indicators and, if necessary, making any adjustments.

#### **EXPERTS FROM THE RELEVANT CITY HALL DEPARTMENTS**

Public experts from all the relevant internal departments should actively participate in the monitoring process, at a minimum to supply the required data and, ideally, to calculate the MEL indicators in line with their departmental responsibilities (e.g., emissions reductions in public transportation, energy consumption in municipal buildings). Their involvement is also needed for enabling inter-departmental reviews of the shared objectives and associated targets.

- Strategic development
- European projects and / or non-reimbursable funds investments
- Budget management (for the economic and financial indicators)
- Digitalization / innovation
- Urban / territorial planning, architecture
- Heritage management (if the CNAP includes actions involving property or land interventions)
- Environment / ecology
- Transport / mobility
- Public utilities (energy, public lighting, sanitation, water / wastewater management)
- Tourism (if the CNAP involves specific actions targeting this sector)
- Culture (if the CNAP involves specific actions targeting this sector)
- Public domain (for the CNAP actions related to green spaces, recreational facilities / areas or public buildings managed by the department)

- Human resources (if the CNAP includes capacity-building actions for the internal staff or imposes measures to reorganize the internal activities - to establish dedicated roles for climate neutrality / sustainable development experts)
- Community relations (if the CNAP involves actions promoting social innovation)
- Social assistance (if the CNAP includes actions focused on climate justice / the integration of vulnerable groups)
- Communication, advertising, marketing (to publicly share information about the monitoring activities and results, while also fostering necessary stakeholder and community engagement)
- Emergency situations (to incorporate risk management and adaptation to climate change impacts)

#### **ENERGY MANAGER**

If the public administration collaborates with an Energy Manager, either through an internal assignment or an external contractual agreement, the Energy Manager should play an active role in the monitoring process, given the critical link between the energy systems and the GHG emission sectors.

# REPRESENTATIVES OF PUBLIC SERVICE AND / OR UTILITY OPERATORS

For the public services (e.g., transportation, sanitation, waste management) and utilities (e.g., water, wastewater, heating, heating / cooling, energy) which are directly linked to specific emission sectors, representatives from the public companies responsible for these services will be invited to participate in the monitoring process, in order to provide the data required for calculating the monitoring indicators.

///

In the cases where the public services or utilities are managed by Intercommunity Development Associations or private companies, their representatives will be similarly involved, as outlined in the preceding point.

#### **STAKEHOLDERS**

#### **LOCAL ECOSYSTEM**

- Representatives from academia and RDI
  - Universities

- Other public / private organizations engaged in research relevant to the emission sectors addressed in the CNAP
- Representatives from non-governmental organizations: NGOs focusing on
  - Environmental issues
  - Urban development
  - Community engagement, citizen participation
- Representatives from the private sector:
  - Large polluting companies, as they are responsible for monitoring and reducing their emissions.
  - Companies owning technological solutions which can support the CNAP monitoring process by providing essential or supplementary data for complementary indicators, creating trend analyses etc.
  - Other entities / individual experts from fields such as environmental science, data analytics, urban planning, and public policy.

#### **LOCAL COMMUNITY**

- Interested citizens
- Representatives of Homeowner Associations
- Representatives of other informal civic groups which are actively engaged in various issues and activities (e.g., groups informally organized at neighborhood level)

#### **CNAP EXTERNAL CONSULTANTS**

If the CNAP was developed by external consultants:

They may actively contribute to the monitoring of the MEL indicators and the GHG inventory, provided they have the necessary expertise and there is an ongoing form of collaboration.

//

If they lack the required technical expertise, they may still be invited to focus exclusively on updating the CNAP based on the monitoring results, provided there is an existing or newly established form of collaboration for this specific task.

#### **OTHER EXTERNAL EXPERTS**

If other relevant strategic documents used at the local level (e.g., SEAP / SECAP, SUMP) have been developed by external consultants, they should be invited to contribute specific data to support the statistics required for calculating the indicators.

If no ongoing collaboration exists with these consultants, their contribution should at least be secured during the mandatory update of the documentation, to incorporate the new data resulting from the updates.

#### **DATA PROVIDERS**

Periodic requests will be made to the entities whose information / statistics databases are relevant for calculating the MEL indicators chosen for the CNAP's monitoring (e.g., the National Institute of Statistics, the Environmental Protection Agency, the Meteorological Agency, the County Agricultural Directorate).

In addition to the above categories, other stakeholders with whom the local public administration can exchange climate-relevant data should be invited to participate in the monitoring process. The invitations should be based on the MEL indicators selected for the CNAP's monitoring, ensuring that the responsible parties or data sources for these indicators are also included (if not already part of the above-mentioned categories).

#### INTERNAL INSTITUTIONAL SETTING

For the operationalization of the CNAP (both in terms of implementation and monitoring), it is recommended to establish a dedicated Climate Neutrality Office within the City Hall.

- This Office would oversee the entire transition to climate neutrality by fostering a proper collaboration among the relevant municipal departments.
- It should be staffed by executive personnel from the relevant departments of the City Hall (the ones listed in the previous section) and coordinated by a Climate Neutrality Officer.

//

If establishing such an Office within the local public administration is not feasible, it is recommended to at least create the position of Climate Neutrality Officer. This role could, for instance, be classified as a sustainable development expert (according to the Romanian Classification of Occupations).

//

If the Climate Neutrality Officer position can not be created, the tasks outlined below should be assigned to the internal and / or external experts responsible for implementing and monitoring the CNAP, under the leadership of the designated person within the City Hall (e.g., the internal coordinator of the CNAP's elaboration process).

CLIMATE NEUTRALITY OFFICE - MINIMAL ROLES				
CLIMATE NEUTRALITY OFFICER	EXECUTIVE PERSONNEL			
<ul> <li>CLIMATE NEUTRALITY TRANSITION OVERSIGHT         <ul> <li>Coordinate the implementation of the actions outlined in the CNAP.</li> <li>Ensure the alignment of the CNAP's actions with the other relevant local initiatives (strategies, plans, programs, policies, public investments, projects).</li> </ul> </li> </ul>				
<ul> <li>FACILITATION OF INTERDEPARTMENTAL COLLABORATION</li> <li>Coordinate with the directors of the key internal departments (as listed in the above section), to promote interdepartmental collaboration.</li> <li>Ensure the communication with other City Hall departments (not mentioned in the above section), for instance through quarterly thematic discussions.</li> </ul>	<ul> <li>Plan is carried out as intended.</li> <li>IMPACT ASSESSMENT         <ul> <li>Evaluate, through the dedicated metrics (MI indicators), how the CNAP actions contribute the main goals of reducing and / or capturing the CO2 emissions across the key emission sectors.</li> <li>Measure the CNAP actions' associated co-benefice.g., improvements in public health, economic</li> </ul> </li> </ul>			
<ul> <li>CNAP MONITORING COORDINATION</li> <li>Oversee the monitoring process of the CNAP.</li> </ul>	opportunities, energy savings, social equity, urban livability).  • Perform the other tasks outlined in the			
<ul> <li>UPPER LEVEL REPORTING</li> <li>Provide annual reports to the Mayor and Local Council.</li> <li>Address the urgent issues requiring executive actions.</li> </ul>	Methodology for Data Collection, Processing Visualization, Interpretation, and Public Dissemination  STAKEHOLDER ENGAGEMENT  Collaborate and communicate with the other			
<ul> <li>STRATEGIC COMMUNICATION AND EXTERNAL COOPERATION</li> <li>Foster the cooperation with the CCC stakeholders.</li> <li>Ensure the strategic communication related to the CNAP.</li> </ul>	stakeholders and experts involved in the implementation and monitoring process.			

#### **EXTERNAL GOVERNANCE**

To effectively implement and monitor the CNAP based on a participatory approach, it is recommended to establish and operationalize a multi-layered, multi-stakeholder CCC governance structure. This structure should actively engage the local stakeholders (organizations within the local ecosystem, community representatives, individual citizens) in the transition towards climate neutrality. One potential model for such a structure is the formation of a Local NetZero Coalition.

 If such a structure was already established during the CCC development of the CCC (if the CNAP was elaborated through a participatory co-design process involving strategic talks, interactive workshops, thematic working meetings, community surveys, public consultations / debates, or other similar methods) it is recommended to further develop it through formalization and activation.

//

• If no such structure exists, it is advised to design, formalize and activate one, in order to properly enable the involvement of the stakeholders from the key categories outlined in the above section.

The collaborative working model between the City Hall and this structure should prioritize regular engagements with the stakeholders, in order to foster their long-term commitment, active participation, and mutually beneficial collaboration.

- The CCC signatories (particularly those directly involved in the development of the CNAP) should actively engage in the monitoring process, alongside other relevant entities (those listed in the Stakeholders section).
- The citizen's participation in monitoring the climate neutrality transition should also be facilitated through dedicated channels, to ensure their active engagement in the process.

The City Hall staff responsible for overseeing the climate neutrality transition (e.g., the Climate Neutrality Officer or the designated representative) should ensure the effective communication and coordination with this structure, in order to facilitate a seamless collaboration and the alignment of the internal activities and external capacities and expectations.

Various interactive formats can be adopted to support this collaborative working model, such as:

- PERMANENT WORKING GROUPS: The groups could focus on specific components, determined collaboratively; for instance, the establishment of the thematic working groups could be based on the emission sectors or the fields of action.
- **PERIODIC MEETINGS:** The meetings (e.g., forums, consultations) could focus on reviewing the monitoring reports, discussing their key findings and gathering stakeholder feedback and recommendations.

MULTI-LEVEL AND MULTI-STAKEHOLDER MONITORING				
STAKEHOLDER ENGAGEMENT	CITIZEN PARTICIPATION			
PREPARATION OF THE CO-MONITORING PROCESS				
<ul> <li>The stakeholders will be presented with the list of proposed MEL indicators, for review and will be consulted to identify potential modifications of additions to the list.</li> <li>The stakeholders will be asked to identify whether they can provide the data required to calculate the MEL indicators based on their areas of expertise and competencies.</li> <li>If the stakeholders are already monitoring other data or indicators, which could complement the existing list, they will be encouraged to share this information.</li> </ul>	<ul> <li>DATA COLLECTION:         <ul> <li>Develop an accessible mobile application integrated with the Climate Neutrality Digital Dashboard (as outlined in the Methodology), to enable the citizens to track the progress on the CO2 reduction and co-benefits, submit observations and provide feedback.</li> <li>Offer other / additional channels / tools (accessible and user-friendly) through which the citizens can contribute relevant data.</li> </ul> </li> </ul>			
• IMPLEMENTATION OF THE CO-MONITORING PROCESS				
<ul> <li>The stakeholders will be periodically invited to participate in the monitoring process, assuming one of the following 2 roles:</li> <li>Direct involvement (calculating specific indicators based on their expertise)</li> </ul>	Provide continuous access to the CNAP's MEL indicators (e.g., through the Climate Neutrality Digital Dashboard, the City Hall website, Social Media platforms, carbon footprint display technologies), to enable the citizens to view the progress, offer feedback on the MEL indicators			

and report issues (e.g., risks, irregularities).

• Indirect involvement (providing the data

needed for calculating the indicators)

#### MULTI-LEVEL AND MULTI-STAKEHOLDER MONITORING

o The stakeholders will also be asked to review the indicator results and provide feedback throughout the process.

#### COMMUNICATION

- o The communication between the public administration and the stakeholders will be maintained through:
  - Working meetings (conducted online or in hybrid formats)
  - Written correspondence (email flows, dedicated groups on platforms such as Microsoft Teams / WhatsApp).
- As outlined in the <u>Methodology</u>, all of the data will be collected in a centralized digital repository managed by the Climate Neutrality Office (or a designated person), aggregating data from all of the stakeholders and being accessible to all those involved.

#### DIALOGUE:

 Organize open dialogues (e.g., citizen panels, public consultations) where the public administrations representatives periodically present the monitoring results and the citizens are encouraged to provide input and feedback on other relevant local issues.

# EXAMPLES OF TASKS WHICH COULD BE UNDERTAKEN BY THE LOCAL STAKEHOLDERS IN THE MONITORING PROCESS

- UNIVERSITIES: data analysis & research contributions.
- **COMPANIES:** support in monitoring (if they have relevant technological solutions, such as remote sensing and IoT for monitoring the GHG emissions, the air quality, the energy consumption) & reporting their own GHG emissions.
- NGOS: support in monitoring (if they have the required capacity) & conducting community outreach & engaging with the citizens & ensuring the inclusion of marginalized and underrepresented groups.
- **CITIZENS:** providing local insights.
- **ALL STAKEHOLDERS:** reviewing and providing feedback on both the process and the results.

#### ADDITIONAL RECOMMENDATIONS

- DATA CONFIDENTIALITY: The staff responsible for the monitoring process should implement robust measures to ensure data confidentiality.
- **PROCESS INTEGRATION:** The monitoring process should be integrated into the City Hall's administrative operations.
- REGULAR **IMPACT ASSESSMENTS:** An impact assessment of the monitoring process should be conducted every 2 years; the assessment should monitoring process, evaluate the taraets challenges, emerging review the stakeholders' feedback, incorporate any new insights and consider the technological advancements.
- PROGRESS BENCHMARKING: The City Hall should share its progress with the relevant national (M100 National Hub), European (EU Mission for Climate Neutral and Smart Cities) and global initiatives, in order to benchmark its transition against peer cities; the benchmarking could be valuable for identifying areas for improvement and gaining access to best practices.
- CAPACITY BUILDING: Continuous efforts should be made to identify and provide training opportunities both for the internal staff and the external stakeholders, in order to enhance their capacity for monitoring the transition to climate neutrality (e.g., training on monitoring tools, data collection processing interpretation dissemination, reporting standards). Sharing best practices and lessons learned with other national and foreign public administrations and organizations should also be considered.