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Developed within M100 HUB

CLIMATE CITY CONTRACT

M100
Mirror Mission
Cities Hub Romania

Inspired by the EU Mission for Climate-Neutral and Smart Cities
Aligned with the NetZeroCities approach

PRIMĂRIA MUNICIPIULUI IAȘI

ZMI

2030-2035

CLIMATE CITY CONTRACT

IAȘI MUNICIPALITY (& IAȘI METROPOLITAN AREA)

DISCLAIMER

This document, which was developed through the Mirror Mission Cities Hub Romania, draws inspiration, both in its structure and content, from the methodology developed by the European Commission for elaborating the documents pertaining to the Climate City Contracts (the Climate Neutrality Action Plan, Investment Plan and Commitments) for the 112 cities which officially participate in the EU Mission for Climate-Neutral and Smart Cities.

By aligning the M100 Climate City Contract with the model set forth by the European Commission, we aim to ensure that this document is in line with European strategic priorities and directives regarding the transition towards climate neutrality.

CONTENT

FIGURES

TABLES

ACRONYMS

- AFOLU (Agriculture, forestry, and other land uses)
- CO2 (Carbon dioxide)
- CSR (Corporate social responsibility)
- EEIP (Energy Efficiency Improvement Programme)
- ESG (Environmental, social, governance)
- EU (European Union)
- EV (Electric vehicle)
- GCAP (Green City Action Plan)
- GDP (Gross domestic product)
- GHG (Greenhouse gas)
- GUP (General Urban Plan)
- IMA IDA (Iași Metropolitan Area Intercommunity Development Association)
- IPPU (Industrial processes and product use)
- ITC (Information Technology and Communication)
- IUDS (Integrated Urban Development Strategy)
- KM (Kilometre)
- KV (Kilovolt)
- KWH/M2 (Kilowatt-hour per square metre)
- LAU (Local administrative unit)
- M100 (Mirror Mission Cities Hub Romania)
- METREX (Network for European Metropolitan Regions and Areas)
- MaaS (Mobility-as-a-Service)
- MW (Milliwatt)
- NBS (Nature-based solutions)
- NRRP (National Recovery and Resilience Plan)
- NGO (Non-Governmental Organisation)
- OP (Operational Programme)
- PAYT (Pay-as-you-throw)
- PJ (Petajoule)
- PIIC (Programme for Civic Involvement and Innovation)
- PPP (Public-private partnership)

- → **RD (Research and development)**
- → **RDI (Research, development and innovation)**
- → **RES (Renewable Energy Sources)**
- → **SECAP (Sustainable Energy and Climate Action Plan)**
- → **SUMP (Sustainable Urban Mobility Plan)**
- → **TOD (Transit-oriented development)**
- → **TDM (Travel Demand Management)**
- → **UEFISCDI (Executive Agency for Higher Education, Research and Innovation Funding)**
- → **UHI (Urban Heat Island)**
- → **VAT (Value added tax)**
- → **VC (Venture Capital)**

I. COMMITMENTS

FORMAL AMBITION

Briefly present (in 2-3 pages) the following aspects:

- **The local climate neutrality context, highlighting the strategic directions adopted at the local level.**
- **The significance and / or opportunities associated with developing this Climate Neutrality Action Plan, particularly in relation to the relevant European strategic priorities.**
- **The vision (and / or goal and / or objectives) and targets officially endorsed by the Climate Neutrality Action Plan for achieving climate neutrality, highlighting the planned reductions in CO2 emissions.**
- **The key priorities delineated within the Climate Neutrality Action Plan.**
- **The overall direct impact expected from implementing the interventions outlined in the Action Plan, together with the total estimated budget.**
- **The local administrations should also commit to adhering to high architectural standards for the public projects, particularly for those with significant community or environmental impact.**

Iași Municipality, together with Iași Metropolitan Area Intercommunity Development Association and the NetZeroCity Local Coalition, are steadfast in the commitment to achieving climate neutrality by 2030 and further accelerating the CO2 emission reductions by 2035 — targeting a 80.30% cut in the polluting emissions by 2030 and 91.70% by 2035. This bold vision is underpinned by a clear set of strategic directions, designed to reduce the greenhouse gas emissions and embed sustainability across all the sectors of urban and metropolitan life.

By 2030, we aim to reduce the CO_2 emissions by 80.30% or 583,194.33 tons CO2 compared to the 2021 baseline, through a series of transformative priority measures:

- Modernizing the **district heating system**, with accelerated and expanded investments to reduce its carbon intensity, while actively encouraging the residents to reconnect to the centralized infrastructure.
- Advancing **sustainable mobility**, by broadening the green transport initiatives and scaling them across the metropolitan area, with a strong emphasis on expanding and promoting both the road and rail public transportation networks.
- Decarbonizing the **residential sector**, by ramping up integrated energy efficiency investments for the multi-apartment buildings, in close collaboration with the proactive homeowner associations.
- Driving p**rivate sector transformatio**n, supported by the firm commitments from the local businesses to enhance the energy performance of their buildings and operations. Many companies are already taking steps to adopt renewable energy solutions, transition to electric vehicle fleets, and promote sustainable behaviors among their employees.

In parallel, building on the outstanding momentum generated by the NetZeroCity Local Coalition, we will implement extensive "soft" actions, focused on governance, organizational, and social innovation. By mobilizing this dynamic network, we aim to engage citizens, institutions, organizations

and businesses alike — inspiring sustainable behaviors and embedding climate-conscious practices at every level of our community. In doing so, we will be cultivating a wide culture of shared responsibility for reducing our collective carbon footprint.

Looking further ahead, by 2035, we intend to deepen our climate leadership by reaching a 91.70% or 666,009.61 tons CO2 reduction in the CO_2 emissions compared to 2021, driven by an integrated suite of priority actions:

- Continuing sustainable **urban mobility**, encouraging the widespread use of clean public transport, cycling, and walking, while easing the traffic congestion.
- Furtherly transforming the **energy system**, through continued efficiency gains in the district heating network, increased renewable energy generation, and modernized public lighting.
- Upgrading the **built environment**, by boosting the energy efficiency in public and residential buildings and expanding the adoption of nearly Zero Energy Building standards.
- Enhancing the **green infrastructure**, with expanded and modernized green spaces and the creation of green-blue corridors that strengthen the urban resilience.
- Advancing the **circular economy practices**, by developing an effective waste management ecosystem focused on better separation, reuse, and recycling.
- Furtherly fostering **governance, organizational, and social innovation**, to embed climate-neutral behaviors, strengthen the local climate governance, and empower the residents and stakeholders to be active drivers of change.

Through these coordinated and ambitious actions, we will be setting a clear and actionable course towards climate neutrality, driving systemic transformation across all the sectors, while ensuring that our residents, businesses, and institutions actively shape a greener, healthier, and more climate neutral and resilient future for our city and metropolitan area.

In light of these commitments, we formally pledge to achieve climate neutrality by 2030 for Iași Municipality and its metropolitan area. Building on this milestone, we are determined to pursue even more ambitious targets through 2035, further accelerating our transition towards a low-carbon future.

We are confident in Iași's capacity to become a leading European example of best practices in climate change mitigation, by demonstrating how integrating the local and metropolitan ambitions, strengthening the community engagement, and fostering collaboration across the private sector, civil society, academia, and the public administration can drive impactful and scalable climate action.

The Climate Neutrality Action Plan (CNAP), embedded within our Climate City Contract (CCC), builds upon the Integrated Urban Development Strategy of Iași Municipality and is closely aligned with the Green City Action Plan (GCAP), developed with support from the European Bank for Reconstruction and Development.

Beyond this strategic alignment, the CCC is grounded in a robust foundation of pre-existing policies, programs, investments, projects, and community initiatives already underway in environmental sustainability, climate change mitigation, and adaptation. This integrated approach ensures that all of our green and climate-focused actions converge toward a unified vision of sustainability, mitigation, and resilience. **This coherence also maximizes the benefits for our residents and stakeholders, while ensuring the effective achievement of our climate neutrality targets.**

TABLE 1 CO2 EMISSION 2021 VS 2030 - SUMMARY

SECTOR	CO2 TONS - BASELINE YEAR (2021)	CO2 TONS - TARGET (2030) *80% REDUCTION	CO2 EMISSIONS - TARGET (2030) * ACCORDING TO CNAP ACTIONS	% REDUCTION BETWEEN 2021 AND 2030
BUILDINGS	409,645.48	81,929.10	87,853.05	78.55%
TRANSPORT	279,641.83	55,928.37	43,434.19	84.47%
WASTE	2,463.58	492.72	1,266.19	48.60%
INDUSTRIAL PROCESSES AND PRODUCT USE (IPPU)	32,112.33	6,422.47	9,276.34	71.11%
AGRICULTURAL, FORESTRY AND LAND USE (AFOLU)	2,393.39	478.68	1,232.50	48.50%
TOTAL	726,256.60	145,251.32	143,062.28	80.30%

TABLE 2 CO2 EMISSION 2021 VS 2035 - SUMMARY

SECTOR	CO2 TONS - BASELINE YEAR (2021)	CO2 TONS - TARGET (2035) *80% REDUCTION	CO2 EMISSIONS - TARGET (2035) * ACCORDING TO CNAP ACTIONS	% REDUCTION BETWEEN 2021 AND 2035
BUILDINGS	409,645.48	81,929.10	36,306.53	91.14%
TRANSPORT	279,641.83	55,928.37	16,167.17	94.22%
WASTE	2,463.58	492.72	577.95	76.54%
INDUSTRIAL PROCESSES AND PRODUCT USE (IPPU)	32,112.33	6,422.47	6,293.39	80.40%
AGRICULTURAL, FORESTRY AND LAND USE (AFOLU)	2,393.39	478.68	901.95	62.31%
TOTAL	726,256.60	145,251.32	60,247.00	91.70%

GUIDING PRINCIPLES

Provide a brief overview (1 page) of the principles that directed the Climate Neutrality Action Plan's design process, as well as those that will guide its implementation and monitoring within the designated time frame.

PRINCIPLES THAT DIRECTED THE ACTION PLAN'S DESIGN PROCESS

The principles guiding the Climate Neutrality Action Plan's design are rooted in a participatory and transparent approach, aiming to include and benefit all local stakeholders while incorporating a metropolitan perspective. These principles are aligned with European, national, and local directives. The design process was specifically guided by **the EU Mission for Climate-Neutral and Smart Cities to incorporate its standards for achieving net-zero targets.** Consequently, the Plan embodies principles that promote collaboration, coordination, inclusivity and effectiveness.

These guiding principles ensure that the Climate Neutrality Action Plan is integrated and aligned with key local strategies and plans to reduce CO2 emissions, including **the Green City Action Plan, the Integrated Urban Development Strategy for Iași Municipality and the Metropolitan Area, the Sustainable Urban Mobility Plan and the Sustainable Energy and Climate Action Plan**. Moreover, it adopts a cross-sectoral approach, ensuring collaboration and coordination with various stakeholders and across different sectors.

TABLE 3 PRINCIPLES THAT DIRECTED THE ACTION PLAN'S DESIGN PROCESS

Collaborative development Reflecting stakeholders views and needs through a participatory process	**Climate justice** Protecting and providing opportunities to vulnerable communities
Integration and responsiveness Integrating the Action Plan within the municipal and metropolitan systems	**Evidence-based** Developing the Action Plan based on data from various strategic documents, analyses, studies, territorial and sectoral reports, and official statistics
Holistic planning Ensuring that actions are unified and coordinated, avoiding disparities among targeted emission domains, stakeholder groups, and communitty types	**Vertical alignment** Coordinating the Climate Neutrality Action Plan with other relevant documents and regulations at local, national and European levels
Convergence Promoting net-zero targets and goals, as well as reducing inequalities at the metropolitan level	**Horizontal alignment** Enhancing the proposed activities by integrating a cross-sectoral dimension, facilitating coordination and collaboration among sectors and stakeholders
Coordination Aligning with the municipal and metropolitan strategies, plans and commitments.	**Action prioritisation** Prioritising actions based on their direct impact on climate neutrality goals, potential additional benefits, responsiveness to local climate challenges and identified beneficiary needs, level of readiness, alignment with European and national climate neutrality priorities, and accessibility of funding sources for implementation
Yielding co-benefits principle Aiming to diminish local CO2 emissions, while producing a spectrum of social, health, economic, and ecological advantages.	

PRINCIPLES THAT WILL GUIDE THE IMPLEMENTATION, EVALUATION AND MONITORING OF THE ACTION PLAN

These principles provide benefits at both the **city and metropolitan levels for all stakeholders,** aligning with European, national, and local recommendations. They also incorporate the guidance and

standards of the EU Mission for Climate-Neutral and Smart Cities. The goal is to ensure an **inclusive, participatory and transparent process for the implementation, evaluation and monitoring of the Action Plan.**

The city and its metropolitan area have already adopted a participatory decision-making process, as demonstrated in the Integrated Urban Development Strategy for Iași Municipality and the Metropolitan Area. This strategy was developed based on **multilevel governance and stakeholder involvement in implementation principles**. Therefore, the following principles, rooted in its governance system, will be incorporated into the process as well:

TABLE 4 PRINCIPLES THAT WILL GUIDE THE IMPLEMENTATION, EVALUATION AND MONITORING OF THE ACTION PLAN

Responsibility Accountability in fulfilling commitments and achieving emission reduction goals, while mitigating climate change impacts	**Multi-stakeholder collaboration** Promoting collaborations between public institutions, civil society, academia, and the private sector to leverage resources and expertise in pursuit of climate neutrality objectives
Transparency Establishing a robust communication strategy to reach a wide and specific audience, while also ensuring access to diverse informational materials	**Participatory monitoring and knowledge exchange** Assessing and overseeing the implementation of the Climate Neutrality Action Plan, while also sharing outcomes with stakeholders and refining actions by: → Conducting systematic and unbiased evaluations; → Monitoring data and outcomes using standardised assessments from reputable sources; → Implementing periodic enhancements based on evaluation and monitoring findings to facilitate responsive actions; → Sharing knowledge to ensure that information and expertise reach a wide range of stakeholders.
Novelty and innovation Allocating funding for research and development initiatives, while integrating innovative approaches and cutting-edge technologies to enhance the execution of envisioned actions	**Climate justice** Ensuring inclusivity by integrating a participatory decision-making process and outlining specific actions to safeguard underprivileged groups, thereby preventing vulnerable communities from being marginalised throughout the climate neutrality transition

Therefore, all signatory stakeholders collectively support the city's and metropolitan area's ambition to transition towards climate neutrality. Their joint efforts underscore a shared commitment to actively contribute to Iași's journey toward becoming a climate-neutral city, with a focus on generating benefits at the metropolitan level. Over 100 stakeholders in Iași have signed pledges to support Iași's climate goals, and NetZero Coalition (https://iasi2035.ro/) has been established, which will be continuously engaged in growing the number of stakeholders that actively work on achieving Iași's climate goals.

II. ACTION PLAN

INTRODUCTION

Briefly describe (1-2 pages) the local context within which the Action Plan is being formulated and outline the general gap it aims to address, by taking into account relevant local strategies and policies, socio-economic development factors, environmental conditions and climate considerations etc.

Iași Municipality is committed to accelerating the transition to climate neutrality and improving quality of life for all residents. While significant progress has been made, there is a clear awareness that in order to achieve these goals, collaboration across all sectors is necessary, guided by a complete inventory of CO2 emissions and a plan to reduce them. To this end, the Climate Neutrality Action Plan was formulated in alignment with the 100 Climate-Neutral and Smart Cities Mission methodology and provides a working framework for implementing major projects and for mobilizing the NetZeroCity Local Coalition. Set in the North-East region, the least developed region in Romania, which faces challenges due to its peripheral geographic position, Iași Municipality has consistently defied odds and achieved an impressive socio-economic development.

A city committed to sustainable development, Iași has made significant progress in addressing climate change and improving urban living conditions. As a signatory of the Covenant of Mayors, Iași developed its Sustainable Energy and Climate Action Plan, which foresees measures aimed at municipal, residential, and tertiary buildings, public lighting and the transport sector. The city joined the European Bank for Reconstruction and Development's (EBRD) 'Green Cities' Programme in 2020, marking a major step towards a sustainable future. In 2023, Iași developed its Green City Action Plan, a comprehensive document designed to tackle the city's key environmental challenges. This Plan aims to transform Iași into a city with clean air, ample green spaces, efficient energy use and universal accessibility. It prioritises actions across various urban infrastructure and service sectors, including transport, energy, green spaces and waste management. The Climate Neutrality Action Plan is closely aligned with the goals of the Green City Action Plan, building upon its proposed actions while establishing a clear roadmap to significantly reduce emissions by 2030 and to advance even deeper reductions by 2035.

Apart from the initiatives of the City Hall, a major advantage for the city's sustainable development is the involvement of the private sector and of an active civil society. Over the past decade, Iași Municipality has successfully implemented public-private-partnerships projects for major business and retail infrastructure, succeeding to attract additional private investments that boosted the local and regional economy. The Palas Campus in Iași currently hosts world renowned companies in the fields of IT and automotive, with over 5,000 employees. The PPP projects also include investments in high quality public spaces and green infrastructure. Moreover, civil society organisations are also involved in projects to increase quality of life and offer mechanisms for civic participation and collaboration. This vibrant civil society will further support the resilience of the city, mobilising citizens, experts and the private sector, which will play a key role in the NetZeroCity Local Coalition.

Iași Municipality has undergone an impressive development as a major hub for business and education over the past years, but it also faces significant climate-related challenges. The second most populous city in Romania with an estimated resident population of 320.000 (and 500,000 in the metropolitan area), serves as a major hub for businesses and tertiary education, contributing to its rapid socio-economic development. From 2017 to 2021, the GDP per capita in Iași County grew by 41%, reaching EUR 9.762, with the city itself reaching around EUR 14,100 per capita, surpassing the national average of EUR 11.904[1]. This economic growth has led to increased construction and urban development, coupled with challenges in infrastructure planning and sustainable land use.

The city's accelerated development has also significantly impacted CO2 emissions and air quality, primarily due to the rise in private car usage, heavy traffic and increased fuel consumption. The use of natural gas and biomass in individual domestic heating and the decreased efficiency of the centralised heating system further exacerbate air pollution, with significant emissions from the Iași 1 and Holboca Combined Heat and Power Plant. Solid waste management also presents a high-priority challenge, with inadequate waste separation and a reliance on landfill disposal posing risks to groundwater resources. While the surface of green spaces has increased over the past years, another key challenge for Iași is ensuring a higher share of green spaces for each resident. With the rapid increase of population density, expanding and modernising green spaces per capita is a priority, coupled with the need to ensure carbon capture and storage. In this context, the Climate Neutrality Action Plan includes targeted interventions expected to significantly reduce the carbon emissions by 2030 and achieve even deeper cuts by 2035, while actively mobilizing the local community in a coordinated and structured manner to support this transition.

The Action Plan is developed within the framework of the M100 Mirror Mission Cities Hub Romania, which supports ten Romanian cities in reaching climate neutrality by 2035. However, following the European model, the Climate City Contract sets the horizon for achieving climate neutrality in Iași by 2030, with further mitigation actions extending through to 2035. The M100 National Hub builds on the model and best practices of the three Romanian cities already selected to participate in the 100 Climate-Neutral and Smart Cities Cities Mission. Iași Municipality is already on track to pursue this goal and to become a model for other cities in Romania and beyond, recognizing that climate challenges require swift, coordinated action. The portfolio of interventions in the Action Plan is structured on six domains: sustainable urban mobility, green infrastructure and nature-based solutions, waste and circular economy, built environment, energy systems and soft interventions to consolidate local governance for climate neutrality and promoting behaviour change. Through these coordinated efforts, Iași will demonstrate that ambitious climate action can not only reduce environmental impact and achieve CO2 reduction targets, but can also enable a thriving local economy and a high quality of life for all its residents.

[1] Green City Action Plan for Iași Municipality

WORK PROCESS

Within the overarching context of the city's journey toward climate neutrality, outline the working steps involved in preparing the Action Plan, including both the completed stages and the future anticipated ones.

- ➔ **Additionally, delineate the timeline and key milestones (including the ones regarding the quality assurance - e.g., foreseen design competitions) for the forthcoming iterations in the Action Plan's development.**

The Iași Metropolitan Area Intercommunity Development Association (IMA IDA) requested support through the 'Functional Areas in the EU' project, initiated by the European Commission and the World Bank. They sought assistance in developing a Climate Neutrality Action Plan, inspired by the successful example of the Cluj-Napoca Climate Neutrality Action Plan, which also takes into account metropolitan factors. In this context, guided by the project's emphasis on knowledge sharing and advancing climate transition at the functional area level, the development of Iași's Climate Neutrality Action Plan received technical support from the World Bank within the framework of the 'Functional Areas in the EU' project. This initiative was aimed not only at directly benefiting Iași Municipality but also at bringing positive impacts to the surrounding metropolitan area. As such, under the guidance of **Iași Municipality and Iași Metropolitan Area Intercommunity Development Association,** the Action Plan is set to have a positive impact at the metropolitan scale, ultimately benefiting all residents through collaborative, cross-sectoral initiatives.

The process of developing the Action Plan involves two phases: completed and future. The design phase of the Climate Neutrality Action Plan was conducted through the close collaboration between the technical experts from Iași City Hall and the Iași Metropolitan Area Intercommunity Association. Specifically, regarding the Iași City Hall, the same actors which were responsible for developing the Green City Action Plan were also involved in the preparation of the Climate Neutrality Action Plan. This approach aimed to maintain continuity, consistency, unity, and coherence among the staff involved in developing the local strategic documentation addressing climate goals.

COMPLETED PHASES

CONTEXT ANALYSIS

We established a three-tier analysis of data, policies, guiding directions, and regulations at the European, national, and local levels. The aim was to ensure alignment with the overarching climate-neutrality framework and internalise methodologies and targets. The first level involved examining European documents, with a particular focus on the **methodology established by the European Commission for City Climate Contracts.** By doing so, we adapted and internalised the EU model and methodology within our local Climate Neutrality Action Plan, ensuring that it meets the standards of the 112 climate-neutral cities within the Mission.

At national level, we examined and aligned with the **The National Integrated Plan for Energy and Climate Change 2021-2030 and the Romanian National Urban Policy.** Additionally, we followed the vision pursued by the **M100 Mirror Mission Cities Hub**, launched by the Ministry of Research, Innovation, and Digitalization and the Ministry of Investments and European Projects, alongside UEFISCDI. The correlation with these sources ensure **connectivity with the national landscape and provide a comprehensive approach.**

The local context analysis involved a comprehensive examination through data analysis to **identify barriers and risks, as well as an assessment of both existing and projected budgets.** It enabled us to understand how to implement change, identify our available resources, and determine the needs required to execute climate actions effectively. We calculated greenhouse gas emissions for key sectors— **buildings, transport, waste, industrial process and product use (IPPU), agricultural, forestry and land use (AFOLU)**—using data from approved official documents, analyses, studies, reports, and statistics from national and international sources. This enabled us to **set targeted reductions per sector.** Additionally, we analysed existing policies and strategies, including the Green City Action Plan 2023, Integrated Urban Development Strategy for Iași Municipality and Iași Metropolitan Area 2021-2030, General Urban Plan of Iași Municipality 2018, Sustainable Energy and Climate Action Plan 2030, Sustainable Urban Mobility Plan post-2020, Thermal Energy Supply Strategy 2030, Energy Efficiency Improvement Programme for Iași Municipality and the Sanitation Service Development Strategy (the complete list can be found in the section "**Current Policies and Strategies**"). By examining existing plans, strategies and commitments, **we ensured a cross-sectoral and interrelated dimension** within municipal and metropolitan policies and strategic direction, providing instruments that reinforce each other and further advance climate actions.

ELABORATION PROCESS

The development of the Action Plan began with establishing a participatory process that involves all stakeholders, followed by defining the vision for the transition to climate neutrality, goals and necessary actions, based on this inclusive process.

After establishing a participatory process, we formulated a clear vision for achieving climate neutrality, grounded in the information gathered during the preceding phase. Next, we organised the necessary measures into actionable items based on emission domains and key areas of focus. This phase also involved aligning these actions with the priorities, objectives and projects outlined in other local strategic documents.

In the next step, we set specific goals for CO2 emissions reductions, co-benefits, and climate and financial indicators. We calculated both individual and cumulative budgets and identified sources and forms of financing. Relevant stakeholders were identified and associated risks were analysed, with mitigation measures planned accordingly.

Lastly, we identified solutions for offsetting residual CO2 emissions. Moreover, we identified both current and forthcoming opportunities to enhance the Action Plan, acknowledging the need for assistance in refining and optimising its effectiveness.

FUTURE ANTICIPATED PHASES

MONITORING, EVALUATION AND IMPROVEMENT

The monitoring, evaluation, and improvement phase involves tracking CO2 emission reductions and conducting annual monitoring and evaluation of the Plan. Based on this ongoing process, the Plan is regularly updated and improved to ensure its effectiveness and relevance.

Our technical experts from Iași City Hall, working with our counterparts at Iași Metropolitan Area Intercommunity Development Association, will annually monitor risks and evaluate MEL (Monitoring, evaluation and learning) indicators outlined in the Action Plan. Our established governance structure for the Green City Action Plan will oversee its execution and management. The

Implementation and Monitoring Working Group, led by a designated coordinator, will supervise progress. Additionally, the Plan **will undergo biennial updates by our Implementation and Monitoring Working Group, with input from the NetZeroCity Local Coalition providing field-specific content.** Each update will include completed actions, new interventions, and evolving contextual factors, ensuring alignment with EU and national climate directives while reflecting local changes.

GREENHOUSE GAS EMISSIONS BASELINE INVENTORY

Describe and elaborate on the most recent greenhouse gas (GHG) inventory conducted by the city, in order to establish the baseline emissions and also to identify the emissions gap towards achieving climate neutrality.

- ➔ **Make sure to also assess the greenhouse gas (GHG) baseline inventory - you can refer to: the sources of data collection and their rationale, the baseline emission conversion factors used, proposed measures for improving future data collection processes etc.**

For calculating the baseline emissions for the year 2021, several strategic documents were consulted. As such, part of the conversion factors applied were sourced from the Sustainable Energy and Climate Action Plan (page 47), and part were estimated based on other available information.

TABLE 5 GREENHOUSE GAS EMISSIONS BASELINE INVENTORY

ENERGY FORM	EMISSIONS FACTORS [TCO2-ECHIV/MWH]	SOURCE DOCUMENT
Electrical energy 2021	0,3	Standard IPPC
Thermal Energy	0,285	Sustainable Energy and Climate Action Plan
Natural Gas	0,202	Sustainable Energy and Climate Action Plan
Diesel	0,268	Sustainable Energy and Climate Action Plan
Gasoline	0,250	Sustainable Energy and Climate Action Plan
Wood	0,410	Sustainable Energy and Climate Action Plan
Electric Energy 2035	0,176	JRC Scientific Information System and Database Report 2022
Thermal Energy 2035	0,141	Determined based on investments into local energy production facilities
Green electric energy	0	Estimated at 0

TRANSPORT 2021 – 1.067.766,14 MWh/year energy | 279.641,83 tons CO2/year emissions

- ➔ **Public transport:** The Energy Efficiency Improvement Programme 2021 (EEIP) offers the energy requirements for public transport for 2021 (page 48), equivalent to a total of 11.105,00 MWh/year electrical energy and 47.615,73 MWh/year diesel.
- ➔ **Municipal transport:** Municipal transport information is available just for the year 2012 in the Sustainable Energy and Climate Action Plan (page 49) and is approximated at around 50 MWh/year diesel and 6 MWh/year gasoline.
- ➔ **Private and commercial transport:** Private and commercial data is presented in the Sustainable Energy and Climate Action Plan (page 49)and is approximated at around 376.665 MWh/year diesel | 251.110 MWh/year gasoline for the year 2012, estimated for a total number of 90.838 vehicles. Information is not available for the year 2021. However, according to the General Directorate of Driving Permits and Registrations, cited by different websites, in 2023 there were approximately 144.564 vehicles registered in the Iasi Municipality which indicates an increase of approximately 159,14 %. Until other information becomes available, for the purpose of this document, the energy requirements for the year 2021 are extrapolated using the total number of vehicles registered in 2023 and considering energy information from 2012. As such, the total energy requirements for private and commercial transport for the year 2021 is approximated at around 599.424,68 MWh/year diesel and 399.616,45 MWh/year gasoline. No information about electric vehicles was available.

- **Public lighting and traffic lights:** The Energy Efficiency Improvement Programme 2021 offers the energy requirements for public lighting and traffic lights for the year 2021 (page 45), estimated at 9.948,28MWh/year electrical energy.

BUILDINGS 2021 – 1.741.866,81 MWh/year energy | 409.645,48 tons CO2/year emissions

- **Private buildings:** The Energy Efficiency Programme 2021 offers the total electrical energy requirements for private buildings (page 54), estimated at 180.486,90 MWh/year. The same document estimates the thermal energy needed at around 132.336 MWh/year, natural gas at approximately 910.313,71 MWh/year, and biomass at approximately 79.995,44 MWh/year.

- **Public buildings:** The Energy Efficiency Programme 2021 offers the total energy requirements for public buildings for the year 2020 (page 54), as follows: 7.972,37 MWh/year electrical energy, 18.234,56 MWh/year natural gas, and 35.024,00 MWh/year thermal energy.

- **Tertiary buildings:** The Energy Efficiency Programme offers an estimate of 68.941,91 MWh thermal energy for unspecified consumers that can be attributed to the total tertiary buildings (page 84). Tertiary buildings will be defined in this context as all the other buildings except for residential and public buildings, as defined in the Energy Efficiency Programme. The Sustainable Energy and Climate Action Plan offers energy requirements information for tertiary buildings, however, only two buildings are considered for those estimates. Information regarding the energy requirements for 2021 for tertiary buildings was not available in the strategic documents. However, by using satellite information provided by Sentinel2 and Landsat, it becomes possible to analyse the total built up area for residential and non-residential use in the Iași Municipality. As such, for the year 2020, the Iași Municipality registered 2.393.114 sqm of non-residential built-up area. All the other built-up area (except non-residential) was measured at around 9.893.504 sqm (building footprint). This means that residential buildings, including public ones, registered 167.360 MW/year of thermal energy for a total of 9.893.504 sqm of building footprint, while the non-residential (tertiary buildings) registered 68.941,91 MWh/year for a 2.393.114 sqm building footprint. By keeping the same proportions between built-up areas and thermal energy requirements for residential buildings and non-residential buildings, it is possible to approximate the total energy requirements for all tertiary buildings at around 77.684,89 MWh/year electrical energy, 382.757,34 MWh/year natural gas, and 68.941,91 MWh/year thermal energy. Biomass was not included in this estimate, which includes all other buildings except the public and residential ones. After deducting the energy requirements for IPPU and AFOLU, the tertiary buildings sector is left with an approximate 55.397,09 MWh/year electrical energy, 272.944,26 MWh/year natural gas, and 49.162,48 MWh/year thermal energy.

IPPU 2021 – 141.345,56 MWh/year energy | 32.112,33 tons CO2/year emissions

According to the Metroverse database, from the total economic profile of the city, approximately 26,7% can be placed in the IPPU sector, more precisely Manufacturing (11.49%) and Construction (15.21%). These two sectors can be thus estimated at 26,7% of the total tertiary buildings sector at approximately 20.741,86 MWh/year electrical energy, 102.196,21 MWh/year natural gas, and 18.407,49 MWh/year thermal energy.

WASTE 2021 – 9.145,83 MWh/year energy | 2.463,58 tons CO2/year emissions

The Energy Efficiency Programme offers the energy requirements for the Waste sector (page 49). These requirements are the following: 407,54 MWh/year electrical energy, 8.708,25 MWh/year diesel and 30,04 MWh/year gasoline.

AFOLU 2021 – 10.534,74 MWh/year energy | 2.393,39 tons CO2/year emissions

According to Metroverse, from the total economic profile of the city, approximately 1,99% can be attributed to the AFOLU sector, and so it can be estimated at 1,99% of the tertiary buildings sector. This results in around 1.545,93 MWh/year electrical energy, 7.616,89 MWh/year natural gas and 1.371,94 MWh/year thermal energy.

TABLE 6 FINAL ENERGY USE BY SOURCE SECTORS

- ➔ **Indicate the base year:** 2021
- ➔ **Indicate the used unit:** MWh/year

	SCOPE 1	SCOPE 2	SCOPE 3	TOTAL
BUILDINGS	**79,995.44**	**1,661,871.37**	**0.00**	**1,741,866.81**
FUEL TYPE / ENERGY USED	79,995.44 MWh biomass	243,856.36 MWh electrical energy 1,201,492.53 MWh natural gas 216,522.48 MWh thermal energy		243,856.36 MWh electrical energy 1,201,492.53 MWh natural gas 216,522.48 MWh thermal energy 79,995.44 MWh biomass
TRANSPORT	**1,046,712.86**	**21,053.28**	**0.00**	**1,067,766.14**
FUEL TYPE / ENERGY USED	647,090.41 MWh diesel 399,622.45 MWh gasoline	21,053.28 MWh electrical energy	0.00 MWh diesel	647,090.41 MWh diesel 399,622.45 MWh gasoline 21,053.28 MWh electrical energy
WASTE	**8,738.29**	**407.54**	**0.00**	**9,145.83**
FUEL TYPE / ENERGY USED	8,708.25 MWh diesel 30.04 MWh gasoline	407.54 MWh electrical energy	0.00	407.54 MWh electrical energy 8,708.25 MWh diesel 0.00 MWh GPL
INDUSTRIAL PROCESS AND PRODUCT USE (IPPU)	**0.00**	**141,345.56**	**0.00**	**141,345.56**
FUEL TYPE / ENERGY USED		20,741.86 MWh electrical energy 102,196.21 MWh natural gas 18,407.49 MWh thermal energy	0.00	20,741.86 MWh electrical energy 102,196.21 MWh natural gas 18,407.49 MWh thermal energy
AGRICULTURAL, FORESTRY, AND LAND USE (AFOLU)	**0.00**	**10,534.74**	**0.00**	**10,534.74**
FUEL TYPE / ENERGY USED	0.00	1,545.93 MWh electrical	0.00	1,545.93 MWh electrical

	SCOPE 1	SCOPE 2	SCOPE 3	TOTAL
		energy 7,616.87 MWh natural gas 1,371.94 MWh thermal energy		energy 7,616.87 MWh natural gas 1,371.94 MWh thermal energy

TABLE 7 EMISSION FACTORS APPLIED

- ➔ **Indicate the primary energy type and greenhouse gas (GHG) emission factor in accordance with the methodology used:** CO2
- ➔ **Indicate the used method, e.g., GPC, IPCC, CRF, national etc.:** IPCC

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)
ELECTRICAL ENERGY 2021 (*1)	0,3	-	-	-	-	-
NATURAL GAS (*2)	0,202	-	-	-	-	-
THERMAL ENERGY 2021 (*3)	0,285	-	-	-	-	-
DIESEL (*4)	0,268	-	-	-	-	-
GASOLINE (*5)	0,250	-	-	-	-	-
WOOD (BIOMASS) (*6)	0,410	-	-	-	-	-
ELECTRICAL ENERGY 2035 (*7)	0,176	-	-	-	-	-
THERMAL ENERGY 2035 (*8)	0,141	-	-	-	-	-
RENEWABLE ENERGY (pv) (*9)	0	-	-	-	-	-

Sources for the above-mentioned conversion factors:

1. Standard IPPC
2. Sustainable Energy and Climate Action Plan
3. Sustainable Energy and Climate Action Plan
4. Sustainable Energy and Climate Action Plan
5. Sustainable Energy and Climate Action Plan
6. Sustainable Energy and Climate Action Plan
7. JRC Scientific Information System and Database Report 2022
8. Determined based on investments into local energy production facilities
9. Estimated at 0.

TABLE 8 GHG EMISSIONS BY SOURCE SECTORS

- ➔ **Indicate the base year:** 2021
- ➔ **Indicate the unit:** tons CO2/year

	SCOPE 1	SCOPE 2	SCOPE 3	TOTAL
BUILDINGS	32,078.17	377,567.31	0.00	**409,645.48**
TRANSPORT	273,325.84	6,315.98	0.00	**279,641.83**
WASTE	2,341.32	122.26	0.00	**2,463.58**

INDUSTRIAL PROCESS AND PRODUCT USE (IPPU)	0.00	32,112.33	0.00	**32,112.33**
AGRICULTURAL, FORESTRY AND LAND USE (AFOLU)	0.00	2,393.39	0.00	**2,393.39**
TOTAL	**307,745.33**	**418,511.27**	**0.00**	**726,256.60**

The table categorises emission reductions from each action, based on the scope they affect. For instance, if the covered actions aim to decrease CO2 emissions linked to grid-supplied electricity, values will be assigned to Scope 2.

TABLE 9 PLANNED ACTIONS BY SOURCE SECTORS

BASE YEAR				2030			2035		
SCOPE	SCOPE 1	SCOPE 2	SCOPE 3	SCOPE 1	SCOPE 2	SCOPE 3	SCOPE 1	SCOPE 2	SCOPE 3
BUILDINGS	21,250.21	295,294.52	0.00	21,820.97	345,045.42	0.00			
II.1 Expansion and modernisation of green areas for carbon capture and storage	2,806.60	36,288.95	0.00	2,850.77	36,734.60	0.00			
II.2 Creating a metropolitan network of green-blue corridors	2,700.50	31,785.55	0.00	2,788.84	32,825.31	0.00			
IV.1 Increasing the energy efficiency of public buildings	0.00	8,033.93	0.00	0.00	8,095.19	0.00			
IV.2 Increasing the energy efficiency of residential buildings	0.00	62,844.95	0.00	0.00	83,392.96	0.00			
IV.3 Implementation of nZEB+ standards for new public buildings	0.00	6,142.55	0.00	0.00	6,268.11	0.00			
V.I Increasing the efficiency and attractiveness of the heating system	15,743.10	64,916.74	0.00	16,181.36	75,530.66	0.00			
V.2 Consolidation of local renewable energy production capacities	0.00	8,897.70	0.00	0.00	11,178.98	0.00			
VI.1 Increasing local commitment to climate neutrality	0.00	32,462.71	0.00	0.00	35,492.78	0.00			
VI.2 Promoting and supporting climate-neutral behavioral change	0.00	43,307.18	0.00	0.00	54,791.11	0.00			
VI.3 Consolidation of local governance for climate neutrality	0.00	614.26	0.00	0.00	735.72	0.00			
TRANSPORT	233,089.21	5.74	0.00	262,296.51	-2,157.97	0.00			
I.1 Encouraging the use of green public transport	78,164.98	0.00	0.00	80,770.48	0.00	0.00			
I.2 Promotion alternative mobility, with a focus on cycling and walking	32,799.10	0.00	0.00	33,345.75	0.00	0.00			

BASE YEAR		2030			2035	
I.3 Traffic congestion relief of major boulevards and crossroads	54,665.17	0.00	0.00	68,331.46	0.00	0.00
II.1 Expansion and modernisation of green areas for carbon capture and storage	26,519.46	552.60	0.00	30,022.41	561.30	0.00
II.2 Creating a metropolitan network of green-blue corridors	28,220.97	531.71	0.00	30,015.87	549.11	0.00
V.3 Modernization of public lighting	2,605.50	646.71	0.00	3,908.25	972.30	0.00
V.4 Green energy supply for EVs	4,903.04	-1,745.92 increase in emissions due to an increased use of electrical energy	0.00	9,128.00	-4,275.95 increase in emissions due to an increased use of electrical energy	0.00
VI.2 Promoting and supporting climate-neutral behavioral change	5,211.00	20.63	0.00	6,774.30	35.27	0.00
WASTE	**1,104.35**	**93.04**	**0.00**	**1,771.93**	**113.70**	**0.00**
II.1 Expansion and modernisation of green areas for carbon capture and storage	204.85	10.70	0.00	208.07	10.87	0.00
II.2 Creating a metropolitan network of green-blue corridors	197.10	10.29	0.00	203.55	10.63	0.00
III.1 Developing a functional circular economy ecosystem	585.33	60.04	0.00	1,170.66	79.35	0.00
VI.2 Promoting and supporting climate-neutral behavioral change	70.24	7.21	0.00	114.72	7.78	0.00
VI.3 Consolidation of local governance for climate neutrality	46.83	4.80	0.00	74.92	5.08	0.00
INDUSTRIAL PROCESS AND PRODUCT USE (IPPU)	**0.00**	**22,835.98**	**0.00**	**0.00**	**25,818.94**	**0.00**
II.1 Expansion and modernisation of green areas for carbon capture and storage	0.00	2,809.59	0.00	0.00	2,853.80	0.00
II.2 Creating a metropolitan network of green-blue corridors	0.00	2,703.38	0.00	0.00	2,791.81	0.00
VI.1 Increasing local commitment to climate neutrality	0.00	9,623.90	0.00	0.00	10,884.88	0.00
VI.2 Promoting and supporting climate-neutral behavioral change	0.00	5,774.34	0.00	0.00	7,256.59	0.00
VI.3 Consolidation of local	0.00	1,924.78	0.00	0.00	2,031.85	0.00

BASE YEAR		2030			2035	
governance for climate neutrality						
AGRICULTURAL, FORESTRY AND LAND USE (AFOLU)	0.00	1,160.89	0.00	0.00	1,491.44	0.00
II.1 Expansion and modernisation of green areas for carbon capture and storage	0.00	209.40	0.00	0.00	212.70	0.00
II.2 Creating a metropolitan network of green-blue corridors	0.00	201.49	0.00	0.00	208.08	0.00
VI.1 Increasing local commitment to climate neutrality	0.00	125.00	0.00	0.00	157.45	0.00
VI.2 Promoting and supporting climate-neutral behavioral change	0.00	416.67	0.00	0.00	692.78	0.00
VI.3 Consolidation of local governance for climate neutrality	0.00	208.33	0.00	0.00	220.43	0.00

* The actions “Encouraging the use of green public transport” and “Green energy supply for EVs” will increase electrical energy consumption in the transport sector. Although EVs and electric buses account for less CO2 compared to traditional combustion fuel motor vehicles, the action was estimated to increase the number of green buses and electric vehicles in Iasi. The CO2 reduction percentage of these actions was calculated based on the final energy use and final CO2 emissions of the transport sector in 2035 compared to 2021. Taking into considerations that grid supplied electrical energy has different conversion factors in 2021 compared to 2035, the final electrical energy need of the transport sector in 2035 was calculated at 55,872.56 MWh electrical energy with CO2 emissions of 8,723.17 tons CO2/year, and in 2021 was calculated at 21,053.28 MWh electrical energy with 6,315.98 tons CO2. Based on these final values, after taking into consideration the possible energy reductions of each action, the CO2 values for each action were determined.

TABLE 10 EMISSIONS GAP 2030

	BASELINE EMISSIONS 2021		BASELINE EMISSIONS REDUCTION TARGET 2030		EMISSIONS REDUCTION FROM ACTION PLAN UNTIL 2030		RESIDUAL EMISSIONS (EMISSIONS 2030)		TARGET ACHIVEMENT
	(absolute)	(%)	(absolute)	(%)	(absolute)	(%)	(absolute)	(%)	(absolute)
BUILDINGS	409,645.48	56.41%	327,716.38	80%	321,792.43	**78.55%**	87,853.05	61.41%	-5,923.95
TRANSPORT	279,641.83	38.50%	223,713.46	80%	236,207.63	**84.47%**	43,434.19	30.36%	12,494.17
WASTE	2,463.58	0.34%	1,970.87	80%	1,197.39	**48.60%**	1,266.19	0.89%	-773.47
INDUSTRIAL PROCESS AND PRODUCT USE (IPPU)	32,112.33	4.42%	25,689.86	80%	22,835.98	**71.11%**	9,276.34	6.48%	-2,853.88
AGRICULTURE, FORESTRY AND LAND USE	2,393.39	0.33%	1,914.71	80%	1,160.89	**48.50%**	1,232.50	0.86%	-753.82

(AFOLU)									
TOTAL	**726,256.60**	**100.00%**	**581,005.28**	**80%**	**583,194.33**	**80.30%**	**143,062.28**	**100.00%**	**2,189.04**

Baseline emissions: The baseline emissions represent the emissions from each sector for the year 2021, presented in both absolute terms and as percentage values.

Baseline emissions reduction target: The baseline emissions reduction target indicates the emissions level each sector should achieve by 2030 if an 80% reduction is met.

Emissions addressed by the Action Plan: The emissions addressed by the Action Plan encompass the reductions expected in each sector based on the planned interventions.

Residual emissions: The residual emissions refer to the remaining emissions in each sector by 2035, after implementing all actions in the current plan. These residual values must be further reduced through future interventions or offsetting.

Target achievement: The "target achievement" column represents the difference between the emissions reductions achieved through current actions and the 80% reduction target. A negative value indicates a shortfall; a positive value indicates an overachievement.

- The **Buildings** sector achieves a **78.55%** reduction, falling **short by 5,923.95** tons of CO_2 compared to the 80% target.
- The **Transport** sector achieves a **84.47%** reduction, **exceeding** the 80% target by **12,494.17** tons of CO_2.
- The **Waste** sector achieves a **48.60%** reduction, **falling short** by **773.47** tons of CO_2.
- The **IPPU** sector achieves a **71.11%** reduction, **falling short** by **2,853.88** tons of CO_2.
- The **AFOLU** sector achieves a **48.50%** reduction, **falling short** by **753.82** tons of CO_2.

Overall, the total emissions reduction achieved by the Climate Neutrality Action Plan until 2030 amounts to **583,194.33** tons of CO_2, corresponding to a **80.30%** decrease from the 2021 baseline. This means the city will **exceed the overall 80% emissions reduction target** by **2,189.04** tons of CO_2. However, several sectors (Buildings, Waste, IPPU, and AFOLU) still underperform relative to their individual targets and will require complementary measures or adjustments to ensure a balanced and robust transition to climate neutrality.

TABLE 11 EMISSIONS GAP 2035

	BASELINE EMISSIONS 2021		BASELINE EMISSIONS REDUCTION TARGET 2035		EMISSIONS REDUCTION FROM ACTION PLAN UNTIL 2035		RESIDUAL EMISSIONS (EMISSIONS 2035)		TARGET ACHIVEMENT
	(absolute)	(%)	(absolute)	(%)	(absolute)	(%)	(absolute)	(%)	(absolute)
BUILDINGS	409,645.48	56.41%	368,680.93	90%	373,338.94	**91.14%**	36,306.53	60.26%	4,658.02
TRANSPORT	279,641.83	38.50%	251,677.64	90%	263,474.65	**94.22%**	16,167.17	26.83%	11,797.01
WASTE	2,463.58	0.34%	2,217.22	90%	1,885.63	**76.54%**	577.95	0.96%	-331.59
INDUSTRIAL PROCESS AND PRODUCT USE (IPPU)	32,112.33	4.42%	28,901.09	90%	25,818.94	**80.40%**	6,293.39	10.45%	-3,082.16
AGRICULTURE, FORESTRY	2,393.39	0.33%	2,154.05	90%	1,491.44	**62.31%**	901.95	1.50%	-662.61

AND LAND USE (AFOLU)									
TOTAL	**726,256.60**	**100.00%**	**653,630.94**	**90%**	**666,009.61**	**91.70%**	**60,247.00**	**100.00%**	**12,378.66**

Baseline emissions: These represent the greenhouse gas (GHG) emissions for each sector in the year 2021, expressed in absolute values (tons CO_2e) and as a share of total citywide emissions.

Baseline emissions reduction target: This column reflects the expected emissions reductions if each sector achieves a **90% reduction** in emissions by 2035 compared to 2021 levels.

Emissions addressed by the Action Plan: These are the emissions reductions projected to be achieved through the implementation of the current Climate Neutrality Action Plan by 2035.

Residual emissions: This reflects the remaining emissions per sector in 2035 after the implementation of all planned measures.

Target achievement: This indicates whether each sector meets or exceeds the 90% reduction target. A **positive value** shows the sector **overachieves**, while a **negative value** indicates a **shortfall**.

The 2035 data highlights the following:

- The **Buildings** sector achieves a **91.14%** reduction, **exceeding** the 90% target by **4,658.02** tons of CO_2.
- The **Transport** sector achieves a **94.22%** reduction, **exceeding** the 90% target by **11,797.01** tons of CO_2.
- The **Waste** sector achieves a **76.54%** reduction, **falling short** by **331.59** tons of CO_2.
- The **IPPU** sector reaches an **80.40%** reduction, **falling short** by **3,082.16** tons of CO_2.
- The **AFOLU** sector achieves a **62.31%** reduction, **falling short** by **662.61** tons of CO_2.

Overall, the Action Plan will result in an estimated reduction of **666,009.61** tons of CO_2 by 2035, corresponding to a **91.70%** reduction from the 2021 baseline. This surpasses the overall citywide target by **12,378.66** tons of CO_2, confirming that the plan not only meets but **exceeds** the 90% climate neutrality goal.

CURRENT POLICIES AND STRATEGIES

Provide a short contextual presentation and assessment of policies, strategies, initiatives, and / or regulations at the local, regional, and national levels that are relevant to the city's transition towards climate neutrality.

TABLE 12 RELEVANT POLICIES, STRATEGIES, INITIATIVES, REGULATIONS

TYPE	LEVEL	TITLE	DESCRIPTION	RELEVANCE	NEED FOR ACTION
PLAN	LOCAL	**GREEN CITY ACTION PLAN 2023**	The Green City Action Plan was developed in 2023 within the 'Green Cities' Programme of the European Bank for Reconstruction and Development (EBRD), which the city joined in 2020. It sets out targets for the next 15 to 20 years.	The Green City Action Plan outlines and ranks the city's key environmental challenges while proposing investment projects and policy measures to tackle them. The vision for the Green Iași Municipality is a place with clean air, ample green spaces, efficient energy use, and universal accessibility. The Plan has identified and prioritised 44 actions across various urban infrastructure and service sectors, including transport, energy, green spaces and waste management, to be implemented over the next five years.	The actions in the Climate Neutrality Action Plan are aligned with the Green City Action Plan 2023 and the Integrated Urban Development Strategy for Iași Municipality and the Iași Metropolitan Area 2021-2030, building on the projects included in these strategies. It focuses on promoting sustainable and efficient urban mobility, including the use of ecological public transport and encouraging cycling and walking. It aims to alleviate traffic congestion and expand green spaces to enhance carbon capture and storage. The Plan also prioritises the development of a metropolitan network of green-blue corridors and a functional circular economy ecosystem. Efforts to improve energy efficiency are targeted at both public and residential buildings, alongside the implementation of nZEB+ standards for new public structures. Additionally, the Plan seeks to modernise public lighting, provide green energy for electric vehicles, and boost local renewable energy production. These measures are supported by initiatives to increase local commitment to climate neutrality, promote climate-neutral behavioural changes, and strengthen local governance in this domain.
STRATEGY	LOCAL	**INTEGRATED URBAN DEVELOPMENT STRATEGY FOR IAȘI MUNICIPALITY AND IAȘI METROPOLITAN AREA 2021-2030**	The Integrated Urban Development Strategy (IUDS) is a medium to long-term planning tool designed to shape the future of Iași Municipality and the Iași Metropolitan Area, focusing on the period between 2021 and 2030 to inform investment decisions.	Objective 4 of the IUDS focuses on promoting sustainable and accessible mobility for all through infrastructure adapted to non-polluting means of transport. Objective 5 "Nature-friendly areas based on smart public utility management systems and reduced energy consumption" is also particularly relevant, as it targets the development of green spaces, and the development of quality public utilities with reduced environmental impact. These actions contribute directly to achieving climate neutrality by promoting sustainable urban infrastructure and reducing overall energy consumption.	
PLAN	LOCAL	**GENERAL URBAN PLAN OF IAȘI MUNICIPALITY 2018**	The General Urban Plan sets the objectives, actions, and measures for the urban development of Iași Municipality, ensuring the necessary conditions through specific regulations.	Recent urban development has significantly increased construction in the municipality, but has suffered in quality due to the lack of administrative coordination in urban	The Climate Neutrality Action adopts a supra-local spatial focus, to address emission sources at a metropolitan scale, in particular those generated from commuting by private

TYPE	LEVEL	TITLE	DESCRIPTION	RELEVANCE	NEED FOR ACTION
			Originally created in 1999 and updated in 2018, it serves as a fundamental document for guiding the city's future development and provides the regulatory framework for spatial urban management in Iași.	planning and infrastructure, including utility networks, road access, cycling and pedestrian pathways, public transport, community facilities for education, health, sports, local services, and public green spaces.	cars. It also includes carbon sequestration measures across the metropolitan area, and training programs for public representatives (including those involved in planning and decision-making), and other relevant stakeholders.
PLAN	LOCAL	**SUSTAINABLE ENERGY AND CLIMATE ACTION PLAN 2030**	The Sustainable Energy and Climate Action Plan (SECAP) is a strategic medium to long-term document that outlines the local public administration's policies related to energy and the environment, developed following the methodology of the Covenant of Mayors. Its primary goal is to reduce CO2 emissions from final energy consumption within the administrative territory of Iași.	The Plan targets municipal buildings, tertiary buildings, residential buildings, public lighting, municipal fleet, public transport, private and commercial transport, the electricity and thermal energy production sector of the city, with a baseline of the emissions inventory set in 2012.	The interventions identified in the Climate Neutrality Action Plan aim to transform Iași Municipality into a climate neutral city by 2030 (with further emission reductions by 2035), accelerating the transition and expanding the measures outlined in the SECAP. The Climate Neutrality Action Plan also extends the SECAP's emission inventory (the SECAP lacks information on the IPPU and AFOLU sectors). It builds on existing SECAP data, updating where possible, and incorporates additional open-source data.
PLAN	LOCAL	**SUSTAINABLE URBAN MOBILITY PLAN POST-2020**	The Sustainable Urban Mobility Plan is the instrument for planning the mobility and transport needs of people and goods for Iași Municipality and its metropolitan area.	The main objective of the Sustainable Urban Mobility Plan at the level of the Iași Growth Pole is to propose measures that will lead to improved accessibility of the municipality and its relationship with other municipalities in the metropolitan area, through socially, economically and environmentally sustainable use of means of transport, as well as the integration of different modes of mobility and transport.	The Climate Neutrality Action Plan is strongly focused on projects that support alternative mobility, while ensuring an integrated metropolitan public transport and reducing reliance on private vehicles. The Plan also includes the development of park-and-ride facilities and the provision of green energy for electric vehicles through a network of charging stations, supporting the reduction of overall energy consumption and emissions in the city.

TYPE	LEVEL	TITLE	DESCRIPTION	RELEVANCE	NEED FOR ACTION
STRATEGY	LOCAL	**THERMAL ENERGY SUPPLY STRATEGY 2030**	The strategy aims to provide a realistic roadmap for achieving climate neutrality. It covers the analysis of heating and cooling demand of the city. It provides an overview of the district heating system and the buildings sector, as well as the potential for renewable energy production.	The strategy highlights that the average energy consumption of residential buildings in Iași is higher than the national average, requiring comprehensive energy efficiency measures. The measures proposed cover both the technical and demand side (increasing the energy efficiency of the district heating system and the rehabilitation of buildings and behaviour change related to energy consumption)	Considering that about 70% of residential buildings use individual heating systems based on natural gas, a major objective of the Climate Neutrality Action Plan is to promote the increase the efficiency of the district heating system and attract more users. This will be done through the construction of a geothermal power plant and a high-efficiency cogeneration plant, alongside modernising the public heating network, thus significantly cutting CO2 emissions.
PROGRAMME	LOCAL	**ENERGY EFFICIENCY IMPROVEMENT PROGRAMME FOR IAȘI MUNICIPALITY**	The main purpose of the Local Energy Efficiency Plan is to optimise energy consumption and identify alternative sources of energy, to ensure rational energy consumption and efficient use of renewable energy sources.	The programme covers several key areas relevant for achieving climate neutrality, namely: electrical energy; street lighting; municipal buildings; solid waste; district heating system; drinking water and wastewater; urban transport.	The Climate Neutrality Action Plan is aligned with the objectives of the Plan and includes ambitious measures for improving energy efficiency in public and residential buildings, including the installation of photovoltaic panels, as well as the implementation of nZEB+ standards in new public buildings. It also covers the modernisation of public lighting with energy-efficient systems.
STRATEGY	LOCAL	**TOURISM DEVELOPMENT STRATEGY FOR IAȘI AND ITS METROPOLITAN AREA 2018-2030**	The strategy aims to provide a rich offer for leisure time activities for its residents and to define a competitive and attractive tourist destination for visitors. It was developed with the participation of the local community, hospitality students and stakeholders from the tourism industry of Iași.	Among other measures such as brand and destination management and the development of quality tourism products and infrastructure, the Plan also includes the revitalisation of green spaces as a development direction.	Measures in the Climate Neutrality Action Plan for the development of green spaces (such as the development of a green-blue corridor on the Bahlui river), along with public transport and cycling infrastructure are set to also encourage sustainable tourism. The tourism sector will also be involved as a key actor in the achievement of climate neutrality.
STRATEGY	LOCAL	**INTEGRATED AIR QUALITY PLAN 2021-2025**	The integrated air quality plan includes a set of quantifiable measures from the point of view of their efficiency, which the City Hall of Iași must apply, so that the limit values for nitrogen dioxide (NO2) and suspended particles (PM10 and PM2.5).	The strategy highlights that the city has a very large number of cars with low pollution norms (Non-Euro, Euro 1, 2 and 3), and that car traffic is the major source of pollution at the level of the urban agglomeration of Iași. The amount of emissions increased as a result of the increase in the car fleet.	The Climate Neutrality Action Plan contributes to improved air quality through a set of measures to support alternative mobility (walking, cycling), public transport, and the use of electric vehicles.

TYPE	LEVEL	TITLE	DESCRIPTION	RELEVANCE	NEED FOR ACTION
STRATEGY	LOCAL	**DIGITAL TRANSFORMATION STRATEGY FOR IAȘI MUNICIPALITY**	The Digital Transformation Strategy was developed in 2019, following the Municipality of Iași's success in the 2017 Digital Cities Challenge, organised by the European Commission. The strategy was developed by experts from the European Commission in collaboration with local specialists. It encompasses key domains relevant for the transition to climate neutrality: smart governance, smart environment, smart living, smart economy, smart people/citizens.	In particular, measures under the smart environment objective aim to manage waste sustainably, reduce CO2 emissions, manage resources responsibly and prevent pollution while maintaining the attractiveness of natural conditions. Smart Mobility includes urban traffic management, improving public transport and infrastructure, supporting intelligent logistics and promoting alternative and multimodal transport options for better accessibility.	The Climate Neutrality Action Plan includes two additional interventions that are aligned with the digital transformation strategy: the digitalisation of waste collection and the development of a web platform for monitoring climate KPIs, which will directly support the achievement of climate targets, while ensuring accountability and transparency.
PROGRAM	LOCAL	**MULTI-ANNUAL PROGRAMME FOR THE DISPOSAL OF USED VEHICLES FROM THE MUNICIPALITY OF IASI**	The programme aims to eliminate vehicles older than 15 years from traffic to increase air quality, protect green spaces and stimulate the renewal of public, private and commercial vehicles fleet.	The programme contributes directly to reducing carbon emission in the city and metropolitan area. Beneficiaries receive vouchers for their old vehicles, financed from the national Environmental Agency and the municipal budget.	The Climate Neutrality Action Plan complements the programme for the disposal of used vehicles. The development of an extensive network of EV charging stations is required to stimulate the renewal of the privately owned car fleet.
STRATEGY	NATIONAL	**NATIONAL INTEGRATED PLAN FOR ENERGY AND CLIMATE CHANGE 2021 – 2030 (NIPECC)**	The National Plan for Energy and Climate Change was adopted in 2019 and was formulated in accordance with the EU energy policy framework, detailing the main objectives for 2030.	According to the Plan, Romania aims to increase its share of energy from renewable sources in the total energy consumption by 2030 by increasing the installed capacity of wind and photovoltaic plants (additional capacities of 6.9 GW from renewable sources compared to 2015), as well as by increasing the number of prosumers.	The Climate Neutrality Action Plan is aligned with the objectives of the NIPECC in terms of reducing GHG emissions and increasing the capacity of renewable energy generation, accelerating the process of achieving the national targets.
POLICY	NATIONAL	**ROMANIA URBAN POLICY 2022-2035 (RUP)**	The first Urban Policy of Romania was adopted in 2021, transposing the new Leipzig Charter through its four objectives (green & resilient, just & inclusive, competitive & productive & well	The second priority of the RUP is 'Creating liveable and climate-smart cities, by developing green-blue infrastructure to mitigate and adapt to urban risks'. The RUP includes a variety of measures related to the climate	Interventions included in the Action Plan for the transition to climate neutrality are aligned with the objectives and priorities of the Urban Policy of Romania.

TYPE	LEVEL	TITLE	DESCRIPTION	RELEVANCE	NEED FOR ACTION
			governed cities).	adaptation and mitigation, reducing air pollution and improving sustainable urban Mobility, with a 2035 target.	

ACTION PORTFOLIO

For each action aimed at achieving climate neutrality as outlined in this Plan, fill out a sheet using the template provided below.

- **Make sure to also include, within this section, the actions pertaining to Organisational and Governance Innovation, as well as the actions related to Social and Other Innovation fields.**

TABLE 13 INDIVIDUAL ACTIONS

ACTION TITLE	**ENCOURAGING THE USE OF GREEN PUBLIC TRANSPORT**
TYPE OF ACTION	Technical intervention
SCALE AND TARGET GROUP (ADDRESSED ENTITIES)	Metropolitan area
FIELD OF ACTION	SUSTAINABLE URBAN MOBILITY
SYSTEMIC LEVER	Technology/Infrastructure
EMISSION DOMAIN(S)	Transport
COVERED INTERVENTIONS	→ Rebuilding "Dacia" Tram & Electric Bus Depot → New public transport Depot in Fortus Industrial Area → Purchase of new trams and electric buses, including chargers → Expansion of tram lines to Valea Lupului → Expansion of tram lines to Tomești → Expansion of tram lines to Holboca → Rehabilitation of BCU - Triumf (including Rond) tram line → Rehabilitation of Podu Ros - Anastasie Panu tram line → Integrated and accessible metropolitan public transport (stations, fleet) → Metropolitan train, including stations, parkings
BRIEF DESCRIPTION	The action to promote green public transport includes several significant interventions. These include the reconstruction of the "Dacia" Tram and Electric Bus Depot to modernise and increase its operational capacity, as well as the establishment of a new public transport depot in the Fortus Industrial Area to support fleet maintenance and operations. The action also involves the purchase of 16 new trams and 49 electric buses, complete with the necessary chargers, designed to reduce CO2 emissions and improve service efficiency. Additionally, tram lines will be extended to Valea Lupului, Tomești and Holboca, in order to broaden the coverage and accessibility within the public transport network. Key tram lines, including BCU - Triumf (with Rond) and Podu Roș - Anastasie Panu, will also be rehabilitated. An integrated and smart metropolitan public transport system will be developed and it will incorporate upgraded stations and fleet for improved connectivity. A metropolitan rail system will be introduced and completed with new stations and parking spaces, to facilitate metropolitan commuting. By 2030, the expansion of the public transport options at the metropolitan level will play a massive role in significantly reducing the CO_2 emissions generated by travel. This development aims to decrease the car usage among the residents of Iași and its surrounding metropolitan area, whether they are city residents commuting to jobs in the metropolitan LAUs, or metropolitan residents traveling to workplaces based in Iași.
OUTCOME	Modal shift to public transportation

ACTION TITLE	**ENCOURAGING THE USE OF GREEN PUBLIC TRANSPORT**
RESPONSIBLE ENTITY / BODY / PERSON	Municipality, Ministry of Transport, Public Transport Operator, County Council, National Railway Company, Individual Citizen
INVOLVED STAKEHOLDERS	Iași Municipality, Iași County Council, Iași Metropolitan Area Intercommunity Development Association, Iași Public Transport Company, Management Authority from the Ministry of Transport, National Railway Company
GHG EMISSIONS REDUCTION ESTIMATE (TOTAL) PER EMISSION SOURCE SECTOR	**2030:** Transport: 76,307.62 tons CO2/year **2035:** Transport: 78,082.74 tons CO2/year
% OF TOTAL CO2 REDUCTION	**2030:** 13.08% **2035:** 11.72%
GENERATED RENEWABLE ENERGY (IF APPLICABLE)	N/A
REMOVED / SUBSTITUTED ENERGY, VOLUME OR FUEL TYPE	**2030:** Transport: Electrical energy: -20,000.00 MWh/year (increase in electrical energy due to increase in use of electric public transport) Diesel: 179,827.40 MWh/year Gasoline: 119,884.94 MWh/year **2035:** Transport: Electrical energy: -22,000.00 MWh/year (increase in electrical energy due to increase in use of electric public transport) Diesel: 185,821.65 MWh/year Gasoline: 123,881.10 MWh/year
TIMELINE (START AND END)	2026-2035

ACTION TITLE	**PROMOTION OF ALTERNATIVE MOBILITY, WITH A FOCUS ON CYCLING AND WALKING**
TYPE OF ACTION	Technical intervention
SCALE AND TARGET GROUP (ADDRESSED ENTITIES)	Metropolitan area
FIELD OF ACTION	SUSTAINABLE URBAN MOBILITY
SYSTEMIC LEVER	Technology / Infrastructure
EMISSION DOMAIN(S)	Transport

ACTION TITLE	**PROMOTION OF ALTERNATIVE MOBILITY, WITH A FOCUS ON CYCLING AND WALKING**
COVERED INTERVENTIONS	➔ "Iasi Velo City" - automatic bike renting stations ➔ Integrated metropolitan cycling network ➔ Intermodal facilities ➔ Modernization of sidewalks and alleys ➔ Rabla Local - support for the decommitment of polluting cars and their replacement with Evs ➔ Shared space areas for the prioritisation of urban mobility
BRIEF DESCRIPTION	This action includes the implementation of "Iași Velo City," an automated bicycle rental system deployed citywide to provide convenient access to bicycles for short-term use. Furthermore, upgrades to sidewalks and pedestrian walkways are planned to enhance the safety, accessibility and comfort for pedestrians. Additionally, the action involves expanding the metropolitan bike lanes and pathways, in order to improve the connectivity across various parts of the metropolitan area. Intermodal facilities will also be developed, to seamlessly integrate different modes of transportation, including bicycle and pedestrian stations and thereby enhancing the overall connectivity. The interventions proposed to facilitate the green and active mobility across the metropolitan area will be vital for reducing the CO_2 emissions by 2030, as they aim to encourage the residents of Iași and its metropolitan area to adopt more sustainable commuting habits by choosing cleaner transportation options for their travels to and from the city. The intermodal solutions will serve as a key pillar of this approach, effectively supporting the development and use of the metropolitan-level cycling infrastructure. The action also encompasses the implementation of the "Rabla Local" program, which offers financial incentives to residents for disposing of old, polluting vehicles and encourages their replacement with electric vehicles. Shared space infrastructure will be created to facilitate a good coexistence between pedestrians, cyclists and vehicles and also enhancing the urban safety and accessibility.
OUTCOME	Modal shift to non-motorized transportation
RESPONSIBLE ENTITY / BODY / PERSON	Municipality, Local NGOs that are active in the field of citizen engagement, active citizenship, community initiatives.
INVOLVED STAKEHOLDERS	Iași Municipality, Iași Metropolitan Area Intercommunity Development Association, Iași Public Transport Company, Local innovation ecosystem, Private sector, Technical University "Gheorghe Asachi" Iași, "Alexandru Ioan Cuza" University of Iași, Local NGOs that are active in the field of citizens engagement
GHG EMISSIONS REDUCTION ESTIMATE (TOTAL) PER EMISSION SOURCE SECTOR	**2030:** Transport: 32,799.10 tons CO2/year **2035:** Transport: 33,345.75 tons CO2/year
% OF TOTAL CO2 REDUCTION	**2030:** 5.62% **2035:** 5.01%
GENERATED RENEWABLE ENERGY (IF APPLICABLE)	N/A

ACTION TITLE	**PROMOTION OF ALTERNATIVE MOBILITY, WITH A FOCUS ON CYCLING AND WALKING**
REMOVED / SUBSTITUTED ENERGY, VOLUME OR FUEL TYPE	**2030:** Transport: Diesel: 77,650.85 MWh/year Gasoline: 47,954.69 MWh/year **2035:** Transport: Diesel: 78,945.03 MWh/year Gasoline: 48,753.94 MWh/year
TIMELINE (START AND END)	2026-2035

ACTION TITLE	**TRAFFIC CONGESTION RELIEF OF MAJOR BOULEVARDS AND CROSSROADS**
TYPE OF ACTION	Technical intervention
SCALE AND TARGET GROUP (ADDRESSED ENTITIES)	Metropolitan area
FIELD OF ACTION	SUSTAINABLE URBAN MOBILITY
SYSTEMIC LEVER	Technology/Infrastructure
EMISSION DOMAIN(S)	Transport
COVERED INTERVENTIONS	➔ Enlargement of C.A. Rosetti Boulevard (DN 24) ➔ Park & Ride facilities ➔ Light traffic beltway ➔ Zero-emission public parking ➔ Anastasie Panu-Palat Underpass ➔ Rehabilitation of Cerna Bridge ➔ Rehabilitation of Socola Overpass
BRIEF DESCRIPTION	Within this action, several interventions aimed at alleviating traffic congestion along the major boulevards and intersections are proposed. The enlargement of C.A. Boulevard Rosetti (DN 24) seeks to enhance traffic flow and significantly reduce congestion. Concurrently, the development of Park & Ride facilities at strategic locations aims to incentivise the use of public transportation, by offering commuters convenient parking options, and reducing the number of vehicles on the road. Additionally, the Municipality plans to construct a light traffic beltway encircling the city centre. This intervention aims to reroute traffic and alleviate congestion in densely populated urban areas. The development of zero-emission public parking lots equipped with EV charging stations is also included in this action. This intervention not only promotes environmentally friendly transportation alternatives but also contributes to reducing pollution. The construction of an underpass at Anastasie Panu-Palat is also intended to enhance the traffic flow, alleviate congestion, and improve connectivity at this critical intersection. Additionally, the rehabilitation of the Cerna Bridge aims to ensure its structural integrity, safety, and longevity, as a key transport link. Lastly, this comprehensive action encompasses the rehabilitation of the Socola Overpass, focusing on improving its condition, extending its lifespan, and ensuring the safety and efficiency of this traffic route.

ACTION TITLE	**TRAFFIC CONGESTION RELIEF OF MAJOR BOULEVARDS AND CROSSROADS**
OUTCOME	Urban traffic decongestion
RESPONSIBLE ENTITY / BODY / PERSON	Municipality, County Council, Public Transport Operator Company, Ministry of Transport, Individual Citizens.
INVOLVED STAKEHOLDERS	Iași Municipality, Iași County Council, Iași Metropolitan Area's Intercommunity Development Association, Iași Public Transport Company, Management Authority from the Ministry of Transport
GHG EMISSIONS REDUCTION ESTIMATE (TOTAL) PER EMISSION SOURCE SECTOR	**2030:** Transport: 54,665.17 tons CO2/year **2035:** Transport: 68,331.46 tons CO2/year
% OF TOTAL CO2 REDUCTION	**2030:** 9.37% **2035:** 10.26%
GENERATED RENEWABLE ENERGY (IF APPLICABLE)	N/A
REMOVED / SUBSTITUTED ENERGY, VOLUME OR FUEL TYPE	**2030:** Transport: Diesel: 129,418.08 MWh/year Gasoline: 79,924.49 MWh/year **2035:** Transport Diesel: 161,772.60 MWh/year Gasoline: 99,905.61 MWh/year
TIMELINE (START AND END)	2026-2035

ACTION TITLE	**EXPANSION AND MODERNISATION OF GREEN AREAS FOR CARBON CAPTURE AND STORAGE**
TYPE OF ACTION	Nature-based solution
SCALE AND TARGET GROUP (ADDRESSED ENTITIES)	All citizens within the metropolitan area
FIELD OF ACTION	GREEN INFRASTRUCTURE AND NATURE BASED SOLUTIONS
SYSTEMIC LEVER	Technology/Infrastructure
EMISSION DOMAIN(S)	Buildings
COVERED INTERVENTIONS	➔ Rehabilitation of Ciurchi Park ➔ City gardens

ACTION TITLE	**EXPANSION AND MODERNISATION OF GREEN AREAS FOR CARBON CAPTURE AND STORAGE**
BRIEF DESCRIPTION	➔ Modernisation of parks ➔ Network of municipal and metropolitan pocket parks This action comprises four key interventions. The rehabilitation of Ciurchi Park is aimed at enhancing its functionality, aesthetic appeal, and ecological importance, by transforming it into a dynamic green space conducive to recreational activities and biodiversity conservation. Additionally, the development of urban gardens will enrich the local greenery, offering residents accessible leisure spaces and fostering community engagement. The existing parks will also undergo modernisation works, in order to incorporate contemporary amenities, sustainable landscaping, and green infrastructure, and enhance their recreational and environmental benefits. The action also foresees the development of a network of pocket municipal and metropolitan parks. These strategically positioned, small-scale parks aim to enhance access to green areas and increase climate resilience. Given the latest local initiatives targeting both the green areas and the watercourses, this action is expected to play a significant role in capturing the CO_2 emissions by 2030, complementing the implementation of the actions proposed for decreasing the local and metropolitan pollution. Furthermore, by 2035, it will be significantly scaled up, to further strengthen the capacity of the natural systems to capture the residual CO_2 emissions.
OUTCOME	Easy access of residents to green areas in their proximity
RESPONSIBLE ENTITY / BODY / PERSON	Municipality, Association for Intercommunity Development Iași Metropolitan area, County Council.
INVOLVED STAKEHOLDERS	Iași Municipality, Iași County Council, "Gheorghe Asachi" Technical University of Iași (Faculty of Architecture "G.M. Cantacuzino", Faculty of Chemical Engineering and Environmental Protection "Cristofor Simionescu"), "Alexandru Ioan Cuza" University of Iași (Faculty of Geography and Geology), the Order of Romanian Architects (especially Iași branch), National Environmental Agency, Association for Intercommunity Development Iași Metropolitan Area, Local NGOs that are active in the field of environmental protection and the urban sector, Local NGOs active in the field of citizen engagement, active citizenship, Local innovation ecosystem & Private sector, North - East Regional Development Agency.
GHG EMISSIONS REDUCTION ESTIMATE (TOTAL) PER EMISSION SOURCE SECTOR	**2030:** Buildings: abate 35,840.90 tons CO2/year Buildings: remove 3,254.64 tons CO2/year (due to decrease in electrical energy required for cooling as a result of mitigation of urban heat island effect) Transport: abate 24,466.56 tons CO2/year Transport: remove 2,605.50 tons CO2/year (due to increase in walking and decrease in personal car use as a result of mitigation of urban heat island effect) IPPU: abate 2,809.59 tons CO2/year Waste: abate 215.55 tons CO2/year AFOLU: abate 209.40 tons CO2/year **2035:** Buildings: abate 36,404.95 tons CO2/year Buildings: remove 3,180.41 tons CO2/year (due to decrease in electrical energy required for cooling as a result of mitigation of urban heat island effect) Transport: abate 24,851.61 tons CO2/year Transport: remove 5,732.10 tons CO2/year (due to increase in walking and decrease in personal car use as a result of mitigation of urban heat island effect) IPPU: abate 2,853.80 tons CO2/year Waste: abate 218.94 tons CO2/year AFOLU: abate 212.70 tons CO2/year

ACTION TITLE	**EXPANSION AND MODERNISATION OF GREEN AREAS FOR CARBON CAPTURE AND STORAGE**
% OF TOTAL CO2 REDUCTION	**2030:** 11.90% **2035:** 11.03%
GENERATED RENEWABLE ENERGY (IF APPLICABLE)	N/A
REMOVED / SUBSTITUTED ENERGY, VOLUME OR FUEL TYPE	**2030:** Buildings: Electrical energy: 7,315.69 MWh/year Transport: Diesel: 5,994.25 MWh/year Gasoline: 3,996.16 MWh/year **2035:** Buildings: Electrical energy: 8,534.97 MWh/year Transport: Diesel: 13,187.34 MWh/year Gasoline: 8,791.56 MWh/year
TIMELINE (START AND END)	2026-2035

ACTION TITLE	**CREATING A METROPOLITAN NETWORK OF GREEN-BLUE CORRIDORS**
TYPE OF ACTION	Nature-based solution
SCALE AND TARGET GROUP (ADDRESSED ENTITIES)	Metropolitan area
FIELD OF ACTION	GREEN INFRASTRUCTURE AND NATURE BASED SOLUTIONS
SYSTEMIC LEVER	Technology/Infrastructure
EMISSION DOMAIN(S)	Transport
COVERED INTERVENTIONS	➔ Green-blue corridor along Bahlui River
BRIEF DESCRIPTION	The "Green-Blue Corridor along the Bahlui River" is the key intervention for the action aimed at establishing a metropolitan network of green-blue corridors. As such, this action encompasses the restoration and revitalisation of areas along the Bahlui River. The intervention entails the development of green spaces, pedestrian and cycling pathways, and water management systems designed to foster biodiversity, mitigate pollution, and cultivate a more sustainable and enjoyable urban landscape for both residents and visitors. As with the previous action, this one is also regarded as a priority for capturing the residual emissions by 2030, with the public administration actively working to fast-track its implementation for timely execution. By 2035, its intervention will be further strengthened

ACTION TITLE	**CREATING A METROPOLITAN NETWORK OF GREEN-BLUE CORRIDORS**
	through the development of more nature-based solutions along the Bahlui corridor, aiming to maximize its impact on offsetting the remaining CO_2 emissions.
OUTCOME	Development of a green-blue backbone along Bahlui river
RESPONSIBLE ENTITY / BODY / PERSON	Municipality, Association for Intercommunity Development Iași Metropolitan area, County Council, suburbs' Public Administrations.
INVOLVED STAKEHOLDERS	Iași Municipality, Iași County Council, Prut-Bârlad Water Agency, "Gheorghe Asachi'' Technical University of Iași (Faculty of Architecture "G.M. Cantacuzino"), "Alexandru Ioan Cuza" University of Iași (Faculty of Geography and Geology), The Order of Romanian Architects (especially Iași branch), National Environmental Agency, Association for Intercommunity Development Iași Metropolitan Area, Local NGOs active in the field of environmental protection and the urban sector, Local NGOs active in the field of citizen engagement, Local innovation ecosystem & Private sector, North - East Regional Development Agency.
GHG EMISSIONS REDUCTION ESTIMATE (TOTAL) PER EMISSION SOURCE SECTOR	**2030:** Buildings: abate 34,486.05 tons CO2/year Transport: abate 23,541.68 tons CO2/year Transport: remove 5,211.00 tons CO2/year (due to increase in walking and decrease in personal car use as a result of mitigation of urban heat island effect) IPPU: abate 2,703.38 tons CO2/year Waste: abate 207.40 tons CO2/year AFOLU: abate 201.49 tons CO2/year **2035:** Buildings: abate 35,614.16 tons CO2/year Transport: abate 24,311.77 tons CO2/year Transport: remove 6,253.20 tons CO2/year (due to increase in walking and decrease in personal car use as a result of mitigation of urban heat island effect) IPPU: abate 2,791.81 tons CO2/year Waste: abate 214.18 tons CO2/year AFOLU: abate 208.08 tons CO2/year
% OF TOTAL CO2 REDUCTION	**2030:** 11.38% **2035:** 10.42%
GENERATED RENEWABLE ENERGY (IF APPLICABLE)	N/A
REMOVED / SUBSTITUTED ENERGY, VOLUME OR FUEL TYPE	**2030:** Transport: Diesel: 11,988.49 MWh/year (increase in walking and decrease in personal car use) Gasoline: 7,992.33 MWh/year (increase in walking and decrease in personal car use) **2035:** Transport: Diesel: 14,386.19 MWh/year (increase in walking and decrease in personal car use) Gasoline: 9,590.79 MWh/year (increase in walking and decrease in personal car use)

ACTION TITLE	**CREATING A METROPOLITAN NETWORK OF GREEN-BLUE CORRIDORS**
TIMELINE (START AND END)	2026-2035

ACTION TITLE	**DEVELOPING A FUNCTIONAL CIRCULAR ECONOMY ECOSYSTEM**
TYPE OF ACTION	Technical intervention
SCALE AND TARGET GROUP (ADDRESSED ENTITIES)	Residential districts and areas
FIELD OF ACTION	WASTE AND CIRCULAR ECONOMY
SYSTEMIC LEVER	Technology/Infrastructure
EMISSION DOMAIN(S)	Waste
COVERED INTERVENTIONS	➔ Digitised eco-islands for separate waste collection ➔ Voluntary centres for separate waste collection ➔ Digitalisation of waste collection fleet
BRIEF DESCRIPTION	The action aimed at developing a functional circular economy ecosystem comprises three interventions. Firstly, the installation of digitised eco-islands equipped with advanced sorting technology will enhance the efficiency and accessibility of the recycling processes. Secondly, the establishment of voluntary centres for separate waste collection will encourage community participation and facilitate proper waste management. Lastly, the digitalisation of the waste collection fleet through GPS integration and route optimization software is intended to improve efficiency, reduce emissions, and enhance overall waste collection management.
OUTCOME	Functional circular economy ecosystem
RESPONSIBLE ENTITY / BODY / PERSON	Municipality, Iași's Waste Operator Company
INVOLVED STAKEHOLDERS	Iași Municipality, Iași's Waste Operator, Local NGOs that are active in the field of environmental protection and the urban sector, Local NGOs that are active in the field of citizen engagement, active citizenship, community initiatives, Local innovation ecosystem & Private sector, IND-AGRO-POLE Cluster (Agro-industry technologies and technical equipment for agriculture and food industry)
GHG EMISSIONS REDUCTION ESTIMATE (TOTAL) PER EMISSION SOURCE SECTOR	**2030:** Waste: 645.37 tons CO2/year **2035:** Waste: 1,250.01 tons CO2/year
% OF TOTAL CO2 REDUCTION	**2030:** 0.11% **2035:** 0.19%

ACTION TITLE	**DEVELOPING A FUNCTIONAL CIRCULAR ECONOMY ECOSYSTEM**
GENERATED RENEWABLE ENERGY (IF APPLICABLE)	N/A
REMOVED / SUBSTITUTED ENERGY, VOLUME OR FUEL TYPE	**2030:** Waste: Electrical energy: 101.89 MWh/year Diesel: 2,177.06 MWh/year Gasoline: 7,51 MWh/year **2035:** Waste: Electrical energy: 203.77 MWh/year Diesel: 4,354.13 MWh/year Gasoline: 15.02 MWh/year
TIMELINE (START AND END)	2026-2035

ACTION TITLE	**INCREASING THE ENERGY EFFICIENCY OF PUBLIC BUILDINGS**
TYPE OF ACTION	Technical intervention
SCALE AND TARGET GROUP (ADDRESSED ENTITIES)	Public buildings
FIELD OF ACTION	BUILT ENVIRONMENT
SYSTEMIC LEVER	Technology/Infrastructure
EMISSION DOMAIN(S)	Buildings
COVERED INTERVENTIONS	➔ Thermal rehabilitation of public buildings (kindergartens, schools, hospitals, administrative buildings), including solar / photovoltaic panels, heat pumps, building management systems (BMS)
BRIEF DESCRIPTION	Increasing the energy efficiency of public buildings requires comprehensive measures, including the thermal rehabilitation of key facilities such as kindergartens, schools, hospitals, and administrative buildings. This intervention entails enhancing the insulation, upgrading the windows and doors, and improving the roofing, to minimise heat loss. Additionally, the implementation of solar panels and photovoltaic systems to harness sunlight for electricity generation will reduce the reliance on conventional energy sources. The integration of heat pumps could offer an effective means of regulating the indoor temperatures, by transferring heat from the surroundings. Moreover, the adoption of advanced building management systems will optimise the operation of heating, ventilation, air conditioning, and lighting systems, ensuring efficient usage, only when necessary.
OUTCOME	Energy savings
RESPONSIBLE ENTITY / BODY / PERSON	Municipality, Public Entities headquartered in targeted public buildings, Energy Manager
INVOLVED	Iași Municipality, the Electric Heating Private Company, Public Entities based in targeted public

ACTION TITLE	**INCREASING THE ENERGY EFFICIENCY OF PUBLIC BUILDINGS**
STAKEHOLDERS	buildings, the North-East Regional Development Agency, the Romanian Council for Green Buildings, the Technical University of Iași (Faculty of Architecture "G.M. Cantacuzino") the Romanian Order of Architects (in particular the Iași branch), the National Environment Agency, the Association for Intercommunity Development Iași Metropolitan Area
GHG EMISSIONS REDUCTION ESTIMATE (TOTAL) PER EMISSION SOURCE SECTOR	**2030:** Buildings: 8,033.93 tons CO2/year **2035:** Buildings: 8,095.19 tons CO2/year
% OF TOTAL CO2 REDUCTION	**2030:** 1.38% **2035:** 1.22%
GENERATED RENEWABLE ENERGY (IF APPLICABLE)	N/A
REMOVED / SUBSTITUTED ENERGY, VOLUME OR FUEL TYPE	**2030:** Buildings: Electrical energy: 3,747.01 MWh/year Natural gas: 8,570.24 MWh/year Thermal energy: 12,258.40 MWh/year **2035:** Buildings: Electrical energy: 4,065.91 MWh/year Natural gas: 9,299.63 MWh/year Thermal energy: 12,958.88 MWh/year
TIMELINE (START AND END)	2026-2035

ACTION TITLE	**INCREASING THE ENERGY EFFICIENCY OF RESIDENTIAL BUILDINGS**
TYPE OF ACTION	Technical intervention
SCALE AND TARGET GROUP (ADDRESSED ENTITIES)	Residential area
FIELD OF ACTION	BUILT ENVIRONMENT
SYSTEMIC LEVER	Technology/Infrastructure
EMISSION DOMAIN(S)	Buildings
COVERED INTERVENTIONS	➔ Thermal rehabilitation and seismic consolidation of multi-apartment buildings, including photovoltaic panels
BRIEF DESCRIPTION	As part of the action to enhance the energy efficiency of residential buildings, the Municipality

ACTION TITLE	**INCREASING THE ENERGY EFFICIENCY OF RESIDENTIAL BUILDINGS**
	will undertake the thermal rehabilitation and seismic consolidation of multi-apartment buildings, accompanied by the integration of photovoltaic panels. This comprehensive approach aims to enhance both the energy performance and structural integrity of the residential structures. Through the thermal rehabilitation measures, the buildings will have a lower energy consumption for heating and cooling, consequently decreasing the utility costs and reducing the environmental impact. Furthermore, the incorporation of photovoltaic panels will facilitate the generation of clean and sustainable energy, reducing the local dependence on traditional energy sources and ensuring energy efficiency. The seismic consolidation measures will guarantee the safety and resilience of buildings during potential seismic events, safeguarding residents and properties, while also increasing energy-efficiency. This action is a priority for reducing the local emissions by 2030, with the homeowner associations of the multi-apartment residential blocks in Iași playing a key role in its roll-out. These associations are instrumental in mobilizing the residents to support the local efforts aimed at improving the energy efficiency of the collective residential buildings, which are widespread throughout the city. Their strong engagement and organizational capacity make them highly effective in driving the targeted changes, as they serve as a vital link between the citizens and the public administration in implementing thermal rehabilitation programs. Moreover, the action is grounded in the principles of integrated, large-scale interventions, specifically designed to produce a dual impact, by simultaneously addressing climate change mitigation and adaptation in a coordinated and cohesive manner, in parallel with the seismic consolidation measures.
OUTCOME	Energy savings
RESPONSIBLE ENTITY / BODY / PERSON	Iași Municipality, The Order of Romanian Architects (especially Iași branch), Associations of house owners and citizens in targeted private buildings, the Technical University of Iași (Faculty of Architecture "G.M. Cantacuzino")
INVOLVED STAKEHOLDERS	Iași Municipality, Iași's Public Heating Companies (Thermal Power Plant S.A and Thermal Service S.A), The Federation of HomeOwners' Associations Iași, North-East Regional Development Agency, Romanian Green Building Council, Energy Company
GHG EMISSIONS REDUCTION ESTIMATE (TOTAL) PER EMISSION SOURCE SECTOR	**2030:** Buildings: 62,844.95 tons CO2/year **2035:** Buildings: 83,392.96 tons CO2/year
% OF TOTAL CO2 REDUCTION	**2030:** 10.78% **2035:** 12.52%
GENERATED RENEWABLE ENERGY (IF APPLICABLE)	N/A
REMOVED / SUBSTITUTED ENERGY, VOLUME OR FUEL TYPE	**2030:** Buildings: Electrical energy: 36,097.38 MWh/year Natural gas: 182,062.74 MWh/year

ACTION TITLE	**INCREASING THE ENERGY EFFICIENCY OF RESIDENTIAL BUILDINGS**
	Thermal energy: 26,467.20 MWh/year **2035:** Buildings: Electrical energy: 52,341.20 MWh/year Natural gas: 263,990.98 MWh/year Thermal energy: 29,113.92 MWh/year
TIMELINE (START AND END)	2026-2035

ACTION TITLE	**IMPLEMENTING THE NZEB+ STANDARDS FOR NEW PUBLIC BUILDINGS**
TYPE OF ACTION	Technical intervention
SCALE AND TARGET GROUP (ADDRESSED ENTITIES)	New public buildings
FIELD OF ACTION	BUILT ENVIRONMENT
SYSTEMIC LEVER	Technology/Infrastructure
EMISSION DOMAIN(S)	Buildings
COVERED INTERVENTIONS	➔ nZEB+ Social housing buildings ➔ nZEB+ Center for audiology & phonetics at Dr.C.I. Parhon Hospital ➔ Smart District (around the future Regional Emergency Hospital)
BRIEF DESCRIPTION	The implementation of nZEB+ standards for new public buildings involves interventions for both social housing buildings and the Center for Audiology & Phonetics at Dr. C.I. Parhon Hospital. Additionally, there is an intervention proposed for establishing a Smart District around the future Regional Emergency Hospital. The interventions for the nZEB+ social housing buildings will encompass various measures, such as enhancing the thermal insulation, installing energy-efficient windows and doors, integrating renewable energy systems (e.g., solar panels and heat pumps), and implementing building management systems to optimise the energy consumption. The nZEB+ Center for Audiology and Phonetics at Dr. C.I. Parhon Hospital is being developed to comply with rigorous energy efficiency standards. Regarding the Smart District surrounding the future Regional Emergency Hospital, the intervention will be devised to integrate measures such as renewable energy sources with energy storage systems, smart grids and energy-efficient infrastructure, electric vehicle charging stations, eco-friendly transportation solutions, and IoT devices and intelligent technologies (for effective resource management and real-time monitoring).
OUTCOME	Implementation of nearly zero-emission building standard for all public buildings
RESPONSIBLE ENTITY / BODY / PERSON	Iași Municipality, Public Entities headquartered in targeted public buildings, Energy Manager
INVOLVED STAKEHOLDERS	Iași Municipality, the Electric Heating Private Company, Public Entities based in targeted public buildings, the North-East Regional Development Agency, the Romanian Council for Green Buildings, the Technical University of Iași (Faculty of Architecture "G.M. Cantacuzino"), the

ACTION TITLE	**IMPLEMENTING THE NZEB+ STANDARDS FOR NEW PUBLIC BUILDINGS**
	Romanian Order of Architects (in particular the Iași branch), the National Environment Agency, the Association for Intercommunity Development Iași Metropolitan Area
GHG EMISSIONS REDUCTION ESTIMATE (TOTAL) PER EMISSION SOURCE SECTOR	**2030:** Buildings: 6,142.55 tons CO2/year **2035:** Buildings: 6,268.11 tons CO2/year
% OF TOTAL CO2 REDUCTION	**2030:** 1.05% **2035:** 0.94%
GENERATED RENEWABLE ENERGY (IF APPLICABLE)	N/A
REMOVED / SUBSTITUTED ENERGY, VOLUME OR FUEL TYPE	**2030:** Electrical energy: 2,391.71 MWh/year Natural gas: 5,470.37 MWh/year Thermal energy: 10,507.20 MWh/year **2035:** Electrical energy: 2,790.33 MWh/year Natural gas: 6,382.10 MWh/year Thermal energy: 10,857.44 MWh/year
TIMELINE (START AND END)	2026-2035

ACTION TITLE	**INCREASING THE EFFICIENCY AND ATTRACTIVENESS OF THE DISTRICT HEATING SYSTEM**
TYPE OF ACTION	Technical interventions
SCALE AND TARGET GROUP (ADDRESSED ENTITIES)	Districts (the ones supplied with public central heating)
FIELD OF ACTION	ENERGY SYSTEMS
SYSTEMIC LEVER	Technology/Infrastructure
EMISSION DOMAIN(S)	Buildings
COVERED INTERVENTIONS	➔ Decarbonisation of CET II Holboca by building a geothermal plant and a high-efficiency cogeneration plant ➔ Cogeneration gas & hydrogen turbines (thermal motors) at CET I Tudor Vladimirescu ➔ Rehabilitation and modernization of public heat supply network
BRIEF DESCRIPTION	The action proposed for enhancing the efficiency and attractiveness of the district heating system is structured around three key interventions: the decarbonization of CET II Holboca

ACTION TITLE	**INCREASING THE EFFICIENCY AND ATTRACTIVENESS OF THE DISTRICT HEATING SYSTEM**
	through the construction of a geothermal plant and a high-efficiency cogeneration plant, the installation of gas and hydrogen cogeneration turbines (thermal motors) at CET I Tudor Vladimirescu, and the rehabilitation and modernization of the public heat supply network. By 2030, substantial investments are planned for this action, which holds top-priority (urgent 0) status on the strategic project agenda of the local public administration. This urgency stems not only from the system's high energy consumption, but also from the significant positive impact that the modernization and efficiency improvements can deliver. Enhancing the performance and efficiency of the district heating system is expected to encourage a much larger number of residents to adopt it as a preferred solution for heating their homes.
OUTCOME	Sustainable public district heating system
RESPONSIBLE ENTITY / BODY / PERSON	Municipality, Public Heating Service Operator, Energy Manager
INVOLVED STAKEHOLDERS	Iași Municipality, Iași's Public Heating Company, Associations of home owners Iași, North-East Regional Development Agency, Romanian Green Building Council, Electric Heating Plant Company
GHG EMISSIONS REDUCTION ESTIMATE (TOTAL) PER EMISSION SOURCE SECTOR	**2030:** Buildings: 80,659.84 tons CO2/year **2035:** Buildings: 91,712.03 tons CO2/year
% OF TOTAL CO2 REDUCTION	**2030:** 13.83% **2035:** 13.77%
GENERATED RENEWABLE ENERGY (IF APPLICABLE)	N/A
REMOVED / SUBSTITUTED ENERGY, VOLUME OR FUEL TYPE	**2030:** Natural gas: 240,298.51 MWh/year Thermal energy: 43.304,50 MWh/year Biomass: 23.998,63 MWh/year **2035:** Natural gas: 288,358.21 MWh/year Thermal energy: 47,634.95 MWh/year Biomass: 27,998.40 MWh/year
TIMELINE (START AND END)	2026-2035

ACTION TITLE	**CONSOLIDATION OF LOCAL CAPACITIES FOR RENEWABLE ENERGY PRODUCTION**
TYPE OF ACTION	Technical intervention
SCALE AND TARGET	Buildings (both public - used for providing public services and private - residential ones)

ACTION TITLE	**CONSOLIDATION OF LOCAL CAPACITIES FOR RENEWABLE ENERGY PRODUCTION**
GROUP (ADDRESSED ENTITIES)	
FIELD OF ACTION	ENERGY SYSTEMS
SYSTEMIC LEVER	Technology/Infrastructure
EMISSION DOMAIN(S)	Buildings
COVERED INTERVENTIONS	➔ Photovoltaic park at CET II Holboca
BRIEF DESCRIPTION	The action to consolidate the local capacities for renewable energy production involves the development of a photovoltaic park at CET II Holboca, through the installation of an extensive array of solar panels. The electricity generated will be fed into the local grid, substantially reducing the dependence on fossil fuels and lowering the associated greenhouse gas emissions. Consequently, the photovoltaic park will enhance the sustainability of the local energy supply and promote the use of clean energy.
OUTCOME	Public energy consumption covered by renewable resources
RESPONSIBLE ENTITY / BODY / PERSON	Iași Municipality, Public Entities headquartered in targeted public buildings, Associations of house owners and citizens in targeted private buildings, Energy Manager
INVOLVED STAKEHOLDERS	Iași Municipality, Iași's Public Heating Company, Associations of home owners Iași, North-East Regional Development Agency, Romanian Green Building Council, Electric Heating Plant Company
GHG EMISSIONS REDUCTION ESTIMATE (TOTAL) PER EMISSION SOURCE SECTOR	**2030:** Buildings: 8,897.70 tons CO2/year **2035:** Buildings: 11,178.98 CO2/year
% OF TOTAL CO2 REDUCTION	**2030:** 1.53% **2035:** 1.68%
GENERATED RENEWABLE ENERGY (IF APPLICABLE)	**2030:** 20.000 MWh/year **2035:** 30.000 MWh/year
REMOVED / SUBSTITUTED ENERGY, VOLUME OR FUEL TYPE	**2030:** Buildings: Electrical energy: 20,000 MWh/year **2035:** Buildings: Electrical energy: 30,000 MWh/year
TIMELINE (START AND	2026-2035

ACTION TITLE	**CONSOLIDATION OF LOCAL CAPACITIES FOR RENEWABLE ENERGY PRODUCTION**
END)	

ACTION TITLE	**MODERNISATION OF PUBLIC LIGHTING**
TYPE OF ACTION	Technical intervention
SCALE AND TARGET GROUP (ADDRESSED ENTITIES)	Buildings (both public - used for providing public services and private - residential ones)
FIELD OF ACTION	ENERGY SYSTEMS
SYSTEMIC LEVER	Technology/Infrastructure
EMISSION DOMAIN(S)	Transport
COVERED INTERVENTIONS	➔ Modernisation of public lighting
BRIEF DESCRIPTION	The action to modernise public lighting focuses on upgrading the existing infrastructure with more energy-efficient and sustainable technologies. The covered intervention refers to replacing the traditional lighting fixtures with LED lights, implementing smart lighting systems for remote monitoring and control, and optimising the lighting design, in order to reduce both the light pollution and energy consumption. Consequently, through this action, the Municipality will achieve improved visibility, increased safety, and significant energy savings, while also reducing the environmental impact of this public service.
OUTCOME	Highly energy-efficient public lighting system
RESPONSIBLE ENTITY / BODY / PERSON	Municipality and Public Lighting Service Operator
INVOLVED STAKEHOLDERS	Iași Municipality, Iași's Public Lighting Service Company, North-East Regional Development Agency, Energy company
GHG EMISSIONS REDUCTION ESTIMATE (TOTAL) PER EMISSION SOURCE SECTOR	**2030:** Transport: 3,252.21 tons CO2/year **2035:** Transport: 4,880.55 tons CO2/year
% OF TOTAL CO2 REDUCTION	**2030:** 0.56% **2035:** 0.73%
GENERATED RENEWABLE ENERGY (IF APPLICABLE)	N/A
REMOVED / SUBSTITUTED	**2030:** Electrical energy: 6,963.80 MWh/year (energy savings from street lighting)

ACTION TITLE	**MODERNISATION OF PUBLIC LIGHTING**
ENERGY, VOLUME OR FUEL TYPE	Diesel: 5.994,25 MWh/year (better street lighting will encourage walking and less car use) Gasoline: 3.996,16 MWh/year (better street lighting will encourage walking and less car use) **2035:** Electrical energy: 7,958.62 MWh/year (energy savings from street lighting) Diesel: 8,991.37 MWh/year (better street lighting will encourage walking and less car use) Gasoline: 5,994.25 MWh/year (better street lighting will encourage walking and less car use)
TIMELINE (START AND END)	2026-2035

ACTION TITLE	**SUPPLY OF GREEN ENERGY FOR EVs**
TYPE OF ACTION	Technical intervention
SCALE AND TARGET GROUP (ADDRESSED ENTITIES)	Buildings (both public - used for providing public services and private - residential ones
FIELD OF ACTION	ENERGY SYSTEMS
SYSTEMIC LEVER	Technology/Infrastructure
EMISSION DOMAIN(S)	Transport
COVERED INTERVENTIONS	➔ Network of charging stations for EVs
BRIEF DESCRIPTION	The action refers to establishing a network of electric vehicle charging stations supplied by green energy, which will be strategically located throughout the city, in order to ensure convenient access for drivers. As such, the interventions will enable quick and efficient vehicle charging. Through this action, the Municipality aims to support the widespread adoption of electric vehicles, reduce the dependence on fossil fuels, and promote sustainable mobility behaviours among the residents.
OUTCOME	Larger share of public and private electric vehicles
RESPONSIBLE ENTITY / BODY / PERSON	Iași Municipality, Energy Company
INVOLVED STAKEHOLDERS	Iași Municipality, Energy Company , North-East Regional Development Agency
GHG EMISSIONS REDUCTION ESTIMATE (TOTAL) PER EMISSION SOURCE SECTOR	**2030:** Transport: 3,157.12 tons CO2/year **2035:** Transport: 4,852.05 tons CO2/year
% OF TOTAL CO2 REDUCTION	**2030:** 0.54% **2035:** 0.73%

ACTION TITLE	**SUPPLY OF GREEN ENERGY FOR EVs**
GENERATED RENEWABLE ENERGY (IF APPLICABLE)	**2030:** 18,800 MWh renewable energy **2035:** 35,000 MWh renewable energy
REMOVED / SUBSTITUTED ENERGY, VOLUME OR FUEL TYPE	**2030:** Electrical energy: -18,800 MWh/year (increase in electrical energy need - renewable energy is not stored in batteries but pumped in the grid, and so, the electrical energy needed to charge the EVs, although it is produced from renewable sources, it will be drawn directly from the grid) Diesel: 11,280.00 MWh/year Gasoline: 7,520.00 MWh/year **2035:** Electrical energy: -35,000.00 MWh/year (increase in electrical energy need - renewable energy is not stored in batteries but pumped in the grid, and so, the electrical energy needed to charge the EVs, although it is produced from renewable sources, it will be drawn directly from the grid) Diesel: 21,000.00 MWh/year Gasoline: 14,000.00 MWh/year
TIMELINE (START AND END)	2026-2035

ACTION TITLE	**ENHANCING THE LOCAL COMMITMENT FOR CLIMATE NEUTRALITY**
TYPE OF ACTION	Other interventions
SCALE AND TARGET GROUP (ADDRESSED ENTITIES)	All stakeholders foreseen for the implementation of the Climate Neutrality Action Plan
FIELD OF ACTION	SOFT INTERVENTIONS (GOVERNANCE INNOVATION AND SOCIAL INNOVATION)
SYSTEMIC LEVER	Democracy/Participation
EMISSION DOMAIN(S)	Buildings | Transport | IPPU | AFOLU
COVERED INTERVENTIONS	➔ Platform for green neighbourhood ambassadors ➔ Civic imagination for climate-neutrality (working groups, hackathon, competition for building owners etc.)
BRIEF DESCRIPTION	As part of the action aimed at strengthening the local commitment to climate neutrality, several key interventions will be implemented, playing a significant role in shifting the collective mindset towards a faster transition. One of the central interventions is the creation of the Green Neighborhood Ambassador Platform, designed to empower the community members to become advocates for sustainability and climate neutrality within their neighborhoods. Coordinated by the NetZeroCity Local Coalition, this platform is expected to drive transformative change across Iași's communities, by encouraging the residents to adopt climate-friendly habits in their everyday lives, ultimately leading to measurable reductions in the polluting emissions. At the same time, the Civic Imagination for Climate Neutrality program (which will feature activities such as working groups, hackathons, and competitions for the building owners) will be rolled out with support from the Coalition. This intervention aims to promote social innovation and provide the citizens with tools and opportunities to take an active role in climate

ACTION TITLE	**ENHANCING THE LOCAL COMMITMENT FOR CLIMATE NEUTRALITY**
	action. The goal is to generate practical, scalable solutions that can be consistently implemented at the local level, in order to both reduce and capture the CO_2 emissions.
OUTCOME	Municipal and metropolitan climate governance mechanism
RESPONSIBLE ENTITY / BODY / PERSON	All stakeholders foreseen for the implementation of the Climate Neutrality Action Plan
INVOLVED STAKEHOLDERS	All the stakeholders involved in implementing the Climate Neutrality Action Plan
GHG EMISSIONS REDUCTION ESTIMATE (TOTAL) PER EMISSION SOURCE SECTOR	**2030:** Buildings: 32,462.71 tons CO2/year Transport: 4,970.04 tons CO2/year IPPU: 9,623.90 tons CO2/year AFOLU: 125.00 tons CO2/year **2035:** Buildings: 35,492.78 tons CO2/year Transport: 6,023.85 tons CO2/year IPPU: 10,884.88 tons CO2/year AFOLU: 157.45 tons CO2/year
% OF TOTAL CO2 REDUCTION	**2030:** 8.09% **2035:** 7.89%
GENERATED RENEWABLE ENERGY (IF APPLICABLE)	N/A
REMOVED / SUBSTITUTED ENERGY, VOLUME OR FUEL TYPE	**2030:** Buildings: Electrical energy: 18,281.04 MWh/year Natural gas: 90,071.61 MWh/year Thermal energy: 16,223.62 MWh/year Transport: Electrical energy: 211.00 MWh/year Diesel: 11,389.07 MWh/year Gasoline: 7,592.71 MWh/year IPPU: Electrical energy: 5,185.47 MWh/year Natural gas: 25,549.05 MWh/year Thermal energy: 4,601.87 MWh/year AFOLU: Electrical energy: 46.38 MWh/year Natural gas: 228.51 MWh/year Thermal energy: 41.16 MWh/year

ACTION TITLE	**ENHANCING THE LOCAL COMMITMENT FOR CLIMATE NEUTRALITY**
	2035: Buildings: Electrical energy: 21,604.87 MWh/year Natural gas: 106,448.26 MWh/year Thermal energy: 16,371.11 MWh/year Transport: Electrical energy: 255.42 MWh/year Diesel: 13,786.77 MWh/year Gasoline: 9,191.18 MWh/year IPPU: Electrical energy: 6,222.56 MWh/year Natural gas: 30,658.86 MWh/year Thermal energy: 5,522.25 MWh/year AFOLU: Electrical energy: 77.30 MWh/year Natural gas: 380.84 MWh/year Thermal energy: 68.60 MWh/year
TIMELINE (START AND END)	2026-2035

ACTION TITLE	**PROMOTION AND SUPPORT OF CLIMATE NEUTRAL BEHAVIOURAL CHANGES**
TYPE OF ACTION	Other interventions
SCALE AND TARGET GROUP (ADDRESSED ENTITIES)	City wide
FIELD OF ACTION	SOFT INTERVENTIONS (GOVERNANCE INNOVATION AND SOCIAL INNOVATION
SYSTEMIC LEVER	Democracy/Participation
EMISSION DOMAIN(S)	Buildings | Transport | IPPU | Waste | AFOLU
COVERED INTERVENTIONS	➔ Awareness raising campaign for residents and companies at city level ➔ Awareness raising campaign for residents and companies at metropolitan level
BRIEF DESCRIPTION	Being closely aligned with the previous action, this one is also aimed at promoting and supporting climate-neutral behavioral changes, by launching targeted awareness campaigns for both the residents and the businesses at the city and metropolitan levels. The core objective is to inform, educate, and inspire the individuals and the organizations to embrace climate-neutral practices. By leveraging a variety of communication and engagement channels, along with educational programs, these campaigns will aim to deepen the public understanding of the importance of reducing the carbon footprint through the adoption of sustainable practices and by actively advocating for climate action within their own ecosystems. This action is expected to be highly successful, as the NetZeroCity Local Coalition has already laid the groundwork through early efforts that have received strong support from both the local population and the business sector. For instance, many companies are already progressing towards making their buildings and operations more energy efficient, and several are exploring

ACTION TITLE	**PROMOTION AND SUPPORT OF CLIMATE NEUTRAL BEHAVIOURAL CHANGES**
	further measures such as transitioning to electric vehicle fleets, using green energy solutions and promoting climate-conscious behaviors among their employees. Additionally, the real estate developers are increasingly integrating carbon footprint reduction into the planning and execution of their projects. On the citizen side, the awareness efforts will continue to motivate the individuals to swiftly reduce the emissions linked to their personal habits, reinforcing the behavioral changes promoted by the other soft actions. Together, this action and the preceding one will form key pillars in the city's approach for reducing the CO_2 emissions by 2030, with the potential to accelerate the emission reduction rates even further by 2035. This potential is strongly supported by the high level of local engagement, active stakeholder participation, and the growing culture of social innovation across Iași.
OUTCOME	Operational local coalition for climate neutrality
RESPONSIBLE ENTITY / BODY / PERSON	All stakeholders foreseen for the implementation of the Climate Neutrality Action Plan
INVOLVED STAKEHOLDERS	All the stakeholders involved in implementing the Climate Neutrality Action Plan
GHG EMISSIONS REDUCTION ESTIMATE (TOTAL) PER EMISSION SOURCE SECTOR	**2030:** Buildings: 48,554.88 tons CO2/year Transport: 5,217.17 tons CO2/year IPPU: 5,774.34 tons CO2/year Waste: 77.44 tons CO2/year AFOLU: 416.67 tons CO2/year **2035:** Buildings: 61,263.65 tons CO2/year Transport: 6,803.43 tons CO2/year IPPU: 7,256.59 tons CO2/year Waste: 122.50 tons CO2/year AFOLU: 692.78 tons CO2/year
% OF TOTAL CO2 REDUCTION	**2030:** 10.30% **2035:** 11.43%
GENERATED RENEWABLE ENERGY (IF APPLICABLE)	N/A
REMOVED / SUBSTITUTED ENERGY, VOLUME OR FUEL TYPE	**2030:** Buildings: Electrical energy: 24,385.64 MWh/year Natural gas: 120,149.25 MWh/year Thermal energy: 21,652.25 MWh/year Biomass: 7,999.54 MWh/year Transport: Electrical energy: 222.10 MWh/year Diesel: 11,988.49 MWh/year

ACTION TITLE	**PROMOTION AND SUPPORT OF CLIMATE NEUTRAL BEHAVIOURAL CHANGES**
	Gasoline: 7,992.33 MWh/year IPPU: Electrical energy: 3,111.28 MWh/year Natural gas: 15,329.43 MWh/year Thermal energy: 2,761.12 MWh/year Waste: Electrical energy: 12.23 MWh/year Diesel: 261.25 MWh/year Gasoline: 0.90 MWh/year AFOLU: Electrical energy: 154.59 MWh/year Natural gas: 761.69 MWh/year Thermal energy: 137.19 MWh/year **2035:** Buildings: Electrical energy: 34,139.89 MWh/year Natural gas: 168,208.95 MWh/year Thermal energy: 22,301.82 MWh/year Biomass: 11,199.36 MWh/year Transport: Electrical energy: 288.73 MWh/year Diesel: 15,585.04 MWh/year Gasoline: 10,390.03 MWh/year IPPU: Electrical energy: 4,148.37 MWh/year Natural gas: 20,439.24 MWh/year Thermal energy: 3,681.50 MWh/year Waste: Electrical energy: 19.97 MWh/year Diesel: 426.70 MWh/year Gasoline: 1.47 MWh/year AFOLU: Electrical energy: 340.10 MWh/year Natural gas: 1,675.71MWh/year Thermal energy: 301.83 MWh/year
TIMELINE (START AND END)	2026-2035

ACTION TITLE	**CONSOLIDATION OF LOCAL GOVERNANCE FOR CLIMATE NEUTRALITY**
TYPE OF ACTION	Other interventions

ACTION TITLE	**CONSOLIDATION OF LOCAL GOVERNANCE FOR CLIMATE NEUTRALITY**
SCALE AND TARGET GROUP (ADDRESSED ENTITIES)	City wide
FIELD OF ACTION	SOFT INTERVENTIONS (GOVERNANCE INNOVATION AND SOCIAL INNOVATION
SYSTEMIC LEVER	Democracy/Participation
EMISSION DOMAIN(S)	Buildings | IPPU | WASTE | AFOLU
COVERED INTERVENTIONS	➔ Training programme for public servants and stakeholders ➔ Web platform for monitoring climate-related KPIs
BRIEF DESCRIPTION	As part of this action to strengthen the local governance for climate neutrality, one intervention focuses on implementing a training program for the civil servants and stakeholders within the local ecosystem, particularly the members of the NetZeroCity Local Coalition, which now includes over 100 members (among which companies, NGOs, homeowner associations, public institutions, agencies, and enterprises, together with actors from the academia and the RDI sector). This comprehensive program will be designed to educate the participants on climate issues, mitigation strategies, and the vital role of local governance in achieving climate neutrality, ensuring that the transition is participatory and implemented across a multi-level, multi-sector system. The intervention will address mechanisms, structures, tools, frameworks, and other elements essential for the collaborative efforts to reduce carbon emissions effectively. Additionally, a second intervention will focus on developing a web-based platform for monitoring various climate-related KPIs. By presenting clear, real-time data, this platform will enable evidence-based actions to accelerate the transition to climate neutrality, including identifying areas that require more targeted, rapid, and large-scale interventions. This digital solution will track the key performance indicators continuously, providing analytics to support informed decision-making and advancing the city's climate neutrality objectives efficiently.
OUTCOME	Operational local coalition for climate neutrality
RESPONSIBLE ENTITY / BODY / PERSON	All stakeholders foreseen for the implementation of the Climate Neutrality Action Plan
INVOLVED STAKEHOLDERS	All the stakeholders involved in implementing the Climate Neutrality Action Plan
GHG EMISSIONS REDUCTION ESTIMATE (TOTAL) PER EMISSION SOURCE SECTOR	**2030:** Buildings: 614.26 tons CO2/year IPPU: 1,924.78 tons CO2/year Waste: 51.63 tons CO2/year AFOLU: 208.33 tons CO2/year **2035:** Buildings: 735.72 tons CO2/year IPPU: 2,031.85 tons CO2/year Waste: 80.00 tons CO2/year AFOLU: 220.43 tons CO2/year
% OF TOTAL CO2 REDUCTION	**2030:** 0.48% **2035:** 0.46%

ACTION TITLE	**CONSOLIDATION OF LOCAL GOVERNANCE FOR CLIMATE NEUTRALITY**
GENERATED RENEWABLE ENERGY (IF APPLICABLE)	N/A
REMOVED / SUBSTITUTED ENERGY, VOLUME OR FUEL TYPE	**2030:** Buildings: Electrical energy: 239.17 MWh/year Natural gas: 547.04 MWh/year Thermal energy: 1,050.72 MWh/year IPPU: Electrical energy: 1,037.09 MWh/year Natural gas: 5,109.81 MWh/year Thermal energy: 920.37 MWh/year Waste: Electrical energy: 8.15 MWh/year Diesel: 174.17 MWh/year Gasoline: 0.60 MWh/year AFOLU: Electrical energy: 77.30 MWh/year Natural gas: 380.84 MWh/year Thermal energy: 68.60 MWh/year **2035:** Buildings: Electrical energy: 302.95 MWh/year Natural gas: 692.91 MWh/year Thermal energy: 1,330.91 MWh/year IPPU: Electrical energy: 1,161.54 MWh/year Natural gas: 5,722.99 MWh/year Thermal energy: 1,030.82 MWh/year Waste: Electrical energy: 13.04 MWh/year Diesel: 278.66 MWh/year Gasoline: 0.96 MWh/year AFOLU: Electrical energy: 108.22 MWh/year Natural gas: 533.18 MWh/year Thermal energy: 96.04 MWh/year
TIMELINE (START AND END)	2026-2035

Present the targeted actions grouped together according to each field of action. Use one sheet for each distinct field of action, following the template provided below.

→ **Make sure to also include within this section the actions pertaining to Organisational and Governance Innovation, as well as the actions related to Social and Other Innovation fields.**

TABLE 14 PORTFOLIO OF ACTIONS

FIELD OF ACTION	**SUSTAINABLE URBAN MOBILITY**
LIST OF COVERED ACTIONS	→ Encouraging the use of green public transport → Promotion of alternative mobility, with a focus on cycling and walking → Traffic congestion relief of major boulevards and crossroads

FIELD OF ACTION	**GREEN INFRASTRUCTURE AND NATURE BASED SOLUTIONS**
LIST OF COVERED ACTIONS	→ Expansion and modernisation of green areas for carbon capture and storage → Creating a metropolitan network of green-blue corridors

FIELD OF ACTION	**WASTE AND CIRCULAR ECONOMY**
LIST OF COVERED ACTIONS	→ Developing a functional circular economy ecosystem

FIELD OF ACTION	**BUILT ENVIRONMENT**
LIST OF COVERED ACTIONS	→ Increasing the energy efficiency of public buildings → Increasing the energy efficiency of residential buildings → Implementing the nZEB+ standards for new public buildings

FIELD OF ACTION	**ENERGY SYSTEMS**
LIST OF COVERED ACTIONS	→ Increasing the efficiency and attractiveness of the district heating system → Consolidation of local capacities for renewable energy production → Modernisation of public lighting → Supply of green energy for Evs

FIELD OF ACTION	**SOFT INTERVENTIONS (GOVERNANCE INNOVATION AND SOCIAL INNOVATION) (CROSS-CUTTING)**
LIST OF COVERED ACTIONS	→ Enhancing local commitment for climate neutrality → Promotion and support of climate neutral behavioural changes → Consolidation of local governance for climate neutrality

IMPACT PATHWAYS

Provide a brief description of the theory of change you will use to achieve climate neutrality.

- ➔ **Use both textual and visual elements, as appropriate, to illustrate the impact pathways, which will be furtherly presented in the subsequent table.**
- ➔ **Make sure to also include within this section the actions pertaining to Organisational and Governance Innovation, as well as the actions related to Social and Other Innovation fields.**

FIGURE 1 IMPACT PATHWAYS: MOBILITY AND TRANSPORT

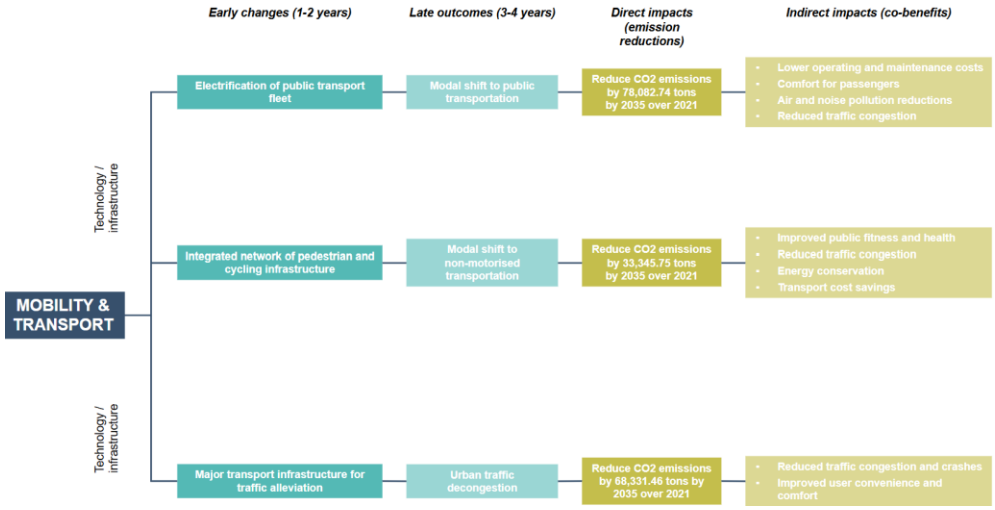


FIGURE 2 IMPACT PATHWAYS: BUILT ENVIRONMENT

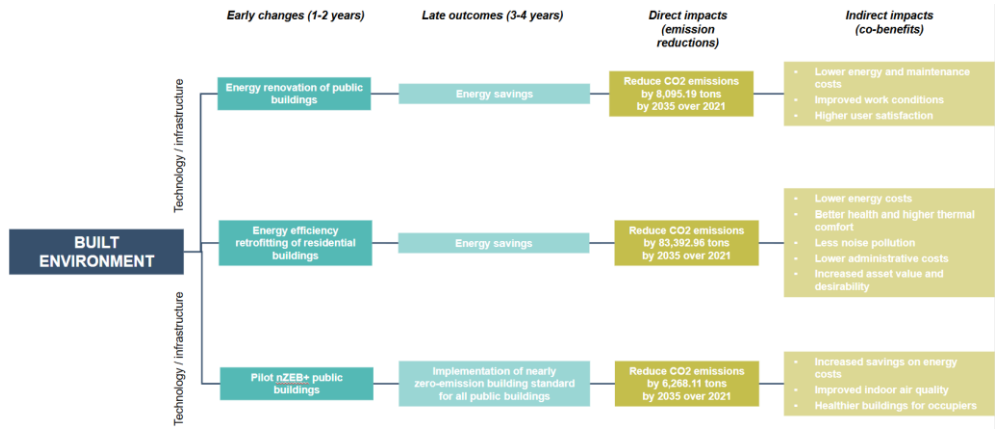


FIGURE 3 IMPACT PATHWAYS: ENERGY SYSTEMS

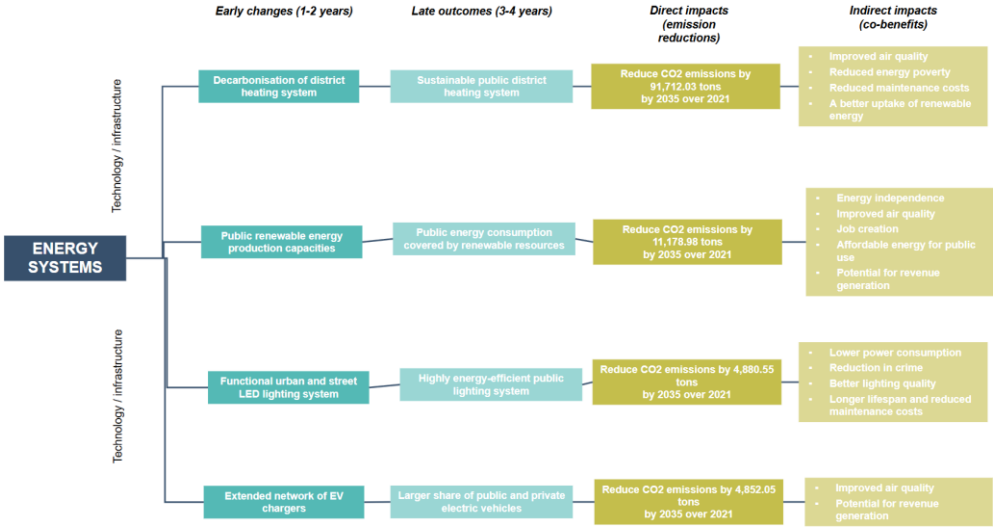


FIGURE 4 IMPACT PATHWAYS: GREEN INFRASTRUCTURE AND NATURE-BASED SOLUTIONS

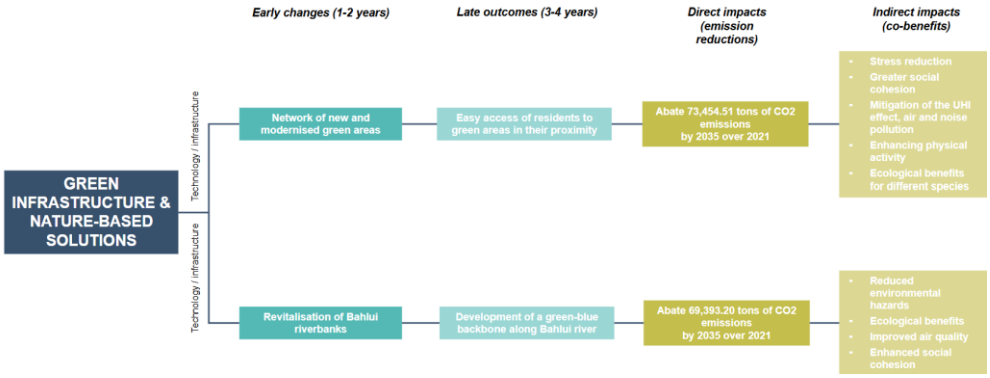


FIGURE 5 IMPACT PATHWAYS: WASTE AND CIRCULAR ECONOMY

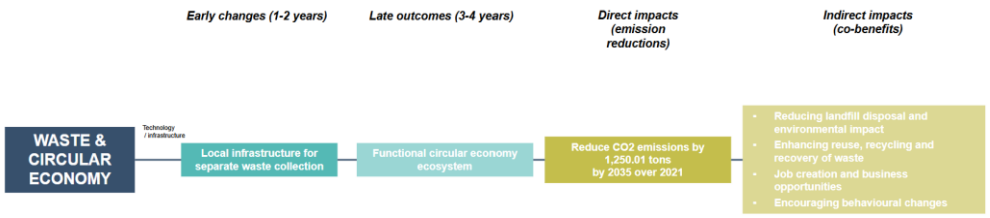


FIGURE 6 IMPACT PATHWAYS: ORGANISATIONAL AND GOVERNANCE INNOVATION

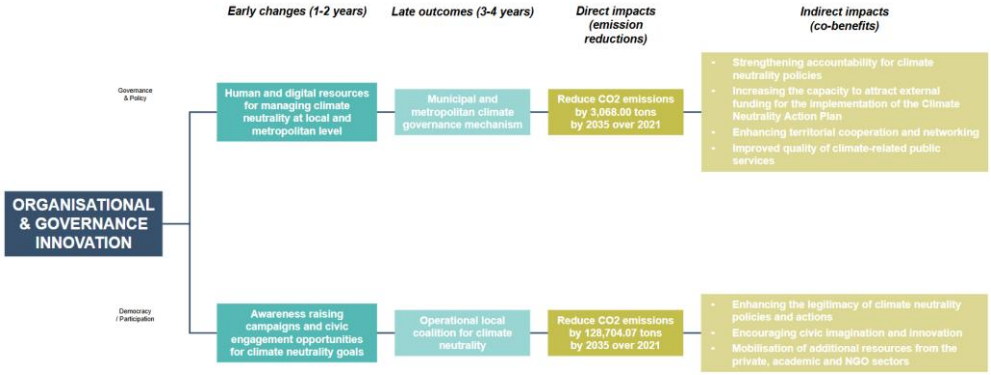


TABLE 15 IMPACT PATHWAYS

FIELDS OF ACTION	SYSTEMIC LEVERS	EARLY CHANGES (1-2 YEARS)	LATE OUTCOMES (3-4 YEARS)	DIRECT IMPACTS (EMISSION REDUCTIONS) 2021-2030	DIRECT IMPACTS (EMISSION REDUCTIONS) 2021-2035	INDIRECT IMPACTS (CO-BENEFITS)
MOBILITY & TRANSPORT	Technology / Infrastructure	Electrification of public transport fleet	Modal shift to public transportation	Reduce CO2 emissions by 76,307.62 tons	Reduce CO2 emissions by 78,082.74 tons	Lower operating and maintenance costs Comfort for passengers Air and noise pollution reductions Reduced traffic congestion
	Technology / Infrastructure	Integrated network of pedestrian and cycling infrastructure	Modal shift to non-motorised transportation	Reduce CO2 emissions by 32,799.10 tons	Reduce CO2 emissions by 33,345.75 tons	Improved public fitness and health Reduced traffic congestion Energy conservation Transport cost savings
	Technology / infrastructure	Major transport infrastructure for traffic alleviation	Urban traffic decongestion	Reduce CO2 emissions by 54,665.17 tons	Reduce CO2 emissions by 68,331.46 tons	Reduced traffic congestion and crashes Improved user convenience and comfort
ENERGY SYSTEMS	Technology / infrastructure	Decarbonisation of district heating system	Sustainable public district heating system	Reduce CO2 emissions by 80,659.84 tons	Reduce CO2 emissions by 91,712.03 tons	Improved air quality Reduced energy poverty Reduced maintenance costs A better uptake of renewable energy
	Technology / infrastructure	Public renewable energy production capacities	Public energy consumption covered by renewable resources	Reduce CO2 emissions by 8,897.70 tons	Reduce CO2 emissions by 11,178.98 tons	Energy independence Improved air quality Job creation Affordable energy for public use

FIELDS OF ACTION	SYSTEMIC LEVERS	EARLY CHANGES (1-2 YEARS)	LATE OUTCOMES (3-4 YEARS)	DIRECT IMPACTS (EMISSION REDUCTIONS) 2021-2030	DIRECT IMPACTS (EMISSION REDUCTIONS) 2021-2035	INDIRECT IMPACTS (CO-BENEFITS)
						Potential for revenue generation
	Technology / infrastructure	Functional urban and street LED lighting system	Highly energy-efficient public lighting system	Reduce CO2 emissions by 3,252.21 tons	Reduce CO2 emissions by 4,880.55 tons	Lower power consumption Reduction in crime Better lighting quality Longer lifespan and reduced maintenance costs
	Technology / infrastructure	Extended network of EV chargers	Larger share of public and private electric vehicles	Reduce CO2 emissions by 3,157.12 tons	Reduce CO2 emissions by 4,852.05 tons	Improved air quality Potential for revenue generation
BUILT ENVIRONMENT	Technology / infrastructure	Energy renovation of public buildings	Energy savings	Reduce CO2 emissions by 8,033.93 tons	Reduce CO2 emissions by 8,095.19 tons	Lower energy and maintenance costs Improved work conditions Higher user satisfaction
	Technology / infrastructure	Energy efficiency retrofitting of residential buildings	Energy savings	Reduce CO2 emissions by 62,844.95 tons	Reduce CO2 emissions by 83,392.96 tons	Lower energy costs Better health and higher thermal comfort Less noise pollution Lower administrative costs Increased asset value and desirability
	Technology / infrastructure	Pilot nZEB+ public buildings	Implementation of nearly zero-emission building standard for all public buildings	Reduce CO2 emissions by 6,142.55 tons	Reduce CO2 emissions by 6,268.11 tons	Increased savings on energy costs Improved indoor air quality Healthier buildings for occupiers
GREEN INFRASTRUCTURE & NATURE-BASED SOLUTIONS	Technology / infrastructure	Network of new and modernised green areas	Easy access of residents to green areas in their proximity	Abate 69,402.14 tons of CO2 emissions	Abate 73,454.51 tons of CO2 emissions	Stress reduction Greater social cohesion Mitigation of the UHI effect, air and noise pollution Enhancing physical activity Ecological benefits for different species
	Technology / infrastructure	Revitalisation of Bahlui river banks	Development of a green-blue backbone along Bahlui river	Abate 66,351.00 tons of CO2 emissions	Abate 69,393.20 tons of CO2 emissions	Reduced environmental hazards Ecological benefits Improved air quality Enhanced social cohesion
WASTE AND CIRCULAR ECONOMY	Technology / infrastructure	Local infrastructure for separate waste collection	Functional circular economy ecosystem	Reduce CO2 emissions by 645.37 tons	Reduce CO2 emissions by 1,250.01 tons	Reducing landfill disposal and environmental impact Enhancing reuse, recycling and recovery of waste

FIELDS OF ACTION	SYSTEMIC LEVERS	EARLY CHANGES (1-2 YEARS)	LATE OUTCOMES (3-4 YEARS)	DIRECT IMPACTS (EMISSION REDUCTIONS) 2021-2030	DIRECT IMPACTS (EMISSION REDUCTIONS) 2021-2035	INDIRECT IMPACTS (CO-BENEFITS)
						Job creation and business opportunities Encouraging behavioural changes
ORGANISATIONAL AND GOVERNANCE INNOVATION	Governance & Policy	Human and digital resources for managing climate neutrality at local and metropolitan level	Municipal and metropolitan climate governance mechanism	Reduce CO2 emissions by 2,799.00 tons	Reduce CO2 emissions by 3,068.00 tons	Strengthening accountability for climate neutrality policies Increasing the capacity to attract external funding for the implementation of the Climate Neutrality Action Plan Enhancing territorial cooperation and networking Improved quality of climate-related public services
	Democracy / participation	Awareness raising campaigns and civic engagement opportunities for climate neutrality goals	Operational local coalition for climate neutrality	Reduce CO2 emissions by 107,236.60 tons	Reduce CO2 emissions by 128,704.07 tons	Enhancing the legitimacy of climate neutrality policies and actions Encouraging civic imagination and innovation Mobilisation of additional resources from the private, academic and NGO sectors

STRATEGY FOR RESIDUAL EMISSIONS

Describe your approach to managing residual emissions.

According to the analysis conducted in the section outlining the Greenhouse Gas Emissions Baseline Inventory, following the implementation of the Climate Neutrality Action Plan, a residual quantity of 143,062.28 tons of CO2 emissions is anticipated at the local level in 2030 and 60,247.00 tons of CO2 in 2035. The residual emissions are divided according to their respective emission domains:

RESIDUAL EMISSIONS 2030:

- BUILDINGS: 87,853.05 CO2 tons
- TRANSPORT: 43,434.19 CO2 tons
- WASTE: 1,266.19 CO2 tons
- INDUSTRIAL PROCESS AND PRODUCT USE: 9,276.34 CO2 tons
- AGRICULTURAL, FORESTRY, AND LAND USE: 1,232.50 CO2 tons

RESIDUAL EMISSIONS 2035:

- BUILDINGS: 36,306.53 CO2 tons
- TRANSPORT: 16,167.17 tons
- WASTE: 577.95 CO2 tons
- INDUSTRIAL PROCESS AND PRODUCT USE: 6,293.39 CO2 tons
- AGRICULTURAL, FORESTRY, AND LAND USE: 901.95 CO2 tons

The Municipality's strategy for addressing the residual emissions comprises multiple dimensions, as detailed below.

SEQUESTRATION OF CARBON EMISSIONS

Within the Action Plan, one of the actions related to the green infrastructure and nature-based solutions focuses specifically on expanding and modernising green areas for carbon capture and storage. This action includes the development of Ciurchi Park, the modernisation of the existing parks, and the creation of new urban gardens and pocket parks in both Iași Municipality and its metropolitan area. Additionally, a metropolitan network of green-blue corridors, centred around the Bahlui River, will be developed. These interventions will facilitate the active absorption and storage of the atmospheric carbon dioxide, as the trees and the vegetation in the green spaces will capture the carbon through photosynthesis, converting it into organic matter and releasing oxygen. The positive impact will be further enhanced by the improvement of the soil quality, which will enable additional underground carbon storage.

REDUCTION OF RESIDUAL EMISSIONS THROUGH THE IMPLEMENTATION OF PROJECTS OUTLINED IN OTHER STRATEGIC DOCUMENTS

In addition to the interventions outlined in the Climate Neutrality Action Plan, other local strategic documents also incorporate measures aimed at reducing the CO2 emissions. Notably, the Green City Action Plan covers actions targeting the transport and mobility, the land use, the green spaces, biodiversity and nature-based solutions, the buildings, the solid waste, the water and wastewater, the energy, and the lighting sectors. All of these actions will directly contribute to the reduction of local CO2

emissions. Additionally, the actions proposed for implementing the smart city concept, for enhancing the environmental governance, and for building capacity will further support these efforts.

Moreover, the public administration has approved other local strategies, plans, and programmes that include measures directly impacting the reduction of the carbon footprint. The most relevant among these are the Integrated Urban Development Strategy and the General Urban Plan, the Sustainable Urban Mobility Plan, the Sustainable Energy and Climate Action Plan, the Thermal Energy Supply Strategy, the Sanitation Service Development Strategy and the Energy Efficiency Improvement Program for Iași Municipality.

FURTHER POTENTIAL MEASURES TO REDUCE THE RESIDUAL EMISSIONS (WHICH MAY BE IMPLEMENTED AS OPPORTUNITIES ARISE)

Such measures, already familiar to the technical staff of the Iași Municipality and the Iași Metropolitan Area association, could be implemented in the medium to long term, contingent on the availability of adequate opportunities for local stakeholders. These opportunities may include non-reimbursable funding sources for projects (e.g., Horizon Europe), partnerships with universities and R&D organisations, initiatives from the civil society (e.g., local co-design initiatives, such as Climathons), and collaborations with the private sector (e.g., piloting innovative solutions developed by private companies to test and validate them locally).

Buildings: Other innovative measures to further reduce CO2 emissions associated with the buildings sector could include:

- **AI-driven energy optimisation:** AI and machine learning algorithms could be used to manage and optimise energy use in real-time, adjusting heating, cooling, and lighting based on occupancy patterns and weather forecasts.
- **Carbon-absorbing concrete:** Utilising carbon-cured concrete that absorbs CO2 over its lifetime could help reduce emissions during production and sequester carbon from the atmosphere.
- **Biodiverse green roofs:** Developing biodiverse green roofs could enhance carbon sequestration, improve building insulation, and contribute to urban biodiversity.
- **Vertical farming:** Integrating vertical gardens on building facades could provide natural insulation, reduce the urban heat island effect, and contribute to local food production, reducing the carbon footprint associated with food transport.
- **Photovoltaic shading systems:** Shading systems equipped with photovoltaic panels could block excessive sunlight and generate renewable energy for the building.
- **Building material reuse platforms:** Digital platforms for the exchange and reuse of building materials could encourage the deconstruction of buildings rather than demolition, facilitating the recycling and repurposing of materials.
- **Modular construction:** Modular construction techniques could be promoted, where building components are prefabricated and can be easily disassembled and reused, reducing waste and emissions associated with construction and demolition.
- **Geothermal heat pumps:** Geothermal heat pump systems could leverage stable underground temperatures for highly efficient heating and cooling, significantly reducing energy consumption.

- **Phase-change materials (PCMs):** PCMs in building walls and ceilings could absorb and release thermal energy during phase transitions, maintaining stable indoor temperatures and reducing HVAC loads.
- **Gamification of energy savings:** Gamification elements could encourage occupants to reduce energy use, with rewards for achieving energy-saving milestones, fostering a culture of sustainability.
- **Personalised energy dashboards:** Personalised energy dashboards could provide occupants with real-time feedback on their energy consumption patterns and suggest tailored actions for improvement.

Transport: To further reduce emissions from the transport sector, a variety of innovative measures could be implemented. These measures could enhance the efficiency of transportation systems, promote the use of cleaner technologies, and encourage shifts towards more sustainable modes of transport.

- **Intelligent transportation systems (ITS):** Implementing ITS technologies that could optimise traffic flow, reduce congestion, and minimise idling times through real-time traffic monitoring and adaptive signal control.
- **Car-sharing programs:** Expanding car-sharing services with electric and hybrid vehicles could reduce the number of privately owned cars and lower overall emissions.
- **Hydrogen fuel cell vehicles:** Supporting the development and deployment of hydrogen fuel cell vehicles for heavy-duty transport, could provide a zero-emission alternative to diesel and gasoline engines.
- **Urban consolidation centres:** Expanding the network of last-mile logistic centres where goods are aggregated and delivered using low-emission vehicles or cargo bikes could reduce the number of delivery vehicles on the road.
- **Green freight programs:** Implementing programmes that encourage freight companies to adopt fuel-efficient practices, use cleaner technologies, and optimise routes.
- **Self-driving electric shuttles:** Deploying autonomous electric shuttles for public transport and last-mile connectivity could improve efficiency and reduce emissions in urban areas.
- **Integrated multi-modal mobility hubs:** Developing mobility hubs that combine various modes of transport, such as buses, trams, bike-sharing, and car-sharing, into a single location to facilitate seamless transitions between different types of transportation.
- **Transit-Oriented Development (TOD):** Promoting high-density, mixed-use development around public transport hubs to reduce the need for long commutes and encourage the use of public transit.
- **Mobility-as-a-Service (MaaS):** Introducing MaaS platforms that integrate various transport services into a single app, providing users with real-time information and seamless payment options for multi-modal journeys.

- **Travel Demand Management (TDM):** Implementing TDM programs that offer incentives for using public transport, carpooling, cycling, and walking, and provide information on the environmental impact of travel choices.

Waste: Additional measures could be implemented to further reduce emissions associated with the waste sector:

- **Advanced sorting technologies:** Implementing automated sorting systems using AI and robotics to efficiently separate recyclable materials from mixed waste streams, increasing recycling rates and reducing landfill use.
- **Composting initiatives:** Expanding community composting programs to manage organic waste more sustainably, could help in reducing methane emissions from landfills.
- **Anaerobic digestion:** Developing anaerobic digestion facilities that convert organic waste into biogas, which could be used as a renewable energy source, while also producing nutrient-rich digestate for use as fertiliser.
- **Incineration with energy recovery:** Using waste incineration plants that recover energy from non-recyclable waste, converting it into electricity and heat, could reduce the volume of waste sent to landfills.
- **Material reuse and upcycling:** Encouraging the reuse and upcycling of materials through initiatives such as repair cafes, maker spaces, and online platforms for exchanging reusable items.
- **Zero-Waste programmes:** Implementing zero-waste programmes that encourage businesses and communities to minimise waste generation through practices such as bulk purchasing, refill stations, and waste audits.
- **School programs:** Introducing waste education programs in schools to teach students about sustainability and waste management, fostering a culture of environmental responsibility from a young age.
- **Pay-As-You-Throw (PAYT):** Implementing PAYT systems that charge households and businesses based on the amount of waste they generate.
- **Resource exchange networks:** Creating networks where waste or byproducts from one industry are used as raw materials by another, reducing overall waste and promoting resource efficiency.
- **Ban on single-use plastics:** Enforcing bans or restrictions on single-use plastics to reduce plastic waste and promote the use of sustainable alternatives.
- **Waste diversion targets:** Setting ambitious waste diversion targets for municipalities and businesses to reduce the amount of waste sent to landfills and incineration, promoting recycling and composting.

IPPU: Additional strategies could be implemented to reduce CO2 emissions associated with the IPU sector. Some of these possible strategies could include the following:

- **Onsite renewable energy:** Incentives for installing solar panels, wind turbines, and other renewable energy systems on industrial sites to generate clean energy and reduce reliance on fossil fuels.
- **Industrial internet of things (IIoT):** Deploying IIoT devices and sensors to collect data on industrial processes, enabling monitoring of the industrial sector.
- **Zero-waste manufacturing:** Implementing zero-waste initiatives that would aim to eliminate waste generation through process redesign, material substitution, and recycling.
- **Circular business models:** Incentivising the adoption of circular economy business models that focus on the reuse, refurbishment, and recycling of products and materials to extend their lifecycle and reduce resource consumption.
- **Carbon pricing mechanisms:** Implementing carbon pricing mechanisms, such as carbon taxes or cap-and-trade systems, to encourage industries to reduce their carbon footprint and invest in cleaner technologies.

AFOLU: To reduce emissions from the Agriculture, Forestry, and Other Land Use (AFOLU) sector, various measures could also be implemented, focusing on sustainable land management, enhancing carbon sequestration, and promoting environmentally friendly agricultural practices.

- **Promotion of urban agriculture:** Promote the development of urban agriculture projects, such as rooftop gardens, community gardens, and vertical farming, to increase green space and local food production.
- **Zoning regulations:** Update zoning regulations to allow for and encourage urban agriculture in residential, commercial, and industrial areas.
- **Soil health improvement programmes:** Encourage and mandate practices that improve soil health, such as cover cropping, reduced tillage, and organic amendments, which enhance soil carbon storage and reduce erosion.
- **Conservation easements:** Establish conservation easements to protect agricultural lands and forests from being converted to urban development, maintaining their role in carbon sequestration and sustainable food production.
- **Efficient irrigation systems:** Mandate the adoption of efficient irrigation systems, such as drip irrigation and rainwater harvesting, to reduce water use and enhance soil health.
- **Organic waste collection:** Implement mandatory organic waste collection programs to divert organic waste from landfills and convert it into compost for use in urban agriculture and landscaping.
- **Composting facilities:** Establish and mandate the creation of municipal composting facilities to manage organic waste and produce compost, reducing methane emissions from landfills and enhancing soil health.
- **Sustainability workshops:** Mandate and provide funding for workshops and training programs for local farmers, gardeners, and residents on sustainable agricultural practices and land management techniques.

➔ **Technical assistance:** Provide technical assistance and resources to farmers, landowners, and community groups to implement sustainable practices effectively.

RESIDUAL EMISSIONS MONITORING

In order to effectively assess the outcomes resulting from the implementation of the aforementioned residual emissions strategy, the monitoring process outlined in the other sections of the Climate Neutrality Action Plan will comprehensively address the carbon capture dimension, alongside the CO2 emission reduction.

INDICATORS FOR MONITORING, EVALUATION AND LEARNING

TABLE 16 PORTFOLIO OF INDICATORS

ACTION	OUTCOME / IMPACT ADDRESSED	INDICATOR TITLE	INDICATOR CODE	TARGET VALUES		
				2027	2030	2035
Encouraging the use of green public transport	Share of daily trips by public transport (%)	Modal share	IS-NZC-I1	33%	45%	50%
Promotion of alternative mobility, with a focus on cycling and walking	Share of daily trips by non-motorised means (%)	Modal share	IS-NZC-I2	35%	40%	42%
Supply of green energy for electric vehicles	Share of electric vehicles out of total private and commercial fleet (%)	Modal share	IS-NZC-I3	2%	20%	25%
Expansion and modernisation of green areas for carbon capture and storage Creating a metropolitan network of green-blue corridors	Green spaces per capita	Green spaces	IS-NZC-I4	20 square metres per capita	35 square metres per capita	38 square metres per capita
Developing a functional circular economy ecosystem	Share of separate waste collection (%)	Separate waste collection	IS-NZC-I5	20%	30%	60%
Increasing the energy efficiency of public buildings	Share of renovated municipal buildings (%)	Public sector energy savings	IS-NZC-I6	70%	80%	90%
Increasing the energy efficiency of residential buildings	Share of renovated residential buildings (%)	Private sector energy savings	IS-NZC-I7	50%	60%	80%
Implementing the nZEB+ standards for new public buildings	Share of new NZEB+ public buildings (%)	Public sector energy savings	IS-NZC-I8	80%	100%	100%
Increasing the efficiency and attractiveness of the district heating system	Percentage decrease in the district heating system losses (%)	Public sector energy savings	IS-NZC-I9	20%	35%	37%
Consolidation of local capacities for renewable energy production	Share of municipal electricity consumption supplied from own renewable sources (%)	Renewable energy	IS-NZC-I10	80%	100%	100%
Modernisation of public lighting	Share of energy efficient bulbs for public lighting (%)	Public sector energy savings	IS-NZC-I11	70%	90%	100%
Enhancing local commitment for climate neutrality	Share of households involved in sustainability programmes (%)	Green energy for households	IS-NZC-I12	15%	50%	80%
Promotion and support of climate neutral behavioural changes	Number of citizen involvement and awareness campaigns for sustainability	Citizen awareness	IS-NZC-I13	20	30	35
Consolidation of local governance for climate neutrality	Number of participants in training programme dedicated to climate	Governance	IS-NZC-I14	50	500	700

ACTION	OUTCOME / IMPACT ADDRESSED	INDICATOR TITLE	INDICATOR CODE	TARGET VALUES		
				2027	2030	2035
	neutrality					

For every proposed indicator, fill out one Metadata Indicator sheet, by using the template provided below.

TABLE 17 INDICATOR METADATA: SHARE OF DAILY TRIPS BY PUBLIC TRANSPORT (%)

INDICATOR NAME	**Share of daily trips by public transport (%)**
INDICATOR UNIT	Percent
DEFINITION	The proportion of total daily trips made using public transportation.
CALCULATION	The total number of daily trips made by public transport divided by the total number of daily trips (including all modes of transportation), multiplied by 100.
DOES THE INDICATOR MEASURE DIRECT IMPACTS (I.E. REDUCTION IN GREENHOUSE GAS EMISSIONS?)	yes
IF YES, WHICH EMISSION SOURCE SECTORS DOES IT IMPACT?	Transport
DOES THE INDICATOR MEASURE INDIRECT IMPACTS (I.E. CO-BENEFITS)?	yes
IF YES, WHICH CO-BENEFIT DOES IT MEASURE?	Improved air quality, Reduced traffic congestion, Less noise pollution, Transport cost savings
IS THE INDICATOR CAPTURED BY THE EXISTING CDP/ SCIS/ COVENANT OF MAYORS PLATFORMS?	yes
EXPECTED DATA SOURCE	Public transport operators
EXPECTED AVAILABILITY (1-5)	4
SUGGESTED COLLECTION INTERVAL	Every 5 years
DELIVERABLES DESCRIBING THE INDICATOR	Comprehensive traffic study
OTHER INDICATOR SYSTEMS USING THIS INDICATOR	Reference Framework for Sustainable Cities, ISO 37110:2022 Sustainable cities and communities, Romania Urban Policy Indicators

TABLE 18 INDICATOR METADATA: SHARE OF DAILY TRIPS BY NON-MOTORISED MEANS (%)

INDICATOR NAME	**Share of daily trips by non-motorised means (%)**
INDICATOR UNIT	Percent
DEFINITION	The proportion of total daily trips made using non-motorized modes of transportation such as walking or cycling.
CALCULATION	The total number of daily trips made by non-motorized means (walking, cycling, etc.) divided by the total number of daily trips, multiplied by 100.
DOES THE INDICATOR MEASURE DIRECT IMPACTS (I.E. REDUCTION IN GREENHOUSE GAS EMISSIONS?)	yes
IF YES, WHICH EMISSION SOURCE SECTORS DOES IT IMPACT?	Transport
DOES THE INDICATOR MEASURE INDIRECT IMPACTS (I.E. CO-BENEFITS)?	yes
IF YES, WHICH CO-BENEFIT DOES IT MEASURE?	Improved air quality, Reduced traffic congestion, Less noise pollution, Improved public fitness and health, Transport cost savings
IS THE INDICATOR CAPTURED BY THE EXISTING CDP/ SCIS/ COVENANT OF MAYORS PLATFORMS?	yes
EXPECTED DATA SOURCE	Surveys, pedestrian and cyclist counts
EXPECTED AVAILABILITY (1-5)	4
SUGGESTED COLLECTION INTERVAL	Every 5 years
DELIVERABLES DESCRIBING THE INDICATOR	Comprehensive traffic study
OTHER INDICATOR SYSTEMS USING THIS INDICATOR	Reference Framework for Sustainable Cities, ISO 37110:2022 Sustainable cities and communities, Romania Urban Policy Indicators

TABLE 19 INDICATOR METADATA: SHARE OF ELECTRIC VEHICLES OUT OF TOTAL PRIVATE AND COMMERCIAL FLEET (%)

INDICATOR NAME	**Share of electric vehicles out of total private and commercial fleet (%)**
INDICATOR UNIT	Percent
DEFINITION	The proportion of electric vehicles (EVs) in relation to the combined total of private and commercial vehicles.
CALCULATION	The total number of electric vehicles (EVs) in the private and commercial fleet

INDICATOR NAME	**Share of electric vehicles out of total private and commercial fleet (%)**
	divided by the total number of vehicles (both electric and non-electric), multiplied by 100.
DOES THE INDICATOR MEASURE DIRECT IMPACTS (I.E. REDUCTION IN GREENHOUSE GAS EMISSIONS?)	yes
IF YES, WHICH EMISSION SOURCE SECTORS DOES IT IMPACT?	Transport
DOES THE INDICATOR MEASURE INDIRECT IMPACTS (I.E. CO-BENEFITS)?	yes
IF YES, WHICH CO-BENEFIT DOES IT MEASURE?	Improved air quality
IS THE INDICATOR CAPTURED BY THE EXISTING CDP/ SCIS/ COVENANT OF MAYORS PLATFORMS?	no
EXPECTED DATA SOURCE	Registration data from vehicle licensing authorities, EV sales reports
EXPECTED AVAILABILITY (1-5)	4
SUGGESTED COLLECTION INTERVAL	Annually
DELIVERABLES DESCRIBING THE INDICATOR	Comprehensive traffic study
OTHER INDICATOR SYSTEMS USING THIS INDICATOR	N/A

TABLE 20 INDICATOR METADATA: GREEN SPACE PER CAPITA

INDICATOR NAME	**Green space per capita**
INDICATOR UNIT	Percent
DEFINITION	The total area of green spaces in square metres per each resident.
CALCULATION	The total area of green spaces, divided by population.
DOES THE INDICATOR MEASURE DIRECT IMPACTS (I.E. REDUCTION IN GREENHOUSE GAS EMISSIONS?)	yes
IF YES, WHICH EMISSION SOURCE SECTORS DOES IT IMPACT?	AFOLU

INDICATOR NAME	**Green space per capita**
DOES THE INDICATOR MEASURE INDIRECT IMPACTS (I.E. CO-BENEFITS)?	yes
IF YES, WHICH CO-BENEFIT DOES IT MEASURE?	Mitigation of the UHI effect, air and noise pollution, Ecological benefits, Enhancing physical activity, Stress reduction
IS THE INDICATOR CAPTURED BY THE EXISTING CDP/ SCIS/ COVENANT OF MAYORS PLATFORMS?	yes
EXPECTED DATA SOURCE	CORINE Land Cover, National Institute of Statistics
EXPECTED AVAILABILITY (1-5)	5
SUGGESTED COLLECTION INTERVAL	Annually
DELIVERABLES DESCRIBING THE INDICATOR	Local register of green spaces
OTHER INDICATOR SYSTEMS USING THIS INDICATOR	Reference Framework for Sustainable Cities, ISO 37110:2022 Sustainable cities and communities, Romania Urban Policy Indicators

TABLE 21 INDICATOR METADATA: SHARE OF RENOVATED MUNICIPAL BUILDINGS (%)

INDICATOR NAME	**Share of renovated municipal buildings (%)**
INDICATOR UNIT	Percent
DEFINITION	The proportion of municipal buildings that have undergone renovation.
CALCULATION	The number of renovated municipal buildings divided by the total number of municipal buildings, multiplied by 100.
DOES THE INDICATOR MEASURE DIRECT IMPACTS (I.E. REDUCTION IN GREENHOUSE GAS EMISSIONS?)	yes
IF YES, WHICH EMISSION SOURCE SECTORS DOES IT IMPACT?	Buildings
DOES THE INDICATOR MEASURE INDIRECT IMPACTS (I.E. CO-BENEFITS)?	yes
IF YES, WHICH CO-BENEFIT DOES IT MEASURE?	Increased savings on energy costs, Longer lifespan and reduced maintenance costs, Improved indoor air quality, Improved work conditions
IS THE INDICATOR CAPTURED BY THE EXISTING CDP/ SCIS/ COVENANT OF MAYORS	yes

INDICATOR NAME	**Share of renovated municipal buildings (%)**
PLATFORMS?	
EXPECTED DATA SOURCE	Iași City Hall
EXPECTED AVAILABILITY (1-5)	5
SUGGESTED COLLECTION INTERVAL	Annually
DELIVERABLES DESCRIBING THE INDICATOR	Internal report
OTHER INDICATOR SYSTEMS USING THIS INDICATOR	Reference Framework for Sustainable Cities, ISO 37110:2022 Sustainable cities and communities, Romania Urban Policy Indicators

TABLE 22 INDICATOR METADATA: SHARE OF RENOVATED RESIDENTIAL BUILDINGS (%)

INDICATOR NAME	**Share of renovated residential buildings (%)**
INDICATOR UNIT	Percent
DEFINITION	The proportion of residential buildings that have been renovated.
CALCULATION	The number of renovated residential buildings divided by the total number of residential buildings, multiplied by 100.
DOES THE INDICATOR MEASURE DIRECT IMPACTS (I.E. REDUCTION IN GREENHOUSE GAS EMISSIONS?)	yes
IF YES, WHICH EMISSION SOURCE SECTORS DOES IT IMPACT?	Buildings
DOES THE INDICATOR MEASURE INDIRECT IMPACTS (I.E. CO-BENEFITS)?	yes
IF YES, WHICH CO-BENEFIT DOES IT MEASURE?	Increased savings on energy costs, Longer lifespan and reduced maintenance costs, Improved indoor air quality, Better health and higher thermal comfort, Increased asset value and desirability
IS THE INDICATOR CAPTURED BY THE EXISTING CDP/ SCIS/ COVENANT OF MAYORS PLATFORMS?	yes
EXPECTED DATA SOURCE	Iași City Hall
EXPECTED AVAILABILITY (1-5)	5
SUGGESTED COLLECTION INTERVAL	Annually

INDICATOR NAME	**Share of renovated residential buildings (%)**
DELIVERABLES DESCRIBING THE INDICATOR	Annual report
OTHER INDICATOR SYSTEMS USING THIS INDICATOR	Reference Framework for Sustainable Cities, ISO 37110:2022 Sustainable cities and communities, Romania Urban Policy Indicators

TABLE 23 INDICATOR METADATA: SHARE OF NEW NZEB+ PUBLIC BUILDINGS (%)

INDICATOR NAME	**Share of new NZEB+ public buildings (%)**
INDICATOR UNIT	Percent
DEFINITION	The percentage of newly constructed public buildings meeting nearly zero-energy building (NZEB) standards.
CALCULATION	The number of newly constructed public buildings meeting NZEB+ standards divided by the total number of new public buildings, multiplied by 100.
DOES THE INDICATOR MEASURE DIRECT IMPACTS (I.E. REDUCTION IN GREENHOUSE GAS EMISSIONS?)	yes
IF YES, WHICH EMISSION SOURCE SECTORS DOES IT IMPACT?	Buildings
DOES THE INDICATOR MEASURE INDIRECT IMPACTS (I.E. CO-BENEFITS)?	yes
IF YES, WHICH CO-BENEFIT DOES IT MEASURE?	Increased savings on energy costs, Longer lifespan and reduced maintenance costs, Improved indoor air quality
IS THE INDICATOR CAPTURED BY THE EXISTING CDP/ SCIS/ COVENANT OF MAYORS PLATFORMS?	no
EXPECTED DATA SOURCE	Iași City Hall
EXPECTED AVAILABILITY (1-5)	5
SUGGESTED COLLECTION INTERVAL	Annually
DELIVERABLES DESCRIBING THE INDICATOR	Internal report
OTHER INDICATOR SYSTEMS USING THIS INDICATOR	N/A

TABLE 24 INDICATOR METADATA: PERCENTAGE DECREASE IN THE DISTRICT HEATING SYSTEM LOSSES (%)

INDICATOR NAME	**Percentage decrease in the district heating system losses (%)**
INDICATOR UNIT	Percent
DEFINITION	The percentage reduction in energy losses within the district heating system.
CALCULATION	The difference between the initial and final losses in the district heating system, divided by the initial losses, multiplied by 100.
DOES THE INDICATOR MEASURE DIRECT IMPACTS (I.E. REDUCTION IN GREENHOUSE GAS EMISSIONS?)	yes
IF YES, WHICH EMISSION SOURCE SECTORS DOES IT IMPACT?	Buildings
DOES THE INDICATOR MEASURE INDIRECT IMPACTS (I.E. CO-BENEFITS)?	yes
IF YES, WHICH CO-BENEFIT DOES IT MEASURE?	Improved air quality, Lower energy costs
IS THE INDICATOR CAPTURED BY THE EXISTING CDP/ SCIS/ COVENANT OF MAYORS PLATFORMS?	no
EXPECTED DATA SOURCE	Iași District Heating Company
EXPECTED AVAILABILITY (1-5)	5
SUGGESTED COLLECTION INTERVAL	Annually
DELIVERABLES DESCRIBING THE INDICATOR	Internal report
OTHER INDICATOR SYSTEMS USING THIS INDICATOR	N/A

TABLE 25 INDICATOR METADATA: SHARE OF MUNICIPAL ELECTRICITY CONSUMPTION SUPPLIED FROM OWN RENEWABLE SOURCES (%)

INDICATOR NAME	**Share of municipal electricity consumption supplied from own renewable sources (%)**
INDICATOR UNIT	Percent
DEFINITION	The percentage of electricity consumed by municipal facilities that is generated from local renewable sources.

INDICATOR NAME	**Share of municipal electricity consumption supplied from own renewable sources (%)**
CALCULATION	The amount of electricity generated from municipal renewable sources by the total municipal electricity consumption, multiplied by 100
DOES THE INDICATOR MEASURE DIRECT IMPACTS (I.E. REDUCTION IN GREENHOUSE GAS EMISSIONS?)	yes
IF YES, WHICH EMISSION SOURCE SECTORS DOES IT IMPACT?	
DOES THE INDICATOR MEASURE INDIRECT IMPACTS (I.E. CO-BENEFITS)?	yes
IF YES, WHICH CO-BENEFIT DOES IT MEASURE?	A better uptake of renewable energy, Energy independence, Lower energy and maintenance costs
IS THE INDICATOR CAPTURED BY THE EXISTING CDP/ SCIS/ COVENANT OF MAYORS PLATFORMS?	no
EXPECTED DATA SOURCE	Iași City Hall
EXPECTED AVAILABILITY (1-5)	5
SUGGESTED COLLECTION INTERVAL	Annually
DELIVERABLES DESCRIBING THE INDICATOR	Internal report
OTHER INDICATOR SYSTEMS USING THIS INDICATOR	N/A

TABLE 26 INDICATOR METADATA: SHARE OF ENERGY EFFICIENT BULBS FOR PUBLIC LIGHTING (%)

INDICATOR NAME	**Share of energy efficient bulbs for public lighting (%)**
INDICATOR UNIT	Percent
DEFINITION	The proportion of energy-efficient light bulbs used in public lighting systems.
CALCULATION	The number of energy-efficient bulbs used for public lighting by the total number of bulbs installed, multiplied by 100.
DOES THE INDICATOR MEASURE DIRECT IMPACTS (I.E. REDUCTION IN GREENHOUSE GAS EMISSIONS?)	yes

INDICATOR NAME	**Share of energy efficient bulbs for public lighting (%)**
IF YES, WHICH EMISSION SOURCE SECTORS DOES IT IMPACT?	Transport (CO2 emissions from public lighting were accounted for in the Transport sector).
DOES THE INDICATOR MEASURE INDIRECT IMPACTS (I.E. CO-BENEFITS)?	yes
IF YES, WHICH CO-BENEFIT DOES IT MEASURE?	Reduction in crime, Better lighting quality
IS THE INDICATOR CAPTURED BY THE EXISTING CDP/ SCIS/ COVENANT OF MAYORS PLATFORMS?	no
EXPECTED DATA SOURCE	Public lighting operator
EXPECTED AVAILABILITY (1-5)	5
SUGGESTED COLLECTION INTERVAL	Annually
DELIVERABLES DESCRIBING THE INDICATOR	Internal report
OTHER INDICATOR SYSTEMS USING THIS INDICATOR	Reference Framework for Sustainable Cities, ISO 37110:2022 Sustainable cities and communities, Romania Urban Policy Indicators

TABLE 27 INDICATOR METADATA: SHARE OF HOUSEHOLDS INVOLVED IN SUSTAINABILITY PROGRAMMES (%)

INDICATOR NAME	**Share of households involved in sustainability programmes (%)**
INDICATOR UNIT	Percent
DEFINITION	The percentage of households participating in sustainability programmes implemented by the Iași City Hall
CALCULATION	The number of households involved in sustainability programmes (tax credits, grants and low-interest loans for energy renovation, carbon taxes, mandates for new buildings) divided by the total number of households, multiplied by 100.
DOES THE INDICATOR MEASURE DIRECT IMPACTS (I.E. REDUCTION IN GREENHOUSE GAS EMISSIONS?)	yes
IF YES, WHICH EMISSION SOURCE SECTORS DOES IT IMPACT?	Buildings
DOES THE INDICATOR MEASURE INDIRECT IMPACTS (I.E. CO-BENEFITS)?	yes

INDICATOR NAME	**Share of households involved in sustainability programmes (%)**
IF YES, WHICH CO-BENEFIT DOES IT MEASURE?	Encouraging behavioural changes, Ecological benefits
IS THE INDICATOR CAPTURED BY THE EXISTING CDP/ SCIS/ COVENANT OF MAYORS PLATFORMS?	no
EXPECTED DATA SOURCE	Iași City Hall
EXPECTED AVAILABILITY (1-5)	5
SUGGESTED COLLECTION INTERVAL	Annually
DELIVERABLES DESCRIBING THE INDICATOR	Internal report
OTHER INDICATOR SYSTEMS USING THIS INDICATOR	N/A

TABLE 28 INDICATOR METADATA: NUMBER OF CITIZEN INVOLVEMENT AND AWARENESS CAMPAIGNS FOR SUSTAINABILITY

INDICATOR NAME	**Number of citizen involvement and awareness campaigns for sustainability**
INDICATOR UNIT	Number
DEFINITION	The total count of initiatives or projects (e.g., events, trainings, workshops) involving citizen participation aimed at promoting sustainability organised by the Municipality or in partnership with other actors.
CALCULATION	Count of initiatives organised
DOES THE INDICATOR MEASURE DIRECT IMPACTS (I.E. REDUCTION IN GREENHOUSE GAS EMISSIONS?)	no
IF YES, WHICH EMISSION SOURCE SECTORS DOES IT IMPACT?	N/A
DOES THE INDICATOR MEASURE INDIRECT IMPACTS (I.E. CO-BENEFITS)?	yes
IF YES, WHICH CO-BENEFIT DOES IT MEASURE?	Encouraging behavioural changes, Encouraging civic imagination and innovation
IS THE INDICATOR CAPTURED BY THE EXISTING CDP/ SCIS/ COVENANT OF MAYORS PLATFORMS?	no

INDICATOR NAME	**Number of citizen involvement and awareness campaigns for sustainability**
EXPECTED DATA SOURCE	Internal activity reports
EXPECTED AVAILABILITY (1-5)	5
SUGGESTED COLLECTION INTERVAL	Annually
DELIVERABLES DESCRIBING THE INDICATOR	Activity reports - Iași Municipality
OTHER INDICATOR SYSTEMS USING THIS INDICATOR	N/A

STAKEHOLDERS

Provide a concise overview of the key stakeholders who hold significant influence or impact on the local transition to climate neutrality.

- ➔ **Make sure to also address the internal and external stakeholders that are relevant to the climate neutrality transition in terms of the necessary financing. For these stakeholders, address the funding issues both in the influence and interest columns, where applicable.**

The Iași Municipality is committed to leveraging all available opportunities through a comprehensive approach that encompasses infrastructure, capacities, processes, resource flows, alliances, and financial resources. This approach is designed to accelerate the achievement of local climate neutrality goals while simultaneously building resilience and enabling the sustainable development of the metropolitan area. Achieving climate neutrality is a complex objective that requires coordinated action across all sectors and at various territorial levels. It demands an inclusive strategy involving relevant authorities, civil society, the private sector, academia, and citizens. Iași Municipality is leading this initiative by actively engaging stakeholders from local to national levels.

This strategy was to build upon the governance model established in the Green City Action Plan. Consequently, the staff and structures involved in developing the Green City Action Plan were mobilised for developing the Climate Neutrality Action Plan. For implementation and monitoring, Iași Municipality will also use the governance model established in the Green City Action Plan. This approach will enable the efficient coordination of CO2 reduction actions, enhance the team's expertise, and improve internal processes to adequately address the climate neutrality dimension.

Moreover, Iași Municipality aims to expand the NetZeroCity Local Coalition, in order to deepen and broaden the collaboration with local businesses, NGOs, academia, and other stakeholders, fostering a united, cross-sectoral effort in advancing the city's climate neutrality objectives. Recognising the need for technical assistance, Iași Municipality plans to ensure that its teams are prepared to handle climate neutrality tasks and integrate them seamlessly into broader green initiatives. Such support will also help the Iași Metropolitan Area IDA disseminate climate goals across the entire metropolitan area through concrete actions. Iași Municipality's proactive approach not only makes the city more sustainable, but also sets an example for other Romanian cities on how the public sector can drive significant climate change initiatives.

In this journey, the involved stakeholders are:

- ➔ **The representatives of the local private sector:** To strengthen the local ecosystem's engagement in achieving climate neutrality, **the NetZeroCity Local Coalition** will effectively align local private sector stakeholders with the established CO2 emission reduction objectives.
- ➔ **The civil society (local NGOs and academia):** Civil society, including local NGOs and academia, plays a crucial role in our Action Plan. We have mapped out NGOs, academic institutions, vulnerable communities and other stakeholders, based on the participatory process of developing **the Green City Action Plan.** This inclusive approach ensures that their perspectives are integrated, not just in the completed phases but in future actions as well.
- ➔ **The funding entities:** Funding entities play a vital role in strategically allocating resources and prioritising climate-friendly investments to drive Iași and its metropolitan area towards a more

climate-neutral and resilient future. Most of the climate policies implemented at the local level so far have resulted from **thematic concentration within Cohesion Policy.** The city budget for capital expenditure relies heavily on EU and national funding. The significant share of EU funding allocated to climate change mitigation and adaptation in the last two programming periods has directly influenced local priorities. Consequently, Iași Municipality has prioritised public interventions in areas such as **energy renovation, public transport, urban renewal, and green infrastructure.**

TABLE 26. STAKEHOLDER ANALYSIS

STAKEHOLDER	SYSTEM	NETWORK	INFLUENCE	INTEREST	ENGAGEMENT
IAȘI CITY HALL	PROCESS	PUBLIC ADMINISTRATION	Collaborating with citizens, the local ecosystem, and various external stakeholders to develop, implement, evaluate, and monitor the interventions outlined in the Climate Neutrality Action Plan.	Mobilising all stakeholders to meet specified indicators and achieve the targets set in the Climate Neutrality Action Plan.	high
IAȘI LOCAL COUNCIL	PROCESSES	PUBLIC ADMINISTRATION	Supporting the implementation of the Climate Neutrality Action Plan by allocating resources, voting for climate neutral policies and regulations.	Enhancing efforts to tackle climate-related issues, for citizens' best interest.	high
IAȘI METROPOLITAN AREA'S INTERCOMMUNITY DEVELOPMENT ASSOCIATION	ALLIANCES	INTERJURISDICTIONAL ASSOCIATION	Expanding the climate neutrality vision, measures, and collaboration from the local level to the entire metropolitan area.	Promoting collaboration and knowledge transfer from the local to the metropolitan level.	high
IAȘI COUNTY COUNCIL	ALLIANCES	PUBLIC ADMINISTRATION	Adopting measures to achieve climate neutrality goals at the county level, promoting environmental awareness in rural communities.	Scaling Iași's climate neutrality transition model to the county level.	moderate
PUBLIC TRANSPORT AUTHORITY	INFRASTRUCTURES	PUBLIC SECTOR	Planning and implementing efficient, low-emission, and high-quality public transportation services catering to all citizens' needs.	Upgrading the fleet and extending the green public transportation network.	high
IAȘI PUBLIC TRANSPORT COMPANY	INFRASTRUCTURES	PUBLIC SECTOR			high
THERMAL POWER PLANT SA	INFRASTRUCTURES	PUBLIC SECTOR	Planning and implementing measures for minimising the environmental impact of the energy system.	Improving internal processes, increasing the efficiency of owned infrastructure, and increasing financial sustainability.	high
THERMAL SERVICE SA	INFRASTRUCTURES	PUBLIC SECTOR			high
SALUBRIS S.A.	INFRASTRUCTURES	PUBLIC SECTOR	Managing waste collection and transportation in a manner that promotes sustainability and reduces greenhouse gas emissions.	Mitigating pollution and fostering a cleaner, healthier urban environment, increasing the efficiency of services and financial sustainability.	high
PUBLIC SERVICES IAȘI SA	INFRASTRUCTURES	PUBLIC SECTOR	Managing green spaces in a sustainable manner, and implementing measures to enhance biodiversity and ecosystem health.	Contributing to the overall resilience of the city's urban environment in the face of climate change.	moderate

STAKEHOLDER	SYSTEM	NETWORK	INFLUENCE	INTEREST	ENGAGEMENT
COMMITTEE FOR ENVIRONMENTAL PROTECTION, TOURISM, AND AGRICULTURE	PROCESS	PUBLIC ADMINISTRATION	Overseeing policies and initiatives related to environmental conservation, sustainable tourism, and agricultural practices.	Advocating for the protection of natural resources and ecosystems, promoting sustainable tourism practices, and supporting environmentally conscious agricultural methods.	high
APAVITAL S.A.	INFRASTRUCTURES	PUBLIC SECTOR	Managing water and wastewater services to preserve freshwater ecosystems, eliminate water pollution, and make water use carbon-neutral and circular.	Enhancing water resource protection and increasing wastewater reclamation rates.	high
'APA PRUT-BARLAD' AGENCY	INFRASTRUCTURES	PUBLIC SECTOR			
DELGAZ GRID S.A	INFRASTRUCTURES	PRIVATE SECTOR	Minimising the environmental impact of natural gas supply and mitigating climate change.	Enhancing energy efficiency, upgrading infrastructure and partnering on emission reduction.	high
THE ORDER OF ROMANIAN ARCHITECTS (IN PARTICULAR THE IAȘI BRANCH)	CAPACITIES	NGO	Promoting the integration of energy efficiency principles, renewable materials, circular economy and nature-based solutions in architecture to reduce carbon emissions and create resilient, eco-friendly environments.	Promoting sustainable architecture and encouraging climate conscious building design and construction.	moderate
CIVICA	CAPACITIES	NGO	Promoting active citizenship, and encouraging citizen engagement and participation in climate-related initiatives.	Fostering a sense of collective responsibility and empowerment within the local community.	high
THE ALLIANCE FOR PROMOTING ALTERNATIVE TRANSPORTATION IASI	ALLIANCES	NGO	Promoting and facilitating the use of sustainable modes of transportation.	Contributing to the reduction of carbon emissions, alleviating traffic congestion, and developing a more climate friendly and resilient transportation system in Iași.	high
TECHNICAL UNIVERSITY "GHEORGHE ASACHI" IAȘI	CAPACITIES	RDI	Advancing local climate neutrality through RDI engagement and tailored curriculum integration.	Encouraging innovation and providing academic programmes focused on climate neutrality.	high
"ALEXANDRU IOAN CUZA" UNIVERSITY OF IAȘI	CAPACITIES	RDI			high
FACULTY OF ARCHITECTURE "G.M. CANTACUZINO"	CAPACITIES	RDI			high
FACULTY OF CHEMICAL ENGINEERING AND ENVIRONMENTAL PROTECTION "CRISTOFOR SIMIONESCU"	CAPACITIES	RDI			high
FACULTY OF GEOGRAPHY AND GEOLOGY	CAPACITIES	RDI			high

STAKEHOLDER	SYSTEM	NETWORK	INFLUENCE	INTEREST	ENGAGEMENT
IAȘI PREFECTURE	ALLIANCES	PUBLIC ADMINISTRATION	Facilitating coordination and providing support for implementing climate policies aligned with national objectives.	Ensuring effective governance and alignment with broader climate goals at the local level.	moderate
IAȘI CHAMBER OF COMMERCE, INDUSTRY AND AGRICULTURE	ALLIANCES	PUBLIC SECTOR	Promoting climate neutrality principles in the local business network.	Developing tailored climate neutrality initiatives for local businesses.	low
MIHAIL STURZA IAȘI INSPECTORATE FOR EMERGENCY SITUATIONS	CAPACITIES	PUBLIC SECTOR	Reducing the repercussions of emergencies and increasing climate resilience through risk assessment, preparedness training, and public education campaigns.	Ensuring public safety, coordinating emergency responses, and assisting during climate change-related crises.	moderate
IAȘI DIRECTORATE FOR PUBLIC HEALTH	CAPACITIES	PUBLIC SECTOR	Providing climate-health expertise, advocating for health-focused policies, promoting active transportation, and implementing heat wave preparedness plans.	Addressing the health impacts of climate change and advocating for strategies to mitigate them.	moderate
SAINT SPIRIDON COUNTY HOSPITAL	CAPACITIES	PUBLIC SECTOR			moderate
IAȘI COUNTY EMPLOYMENT AGENCY	CAPACITIES	PUBLIC SECTOR	Integrating workforce development with climate initiatives, offering training programmes for green jobs, and promoting employment in sustainable industries.	Cultivating a skilled workforce for green job opportunities to foster economic growth and enhance climate resilience in the region.	moderate
IAȘI DIRECTORATE OF SOCIAL ASSISTANCE	CAPACITIES	PUBLIC SECTOR	Integrating social welfare measures with climate resilience efforts, ensuring that vulnerable populations have access to resources and support systems to cope with climate-related challenges, implementing programs aimed at enhancing community resilience, and promoting sustainable livelihoods among disadvantaged groups.	Fostering social equity and resilience within the community amidst climate challenges.	high
IAȘI GENERAL DIRECTORATE FOR SOCIAL ASSISTANCE AND CHILD PROTECTION	CAPACITIES	PUBLIC SECTOR			moderate
IAȘI COUNTY AGENCY FOR PAYMENTS AND SOCIAL INSPECTION	CAPACITIES	PUBLIC SECTOR			moderate
IAȘI COMMUNITY FOUNDATION	ALLIANCES	NGO	Activating community spirit, encouraging local climate initiatives, mobilising private funding.	Fostering community engagement for climate action initiatives.	moderate
IAȘI ENVIRONMENTAL PROTECTION AGENCY	INFRASTRUCTURES, PROCESSES, CAPACITIES	PUBLIC SECTOR	Executing a range of projects focused on increasing the resilience of natural systems against climate change.	Fostering a more carbon-neutral and resilient community through educational and awareness campaigns aimed at promoting climate neutrality and sustainable development principles.	high
ASSOCIATION FOR ECOLOGY AND SUSTAINABLE DEVELOPMENT (AEDD) IASI	ALLIANCES	NGO			moderate
IAȘI AGRICULTURE DIRECTORATE	INFRASTRUCTURES, CAPACITIES, FUNDS	PUBLIC SECTOR	Promoting sustainable farming methods and enhancing agricultural resilience to climate change.	Encouraging the adoption of climate-smart agricultural techniques, resource conservation, and biodiversity preservation, and providing support to mitigate the impacts of extreme weather events.	Moderate

STAKEHOLDER	SYSTEM	NETWORK	INFLUENCE	INTEREST	ENGAGEMENT
IAȘI COUNTY COUNCIL OF STUDENTS	CAPACITIES, ALLIANCES	REPRESENTATIVE ASSOCIATION	Engaging and empowering students to address environmental and social issues, including those related to climate change.	Fostering a culture of environmental stewardship and civic engagement.	moderate
IAȘI COUNTY SCHOOL INSPECTORATE	CAPACITIES	PUBLIC SECTOR	Encouraging schools to actively engage in local climate neutrality initiatives.	Fostering a culture of climate neutrality among students and educators.	high
IAȘI COUNTY DIRECTORATE FOR STATISTICS	CAPACITIES	PUBLIC SECTOR	Collecting and disseminating environmental and climate data alongside pertinent indicators.	Enabling the formulation of evidence-based policies, allocation of resources, and monitoring of climate-related initiatives.	low
NORTH-EAST REGIONAL DEVELOPMENT AGENCY	FUNDS	REGIONAL DEVELOPMENT AGENCY	Offering financial assistance for both public and private endeavours aimed at achieving climate neutrality.	Addressing the priorities outlined in the North-East Regional Programme.	high
ROMANIAN GREEN BUILDING COUNCIL	ALLIANCES	NGO (CERTIFICATION BODY)	Promoting best practices, technologies and certifications for achieving climate neutrality in buildings.	Transitioning the built environment into a climate-neutral sector.	moderate
INVESTMENTS AND EUROPEAN PROJECTS MINISTRY	FUNDS	PUBLIC SECTOR	Distributing funds for climate neutrality projects across various ministries, endorsing the public administration's endeavours to establish Iași city and its metropolitan area as carbon-neutral, and promoting it as a model for others to emulate.	Advancing and strengthening Romania's endeavours to achieve climate neutrality objectives.	moderate
FINANCE MINISTRY	FUNDS	PUBLIC SECTOR			
DEVELOPMENT, PUBLIC WORKS, AND ADMINISTRATION MINISTRY	FUNDS	PUBLIC SECTOR			
TRANSPORT MINISTRY	FUNDS	PUBLIC SECTOR			
ENERGY MINISTRY	FUNDS	PUBLIC SECTOR			
ENVIRONMENT MINISTRY	FUNDS	PUBLIC SECTOR			
RESEARCH, INNOVATION AND DIGITALISATION MINISTRY	FUNDS	PUBLIC SECTOR			
COMMERCIAL BANKS	FUNDS	BANKING INSTITUTIONS	Funding public investments for climate neutrality beyond local budgets and backing private projects to cut local greenhouse gas emissions.	Adhering to European principles and objectives for climate neutrality while designing a range of environmentally friendly banking services.	Moderate
PRIVATE COMPANIES	FUNDS	PRIVATE SECTOR	Initiating climate neutrality projects to reduce own emissions, and supporting public and community-driven initiatives, including through CSR (corporate social responsibility) initiatives.	Boosting brand identity while reinforcing climate neutrality and resilience through heightened awareness and engagement in combating climate change.	moderate
CITIZENS	CAPACITIES, PROCESSES, ALLIANCES, FUNDS	CIVIL SOCIETY	Taking part in and initiating activities to enhance the quality of their everyday life, reduce individual carbon footprints and protect natural ecosystems.	Enhancing well-being, climate resilience, and satisfaction through active engagement.	high

Shortly describe the participatory model for achieving climate neutrality, highlighting the collaboration with the local community (citizens), local stakeholders (e.g., private companies,

NGOs, research organisations) and external partners (e.g., other public administrations, regional development agencies, national ministries, other organisations).

- ➔ **Relevant aspects may include the local context, the prior experience in community and stakeholder collaboration (e.g., jointly developed and implemented projects, strategic partnerships) and the engagement with various external partners.**
- ➔ **Present the participatory measures used in developing this Action Plan (if applicable) and the participatory method (approaches, processes, mechanisms, instruments, structures, capacity building) to be employed in order to ensure both the implementation and monitoring of the current Climate Neutrality Action Plan.**
- ➔ **Make sure to also describe the actions pertaining to Organisational and Governance Innovation, as well as the actions related to Social and Other Innovation fields.**
- ➔ **Do not forget to make reference to upholding the principles of climate justice, particularly for the marginalised communities.**

THE BASIS FOR PARTICIPATORY CLIMATE ACTION

Through its NetZeroCity Local Coalition, Iași Municipality actively engages with the local community, stakeholders, and external partners in environmental sustainability initiatives, as well as in climate change mitigation and adaptation projects, through a participatory model. This approach capitalises on the Municipality's context and past engagement experiences. In recent years, Iași Municipality has involved stakeholders at various levels, from laying the groundwork for action initiatives to implementing and monitoring climate plans. Through ongoing dialogue and cooperation, Iași Municipality strives to ensure that efforts align with the diverse needs and perspectives of all involved, driving meaningful progress towards climate goals.

PARTICIPATION AND COLLABORATION MECHANISMS DEVELOPED BY IAȘI MUNICIPALITY

Over the last years, the Iași City Hall has developed multiple instruments aimed at fostering closer collaboration with the community and the local ecosystem in sustainability actions. The City Hall's efforts have been extended to also facilitate cooperation in other fields, with the ultimate goal of consolidating the relationship between the public sector, citizens and other types of stakeholders.

- ➔ **A relevant example of this approach is the digital participatory budgeting platform launched by the Municipality (eportal.primaria-iasi.ro)**, as the main framework for partnership between the public administration and its citizens. As such, the platform facilitates the community's active engagement through ideas, suggestions, and proposals aimed at enhancing the quality of life within the local community. This mechanism encourages citizens to contribute to the decision-making process concerning investment priorities of local importance, to be financed from the local budget.
- ➔ **In a similar approach, Iași Municipality is currently transitioning into a digitised local administration.** To this end, it has adopted a range of technological solutions designed to streamline the interaction between the citizens and the public authorities, via digital platforms (primaria-iasi.ro). Consequently, Iași City Hall hosts an electronic services portal for form submissions and collaborative engagement with citizens, complemented by an integrated suite of solutions catering to various virtual tasks (e.g., press releases, platform for tracking request statuses, tool for reporting public grievances and notifications, OpenData portal, eTax solution).

- **The Municipality implements an annual non-reimbursable financing programme funded from the local budget**, aimed at providing support to NGOs engaged in community development projects. The 2024 funding session designated funds for projects spanning six main areas: sports, culture, youth, transparent and participatory governance, social-health-education-environment, and written culture. For this session, the Municipality of Iași earmarked €3.74 million to foster community-driven initiatives within these covered areas.

- **The Municipality also leverages multiple non-reimbursable financing sources to implement projects aimed at enhancing the citizens' connection with the natural environment.** The "Green Oasis in our Neighborhood" project stands out for its emphasis on cultivating a stronger connection between citizens and their immediate natural surroundings. The project successfully secured funding from the Regional Operational Programme to rehabilitate five degraded areas and improve three urban streets directly adjacent to these locations. The main objective was to transform these areas into recreational and leisure spaces for the community, while concurrently addressing the air pollution mitigation and promoting noise reduction measures.

- **Iași City Hall has obtained and intends to further use non-reimbursable funds to enhance its administrative capacity and also to foster a stronger collaboration with the community it serves, as well as with stakeholders within the territory of Iași Municipality.** Several examples of such projects are outlined below:

  - Through the project for **"Improving the planning capacity by updating strategic documents and increasing the quality of services provided by Iași Municipality"**, funded by the Administrative Capacity Operational Programme, Iași Municipality focused on enhancing the decision-making process at the local level. The project activities consisted of implementing coherent methodologies and systems to substantiate the local decisions, aligning them with available resources, and providing training to the internal staff. The project's impact resulted in an increased adaptability and flexibility of the municipal authority in its interactions with the citizens, the business community, and other relevant stakeholders. Consequently, the project's outcomes benefited all the residents, as well as the institutions, businesses, and organisations operating within Iași's jurisdiction, including the transient individuals such as students, businessmen, artists, tourists, and merchants.

  - Through the **Digital.IASI project**, funded by the Administrative Capacity Operational Programme, the Municipality implemented an innovative web-based multi-institutional digital ecosystem within its subordinate institutions. This ecosystem, based on cloud computing technology, incorporates pre-existing capabilities for interconnectivity and interoperability with other institutions, as well as accessibility from various devices at any time. It also integrates qualified electronic signature and seal functionalities into the browser and streamlines the digitised procedures, in order to enhance the user experience for officials and citizens. These interventions significantly improved the transparency and traceability of the administrative acts, while reducing the bureaucratic processes.

- **In addition to the projects financed through the national funding programmes, Iași Municipality has also engaged in international projects and networks funded through programmes coordinated directly by the European Commission.** Below is a summary of the most significant projects and networks pursued by the Municipality in order to increase its European

visibility and also to cultivate solid partnerships with peers across multiple European countries, by collaboratively generating innovative solutions to common challenges.

TABLE 29 INTERNATIONAL PROJECTS AND NETWORKS INVOLVING IAȘI MUNICIPALITY

INTERNATIONAL PROJECTS	INTERNATIONAL NETWORKS
➔ The **NextGen YouthWork project**, funded by URBACT IV), involved Iași Municipality as a partner along with nine other cities from the Netherlands, Hungary, Finland, Italy, Spain, Denmark, Poland, and Macedonia. The project aimed to develop a future-oriented hybrid and sustainable youth work model, in order to address the challenges arising from the increasing role of digitization in the young people's lives. The project focused on establishing long-term strategies to shape the Digital Youth City/Digital Youth Worker of the future. Additionally, it facilitated knowledge and experience exchanges among the participating cities, to design short-term actions addressing various youth-related issues, such as identifying new work areas for the digitally skilled young individuals, promoting their involvement in communities and political activities, enhancing their access to effective support services, fostering talent development, and combating cyber-bullying. ➔ As part of the **CLEAN project (Technologies and Open Innovation for Low-Carbon Regions)**, funded by Interreg Europe, Iași Municipality collaborated with counterparts from Sweden, Spain, Italy, France, Slovenia, Finland, and Greece. The project aimed to tackle the challenge of effectively meeting the EU energy efficiency targets for buildings. From 2017 to 2021, the partners collaborated to enhance the capacity of their policy instruments to promote increased energy efficiency. ➔ The municipality was also engaged in the **InnovaSUMP project (Innovations in Sustainable Urban Mobility Plans for Low-Carbon Urban Transport)**, funded by Interreg Europe, alongside nine partners from multiple European countries. The main aim of the InnovaSUMP project was to facilitate the development or updating of Sustainable Urban Mobility Plans, by offering expertise and showcasing the advantages of their implementation. Additionally, the project aimed to foster a firm commitment to low-carbon mobility and advancing the "low-carbon" economy.	➔ Iași Municipality collaborates with partners from Latvia, Greece, Portugal, Poland, France, Italy, and Bosnia-Herzegovina in the **DIGI-INCLUSION Action Planning Network**, supported by Urbact. This network is dedicated to addressing social exclusion, by enhancing digital inclusion. Its goals refer to providing access to technology and empowering individuals to develop key skills and fully use the opportunities presented by the digital world. ➔ Iași Municipality participated in the **Civic eState network**, a Transfer Network supported by Urbact, focused on developing new models of urban co-governance centred around the commons. Over two years of EU cooperation, the network aimed to promote urban co-governance and experiment with public-community partnerships, in order to enable inhabitants and local communities to exercise their constitutional rights to self-organise and collectively advocate for urban commons. The network outputs aimed to ensure the collective management of essential urban facilities, fostering fair and open access, participatory decision-making, sustainability, and nature preservation for the benefit of future generations. Partners from the Netherlands, Slovakia, Spain, Poland, and Belgium were also involved in this network.

➔ **In order to generate a positive impact not only within its local community but also in its neighbouring areas, Iași Municipality participates in several Intercommunity Development Associations alongside the nearby localities.** These collaborations are dedicated to developing integrated and sustainable projects that generate mutual benefits for the Municipality and its partners, ultimately benefiting the citizens and stakeholders in the covered territories. A recent example of this initiative is the establishment of the Iași Metropolitan Public Transport Association. This Association was created to regulate and integrate local transport within the Iași metropolitan area, aiming to increase the capacity to attract EU funds for the key investments in the transport service's infrastructure, ensuring a smart mobility system for the covered area.

COLLABORATIVE INITIATIVES DEVELOPED BY THE IAȘI METROPOLITAN AREA INTERCOMMUNITY DEVELOPMENT ASSOCIATION

Iași Metropolitan Area comprises the Municipality of Iași and the communes of Aroneanu, Bârnova, Ciurea, Comarna, Costuleni, Dobrovaţ, Golăiesti, Grajduri, Holboca, Leţcani, Miroslava, Mogoşeşti, Movileni, Popricani, Prisăcani, Rediu, Românești, Scânteia, Schitu Duca, Tomești, Ţigănaşi, Ţuţora, Ungheni, Valea Lupului, Victoria and Voinești.

In 2004, the Iași County Council, the Municipality of Iași, and 13 neighbouring communes signed an agreement to establish the Iași Metropolitan Area Inter-community Development Association (IMA IDA). The decision was based on shared development objectives and the goal of fostering partnerships to achieve mutual benefits. Currently, the Iași Metropolitan Area Intercommunity Development Association includes Iași County Council, Iași City Hall and the City Halls of the 26 aforementioned communes.

The strategic development objectives of the Iași Metropolitan Area Intercommunity Development Association refer to:

- ➔ Strengthening the roles of the administrative-territorial units, as a key development hub for Moldova and the EU's eastern border.
- ➔ Promoting a balanced and accelerated economic growth among the metropolitan partners.
- ➔ Ensuring a harmonious and coherent development within the metropolitan communities.
- ➔ Enhancing the cultural identity of the member communities.
- ➔ Improving the accessibility and infrastructure within the metropolitan area and beyond.
- ➔ Providing efficient and competitive public services across the metropolitan territory.
- ➔ Boosting the performance of the metropolitan public administrations.
- ➔ Enhancing the living conditions for the metropolitan communities.
- ➔ Increasing the access to the available funding resources through projects implemented in partnerships.
- ➔ Establishing national and international partnerships to benefit all of the Iași Metropolitan Area's members.

The Iași Metropolitan Area Intercommunity Development Association, alongside the Municipality of Iași, is also part of the Iași Metropolitan Public Transport Association. The motivations for joining this associative structure consist of enhancing the quality of the metropolitan public transport, meeting the European environmental standards in terms of transport and mobility, and promoting economic development through a modern transport infrastructure.

The Iași Metropolitan Area Intercommunity Development Association is also a member of METREX, a network of public organisations established in 1996, focused on enhancing the performance of regions and metropolitan areas in Europe, with the goal of improving the quality of life for residents.

The Iași Metropolitan Area Intercommunity Development Association initiated and continues to implement a multitude of actions focused on fostering a thorough cooperation among the local public administrations within the Iași Metropolitan Area and also on enhancing its international collaborations. These initiatives are undertaken with the main objective of advancing the interests of both the individuals and the entities hosted by the Iași Metropolitan Area. The following list summarises the main collaborative projects and cooperative actions undertaken by IMA IDA.

Completed actions

- ➔ Within the **"Elaboration and Management of Integrated Urban Development Plans'' project**, IMA IDA collaborated with partners from Ukraine and the Republic of Moldova to facilitate the creation of favourable economic, social and environmental conditions, while improving public infrastructure and housing in the targeted cities. Simultaneously, the project aimed to strengthen the strategic planning, analysis, monitoring, and evaluation capabilities of the local public authorities in Ungheni, Iași, and Noua Suliță, thereby providing institutional support in line with the

European and national policies, in order to foster the development and competitiveness of the administered territories.

- IMA IDA collaborated with 14 partners from Poland, Spain, Belgium, Slovenia, UK, Sweden, Germany, Holland and Romania, within the **PUSH & PULL project**. Focused on the parking management and the associated strategies to enhance the urban transport efficiency, the project aimed to improve the urban mobility in the European cities, by integrating parking space management with mobility management measures.

- Within the **DECoR HRD project**, IMA IDA, alongside two other partners, worked on enhancing the economic development within the rural communities within the Iaşi Metropolitan Area. The project aimed to elevate the quality of human resources in the rural areas through training, information dissemination, and counselling, in order to facilitate non-agricultural employment opportunities, in line with the demands of the local and regional labour markets.

- As environmental protection is one of the IMA IDA's main objectives, the **"Clean Romania" project**, funded in 2022 by the Environment Fund Administration, supported greening activities across seven areas within the metropolitan territory. These actions resulted in the collection of multiple types of waste, including glass, textiles, plastics, electrical and electronic waste, cardboard, rubber, tires, and metal.

- In 2022, IMA IDA launched the **Tech Generation Programme**, supported by the Digital Communities Association, under the Digital Nation brand. The programme provided 300 participation scholarships to young pupils and students. Through this initiative, the beneficiaries gained valuable digital and IT skills, enabling them to access new employment opportunities locally.

- In 2022, IMA IDA signed a **collaboration agreement with the Faculty of Geography and Geology at "Alexandru Ioan Cuza" University of Iaşi**, the Prut-Bârlad Water Basin Administration, the Iaşi County Council, and the City Hall of 22 commune within the Iaşi Metropolitan Area. The agreement facilitated internships for the students enrolled in the Geomatics master's degree program, who had the opportunity to work within the public institutions affiliated with IMA IDA. During the internship period, various materials (graphic materials, maps, numerical models, research reports, public interest documents) were produced. Additionally, an online web GIS platform was developed, for the benefit of the metropolitan members.

Actions under implementation

- The **Development of tracks for cyclists in the metropolitan area of Iaşi project**, jointly submitted to the Environmental Fund Administration by IMA IDA, Iaşi County Council, Bârnova Commune, and Dobrovăţ Commune, will support the development of 17,14 km of cyclist tracks along the route from Bârnova Monastery to Dobrovăţ Monastery. The bike path will be marked and signposted, with additional amenities such as bike racks, rest areas, and night lighting included in the project.

- IMA IDA is a member of the Action Planning Network titled **Agents of Co-existence and Open Government – Building Skills and Capabilities of Civil Servants and Citizens to Better Embrace Innovation in Local Government**. This network comprises nine partners from various European countries, including Belgium, Poland, Latvia, Hungary, Slovakia, Spain, Denmark, and the Netherlands. Financed through the URBACT IV Programme, the network's main objective is to address the challenge of integrating social innovation and inclusion across all the aspects of local

governance. This goal will be achieved by enhancing the skills and capacities of the municipal staff, while establishing new organisational structures to promote civic participation, thereby strengthening the foundation of democracy.

- One of the long-term projects undertaken by the IMA IDA is the **Metropolitan Market project**, which was initiated in 2022. The Metropolitan Market involves the organisation of multiple markets across the metropolitan area, providing a platform for local producers, farmers, craftsmen, and others to exchange experiences and develop new connections. Through these markets, citizens have the opportunity to engage with the vendors, learn about their products, and understand the production process. By hosting these markets in various communities, the project aims to ensure a widespread access to the local products, thereby promoting economic development and encouraging the consumption of locally sourced goods.

COMMUNITY-DRIVEN ACTIONS LED BY NGOs

The civil society in Iași implements multiple actions aimed at mobilising the local community of all age groups to engage in local initiatives focused on environmental protection, mitigating the local carbon footprint, and enhancing the resilience against climate change. Brief highlights of some of the most relevant examples in this regard are presented below:

- **Climathon Iași 2024**, organised by Impact Hub Bucharest in collaboration with EIT Climate-KIC and supported by Raiffeisen Bank Romania, was facilitated locally by the CIVICA Association. This event served as a platform for citizens to participate in a contest of innovative ideas aimed at enhancing Iași's resilience to the impacts of climate change (heat waves, urban heat islands, sudden weather shifts). The participants were tasked, either individually or in teams, with developing ambitious and sustainable business proposals to address the thermal discomfort and promote climate protection. Throughout the hackathon event, participants collaborated with trainers, entrepreneurs, and experts to devise innovative solutions for a more climate-adaptive city.

- **The Programme for Civic Involvement and Innovation** works as a network mechanism aimed at identifying, connecting, and amplifying the impact of local civic initiatives that enhance the quality of life in Iași and strengthen local democracy. Through a participatory approach, the programme provides tailored development and support experiences, including learning opportunities, mentoring, and access to resources, to civic groups and NGOs. These experiences are designed to enhance their capacity to generate changes in the community, understand the democratic decision-making processes, and influence the public decisions, as needed. The programme seeks to transform the local landscape by:

  - Creating the infrastructure needed to support the involvement, collaboration, and civic innovation at the local level, leveraging the contributions of citizens interested in improving life in Iași through their time, expertise, or financial resources.
  - Providing learning and development experiences for increasing the impact of the local civic initiatives addressing various issues which impact the quality of life in Iași.

- **The Citizens Lead Initiative**, a recipient of grants from the Open Society Foundations and implemented by the CIVICA Association, engaged citizens and elected officials through public meetings during 2017-2018. Prior to each session, residents of Iași were encouraged to suggest solutions and ideas for implementation with the support of elected representatives, local administration, and the community. These meetings, attended by at least three local councillors

and representatives from the local administration, involved discussions and debates on the proposed solutions, alongside the citizens. Elected officials were recommended to consider adopting these solutions. Following each meeting, working groups were formed to collaboratively implement the debated proposals. Each meeting focused on a specific theme, inviting residents to contribute solutions for culture, public transport and urban mobility, entrepreneurship, youth, and public spaces (two panels: child-friendly city, and sociable neighbourhoods).

- **The #TrotuareLibere** (en: #FreeSidewalks) campaign encourages citizens to report instances where cars unlawfully occupy the sidewalks designated for pedestrians and to submit petitions to the City Hall, requesting the installation of protective bollards. As part of the campaign, volunteers from various organisations, including Iași - the Youth Capital of Romania 2019-2020, EuRespect, the County Council of Iași Students, the Real Sports Association, and the CIVICA Association (coordinator of the campaign), distributed flyers for the #ParchezNuBlochez (en: #IParkNotBlock) campaign initiated by Grow Up Romania. They conducted dialogues with citizens, in order to understand their viewpoints and identify potential solutions. Concurrently, discussions were initiated with car owners, in order to emphasise that sidewalks are not designated parking spaces and that obstructing them creates difficulties for individuals with disabilities. In addition to distributing flyers, representatives from the Iași Local Police issued written warnings to owners of illegally parked cars.

PRIVATE SECTOR PROJECTS

Palas Iași Urban Complex is a public-private partnership which has redefined the heart of Iași and has boosted the regional economy of the North-Eastern Region, by creating a dialogue between mixed-use development, cultural heritage and public space. The project includes five areas of intervention: Palas Mall, Palas Garden, Palas Campus and Palas Residential, in addition to the rehabilitation of the Palace of Culture. The stepping stone of the complex was Palas Mall which opened in 2012 as the first mixed-use development of Romania and featured a 50,000 mp garden - Palas Garden, which is the first public garden of Romania developed from private funds.

The transformation of the area continued with continuous reimaginations of the use of the garden, the rehabilitation of the Palace of Culture, completed in 2016, and the development of Palas Campus, an innovation and creativity centre opened in 2023, which attracted world renowned companies (e.g., Amazon, Microsoft). The urban complex will continue to evolve through a one of a kind residential project designed by UNStudio, which will represent a novelty for the Romanian architectural landscape.

The Palas Urban Complex transformed an underdeveloped area of the city into a vibrant community space, which in the last decade has redefined the heart of the city. The project is located in the proximity of the Palace of Culture, more precisely on the site of the former site of the household of the Royal Court, both of which at the time of the development of the project, were in a state of disrepair. What started as the first mixed-use development project of Romania, which included a shopping mall and several office buildings and event halls, quickly turned into a public-private partnership with Iași Municipality. These concentrated efforts on the relationship between the newly built spaces and the Palace of Culture and gave rise to the Palas Garden project addressing the open space framed by the palace and the new buildings. The urban development concept for the entire Palas project was based on the dialogue with the representatives of the Palace of Culture, whose rehabilitation was completed by Iași Municipality in 2016. The garden is designed to frame an iconic

view of the Palace of Culture, shedding light on what used to be its lesser known back facade, and provides various types of public spaces and promenade areas. The design concept preserves the lake and the archaeological vestiges of the household of the Royal Court and features monumental stairs leading to the Palace, an outdoor amphitheatre, a Venetian carousel and various squares and green areas, whose use is constantly being redefined by its users. The design of the garden area and its interaction with the surrounding buildings invite users to explore, play and use the space in creative ways.

In 2020, Palas Iași was awarded the LEED Neighbourhood Development certification by the US Green Building Council, becoming the first project in Central and Eastern Europe to obtain such a certification and at the time, was one of only five certified projects in Europe. The award recognizes the project's impact and benefits for the community, acknowledging the access to leisure facilities, support for active mobility and the multiple ways in which it aggregates social interaction and cultural events.

In 2024, the Palas Campus achieved a dual green certification: EDGE, conferred by the International Finance Corporation, and LEED Platinum, the highest level of LEED certification awarded by the U.S. Green Building Council. BuildGreen, a top entity specialising in the design, development, and certification of sustainable buildings in Central and Eastern Europe, provided support throughout the certification process.

- **The office complex was conceived in the design phase as a modern business infrastructure aligned with sustainability standards, securing the first green credit granted in Romania by the International Finance Corporation (member of the World Bank Group) in 2021**. Specifically, the financial institution allocated 72 million euros to support the project in obtaining the EDGE Advanced certification, with an anticipated energy and water consumption reduction of at least 40% compared to conventional buildings.

- **The building's exceptional performance was validated based on several parameters, including the energy efficiency, the low carbon emissions, the water conservation, the material usage, and the connectivity.** This investment facilitated the creation of green areas, relaxation spaces, 650 metres of bicycle paths, 16 charging stations for electric vehicles, over 200 bicycle parking spaces, and six changing rooms equipped with showers to promote green mobility. Additionally, pedestrian connections were established, a new road was constructed to optimise the traffic flow in the centre of the city, and five adjacent streets underwent widening and modernization. The project also features an underground parking facility with a capacity of 625 spaces. The installed equipment reduces water consumption by 45%, while the integrated smart metering within the building management system ensures effective resource monitoring and management. Moreover, more than 1,200 photovoltaic panels were installed, in order to offset the energy costs and enhance the overall sustainability.

- **Furthermore, Palas Campus achieved the LEED Platinum certification under the LEED v4 Core and Shell Development evaluation system**, meeting the initial sustainability construction prerequisites established by the U.S. Green Building Council and validated by Green Business Certification Inc.

More recent projects, such as the Palace Campus and Palace Residential, continue to explore the relationship between public and private space and to contribute to mainstreaming sustainability practices in the built environment.

THE PARTICIPATORY MEASURES FOR DEVELOPING THE ACTION PLAN

In the development process of the Climate Neutrality Action Plan, Iași Municipality and IMA IDA have embraced a participatory approach, consisting of two main phases: **drafting and public consultation**.

- **The drafting phase for the Climate Neutrality Action Plan was thorough and inclusive, involving consultation with the community and local stakeholders.** We ensured that the proposed actions were aligned with the already-approved municipal strategic documents. The primary reference document was the **Green City Action Plan**, which was itself developed through a participatory approach. To incorporate a wide range of perspectives and ensure broad-based support for the Green City Action Plan, the drafting process engaged local stakeholders through both online and offline public consultation tools, such as:
  - **MEDIA CHANNELS:** To ensure stakeholder engagement during the development of the Green City Action Plan, Iași Municipality employed various media channels (both print and digital) and tools. The responsible staff made announcements and published articles in the local publication Curierul de Iași, and used the Facebook page to reach a wider audience. Moreover, they created a private Facebook group, **Iași Oraș Verde**, which has approximately 5 000 members.
  - **EVENTS:** During the stakeholder engagement events, in-person meetings were organised, particularly focusing on separate sessions involving thematic group discussions. These meetings were the most dynamic and highlighted significant contributions from a wide range of stakeholders. Through these interactions, Iași Municipality was able to prioritise the actions for our Green City Action Plan.
- **After the drafting process was finalised, Iași Municipality initiated the public consultation phase to collect feedback and additional input from citizens and stakeholders regarding the content of the document.** This endeavour led to enhancements in its quality as the staff integrated their contributions into the final version of the documentation.

THE PARTICIPATORY MEASURES FOR IMPLEMENTING AND MONITORING THE ACTION PLAN

At the internal level, the Municipality will ensure both the implementation and monitoring of the Climate Neutrality Action Plan by adopting and adapting the model currently used for the implementation of the Green City Action Plan. This model will be coordinated with the pool of public and private entities which were tasked with the execution and evaluation of the SECAP, ensuring that the same experts and structures responsible for the other relevant local strategic documents will also be engaged in the management and assessment of the Climate Neutrality Action Plan.

Accordingly, in line with the Green City Action Plan model, the Climate Neutrality Action Plan will be managed by an Implementation and Monitoring Working Group supervised by a designated coordinator, a Supervisory Board led by the Mayor, and Green City Action Plan ambassadors who will also serve as Climate Neutrality Ambassadors, becoming part of the NetZeroCity Local Coalition, whose proposed structure is detailed below.

The Implementation and Monitoring Working Group (which has already been considered within the Green City Action Plan) will primarily comprise the following directorates, departments, and specialised services within Iași City Hall (which are also engaged in the SECAP implementation):

- Directorates: Implementation of the Integrated Urban Development Strategy, General Economic and Local Public Finance, European Projects, Architecture and Urbanism, Technical Directorate and Community Services, Heritage Exploitation, Public and Private Heritage Records, Housing Fund.
- Specialised services: Energy Efficiency and Public Utilities, Environmental Quality Promotion and Monitoring, Municipal Streets, Owner Associations.
- Statistics and Forecast Department.
- Other offices and services within the local public administration structures, as needed.

The main participatory mechanism devised by the Municipality to ensure the collaborative implementation and monitoring of actions aimed at reducing the CO2 emissions is the NetZeroCity Local Coalition. As the Climate Neutrality Action Plan aims to align closely with the existing local strategic documents, the Coalition follows the structure proposed for the SECAP implementation team, aspiring to include an even broader range of local entities and structures over time:

- Local public service and utility companies: organisations responsible for heating, public lighting, public transport, sanitation/waste management, and public domain administration and maintenance.
- Electricity and natural gas supply and distribution companies: both suppliers and distributors.
- Companies providing energy services: firms specialising in energy efficiency, consultancy, energy audits, and energy management.
- Business environment and local private companies: local business community.
- Professional associations: specialists and experts in various relevant fields, such as energy efficiency, energy production, renewable energy sources, environmental protection, buildings, urban management.
- Citizen representation structures/entities: owner associations and non-governmental organisations.
- Citizens.

In addition to the structure proposed for SECAP, the Municipality will also engage local academic institutions and relevant RDI organisations within the Coalition, together with local NGOs and also the local media. Moreover, to ensure a comprehensive metropolitan approach, the Municipality, with the support of the IMA IDA, will also incorporate organisations and operators that work both in the various localities within the Iași Metropolitan Area and across the metropolitan scale.

In each of the above phases, both the Iași Municipality and the IMA IDA will consider their marginalised communities, ensuring that their needs are duly addressed throughout the implementation of this Action Plan. Finally, consistent with their dedication to climate neutrality, Iași Municipality and IMA IDA will simultaneously increase their climate resilience efforts, striving for a cohesive integration between the climate mitigation and adaptation actions.

As such, a participatory approach will be adopted during the implementation of the Climate Neutrality Action Plan, with a particular focus on the soft interventions related to Governance Innovation and Social Innovation. The proposed interventions aim to enhance the local commitment to climate neutrality, promote climate-neutral behavioural changes, and strengthen the local governance for climate neutrality. The effective implementation of the climate neutrality actions will

be ensured through collaboration and engagement with stakeholders, facilitated by community-driven tools and strategies that are responsive to local needs.

- **With its commitment to establishing a dedicated framework for climate neutrality, Iași Municipality leverages the existing operational governance structure from the Green City Action Plan as a solid foundation.** Iași Municipality has already taken proactive steps to establish the NetZeroCity Local Coalition, aimed at expanding and strengthening partnerships with local businesses, NGOs, academia, and other stakeholders.

- **The establishment of a "Platform for Neighborhood Green Ambassadors" will aim to enhance the local commitment to climate neutrality.** This platform will incorporate various activities and initiatives intended to engage residents as advocates for environmentally sustainable and climate-neutral practices within their neighbourhoods. Through this platform, residents will be empowered to take ownership of climate action initiatives and promote sustainable behaviours within their communities. Additionally, civic engagement efforts, such as working groups, hackathons, and competitions for building owners, will be organised to actively involve residents in the decision-making process and encourage their participation in climate-friendly activities. Overall, this participatory measure will seek to create a collaborative environment where residents can contribute to the collective effort of achieving climate neutrality at the local level.

- **Promoting and supporting climate-neutral behavioural changes will involve launching awareness campaigns targeting local residents and businesses.** These campaigns will specifically aim to raise awareness among residents and businesses within the Iași Metropolitan Area. Through these campaigns, Iași Municipality aims to educate and encourage individuals and companies to adopt climate-friendly behaviours and practices. By promoting awareness and providing support, Iași Municipality intends to facilitate a widespread shift towards sustainable behaviours, contributing to collective efforts to achieve climate neutrality.

- **Strengthening the local governance for climate neutrality will involve implementing several key initiatives.** Firstly, a training program for public officials and stakeholders will be developed to enhance their understanding of climate-related issues and equip them with the necessary skills to implement effective climate policies and initiatives. Additionally, a web platform will be created to monitor key performance indicators related to climate action. This platform will provide real-time data and insights, enabling stakeholders to track progress, identify areas for improvement, and make informed decisions to advance climate goals. These efforts aim to build robust governance structures that will effectively support the journey towards climate neutrality.

Moreover, in alignment with the local commitment to a participatory approach in implementing the Action Plan, Iași Municipality and IMA IDA will also:

- **Encourage citizens to take the lead in advocating for climate neutrality by promoting volunteerism.** Partnering with local NGOs, in order to provide opportunities for active participation in the local transition towards a climate-friendly community, inspiring individuals to become agents of change.

- **Engage with the national M100 cohort of cities.** Iași Municipality aims to actively participate in the cohort of cities that will lead Romania's urban transition towards climate neutrality in the coming years, along with the three Romanian cities which are currently part of the EU Mission for Climate-Neutral and Smart Cities. Through a strong collaboration with peers and also with the M100

coordinators, Iași Municipality intends to consolidate, share, and enhance its collective knowledge, enabling both Iași and the other Romanian cities to achieve climate neutrality.

- **Advance the scaling up of the Action Plan both nationally and internationally, actively engaging in peer-learning opportunities.** Iași Municipality and Iași Metropolitan Area are deeply involved in various national associations and international networks, as evidenced throughout this document. Through these collaborations, the aim is to share the knowledge and best practices gained from implementing the Action Plan and to learn from peers.
- **Strengthen global partnerships to advance the local climate agenda.** At the moment, Iași Municipality is formalising a partnership with the World Bank to secure technical assistance for achieving climate neutrality. Additionally, the City Hall is enhancing and refocusing existing partnerships from past collaborative projects and network memberships like METREX, to further the local climate neutrality efforts.
- **Attract external resources:** Efforts will be made to attract various external resources (financial, human, informational, and material) towards the city and its metropolitan area, in order to accelerate the transition to climate neutrality.

In terms of funding, efforts will be made to explore ways to attract more private capital for local climate neutrality projects. This aims to bridge existing funding gaps and encourage the integration of climate-neutral components and principles into private sector initiatives.

- **Facilitating access to funding from the North-East Regional Programme.** The Municipality will collaborate with the North East Regional Development Agency in order to encourage the private companies to tap into the funds available through the North-East Regional Programme, as this programme offers significant opportunities for environment and climate friendly investment projects.
- **Harnessing PPPs.** Efforts will be made to explore additional avenues of private financing to facilitate the transition to carbon neutrality. Building on the prosperous partnerships with Iulius Company and Centric IT Solutions, public-private collaborations will be expanded to stimulate innovation and investment in sustainable, climate-neutral projects.
- **Soft actions aiming to mobilise private capital for climate neutrality interventions.** Through efforts to encourage civic engagement activities, various local stakeholders will be empowered to raise awareness and inspire local companies, particularly those with an international dimension, to align with the ESG standards by investing in local initiatives.
- **Crowdfunding for gathering private resources for small-scale green and climate-neutral projects.** Initiatives such as PIIC (Programme for Civic Involvement and Innovation) or the Climathon, facilitated by CIVICA, will serve as inspiration for the future endeavours in this direction.

BARRIERS

Provide a summary of the main local barriers impeding the city's transition towards climate neutrality.

- ➔ **For each barrier, briefly outline its impact on hindering the climate neutrality achievement and describe the approach / intervention / solution for overcoming it through the implementation of the current Climate Neutrality Action Plan.**
- ➔ **Make sure to also incorporate barriers related to climate investment: structural, policy, economic and financial obstacles which could hinder the deployment of capital to support climate action.**

Iași Municipality, along with its metropolitan area, faces several barriers that could hinder the achievement of climate neutrality. The table below identifies these barriers across the main emission domains at both the local and metropolitan levels, as well as the transversal and funding barriers, which could significantly challenge the implementation of the current Action Plan.

However, for each barrier, the table presents the main solutions, primarily derived from the cumulative interventions outlined in this Plan, as well as other measures from relevant strategic documents, especially the Integrated Urban Development Strategy and the Green City Action Plan. Additionally, the proposed solutions encompass the numerous ongoing efforts (projects, programmes, and regulations.) pursued by the Municipality in order to mitigate the impact of these barriers upon Iași's sustainable development and its journey towards climate neutrality.

TABLE 30 KEY BARRIERS

EMISSION DOMAIN	IDENTIFIED BARRIER	DESCRIPTION	PROPOSED SOLUTION
ENERGY SYSTEMS	High CO2 emissions from energy sources and infrastructure deficiencies	Locally, the energy pollution stems from the high coal usage for heating, the biomass and natural gas use in homes, and the emissions generated by the power plants. In Iași 's central area, an aged and deteriorating energy network leads to frequent outages and voltage fluctuations. Moreover, within IMA, the thermal energy is centralised only in Iași municipality, leaving other areas without centralised systems. Furthermore, not all the municipalities in IMA have centralised natural gas supply.	To overcome this barrier, the Action Plan outlines six integrated interventions designed to decarbonize the energy system. These interventions are grouped into four key actions, which are aimed at: enhancing the efficiency and attractiveness of the heating system, boosting the local renewable energy production capacities, modernising the public lighting, and supplying green energy for electric vehicles.
ENERGY SYSTEMS	Limited community and ecosystem engagement in energy efficiency and green transition	The citizens, local enterprises, and other organisations do not have the know-how, drive, and resources needed to adopt energy efficiency and green energy solutions.	Firstly, by implementing all the actions aimed at optimising the energy system, the Municipality will become a community leader and a model of good practice for the individual citizen behaviours. Additionally, the Municipality will invest in enhancing the energy efficiency of the local residential buildings, ensuring that its residents live in more energy-efficient homes. Furthermore, the initiatives dedicated to the citizens, such as the green neighbourhood ambassadors platform and the civic involvement interventions, are specifically designed to actively engage the citizens in the local CO2 reduction efforts, encouraging them to adopt sustainable and climate-neutral practices, including in terms of their energy consumption patterns.

EMISSION DOMAIN	IDENTIFIED BARRIER	DESCRIPTION	PROPOSED SOLUTION
BUILT ENVIRONMENT	Brownfield sites yet to undergo green transformation towards climate neutrality	Locally, there are abandoned industrial areas awaiting refurbishment and green redevelopment investments. Additionally, areas susceptible to natural hazards remain undeveloped.	At the local level, the municipality has already adopted strategic documents (e.g., IUDS) and planning documents (e.g., GUP) that propose measures for the climate-neutral conversion of the brownfield sites. These measures are planned to be implemented by the Municipality and the other public administrations within the metropolitan area in the coming years. For these investments, the public administration will draw on the existing best practice models from both Romania and abroad, aiming to leverage the expertise of the peers who have already undertaken similar initiatives. Additionally, the Municipality will strive to develop strong collaborations with the potential private investment partners, in order to maximise the benefits for the citizens, the local environment, and the climate.
BUILT ENVIRONMENT	Most of the building stock is not energy efficient	The inadequate energy efficiency in the local building stock is exacerbated by the rising natural gas prices. Despite the EU/State Budget funding allocated for thermal rehabilitation, some owners decline such investments, due to unwillingness, lack of awareness/education, financial constraints etc. Moreover, many residential, public, and commercial buildings are characterised by retrofitting challenges and, at the same time, the high costs often deter owners and developers from investing in energy-efficient solutions, despite the long-term savings potential.	This Action Plan addresses this barrier by introducing an ambitious set of actions aimed at increasing the energy efficiency of public and residential buildings, alongside implementing nZEB+ standards for the new public buildings. Moreover, in order to reduce the homeowners' reluctance, awareness campaigns will be conducted, which will clearly explain the benefits of such investments. Additionally, the Municipality's prior investments in similar projects provide valuable experience and have already helped some citizens understand the advantages of such initiatives.
MOBILITY & TRANSPORT	Local conditions not favouring carbon-free mobility	The air pollution is the highest challenge within Iași, predominantly stemming from transportation, namely the surge in private motor vehicles. This issue is compounded by the subpar traffic management, an ageing vehicle fleet, and the limited non-motorized and public transport options. Furthermore, certain neighbourhoods lack public transport coverage, and the existing stations suffer from degradation. The congestion on main roads hampers the public transport efficiency, while the high-demand localities within IMA struggle with inadequate transport lines, and the suburban areas lack railway stations, hindering the potential railway use. Moreover, the absence of equipped public transport stations within IMA's communes and the lack of route maps and timetables further compound the problem. The inadequate pedestrian spaces in residential hillside areas and Iași 's underutilised railway stations also contribute to this barrier. Additionally, the expansion areas lack proper pedestrian facilities and crossings over the rivers and railways. Additional shortcomings pertain to the intermodal hubs facilitating the transition between metropolitan and urban public transport, coupled with the absence of park-and-ride facilities to ease the congestion in suburban regions. The high costs of electric vehicles, the limited subsidies, and the energy price hikes, combined with their limited range and autonomy, alongside the influx of inexpensive yet environmentally harmful second-hand vehicles	This barrier will be significantly reduced through the sustainable urban mobility actions outlined in this Action Plan. These integrated actions target several complementary levels: encouraging the use of eco-friendly public transport, promoting the alternative mobility with an emphasis on cycling and walking, and alleviating the traffic congestion on the major boulevards and intersections. As such, the more than 20 interventions proposed in this area will significantly reduce the pollution (including the CO2 emissions, the noise, and even the visual pollution) from mobility and transport, thereby enhancing the air quality at both local and metropolitan levels. Additionally, the public administration has adopted a robust SUMP, which proposes numerous measures to increase the sustainability of local mobility and transport. Some of the projects proposed in the SUMP are already being implemented.

EMISSION DOMAIN	IDENTIFIED BARRIER	DESCRIPTION	PROPOSED SOLUTION
		from other EU nations, dampen the residents' interest in adopting EVs, especially for longer trips. Furthermore, the parking lots in collective housing districts occupy much of the land originally designated for community spaces.	
WASTE & CIRCULAR ECONOMY	Current state of waste and wastewater management and the associated pollution	At the local level, the inadequate source separation leads to the majority of waste being landfilled. Moreover, there's a minimal portion of waste diverted from landfills through separation, treatment, recycling, or recovery processes. Although the landfill operates with sanitary measures, the landfill gases remain unrecovered, posing potential risks to groundwater from leachate infiltration. Regarding the wastewater, the water system faces significant pollution challenges, primarily due to a combined sewage system serving the city, leading to frequent discharge of mixed rainwater and wastewater into the receiving streams. Additionally, the absence of a comprehensive drainage master plan exacerbates stormwater management issues, while the expansion of fish farming in the lakes contributes to higher organic loads and eutrophication.	This Action Plan proposes an action aimed at developing a functional circular economy ecosystem, with the goal of improving the local waste collection and management system, such as to be more environmentally sustainable. This action includes interventions aimed at installing digitised eco-islands for separate waste collection, establishing voluntary centres for the same purpose, and modernising the waste collection fleet through digitization. Moreover, the waste and wastewater infrastructure will undergo improvements through the dedicated projects outlined in the other relevant local strategic documents, notably the GCAP and the IUDS. The projects covered in these documents are also geared towards optimising the system, in order to mitigate the CO2 emissions and other forms of pollution, especially the odour. Complementing these capital-intensive investments are the soft interventions, which were designed to encourage the citizens and also the private entities to adopt behaviours that contribute to a reduced carbon footprint, including in waste generation and recycling practices within households and businesses. As a result, all the interventions covered by the Climate Neutrality Action Plan, coupled with the complementary measures foreseen in the other strategic documents, will foster the integration of circular economy principles at both local and metropolitan scales, thereby alleviating these infrastructural and behavioural barriers.
WASTE & CIRCULAR ECONOMY	Social barriers hindering the adoption of sustainable waste and circular economy practices	Locally, various behavioural barriers, such as the convenience, the indifference, the limited exposure to good practices, and the lack of education and awareness discourage the voluntary participation in sustainable waste management practices (e.g., selective collection, recycling, and composting) as well as in circular economy initiatives.	
GREEN INFRASTRUCTURE & NATURE-BASED SOLUTIONS	Shortcomings concerning the green-blue infrastructure	Despite the presence of local parks and gardens, these areas are not currently meeting the national and European standards in terms of green spaces. The major deficiencies include the limited free municipal areas that are used as an extension of the current green areas, the unclear building permits, the inadequate land use planning in peripheral development, the uneven distribution of green spaces, and the new neighbourhoods lacking basic recreational facilities. Additionally, the residential areas could repurpose parking lots and unused spaces into green community areas, especially since many public spaces have been converted into parking lots. Neglecting the potential of the Bahlui riverbanks as a green-blue axis is another local weakness. Moreover, while soil quality may not be a pressing issue presently, the ongoing activities such as industrial operations, waste runoff, and transportation emissions pose environmental and climate risks. Additionally, although within the IMA there is abundant wildlife, a more careful land use planning is needed, in order to prevent the local habitat's fragmentation, particularly in the context of the future road expansions outside the city centre. The poor water quality and waste management	The Climate Neutrality Action Plan includes targeted actions for the green infrastructure and the NBS, covering interventions designed to expand and modernise the green spaces for carbon sequestration and storage, alongside the establishment of a metropolitan network of green-blue corridors along the Bahlui river. Furthermore, both the citizens and the businesses will be incentivized to actively contribute to the development of the green spaces within the city and the metropolitan area, through dedicated programs, such as the platform for green neighbourhood ambassadors, the civic engagement initiatives (especially the competitions for residential owners), and the awareness and educational campaigns. Through these actions, the green elements of Iași and its metropolitan area will not only be preserved but also enhanced, addressing the current deficiencies in order to better serve the local community.

EMISSION DOMAIN	IDENTIFIED BARRIER	DESCRIPTION	PROPOSED SOLUTION
		also threaten the local aquatic ecosystems. Finally, the tourist areas require increased greening efforts.	
TRANSVERSAL BARRIERS	Other related deficiencies	While the water sector is still characterised by stability regarding the availability of surface and groundwater sources for the local needs, multiple issues persist within Iași (e.g., high non-revenue water levels, which contribute to unnecessary energy consumption, the absence of a system for reusing treated wastewater or grey water). Additionally, the critical systems, such as the public health, water, energy, and emergency response are insufficiently resilient in the face of climate variability and extremes. As such, there is a pressing need to enhance the preparedness of the city systems and services, in order for the Municipality to better manage challenges such as heat waves and urban heat islands, intensified and shortened periods of rainfall, and the need for a higher use of nature-based solutions.	Aside from the direct contributions of the proposed interventions within this Action Plan to address these deficiencies, the projects outlined in the other local strategic documents, coupled with the ongoing local programs, are devised to mitigate the adverse effects of these barriers upon the citizens, the private entities, and the natural environment in both Iași and its metropolitan area.
TRANSVERSAL BARRIERS	Limitations in the capacity of residents and organisations to pursue climate neutrality actions	This barrier stems from the limited awareness and education among residents and local organisations regarding climate neutrality, resulting in an improper comprehension and dedication towards the local climate transition process. Additionally, there is a general deficiency in coordinating and managing volunteer activities at the local level, coupled with insufficient financial resources to sustain volunteering programs, which implicitly reduces their effectiveness. Consequently, this issue also hampers the individual stewardship and community initiatives aimed at reducing carbon emissions.	Tackling this barrier hinges on the comprehensive execution of the entire Action Plan. However, the soft interventions (and especially the Social Innovation ones) are the most important in solving these barriers, as they are designed for educating the community and the local ecosystem about climate neutrality and also for actively involving them in the municipal and metropolitan initiatives aimed at reducing CO2 emissions.
TRANSVERSAL BARRIERS	Limited capacity to achieve climate justice, particularly in the vulnerable rural communities in the metropolitan area	Within the IMA, multiple rural communities face entrenched poverty, insufficient human capital development (mainly in terms of education and health), and substandard living conditions. These communities face not only the risks of poverty and social exclusion but also those stemming from climate change, lacking both resilience and readiness to support the local climate neutrality journey. Furthermore, at the IMA level, there's a growing dependency ratio and declining labour force replacement rate. These issues further cause the adverse effects, mainly the increased and inequitable vulnerability to climate change, the diminished mitigation capacity, and the heightened pressure on public services such as the social assistance system.	This Action Plan was designed with a clear commitment to the principles of climate justice, ensuring the protection of the rights of the most vulnerable individuals and promoting the equitable distribution of both the challenges and the benefits associated with climate change. However, IMA IDA will have a key role in mitigating this barrier, particularly considering the large presence of marginalised rural populations. In this context, IMA IDA will engage in collaboration not only with the Iași Municipality but also with the other public administrations within the metropolitan area, as well as with relevant IDAs and NGOs operating at the metropolitan level. These collaborations will focus on implementing measures for community development, social inclusion and climate resilience, aiming to alleviate the adverse impacts of climate change on the vulnerable groups. However, these efforts will not be solely guided by the Climate Neutrality Action Plan; rather, they will mainly draw from the comprehensive strategies outlined in the IUDS and Green City Action Plan, which delve deeper into addressing this aspect.
TRANSVERSAL BARRIERS	Urban sprawl	This barrier arises from the ongoing and inadequately regulated urban sprawl, which is particularly evident in the suburban LAUs within	Given the extensive nature of this barrier, its resolution mainly depends on the implementation of principles outlined in the

EMISSION DOMAIN	IDENTIFIED BARRIER	DESCRIPTION	PROPOSED SOLUTION
		IMA. This sprawl complicates the transition towards climate neutrality, especially in terms of ensuring climate justice for all the residents. As such, the pronounced demographic growth within IMA underscores a trend towards suburbanisation, which is further exacerbated by gentrification. Additionally, the urban expansion in the rapidly developing communes has not been guided by integrated urban planning. Consequently, the lack of coherent urban planning has also led to a decrease in per capita green spaces.	General Urban Plan and its associated regulations. Concurrently, the Integrated Urban Development Strategy proposes specific measures to address these shortcomings. Moreover, as urban sprawl significantly impacts the natural environment and contributes to increased CO2 emissions at both local and metropolitan levels, the Climate Neutrality Action Plan includes interventions that will contribute to mitigating these adverse effects. However, there is a need for a Territorial Development Plan for the Iași Metropolitan Area, which would comprehensively address these deficiencies. To this end, successful models from Romania, such as the Territorial Development Plan developed by peers in the Oradea Metropolitan Area, will be consulted. It is expected that the M100 Hub will provide the necessary tools for such exchanges of knowledge and experiences.
TRANSVERSAL BARRIERS	Constrained administrative capacity amidst the European climate neutrality objectives	This barrier arises from the limited administrative capacity of the public administration staff, compounded by the absence of previous similar initiatives and the recent adoption of such targets even at the European level. However, the Municipality has previously developed relevant urban planning documents, such as the IUDS and the GCAP, which address various climate-related aspects, albeit not exclusively focused on climate neutrality. However, these documents generally prioritise the broader green transition rather than solely targeting CO2 emissions reduction in order to mitigate the climate changes.	The Climate Neutrality Action Plan directly addresses this barrier, particularly through the proposed Governance Innovation interventions. Additionally, the pre-existing Green City Action Plan, which was developed with support from the European Bank for Reconstruction and Development, provides a significant advantage, having been developed through an extensive participatory process and benefiting from specialised technical expertise. Iași Municipality is also in the process of developing a partnership with the World Bank, through which technical assistance on climate neutrality issues will be received. Furthermore, efforts are being made to leverage capacity-building opportunities provided by the national M100 Hub and also those available through other international resources, such as those prepared by NetZeroCities, CapaCities, Urbact, Interreg, and the European Urban Initiative. Lastly, through the M100 Hub and its national and international partners, Iași Municipality aims to adopt best practices from the Romanian cities awarded with the EU Mission for Climate-Neutral and Smart Cities Label, as well as from other European cities that are part of the EU Mission.
TRANSVERSAL BARRIERS	National-level administrative barriers	This barrier covers multiple administrative challenges, ranging from sector-specific (e.g., unclear laws regarding hazardous waste management, non-implementation of pay-as-you-throw systems, lack of alignment between waste generation and taxation, ambiguous regulations on micro-mobility, absence of a regulatory framework for metropolitan transport and standardised mechanisms for monitoring building energy efficiency) to cross-cutting barriers (e.g., frequent, political shifts, lack of coordination among services within the national public administration, bureaucratic hurdles in land expropriation for public infrastructure, ineffective public procurement legislation, tax uncertainties). The inadequate collection, synthesis, monitoring, and utilisation of statistical data by relevant national agencies furtherly exacerbates these barriers.	The M100 Hub will serve as the main channel for communicating these issues and collaborating with our peers and also with the other national actors, in order to resolve them. Furthermore, Iași Municipality and IMA IDA will actively participate in relevant discussions within the other national and international networks and platforms in which both the Iași Municipality and IMA IDA are involved, with the goal of identifying and implementing effective solutions.

EMISSION DOMAIN	IDENTIFIED BARRIER	DESCRIPTION	PROPOSED SOLUTION
FUNDING BARRIERS	Restrictions on debt levels for both public and private entities	The public institutions and also the private organisations often operate under specific debt limits, which can impede the progress of their climate neutrality projects. The limitation is particularly severe for public institutions, which face regulatory constraints on accumulating debt, thereby reducing their capacity to obtain funding for such projects.	In order to address this barrier, which is currently among the most pressing ones, the public administration will need to both increase its local budget revenues and settle its existing debts, including the current loans. Similarly, the private companies will need to adopt measures for boosting their revenues, while also effectively managing their existing debts. However, implementing these solutions will be a challenging task, and all the actors will require extensive external support in the coming years.
FUNDING BARRIERS	Inadequate financial contributions from private companies for climate neutrality projects	Several factors contribute to this barrier, including the private sector's hesitance to allocate capital to climate neutrality projects and their difficulties in accessing innovative financing solutions. Motivating local entrepreneurs and investors to participate in carbon reduction projects is challenging, due to concerns about profitability, uncertainty surrounding new technologies, national regulatory obstacles, and a lack of knowledge and awareness about climate neutrality investment opportunities. Additionally, private companies face challenges in obtaining non-reimbursable financing allocated from the national and EU budgets, while the limitations in entrepreneurs' education and their risk aversion also hinder their adoption of venture capital funding and other innovative financing solutions, leading to reluctance to use the available but previously untapped financing schemes. Moreover, one of the main economic issues within the IMA is the underdevelopment of its peripheral areas, which have few employees and a low density of companies, as most businesses and employees are concentrated in Iași Municipality. This concentration causes territorial disparities, slowing the expansion of climate neutrality projects among the companies that operate in the other IMA localities. Consequently, most of the climate neutrality projects will inevitably be developed in Iași Municipality, further exacerbating this deficiency.	In order to address this barrier, the Municipality aims to enhance the promotion of the non-reimbursable financing opportunities which are available to local companies through the North-East Regional Programme, the other national operational programmes, and through the European financing instruments. This effort will require a stronger collaboration with the North-East Regional Development Agency, which will need to undertake more extensive promotional and informational campaigns regarding the non-reimbursable funds available in the coming years. Additionally, this Action Plan includes measures to incentivise the private companies to participate in the local climate neutrality efforts, with the goal of attracting more investment from entrepreneurs and investors for projects that directly contribute to reducing CO2 emissions.
FUNDING BARRIERS	Financing difficulties for the investments foreseen by the proposed actions	The financial difficulties stem from multiple issues, including the limited funding within the current local budget and the high investment costs that exceed the local financial capacity. Many of the proposed climate neutrality actions require substantial upfront investments, which are greater than the available local revenues, especially in the context of rising inflation. The Municipality also encounters challenges in obtaining EU funds for the planned public investments due to national-level delays, instability, and complex procedures that impede the access to the available non-refundable financing programmes. The difficulty in combining multiple funding sources further exacerbates this barrier, compounded by various financing risks.	In the coming years, Iași Municipality, together with all the public administrations within the IMA will make substantial efforts to access the funds allocated through the North-East Regional Programme, the NRRP, the other national operational programmes, as well as other national channels (such as the grants which will be available through the Environmental Fund Administration and the National Investment Company) and international sources (namely the funding programmes managed directly by the European Commission, such as LIFE or Horizon Europe). Additionally, focus will be placed on identifying supplementary financing sources, with the main emphasis on mobilising private capital. The exploration of new mechanisms, not previously tested but potentially beneficial for financing the investments needed to reduce the carbon footprint, will also be undertaken. However, despite the activation of all these mitigation solutions, the complete elimination of this barrier is not guaranteed. Therefore,

EMISSION DOMAIN	IDENTIFIED BARRIER	DESCRIPTION	PROPOSED SOLUTION
			addressing this issue remains a key point on the agenda for involvement in the M100 Hub.

RISKS

Provide a short summary of the main risks which may affect the achievement of the city's climate-neutrality goals.

- ➔ **For each risk, briefly outline its impact on hindering the climate neutrality achievement and describe the approach / intervention / solution for overcoming it through the implementation of the current Climate Neutrality Action Plan.**
- ➔ **Make sure to also incorporate the risks related to the financing of the climate investments.**

The table below outlines the main risks that might hinder the achievement of climate neutrality within Iași Municipality and its metropolitan area, along with the key solutions that will be activated in order to address these risks. Within this analysis, the primary risks affecting each field of action, as well as those with a cross-cutting influence on the entirety of the Climate Neutrality Action Plan, have been identified. Additionally, the risks associated with financing the proposed interventions have been considered.

Additionally, specific mitigation solutions were devised for each identified risk, in order to diminish their influence on the effective implementation of the investments and initiatives outlined in this Plan. Certain actions proposed within this Action Plan inherently contribute to most of the risks' reduction. Furthermore, the Municipality and IMA IDA engage in ongoing efforts to solve recurrent challenges and mitigate emerging risks that could impede their objectives for integrated sustainable urban development, thereby positively contributing to the climate neutrality efforts. Lastly, this Action Plan introduces additional tools, which were tailored specifically to mitigate other risks that may jeopardise Iași's attainment of its climate neutrality objectives by 2030.

On an annual basis, technical experts from Iași City Hall, in collaboration with their counterparts from IMA IDA, will conduct the monitoring of these risks, alongside the evaluation of the MEL indicators delineated in this Action Plan.

In order to uphold a cohesive operational approach within the local public administration concerning its sustainability and climate neutrality work, the execution and oversight of this Action Plan, including the inherent risks of the proposed interventions, will be **managed by the governance structure which has been previously established for the implementation and monitoring of GCAP, as outlined below:**

- ➔ The Implementation and Monitoring Working Group will not only oversee the actions's execution and progress, but will also identify and mitigate their associated risks, under the close supervision of a designated coordinator.
- ➔ The GCAP Supervisory Board, presided over by the Mayor of Iași, will grant the final approval for the measures which will be used for addressing the emerging risks, as necessary.
- ➔ The GCAP ambassadors, which will be affiliated with the NetZeroCity Local Coalition, will be responsible for presenting to the public administration the risks which they will identify at both local and metropolitan levels, and also with suggesting mitigation strategies.
- ➔ The IMA IDA's staff will offer comprehensive support to the above structures throughout the implementation phase of the Climate Neutrality Action Plan. Additionally, they will manage and mitigate the risks that will emerge in the other localities within the Iași Metropolitan Area.

Finally, adhering to the EU Mission for Climate-Neutral and Smart Cities' model, the monitoring process will integrate an uncertainty framework, in order to monitor both the predefined indicators and also potential uncertainties. Drawing inspiration from the model formulated by M. Bodde, K. Van der Wel, P. Driessen, and A. Wardekker, the Municipality will tackle four types of uncertainties relevant to strategic environmental assessments: inherent uncertainties arising from system complexities, scientific uncertainties due to data limitations, social uncertainties stemming from diverse stakeholder values and the political climate, and legal uncertainties resulting from the variability of the legal framework.

TABLE 31 MAIN RISKS

FIELD OF ACTION	IDENTIFIED RISK	RISK DESCRIPTION	MITIGATION SOLUTION
ENERGY SYSTEMS	The complex investments required to enhance the efficiency and attractiveness of the heating system	The anticipated interventions demand a varied and intricate array of technical solutions, generating challenges in finding reliable suppliers who can provide such solutions quickly and at competitive prices.	To mitigate this risk, the Municipality will engage all the specialised technical departments within the City Hall, leveraging their expertise from prior similar investment projects. Additionally, the Municipality will collaborate with external technical experts as necessary, which will provide supplementary support in the processes requiring additional assistance.
BUILT ENVIRONMENT	The ageing of the housing stock, particularly considering the presence of residential buildings with high seismic risk	The presence of ageing residential buildings with high seismic risk raises significant safety concerns for both the occupants and the neighbouring properties, imposing urgent intervention to mitigate the risk of potential disasters. Moreover, retrofitting the older buildings in order to improve their energy efficiency might be more difficult and financially burdensome in terms of the needed works, given their structural vulnerabilities. Lastly, addressing the ageing housing stock requires not only energy-efficient upgrades but also measures to enhance their resilience against climate change impacts, and especially against extreme weather events. The presence of seismic risks adds another layer of complexity to ensuring the long-term sustainability and resilience of these buildings.	The works outlined in this Climate Neutrality Action Plan for the actions dedicated to enhancing the energy efficiency of the public and residential buildings can be integrated with technical interventions for improving the buildings' seismic resilience. Additionally, the GCAP proposes improving the seismic resistance of the buildings, by assessing their current state in terms of earthquake risk and resilience, and estimating the capital expenditures required for the improvements. Furthermore, the SECAP proposed actions for the development of programs aimed at strengthening the buildings with seismic risk within the Municipality.
BUILT ENVIRONMENT	Increasing costs in the construction industry	The risk of rising costs for the anticipated actions, driven by inflation and the mismatch between demand and supply in the Romanian construction sector, could lead to increased budgets for the proposed interventions. This risk could affect both the construction of new nZEB buildings and the energy efficiency works anticipated for the existing structures.	The public administration will prepare technical studies that emphasise cost-effective and viable investments. Furthermore, comprehensive market research will inform the contracting processes and equipment procurement, in order to ensure the best possible offers. The inflation-related variances will be addressed through the local budget, the primary funding being sourced from EU funds.
BUILT ENVIRONMENT	Insufficient capacity	This organisational risk refers to the ability of the public staff to carry out the numerous proposed interventions, considering their significant size and complexity. The risk is relatively lower for the interventions aimed at increasing the energy efficiency of buildings, as the Municipality has prior experience in this area. However, the risk is higher for the nZEB buildings and the smart district, which involve a greater level of innovation and unfamiliarity.	The municipality will engage with external experts from the private sector, academia, and other competent entities, such as the Romanian Green Building Council, in order to enhance its internal technical expertise, as required. Furthermore, the public administration is open to absorbing best practices from its national and international counterparts with relevant experience in this field, in order to better prepare for these ambitious investments.
MOBILITY & TRANSPORT	Challenges arising from the actions / policies of central authorities	The central authorities show a sluggish pace in implementing the major transportation infrastructure projects, with metropolitan areas receiving insufficient attention.	These risks will undoubtedly represent topics of discussion and resolution within the M100 hub; however, the local public administration consistently allocates efforts towards the early

FIELD OF ACTION	IDENTIFIED RISK	RISK DESCRIPTION	MITIGATION SOLUTION
MOBILITY & TRANSPORT	Financial uncertainties linked to projects involving transportation and mobility infrastructure	The financial challenges linked to transport and mobility infrastructure projects are magnified by the high implementation expenses and the persistent threat of inflation, which strain the already limited local budget resources. This risk is compounded by the need for periodic adjustments to the investment costs, despite the cumbersome and costly nature of such procedures. The escalation in energy prices further amplifies these risks. This situation particularly affects the uptake of energy-driven mobility solutions such as electric buses and cars, especially among residents.	and efficient preparation and implementation of its mobility and transport investments. Additionally, the Iași Infrastructure Intercommunity Development Association has been established at the county level, serving as the instrument through which, in partnership with the National Road Infrastructure Administration Company and the LAUs from Iași County, the Iași County Council will manage the projects targeting the major transport infrastructure. Another valuable mechanism for cooperation and also for the implementation (and implicitly for funding) of the mobility and transport projects is the Iași Metropolitan Public Transport Association, which will coordinate the sustainable mobility throughout the entire functional urban area. The main responsibility of this association is to secure the financing needed for transforming the railway lines into traffic axes for the urban and metropolitan environments.
MOBILITY & TRANSPORT	The rising motorisation index trend, which not only escalates the need for residential parking and strains the street grid, thereby compromising the public space resources, but generates higher levels of CO2 and other pollutants linked with motorised transportation	The influx of vehicles associated with a higher motorization index puts pressure on the existing infrastructure, prompting the need for additional road construction and maintenance. Such works could lead to further carbon emissions from construction activities and increased energy consumption for the transportation-related infrastructure. Moreover, as more residents opt for private vehicles, there may be less public support or demand for sustainable mobility alternatives (e.g., public transportation, cycling, walking), hindering the local progress towards reducing the carbon emissions in the transportation sector.	All of the interventions outlined in the Climate Neutrality Action Plan in terms of sustainable urban mobility will play a significant role in mitigating this risk. In addition to these interventions, we also mention the projects delineated in the Sustainable Urban Mobility Plan, along with the investments proposed in the Integrated Urban Development Strategy and the Green City Action Plan. These investments collectively form a comprehensive and robust portfolio of projects specifically aimed at enhancing the sustainability of the transportation sector within the Iași Metropolitan Area.
GREEN INFRASTRUCTURE & NATURE-BASED SOLUTIONS	Environmental vulnerabilities associated with human interventions in natural areas	The interventions proposed in terms of the green infrastructure require careful environmental planning. These projects must be undertaken with proper care, in order to protect the local biodiversity and natural habitats, minimising any disruptive or invasive effects.	In executing the actions outlined in the Climate Neutrality Action Plan concerning the green infrastructure, experts possessing technical environmental competencies from the City Hall and from the other relevant public institutions will be engaged. Moreover, the public administration will seek specialised assistance from external experts, including those from other public bodies (e.g., environmental agencies), as well as from the private, academic and non-governmental sector. Their expertise will be used for ensuring a thorough environmental planning for the interventions to be conducted in the targeted green spaces.
GREEN INFRASTRUCTURE & NATURE-BASED SOLUTIONS	The tendency to convert land resources often overlooks the necessity of incorporating new public spaces, particularly in emerging residential areas, thereby increasing the risk of inadequate green areas	Neglecting to include new public green spaces means missed opportunities for carbon sequestration, the Municipality risking to lose out on a natural mechanism for reducing its carbon emissions. Additionally, the absence of green spaces exacerbates the urban heat island effect, leading to increased energy consumption for cooling and higher emissions of greenhouse gases. Moreover, without enough greenery, the air quality may furtherly deteriorate, leading to health issues and increasing the reliance on energy-intensive air purification systems, hindering the local efforts to reduce the carbon	The resolution to this risk lies in the integrated implementation of the interventions outlined in the Climate Neutrality Action Plan and GCAP, in conjunction with those proposed in the IUDS. These actions will be thoroughly aligned with the regulations and directives set forth in the GUP, concerning the green public spaces.

FIELD OF ACTION	IDENTIFIED RISK	RISK DESCRIPTION	MITIGATION SOLUTION
		emissions.	
WASTE & CIRCULAR ECONOMY	The inadequate technical infrastructure for sorting the collected mixed solid waste	Without the proper sorting infrastructure, a significant part of the collected mixed solid waste will end up in landfills (which generate methane, a potent greenhouse gas) rather than being diverted for recycling or composting. Additionally, the inadequate sorting infrastructure might hamper the recycling process by making it difficult to recover recyclable materials from mixed waste streams, and thus resulting in missed opportunities to conserve resources and reduce the energy consumption associated with manufacturing new products from virgin materials. Furthermore, in the absence of efficient sorting facilities, the mixed solid waste often requires more energy-intensive treatment methods, which consume significant amounts of energy and may emit greenhouse gases, counteracting the local efforts to achieve climate neutrality. Moreover, an inefficient waste sorting infrastructure can hinder the public engagement and participation in the local waste reduction initiatives, because when residents perceive that their efforts to separate waste are not being effectively used, they may become disillusioned and less motivated to adopt sustainable behaviours.	The resolution to this risk hinges on the work led by the Iași Sanitation Intercommunity Development Association, which was established to oversee the management and monitoring of the sanitation services, but also to facilitate the joint investments for the development and modernization of the sanitation systems. In order to improve the technical infrastructure for sorting the mixed solid waste, this IDA will collaborate with the local waste operators, facilitated by the local public administration, to implement the investments foreseen in both the Climate Neutrality Action Plan and the Green City Action Plan. Apart from interventions outlined in the Climate Neutrality Action Plan, those covered by the GCAP include: ➔ Installing eco-islands for separate solid waste collection ➔ Developing a waste management centre ➔ Implementing digitization measures for the waste collection operators ➔ Initiating a waste-to-energy conversion project at the landfill site
WASTE & CIRCULAR ECONOMY	Insufficient involvement of citizens in selective waste collection	The citizens' lack of engagement with selective waste collection arises from several factors. These include the lack of a collective culture oriented towards waste reduction, the inadequate education on the subject, the limited understanding of circular economy principles and their advantages, and the insufficient availability of appropriate spaces for selective waste disposal. Consequently, it may take citizens longer to adopt sustainable waste disposal practices, potentially delaying the desired outcomes. One significant concern associated with this risk is the inadequate implementation of separate packaging waste collection, particularly in the small shops and among the rural population within the IMA.	Once the citizens are provided with the infrastructure that will facilitate selective waste collection and recycling, these facilities will foster a greater engagement in sustainable waste management and openness towards circular economy practices. In this regard, the public administration's leadership will play a key role in fostering the needed community engagement. Moreover, the Action Plan proposes a set of Social Innovation interventions aimed at guiding citizens towards more sustainable behaviours, which will also be visible in the reduction of their carbon footprint and waste generation. Additionally, the NetZeroCity Local Coalition, particularly through the work to be pursued by the green neighbourhood ambassadors, will focus on raising awareness, disseminating information, and promoting sustainable community initiatives, which will cultivate an environmental and climate consciousness among the citizens, particularly with respect to waste generation.
GOVERNANCE AND SOCIAL	The risk of the public climate neutrality vision vision not being adopted by the community and stakeholders	The potential inefficacy of communicating the positive impacts and co-benefits resulting from implementing this Action Plan could diminish the visibility, accessibility, and impact of the proposed climate neutrality actions. Consequently, an improper public acceptance of the local climate neutrality vision or misunderstandings regarding the benefits of implementing the interventions outlined in the Action Plan may arise. This risk is particularly heightened by the fact that certain students from the IMA, who not only represent young talents but also the most receptive population to change, choose to pursue their university studies in Bucharest and Cluj-Napoca, despite Iași also being a prominent university centre.	The Social Innovation interventions outlined in the Climate Neutrality Action Plan will directly contribute to mitigating this risk, under the coordination of the NetZeroCity Local Coalition. Through its ambassadors, who will co-manage the proposed interventions, the Coalition will enhance the local community's understanding of the importance of reducing their carbon footprint for their personal well-being but also for the local environment's protection. Additionally, the Coalition will foster an active civic involvement in the local initiatives aimed at achieving climate neutrality. Moreover, as previously mentioned, the public administration aims to be a modern, proactive, and committed leader, guiding the community towards climate neutrality. At the

FIELD OF ACTION	IDENTIFIED RISK	RISK DESCRIPTION	MITIGATION SOLUTION
GOVERNANCE AND SOCIAL INNOVATION	Limited public engagement	If, at the local level, the overall volunteering faces threats such as the ones previously presented, it may even result in fewer volunteers participating in the local climate mitigation initiatives. For instance, a reduced involvement could hinder the community outreach and education efforts, and even limit the scale and effectiveness of the climate projects developed by the civil society. In essence, a lack of robust volunteer support could impede the Municipality's ability to mobilise resources, leverage community involvement, and drive the systemic changes needed to achieve the local climate neutrality goals.	metropolitan level, these efforts will be coordinated by the IMA IDA, with the same goal. An effective, frequent, transparent, and easily understandable public communication will be maintained throughout the entire implementation of the Climate Neutrality Action Plan, for helping citizens to understand the importance, direct impact, and co-benefits of the pathways pursued to reduce the local CO2 emissions.
GOVERNANCE AND SOCIAL INNOVATION	Constrained governance capability in pursuing the climate neutrality goals	The novelty of the governance tools required to achieve climate neutrality brings forth numerous uncertainties. These include the unfamiliarity with operational procedures, the governance structures, the collaborative tools, and the intervention methodologies. Additionally, various future challenges are anticipated, including a lack of understanding of specific technical aspects of climate neutrality, difficulties in attracting the necessary resources, staffing limitations, and the challenge of aligning the European ambitions with the local circumstances.	The mitigation of this risk mainly hinges on accessing the learning and training resources provided by the M100 Hub. Nevertheless, the municipality benefits from the governance framework proposed and implemented within the GCAP, which will be further developed and used to facilitate the transition to climate neutrality. Furthermore, as previously indicated, the municipality will finalise a support agreement with the World Bank, through which the public administration will receive specialised technical assistance in the field of climate neutrality. Additionally, it will continue its collaborations with other external partners (various technical consultants, universities, European cities and other international partners), in order to implement a climate neutrality governance model that aligns with the European priorities and recommendations.
OTHER TRANSVERSAL RISKS	Unsustainable urban development patterns	The expansive development in dispersed, low-density forms, lacking an efficient land use in the already urbanised areas, which are well-connected to public transport networks, represents an unsustainable practice. This approach consumes land and additional economic resources, straining both the transport and the technical infrastructure. This pattern fosters an unsustainable lifestyle, which is reliant on personal vehicles, leading to polluting emissions. Moreover, the fragmented built footprint and the clear separation of residential areas from the industrial, commercial, and service areas may concentrate a majority of jobs in the city centre, potentially resulting in traffic congestion and increased pollution from transportation and mobility.	This risk extends beyond climate neutrality, and its mitigation is not confined to the framework of this Action Plan alone. Consequently, addressing it relies on a closer collaboration between Iași Municipality and IMA IDA, but also with the other public administrations within IMA, through IMA IDA. Equally important will be the dialogue with the private stakeholders, particularly the real estate developers, the utility providers, and the entities involved in the major infrastructure projects, as well as the Intercommunity Development Associations established around Iași Municipality. To comprehensively address this risk, the most important measures are the ones outlined in IUDS and SUMP, alongside the need to develop a Territorial Development Plan spanning the entire metropolitan area.
OTHER TRANSVERSAL RISKS	An increase in the population susceptible to the impacts of climate change	This risk comprises several elements which are present within IMA, such as the unemployed individuals, the ageing population and the consequential dependency ratio between older and younger individuals, the children at risk of poverty and limited access to quality education, the individuals having various health issues (e.g., respiratory conditions), and the widening divide between urban and rural areas. Together, these factors may collectively elevate the vulnerability of the IMA's population to the impacts of climate change.	At the local level, multiple NGOs implement projects for enhancing the living standards of the marginalised communities, with the Municipality providing support through both direct assistance and public social and health services. Similarly, at the metropolitan level, IMA IDA has incorporated into its strategic objectives the improvement of the accessibility and integrated facilities within the metropolitan area, along with the goal to improve the living conditions for the communities living within the metropolitan area. Overall, the implementation of the social measures outlined in the IUDS will contribute to reducing the vulnerabilities experienced by the disadvantaged groups, while this Action Plan integrates the

FIELD OF ACTION	IDENTIFIED RISK	RISK DESCRIPTION	MITIGATION SOLUTION
			dimension of climate justice within each of its proposed interventions. Looking ahead, a larger participation in various international projects focused on climate resilience will enable the public authorities within the Iași Metropolitan Area, led by the Iași Municipality, to better address the needs of the economically, socially, and climatically vulnerable populations.
OTHER TRANSVERSAL RISKS	Other external risks	This combination of risks covers multiple broader macro-level considerations, such as the political instability that could lead to shifts in policies and regulations, the legal and regulatory obstacles arising from changes in laws and regulations, the technical risks associated with the performance of new or emerging technologies, and the market fluctuations impacting the availability of products and services.	The main approach for mitigating the local and metropolitan impact of these risks consists of increasing the administrative capacity of Iași Municipality, IMA IDA, and the other public administrations in the Iași Metropolitan Area, in order for them to better prepared to effectively manage any potential critical situations resulting from these risks, through the implementation of contingency measures. However, these actors are already undertaking various initiatives in this regard, including projects financed through non-refundable funds focused on administrative capacity and collaborations with external partners. All these efforts will be further consolidated in the coming years, with significant support expected from the technical assistance to be provided by the World Bank.
OTHER FUNDING RELATED RISKS	Obstacles in the absorption of EU funds	This risk refers to the uncertainties that could be caused by the financing entities, in the process of accessing the EU funds to be allocated until 2027. These uncertainties may include restrictive conditions, delays in the calls, prolonged evaluation and contracting periods etc. Considering that EU funds are needed to finance most of the interventions outlined in this Action Plan, this risk has the potential to affect the capacity to fund the actions aimed at achieving climate neutrality.	In addition to advocating for this risk's reduction within the M100 Hub, the municipality remains committed to accessing the available EU funds, as it has done previously. Furthermore, where internal capacity may be limited, the municipality is open to collaborating with external consultants who could assist in drafting and submitting funding proposals, as well as managing the projects' contracting and implementation. Furthermore, additional internal resources will be dedicated to accessing supplementary financing sources, including the potential capital from the private sector. This strategic approach aims to ensure that by the conclusion of the current programming period in 2027, the public administration will have a more diversified pool of financing instruments, extending beyond the EU funds.
OTHER FUNDING RELATED RISKS	Price variations driven by inflation	Inflation-induced price fluctuations may affect the budget set for the proposed interventions, especially given the increasing demand for climate-neutral and smart investments.	In the event of increased inflationary pressures, the public administration will intensify its monitoring of the local budget through its economic departments. Additionally, when preparing the funding proposals and conducting the technical and economic analyses for the climate neutrality investment projects, a higher attention will be given to estimating the budgets, such as to accommodate any potential cost increases due to inflation. Moreover, the capital deployment policies that will be pursued during the Action Plan's implementation, coupled with additional efforts to explore alternative financing sources in the future (in order to diversify available funds), will furtherly contribute to mitigating this risk. Should the risk of inflation become even more pronounced, the municipality will seek support from external experts, in order to develop a targeted risk management strategy addressing specifically the inflation risks, for ensuring the successful execution of the foreseen

FIELD OF ACTION	IDENTIFIED RISK	RISK DESCRIPTION	MITIGATION SOLUTION
			climate neutrality investment projects.
OTHER FUNDING RELATED RISKS	Citizens' limited ability to invest in their own climate neutrality solutions	The constrained purchasing power, particularly amid inflationary pressures, could affect the citizens' inclination to invest in personal climate neutrality solutions, such as nature-based solutions (e.g., green roofs), electric vehicles, photovoltaic panels or heat pumps for household energy, or tools for monitoring energy consumption at home.	The municipality will promote the citizens' access to nationally-provided funding sources, including the "Rabla" programmes for light bulbs, household appliances, and cars, or the "Green Home" financing program for purchasing photovoltaic panels. Additionally, the municipality will leverage other national financing mechanisms to assist its citizens in the years ahead.

In this context, we also highlight the main socio-economic vulnerabilities, environmental challenges, and climate risks facing Iași Municipality and its metropolitan area.

According to the IUDS, the global climate changes have impacted the local territory, notably through the rising temperatures and the significantly altering precipitation patterns. For instance, these changes pose a threat to the Iași Metropolitan Area, as they have caused urban floods by overwhelming the capacity of the centralised sewer systems to handle rainwater during periods of intense rainfall.

The main natural and climatic risks identified within Iași Municipality, as detailed in the SECAP, are presented in the table below, which outlines their current levels, the anticipated changes in intensity and frequency, and the corresponding time intervals.

TABLE 32 CLIMATE RISKS IDENTIFIED WITHIN IAȘI MUNICIPALITY

RISK FACTOR	ACTUAL RISKS	ANTICIPATED RISKS		
	ACTUAL LEVEL	ANTICIPATED VARIATION IN INTENSITY	ANTICIPATED VARIATION IN FREQUENCY	TIME INTERVAL
EXTREME HEAT	Medium	Increase	Increase	Medium term
EXTREME COLD	Medium	Decrease	Decrease	Medium term
EXTREME PRECIPITATION	Medium	Increase	No anticipated variation	Medium term
FLOODING	Medium	No anticipated variation	No anticipated variation	Short term
DROUGHTS	Medium	Increase	No anticipated variation	Short term
STORMS	Low	No anticipated variation	No anticipated variation	Medium term
LANDSLIDES	High	Increase	Increase	Short term
EARTHQUAKES	Moderate	No anticipated variation	No anticipated variation	Short term

Source: SECAP

Similarly, the SECAP outlines the primary vulnerabilities identified within Iași Municipality, which were summarised in the table below:

TABLE 33 VULNERABILITY ASPECTS IDENTIFIED WITHIN IAȘI MUNICIPALITY

VULNERABILITY TYPE	VULNERABILITY ASPECT	ADDITIONAL DETAILS
SOCIO - ECONOMIC	Significant fluctuations in temperature impact the population's health.	The exacerbation of extreme temperatures results in a rise in illnesses and fatalities, particularly among the elderly and children.

VULNERABILITY TYPE	VULNERABILITY ASPECT	ADDITIONAL DETAILS
	Floods impact the safety and health of the population.	The probable effects include the spread of toxic substances from inundated warehouses, leading to potential harm to individuals, as well as the infestation of the flooded area by microbes and pathogens, resulting in human casualties.
PHYSICAL AND ENVIRONMENTAL	Rising temperatures result in a heightened thermal stress among the population.	An upward trend in average annual temperatures is anticipated by the year 2050, as a consequence of climate change, affecting the populations living in residences without sufficient thermal comfort standards.
	Landslides have the potential to induce both material and human devastation.	Certain areas, such as the center, Copou - Sărărie, Tudor Vladimirescu, Metalurgiei, and Bularga, are susceptible to landslides.
	Earthquakes impact the safety of the population and of the buildings.	The central area is characterised by its exposure to seismic hazards. Within the municipality of Iași, more than 400 buildings have been assessed and designated as possessing seismic risk.
	Floods have the potential to result in material damage.	The repercussions of floods manifest in the destruction of buildings, infrastructure (such as roads), acceleration of corrosive processes, material losses due to depreciation etc.
	Rainfall and storms cause both material and economic devastation.	The consequences include street exposure, the disruption of car traffic, interruptions in energy supply, soil erosion etc.

Source: SECAP

Another key source for this analysis is the Green City Action Plan, which outlines several priority environmental challenges for Iași Municipality. These challenges encompass: the poor air quality and the associated greenhouse gas emissions, primarily resulting from fossil fuel-based transport and energy supply; the limited availability and access to green and blue open spaces; the water quality issues and the surface water pollution; the inadequate wastewater recycling; the cross-cutting issues related to gender and social inclusion. These cross-cutting issues include the inequalities, vulnerabilities, and disadvantages linked to gender, ethnicity, age, disability, sexual orientation or gender identity, religion, poverty, and migrant or refugee status.

According to the same source, the physical and socio-economic vulnerabilities in Iași, along with the various hazards to which the Municipality and its metropolitan area are exposed, result in significant risks of loss and damage. The greatest risks, based on the extent of the hazard exposure, the proportion of potentially affected inhabitants, and the likelihood or frequency of hazard occurrence, include those that impact multiple sectors and populations, severely reduce natural resources, and cause substantial economic and social damage. These risks cover the extreme temperatures, the seismic activity, the extreme variations in water levels (floods or droughts), and the air and soil pollution.

Moreover, as indicated by the GCAP, the physical vulnerability of Iași is intertwined with various social and economic factors that disproportionately impact specific demographic groups. Notably, the ageing infrastructure, characterised by older buildings with inadequate structural integrity, renders them particularly susceptible to seismic activity. These structures often accommodate vulnerable populations due to their affordability, and such groups exhibit limited adaptive capacities stemming from their socioeconomic status, financial constraints, and mobility limitations. Furthermore, elderly residents face heightened vulnerability to the extreme weather events, compounded by their reduced adaptive capacities, social isolation, and pre-existing health conditions. Additional socio-economic vulnerabilities stem from factors such as residing in marginalised neighbourhoods prone to hazards, substandard housing conditions, overcrowding, and behaviours influenced by financial constraints, including the inadequate nutrition, the sedentary lifestyles, and the poverty.

The residents living with disabilities and chronic illnesses face an even higher vulnerability during the extreme weather events, earthquakes, and floods, due to their limited mobility and reliance on caregivers or medical equipment. Similarly, the infants and young children are equally susceptible during floods and heat waves, due to their increased vulnerability to waterborne diseases, drowning, diminished capacity to regulate the body temperature, and the disrupted access to education. Additionally, societal expectations for women to undertake caregiving responsibilities limit their mobility during disaster events and hinder their capacity to engage in paid employment. Consequently, these demographic groups experience greater physical vulnerability during such events and encounter challenges in achieving a proper financial recovery.

In order to address the vulnerability of the residents to climate changes, the Climate Neutrality Action Plan is structured based on the principles of climate justice. These guiding principles will inform the implementation of all the interventions aimed at reducing the carbon footprint at both local and metropolitan levels.

OPPORTUNITIES

Outline the main opportunities you aim to leverage in order to accelerate the local transition towards climate neutrality.

Both the Iași Municipality and IMA IDA aim to exploit the pool of available opportunities through the adoption of a comprehensive approach that covers infrastructure, capacities, processes, resource flows, alliances, and financial resources. This strategic approach will allow a faster achievement of the local climate neutrality goals, while concurrently fostering resilience and sustainable development within the metropolitan territory.

Regarding the capacity building, the enhancement of the local competencies and expertise in terms of climate neutrality will be pursued by accessing various educational opportunities, aimed at increasing the collective capacity for implementing climate mitigation measures.

- **Internal readiness:** The main aim is to capitalise on the specialised services, technical support, and knowledge-sharing opportunities facilitated by the M100 Hub, for increasing the local capacity, particularly within the GCAP governance structure, which will be leveraged for implementing the Climate Neutrality Action Plan. Additionally, both the public administration and IMA IDA will tap into the available international educational opportunities, such as those offered by the EU Mission for Climate-Neutral and Smart Cities, NetZeroCities and CapaCities.
- **External capabilities:** The Municipality aims to increase even more the capacity of its NetZeroCity Local Coalition (stakeholders from the private sector, civil society, and citizens, including the GCAP ambassadors that will partake in this Coalition). IMA IDA will undertake a similar approach and will also seek to fortify the capacities of the other public administrations within the Iași Metropolitan Area (including through best practice transfers from the Iași Municipality).
- **Additional resources:** Both the Iași City Hall and IMA IDA are also open to seizing any other capacity-building prospects that may emerge, such as informative / awareness events, training initiatives, twinning programs, exchange visits, study tours, international collaborative projects, and support from European institutions.

At both the local and metropolitan levels, a range of measures will be implemented in order to optimise the existing processes:

- **Local process integration:** Iași Municipality aims to integrate the methodological processes developed within the EU Mission for Climate-Neutral and Smart Cities at the local level, by adopting the relevant procedures, structures and solutions.
- **Process innovation:** Both the public administration and IMA IDA will leverage any opportunity conducive to process innovation. In this case, we refer mainly to enhancing the internal work structures and the public services, primarily through the soft measures outlined in the Action Plan, but also through additional measures emerging from future opportunities. Similarly, both the entities will focus on addressing the emissions from each sector individually through innovative technological solutions, as outlined in the Action Plan.

Several opportunities will also be capitalised in terms of alliances and partnerships:

- **Local partnerships:**
  - **NetZeroCity Local Coalition:** The Municipality aims to strengthen and expand its collaborations with the local businesses, NGOs, academia, and other stakeholders, in order to harness their resources and networks, for advancing the local climate initiatives.
  - **PPPs:** Public-private partnerships, modelled after the successful collaborations with Iulius Company and Centric IT Solutions, will be expanded, in order to foster innovation and investment in sustainable and climate-neutral projects.
- **National collaborations:**
  - **M100 Hub:** The Municipality will engage with the other cities selected to be part of the national hub, in order to pursue exchanges of information and resources.
  - **EU Mission Cities:** The Municipality aims to partner with the three Romanian cities which are part of the EU Mission for Climate Neutral and Smart Cities.
  - **National associations:** The Municipality and IMA IDA want to consolidate their role within organisations such as the Romanian Federation of Metropolitan Areas and Urban Agglomerations and the Romanian Association of Municipalities.
- **International relationships:**
  - **World Bank partnership:** Developing a collaboration agreement with the World Bank, focusing on technical assistance for achieving climate neutrality.
  - **Existing international partners:** Strengthening and redirecting the existing partnerships from previous collaborative projects and from networks in which membership already exists (e.g., METREX), towards future climate neutrality work.
  - **EU programmes:** Accessing the networking opportunities offered by EU programmes and initiatives (NetZeroCities, European Urban Initiative, URBACT, Interreg etc.).

Given that the financing component represents both the most urgent need and the most significant opportunity, the Municipality and IMA IDA will dedicate substantial efforts to developing the funding mechanisms needed for supporting the climate neutrality actions:

- **Prioritising the non-reimbursable financing sources:** The Municipality will prioritise the processes of obtaining non-reimbursable funds for climate neutrality and sustainability projects from the national programmes and the NRRP. Furthermore, the Municipality expects that, in the medium term, the Ministries, the Regional Development Agency, and the other relevant national financing bodies will increase their allocation of resources towards climate neutrality initiatives undertaken by Romanian cities, particularly following the launch of the M100 Hub.
- **Seeking additional EU funding support:** In order to supplement the national public funding, both Iași Municipality and IMA IDA intend to seek financial support from European programmes such as LIFE, Horizon Europe, Driving Urban Transitions etc.

- **Exploring innovative financing:** The City Hall also intends to delve deeper into the innovative financing instruments and models, in order to better understand how they can be used for funding the climate neutrality projects that currently require additional resources.
- **Attracting private capital:** The Municipality plans to explore ways to attract more private capital for the local climate neutrality projects, aiming to bridge the existing funding gaps and also to encourage the incorporation of climate-neutral components and principles into the private sector's initiatives.

In terms of resource flows, the Municipality is following several directions of action:

- **Optimization and efficiency:** The Municipality aims to enhance the efficiency of the resource flows across the metropolitan area, minimising the potential losses and waste, in order to maximise the benefits that can be obtained from the available resources.
- **Attracting external resources:** Efforts will be made to attract various external resources (financial, human, informational, and material) towards the Iași Metropolitan Area, which will be leveraged in order to accelerate the transition to climate neutrality. In this regard, advantages will be gained from the strategic location of being in Iași County, the most developed county in the North-East Development Region. Additionally, the potential improvements in accessibility through the proposed Ungheni-Iași-Târgu Mureș highway and the possible expansion of Iași International Airport will be capitalised on.
- **Harnessing young human resources:** The Municipality will implement proactive policies to capitalise on its young human resources (especially given the large number of local students), by encouraging their involvement as catalysts for change within the community, as these individuals have the capability, willingness, and openness to cultivate behaviours and attitudes that prioritise climate neutrality as a core developmental value.

Regarding the infrastructure, significant investment projects have been implemented within both the Iași Municipality and its metropolitan area during the previous programming periods, as detailed in preceding sections. Both the Iași Municipality and IMA IDA intend to use these projects as the cornerstone for the forthcoming investments aimed at achieving climate neutrality. Furthermore, the continuation of these investments is envisioned in this Action Plan, spanning all the key dimensions of the local infrastructure - built environment, transportation, waste management, energy, and green-blue infrastructure. As such, at both the local and the metropolitan levels, the overarching objectives consist of enhancing the sustainability of the local infrastructure, minimising its carbon footprint, and even exploring opportunities for carbon capture wherever feasible.

ASSISTANCE NEEDS

Provide a brief overview of the key areas or aspects where external support would be required, in order to overcome the local barriers, mitigate the external risks and capitalise on the available opportunities, such as to achieve climate neutrality.

- **Take into account the gaps that need to be fulfilled (eg., financing, data collection, monitoring and assessment, knowledge deficiencies, governance, citizen engagement, stakeholder collaboration, innovative approaches etc.).**

On the journey towards achieving climate neutrality by 2030, both Iași Municipality and IMA IDA commit to sustained and integrated efforts to reduce the CO2 emissions at both local and metropolitan levels, by employing a combination of hard actions and soft measures. Nevertheless, external support is required in order to accelerate the transition to a carbon-neutral future. As such, technical assistance is needed to ensure the effective mitigation of climate change through robust measures, which will yield substantial direct impacts and multiple scalable co-benefits.

Consequently, the main areas where additional guidance would be needed for overcoming the local barriers, mitigating the external risks, and capitalising on the available opportunities are outlined below:

- **FINANCING:** The financing component of the interventions outlined in this Action Plan is the area where external support is most critically needed, as the local budget cannot adequately fund the ambitious measures needed to reduce the CO2 emissions. Both the Municipality and IMA IDA would benefit from a broader access to non-reimbursable financing in order to cover part of the costs associated with the foreseen climate neutrality actions, alongside assistance in accessing additional funding channels. In this regard, technical guidance would be needed to draw capital from previously untapped or underused sources, such as the innovative funding mechanisms (e.g., green / sustainability bonds) and the European financing instruments (e.g., EBRD loans). Furthermore, support would be beneficial in blending different funding sources and also in mobilising private investments - contributions from companies (e.g., via PPPs), NGOs (through their sustainability and climate mitigation projects) and citizens (e.g., through crowdfunding and also through personal investments aimed at reducing the carbon footprint).
- **ADMINISTRATIVE GOVERNANCE AND CAPACITY:** Considering that climate neutrality has not previously been integrated into the local governance through a dedicated framework, and recognizing the novelty of this subject for the Municipality, the public administration faces the need to establish a governance model that would enable the efficient coordination of the CO2 emission reduction investments. Such a model should also enhance the City Hall's staff expertise and optimise the related internal processes and instruments. However, a notable advantage for Iași, in comparison to many other Romanian municipalities, is the pre-existing operational governance structure established for the implementation and oversight of the GCAP, which will also be deployed for the climate neutrality component. Consequently, technical assistance would be required to ensure that both the Implementation and Monitoring Working Group of the GCAP and its Supervisory Board are properly equipped to manage the climate neutrality aspects, enabling the seamless integration of climate change mitigation into the broader scope of the local green initiatives. Additionally, support would be necessary for IMA IDA to enhance its readiness in this field, by equipping it with the knowledge and tools needed to extend the local ambitions among the

entire metropolitan area of Iaşi and, at the same time, to support these ambitions through concrete measures.

- **LOCAL COLLABORATION:** In the recent years, the Municipality has successfully engaged three robust pillars of local collaboration, which will be further developed in order to engage the community and the local stakeholders in the foreseen climate neutrality actions: the private enterprises (and especially the large corporations) are directing more and more investments towards local sustainability and green transition projects, the civil society is developing multiple such community initiatives, and a network of ambassadors has been established through the GCAP to support the implementation of green measures at the local level. Nevertheless, to strengthen the local ecosystem's engagement in the climate neutrality work, technical support is needed in order to furtherly operationalize the Net Zero Local Coalition, which will effectively align these stakeholders with the municipality's CO2 emission reduction objectives. The Coalition will convene, mobilise, and engage all the relevant stakeholders, including the citizens and the academic community, in the efforts pursued towards achieving climate neutrality within Iași Municipality and its metropolitan area.

- **EXTERNAL PARTNERSHIPS:** Over the years, owing to geographical and infrastructural factors, the North-East Development Region, which hosts Iași Municipality and its metropolitan area, has not enjoyed the same level of connectivity with the rest of the country and other states, as other Romanian regions. Despite these obstacles, both the local public administration and the IMA IDA have managed to become proactive actors within the national and European landscapes. Nevertheless, further assistance would be highly beneficial for these two entities, in order to fortify their existing external collaborations and especially to cultivate new ones, particularly in light of the involvement of three Romanian cities in the EU Mission for Climate-Neutral and Smart Cities, the launch of the M100 Hub, and the increasing number of European initiatives focused on international collaboration concerning carbon neutrality topics. Such support would facilitate more discovery and learning processes and also enable extensive exchanges of knowledge and resources.

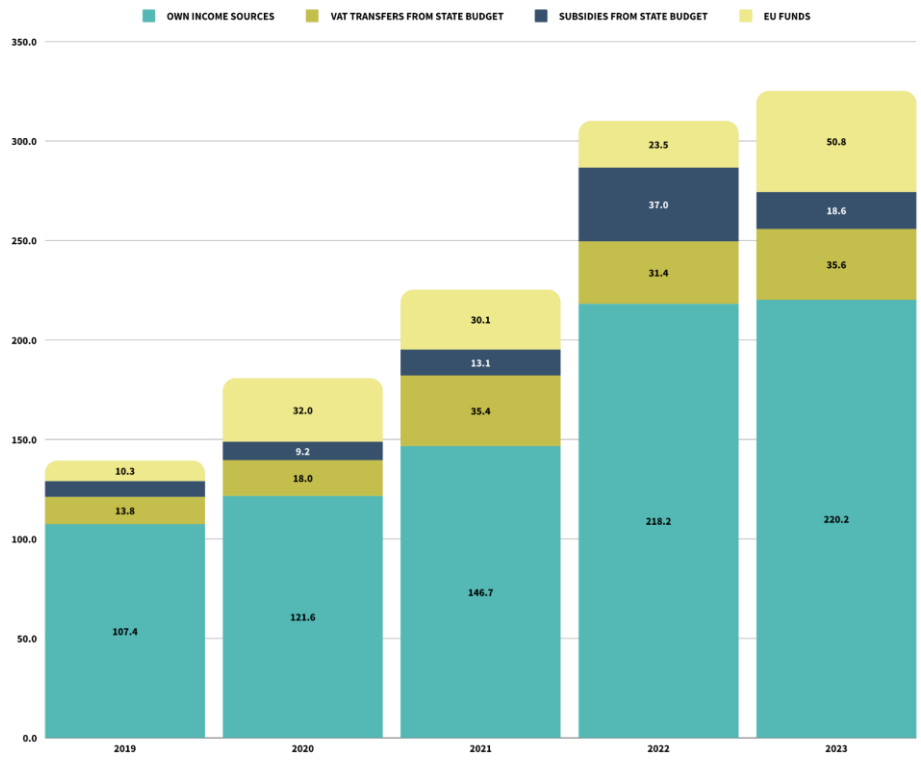
III. INVESTMENT PLAN

EXISTING FUNDING AND FINANCING

Outline, analyse and evaluate the past and current funding and financing allocated to climate-related initiatives across each field of action.

The total budget of the Iași Municipality (excepting subordinated institutions with non-relevant activities for climate neutrality) reached a record value of €328 mil. collected in 2023 and was 2,35 times higher than in 2019. The budget approved for 2024 indicates an even higher income, of almost €405 mil., thanks to the generous contribution of EU funds, especially the NRRP.

FIGURE 7 SOURCES OF INCOME FOR IAȘI MUNICIPALITY BASED ON BUDGET EXECUTION FOR 2019-2023



Source: Ministry of Development, Public Works and Administration. Directorate for Fiscal Policies and Local Budgeting

Over 43% of the 2024 projected local budget is allocated for relevant climate policies, such as district heating, public transport, waste collection, green spaces or public lighting. These

allocations include both capital investments and current expenses, such as subsidies for heating homes connected to the central heating system, subsidies for the operation of public transport, the costs of maintaining green spaces and cleaning.

District heating is benefiting from the largest public allocations. The City Hall has recently contracted a loan of €40 mil. loan to purchase the natural gas necessary for the centralised system, in addition to the subsidies and investment in network rehabilitation. Public transport comes second, with annual subsidies of over €15 mil. and large investment needs in modernising the fleet and building a new garage. Public sanitation is also costly and significant funding has been allocated to improving separate waste collection. Last but not least, the energy renovation of public buildings (schools, hospitals) requires a large amount of public funding, but most of it comes from EU projects implemented under the National Recovery and Resilience Facility.

Green areas, public lighting, pedestrian and cycling infrastructure or the energy renovation of residential buildings can all play a central role in achieving climate neutrality at municipal level. The budget allocation for these domains is still modest, but the Municipality has concrete plans to attract external funding for their prioritisation.

TABLE 34 FUNDING ALLOCATION PROJECTED BY FIELD OF ACTION ACCORDING TO THE LOCAL BUDGET APPROVED FOR 2024

The capital flow table needs to also incorporate capital stock.

FIELDS OF ACTION	SECTOR SUBSECTION	% CURRENT BUDGET ALLOCATION
TRANSPORTATION	Public transport	7.80 %
	Non-motorized mobility	0.90 %
	Infrastructure for EVs	0.40 %
BUILT ENVIRONMENT	Energy renovation of public buildings	6.40 %
	Energy renovation of residential buildings	1.70 %
	nZEB+ public buildings	1.20 %
ENERGY SYSTEMS	District heating	15.40 %
	Public lighting	0.80 %
GREEN INFRASTRUCTURE AND NATURE BASED SOLUTIONS	Parks, green and recreational areas	2.40 %
WASTE AND CIRCULAR ECONOMY	Waste collection and sanitation	6.90 %

Source: Own calculations, based on the local budget approved by the Local Council and published on the website of the Municipality of Iași

STRATEGIC FUNDING AND FINANCING

Assess the city's current financial policies, in order to illustrate how the public administration is allocating capital towards becoming climate neutral.

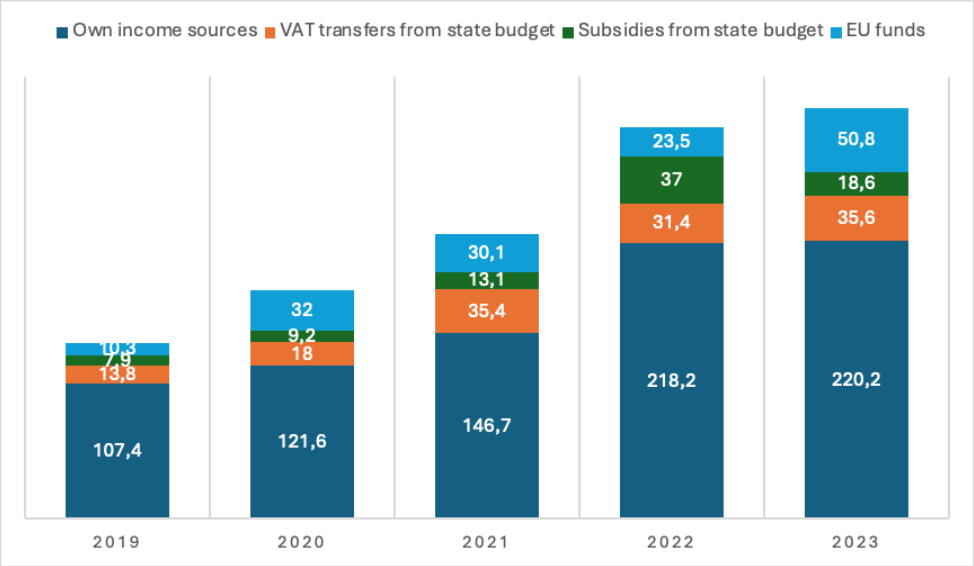
- ➔ **This evaluation should encompass the existing strategies and resources available to the city to facilitate the transition.**
- ➔ **Identify the various forms of capital available for the city, particularly those specific to local climate neutrality targets.**

Total receipts to the municipal budget increased 2.4 times between 2019 and 2023, primarily due to the doubling of revenues from local sources. The main source of income for Iași Municipality is the income tax, which is directly proportional to the number of employees and their average salary. The economic growth reported by the city in the last 5 years resulted in additional income taxes of €61 mil. in 2023 against 2019. During this time, property taxes have remained at a relatively low level (€20-25 mil. per year). Other local income sources, such as taxes on vehicles (approximately €6 million per year), revenues from concessions, rentals and dividends (€11 mil. per year), fines, special taxes and different public services delivered to residents and companies continue to have a positive dynamic.

EU funds are the second most important sources of revenues after local taxes and services delivered by the municipalities. Their volume increased 5 times between 2019 and 2023 thanks to the efforts made by the City Hall to prepare, submit for financing and successfully implement different projects. The current portfolio of EU projects amounts to over €180 mil. only from the NRRP. The pre-allocation for the city under the 2021-2027 North-East Regional Programme is of €132,8 mil., without including here the projects that will be submitted under the competitive calls of the respective programme or those financed by other EU programmes. Realistically speaking, the city can easily absorb up to €400 mil. until 2030, compared to 200 mil. in the previous programming period.

National subsidies for investment projects were, accepting the year 2022, modest so far and directed to areas of interventions that are not directly linked to climate neutrality. The spectrum of programmes managed by national entities is becoming more diverse and some of them, such as those implemented by the Environmental Fund Administration can actively encourage the climate transition. The City Hall is keen to exploit these funding opportunities in the future.

FIGURE 8 SOURCES OF INCOME FOR IAȘI MUNICIPALITY BASED ON BUDGET EXECUTION FOR 2019-2023



Source: Ministry of Development, Public Works and Administration. Directorate for Fiscal Policies and Local Budgeting

The budget approved by the Local Council for 2024 foresees total budget revenues of €405 mil., out of which €247 mil. from own sources (€116 mil. from income taxes, €26 mil. from property taxes, €8 mil. from vehicle taxes and €97 mil. from other local sources), €54 mil. from VAT transfers, €11 mil. from national subsidies and €93 mil. from EU funds (including NRRP).

TABLE 35 PROJECTED INCOME SOURCES FOR THE CITY ACCORDING TO THE LOCAL BUDGET APPROVED FOR 2024

INCOME CATEGORY	CITY INCOME	% OF CITY BUDGET
Income taxes	€ 115.7 mil.	28.6%
Property taxes (buildings, land, vehicles)	€ 34.6 mil.	8.5%
Revenues from concession, rentals and dividends	€ 13.4 mil.	3.3%
Capitalisation of public assets	€ 1.6 mil.	0.4%
Fines and penalties	€ 3.3 mil.	0.8%
Other taxes and services delivered to residents and companies	€ 74.3 mil.	18.3%
VAT transfers	€ 53.7 mil.	13.3%
Subsidies	€ 11.1 mil.	2.7%
EU funds (including NRRP)	€ 93.1 mil.	23.0%
Other sources	€ 4.4 mil.	1.1%
TOTAL INCOME	**€ 405,2 mil.**	**100%**

Source: The local budget approved by the Local Council and published on the website of the Municipality of Iași

TABLE 36 PROJECTED CAPITAL SOURCES FOR THE CITY IN THE 2025-2035 PERIOD

TYPE	SIZE RANGE (EURO)	LEVEL	DESCRIPTION
LOCAL SOURCES (LOCAL BUDGET REVENUES FROM TAXES AND SERVICES)	€ 300 mil.	Public	Local budget allocation for EU project co-financing, capital expenditure and delivery of relevant public services (subsidies for district heating, public transport, maintenance of public lighting, parks, sanitation etc.)
MUNICIPAL LOANS	€ 100 mil.	Public	Loans contracted with EBRD and a private bank for public transport investment, district heating and other green interventions
NRRP	€ 160 mil.	Public	Projects already contracted for public transport fleet and digitalisation, energy renovation of public and residential buildings, nZEB+ public housing, eco-island and voluntary waste collection centres.
2021-2027 NORTH-EAST REGIONAL PROGRAMME	€ 200 mil.	Public	Pre-allocation for the Municipality of Iași for sustainable urban mobility, green infrastructure and urban renewal (€ 132.8 mil.) plus competitive calls.
OTHER EU PROGRAMME FOR THE 2021-2027 PROGRAMMING PERIOD	€ 150 mil.	Public	Projects submitted under competitive calls (e.g., 2021-2027 Transport Programme for the metropolitan train project; Modernization Fund and Sustainable Development Programme for energy-related projects etc.)
POST-2027 EU FUNDING	€ 250 mil.	Public	We foresee extensive EU funding being available in the future programming period for local projects targeting climate-related interventions (public transport, energy renovation and RES generation, green infrastructure, climate change mitigation and adaptation etc.)
NATIONAL PROGRAMMES	€ 50 mil.	Public	We expect the local administration and other relevant stakeholders to absorb up to € 50 mil. from various investment programmes with national funding, such as those implemented by the Environmental Fund Administration for EVs and chargers, energy renovation, public lighting etc.
PRIVATE FUNDING	€ 100 mil.	Private	This encompasses multiple private financing pathways, mainly: co-financing the energy renovation projects for the residential buildings by their tenants, through the Homeowners Associations; replacing the old vehicles with electric vehicles among both the citizens and the private operators (for instance, transitioning the companies' commercial and operational fleets to EVs); private sector initiatives to reduce their operational carbon footprint (such as adopting green energy, implementing circular economy practices, improving the buildings' energy efficiency, greening their headquarters and workplaces' surroundings); real estate developers adopting climate neutrality measures in their projects (particularly by replicating the existing local best practices, like those of Iulius); green donations and CSR campaigns pursued by the local companies. This capital is expected to be mobilized primarily in the 2030–2035 timeframe, while the period up to 2030 will prioritize absorbing the maximum possible volume of non-reimbursable funds from the available grant programs, for the actions to be implemented by the public administration.

Source: Own estimations

COST SCENARIOS AND CAPITAL PLANNING

Present the estimated costs and capital planning associated with the actions outlined in the Climate Neutrality Action Plan. These should ideally serve as targets to optimise towards.

- ➔ **Assess the anticipated financial implications for the city, both as implementation and ongoing operational costs, to inform adjustments to the city budget for their incorporation.**
- ➔ **Make sure that all the proposed actions are listed, including those pertaining to Governance Innovation and Social Innovation.**
- ➔ **Feel free to provide cost projections for the measures detailed in the Action Plan as appropriate.**
- ➔ **Outline the city's capital objectives and how you aim to achieve them, by leveraging various sources of capital.**

Current estimates indicate that the total budget necessary for the implementation of the Climate Neutrality Action Plan for Iași reaches €1.309 mil., corresponding to an average annual allocation of approximately €120 mil. between 2025 and 2035. However, our projections foresee that most funding will be made available in the first 5 years. This reflects both the availability of extensive EU funding for the 2021-2027/2029 programming period (including NRRP) and the emergency of intervention in many areas, such as public transport, waste management or district heating.

Urban mobility, including public transport, non-motorized mobility, traffic decongestion and promotion of EVs, is the field of action that will benefit from the largest financial allocation (almost 50% of the total budget). This sector is confronted with the continuous increase in the number of second-hand, polluting vehicles. Urgent public interventions are needed to change the mobility patterns and reduce the environmental impact of transport.

The built environment is the second most important area of intervention with almost one third of the total budget. The focus will be on improving the energy performance of both public and private buildings. These sub-sectors are responsible for the largest share of GHG emissions at local level. The main challenge for private buildings is to raise awareness and mobilise funding from residents and companies interested in investing in the climate proofing of their own properties.

Energy systems come third in terms of financial allocation for climate action. The district heating system needs urgent decarbonisation interventions to meet the EU and national requirements. Its energy efficiency will have a large impact on the operational budget of the municipalities, by lowering the level of subsidies. Renewable energy will ensure greater independence and will reduce the risk of energy poverty in a global market context characterised by volatility.

Other fields of intervention, such as waste collection & sanitation or parks & green infrastructure will receive less funding for capital expenditure, but will continue to spend a large share of the operational costs supported by the municipal budget.

Make sure to list every one of the actions proposed in the previous chapter.

- ➔ **If feasible, in the fifth column, divide the costs based on the mentioned funding sources and indicate the amount that can be secured from each source individually.**

TABLE 37 COSTS, CAPITAL PLANNING AND ECONOMIC INDICATORS BY ACTION

FIELDS OF ACTION	ACTION	IMPLEMENTATION COSTS/ CAPEX (EURO)	OPERATIONAL COSTS (EURO)	POSSIBLE SOURCES OF CAPITAL	% OF THE TOTAL CLIMATE NEUTRALITY BUDGET	% OF THE TOTAL CO2 REDUCTION BY 2030	% OF THE TOTAL CO2 REDUCTION BY 2035
ENERGY SYSTEMS	Decarbonisation of CET II Holboca by building a geothermal plant and a high-efficiency cogeneration plant	€ 20.100.000	€ 577.875	Modernisation Fund 2021-2027 Sustainable Development Programme Post 2027 EU Programmes National funding Local budget	1,54%	13.83%	13.77%
	Cogeneration gas & hydrogen turbines (thermal motors) at CET I Tudor Vladimirescu	€ 40.000.000	€ 1.400.000	NRRP Modernisation Fund 2021-2027 Sustainable Development Program National funding Local budget	3,06%		
	Rehabilitation and modernisation of public heat supply network	€ 29.200.000	€ 584.000	2021-2027 Sustainable Development Program Post 2027 EU Programmes National funding Local budget PPP	2,23%		
	Photovoltaic park at CET 2 Holboca	€ 10.000.000	€ 100.000	NRRP Modernisation Fund 2021-2027 Sustainable Development Program National funding	0,76%	1.53%	1.68%
	Modernization of public lighting	€ 120.000.000	€ 2.400.000	National funding Local budget PPPs Loans	9,17%	0.56%	0.73%
	Network of charging stations for Evs	€ 5.000.000	€ 175.000	NRRP National funding Local budget PPPs	0,38%	0.54%	0.73%
MOBILITY AND TRANSPORT	Rebuilding "Dacia" Tram & Electric Bus Depot	€ 46.530.000	€ 1.628.550	EBRD loan 2021–2027 North-East Regional Programme NRRP	3,55%	13.08%	11.72%
	New public transport depot in Fortus Industrial Area	€ 28.000.000	€ 980.000	2021–2027 North-East Regional Programme Post-2027 EU Programmes Local budget	2,14%		
	Purchase of new trams and electric buses	€ 50.000.000	€ 3.250.000	NRRP 2021–2027 North-East Regional Programme Post-2027 EU Programmes Local budget	3,82%		

FIELDS OF ACTION	ACTION	IMPLEMENTATION COSTS/ CAPEX (EURO)	OPERATIONAL COSTS (EURO)	POSSIBLE SOURCES OF CAPITAL	% OF THE TOTAL CLIMATE NEUTRALITY BUDGET	% OF THE TOTAL CO2 REDUCTION BY 2030	% OF THE TOTAL CO2 REDUCTION BY 2035
	Expansion of tram lines to Valea Lupului	€ 11.000.000	€ 220.000	2021–2027 North-East Regional Programme Post-2027 EU Programmes Local budget	0,84%		
	Expansion of tram lines to Tomești	€ 15.600.000	€ 312.000	2021–2027 North-East Regional Programme Post-2027 EU Programmes Local budget	1,19%		
	Expansion of tram lines to Holboca	€ 19.200.000	€ 384.000	2021–2027 North-East Regional Programme Post-2027 EU Programmes Local budget	1,47%		
	Rehabilitation of BCU - Triumf (including Rond) tram line	€ 6.000.000	€ 120.000	2021–2027 North-East Regional Programme Post-2027 EU Programmes Local budget	0,46%		
	Integrated and accessible metropolitan public transport (stations, fleet)	€ 36.500.000	€ 1.642.500	2021–2027 North-East Regional Programme Post-2027 EU Programmes Local budgets County budget	2,79%		
	Metropolitan train, including stations, parkings	€ 200.000.000	€ 9.000.000	2021–2027 Transport Programme Post-2027 EU Programmes Local budgets County budget	15,28%		
	Rehabilitation of Podu Ros - Anastasie Panu tram line	€ 6.000.000	€ 120.000	2021–2027 North-East Regional Programme Post-2027 EU Programmes Local budget	0,46%		
	"Iasi Velo City" - automatic bike renting stations	€ 4.450.000	€ 333.750	2021–2027 North-East Regional Programme Post-2027 EU Programmes Local budget	0,34%		
	Integrated metropolitan cycling network	€ 34.000.000	€ 680.000	2021–2027 North-East Regional Programme Post-2027 EU Programmes National funding Local budget	2,60%	5.62%	5.01%
	Intermodal facilities	€ 2.700.000	€ 81.000	2021–2027 North-East Regional Programme Post-2027 EU Programmes Local budget	0,21%		

FIELDS OF ACTION	ACTION	IMPLEMENTATION COSTS/ CAPEX (EURO)	OPERATIONAL COSTS (EURO)	POSSIBLE SOURCES OF CAPITAL	% OF THE TOTAL CLIMATE NEUTRALITY BUDGET	% OF THE TOTAL CO2 REDUCTION BY 2030	% OF THE TOTAL CO2 REDUCTION BY 2035
	Modernisation of sidewalks and alleys	€ 17.000.000	€ 255.000	Local budget	1,30%		
	"Rabla Local" - support for the decommitment of polluting cars and their replacement with Evs	€ 2.000.000	€ 40.000	National funding Local budget	0,15%		
	Shared space areas for the prioritisation of urban mobility	€ 15.000.000	€ 300.000	2021–2027 North-East Regional Programme Post-2027 EU Programmes Local budget	1,15%		
	Enlargement of C.A. Rosetti Boulevard (DN 24)	€ 13.550.000	€ 271.000	National funding Local budget	1,04%		
	Park & Ride facilities	€ 4.200.000	€ 147.000	2021–2027 North-East Regional Programme Post-2027 EU Programmes Local budget	0,32%		
	Light traffic beltway	€ 45.000.000	€ 900.000	2021-2027 Transport Programme Post-2027 EU Programmes National funding	3,44%		
	Zero-emission public parking	€ 7.800.000	€ 273.000	2021–2027 North-East Regional Programme Post-2027 EU Programmes Local budget	0,60%	9.37%	10.26%
	Anastasie Panu - Palat Underpass	€ 42.600.000	€ 852.000	Local budget Loans	3,25%		
	Rehabilitation of Cerna Bridge	€ 6.000.000	€ 90.000	National funding Local budget Loans	0,46%		
	Rehabilitation of Socola Overpass	€ 9.000.000	€ 135.000	National funding Local budget Loans	0,69%		
WASTE AND CIRCULAR ECONOMY	Digitised eco-islands for separate waste collection	€ 3.500.000	€ 157.500	NRRP Local budget	0,27%		
	Voluntary centres for separate waste collection	€ 7.000.000	€ 245.000	NRRP Local budget	0,53%	0.11%	0.19%
	Digitalisation of waste collection fleet	€ 450.000	€ 20.250	Local budget PPPs	0,03%		
GREEN INFRASTRUCTURE AND NATURE BASED SOLUTIONS	Rehabilitation of Ciurchi Park	€ 5.000.000	€ 100.000	2021–2027 North-East Regional Programme Local budget	0,38%	11.90%	11.03%
	City gardens	€ 990.000	€ 19.800	Local budget	0,08%		

FIELDS OF ACTION	ACTION	IMPLEMENTATION COSTS/ CAPEX (EURO)	OPERATIONAL COSTS (EURO)	POSSIBLE SOURCES OF CAPITAL	% OF THE TOTAL CLIMATE NEUTRALITY BUDGET	% OF THE TOTAL CO2 REDUCTION BY 2030	% OF THE TOTAL CO2 REDUCTION BY 2035
	Modernisation of parks	€ 10.000.000	€ 200.000	2021–2027 North-East Regional Programme Local budget	0,76%		
	Network of municipal and metropolitan pocket parks	€ 2.000.000	€ 40.000	2021–2027 North-East Regional Programme Local budgets	0,15%		
	Green-blue corridor along Bahlui River	€ 18.000.000	€ 360.000	2021–2027 North-East Regional Programme Post-2027 EU Programmes Local budget	1,37%	11.38%	10.42%
BUILT ENVIRONMENT	Thermal rehabilitation of public buildings (kindergartens, schools, hospitals, administrative buildings), including solar / photovoltaic panels, heat pumps, BMS	€ 61.431.000	€ 2.150.085	NRRP 2021–2027 North-East Regional Programme Post-2027 EU Programmes National funding Local budget	4,69%	1.38%	1.22%
	Thermal rehabilitation and seismic consolidation of multi-apartment buildings.	€ 11.900.000	€ 416.500	NRRP 2021–2027 North-East Regional Programme Post-2027 EU Programmes National funding Private contribution Local budget	0,91%	10.78%	12.52%
	nZEB+ Social housing buildings	€ 15.000.000	€ 525.000	NRRP Local budget	1,15%	1.05%	0.94%
	nZEB+ Center for audiology & phonetics at Dr.C.I. Parhon Hospital	€ 25.000.000	€ 875.000	2021-2027 Health Programme Local budget	1,91%		
	Smart District (around the future Regional Emergency Hospital)	€ 300.000.000	€ 10.500.000	Post-2027 EU Programmes National funding Private funding (PPP) Local budget	22,92%		
SOFT INTERVENTIONS (GOVERNANCE INNOVATION AND SOCIAL INNOVATION)	Platform for green neighbourhood ambassadors	€ 100.000	€ 7.500	Other EU programmes for 2021-2027 National funding Private funding Local budge	0,01%	8.09%	7.89%
	Civic engagement for climate neutrality (workshops, hackathons,	€ 1.000.000	€ 36.000	Other EU programmes for 2021-2027 National funding Private funding Local budget	0,08%		

FIELDS OF ACTION	ACTION	IMPLEMENTATION COSTS/ CAPEX (EURO)	OPERATIONAL COSTS (EURO)	POSSIBLE SOURCES OF CAPITAL	% OF THE TOTAL CLIMATE NEUTRALITY BUDGET	% OF THE TOTAL CO2 REDUCTION BY 2030	% OF THE TOTAL CO2 REDUCTION BY 2035
	competitions etc.)						
	Awareness raising campaign for residents and companies at city level	€ 500.000	€ 37.500	Other EU programmes for 2021-2027 National funding Private funding Local budget	0,04%	10.30%	11.43%
	Awareness raising campaign for residents and companies at metropolitan level	€ 500.000	€ 37.500	Other EU programmes for 2021-2027 National funding Private funding Local budget	0,04%		
	Training programme for public servants and local stakeholders	€ 250.000	€ 18.750	Other EU programmes for 2021-2027 National funding Local budget	0,02%	0.48%	0.46%
	Web platform for climate-related KPIs monitoring	€ 100.000	€ 7.500	Other EU programmes for 2021-2027 National funding Local budget	0,01%		
TOTAL		**€ 1.309.151.000**	**€ 43.005.56**	**-**	**100%**	**100%**	**100%**

TABLE 38 SUMMARISED COSTS AND CO2 REDUCTIONS BY FIELD OF ACTION

FIELDS OF ACTION	TOTAL COSTS FOR ALL THE COVERED ACTIONS (EURO)	% OF THE TOTAL BUDGET	TOTAL CO2 REDUCTIONS FOR ALL THE COVERED ACTIONS BY 2030	% OF THE TOTAL CO2 REDUCTION BY 2030	TOTAL CO2 REDUCTIONS FOR ALL THE COVERED ACTIONS BY 2035	% OF THE TOTAL CO2 REDUCTION BY 2035
ENERGY SYSTEMS	€ 224.300.000	17,13 %	95,966.88	16.46%	112,623.61	16.91%
MOBILITY AND TRANSPORT	€ 622.130.000	47,52 %	163,771.89	28.08%	179,759.95	26.99%
WASTE AND CIRCULAR ECONOMY	€ 10.950.000	0,84 %	645.37	0.11%	1,250.01	0.19%
GREEN INFRASTRUCTURE AND NATURE-BASED SOLUTIONS	€ 35.990.000	2,75 %	135,753.14	23.28%	142,847.71	21.45%
BUILT ENVIRONMENT	€ 413.331.000	31,57 %	77,021.44	13.21%	97,756.26	14.68%
SOFT INTERVENTIONS (GOVERNANCE INNOVATION AND SOCIAL INNOVATION)	€ 2.450.000	0,19 %	110,035.60	18.87%	131,772.07	19.79%
TOTAL	**€ 1.309.151.000**	**100%**	**583,194.33**	**100%**	**666,009.61**	**100%**

FINANCIAL INDICATORS FOR MONITORING, EVALUATION AND LEARNING

Briefly present the used monitoring indicators and explain them, if necessary.

TABLE 39 FINANCIAL INDICATORS BY FIELD OF ACTION

FIELDS OF ACTION	INDICATOR	INDICATOR VALUE AND UNIT - 2035
SUSTAINABLE URBAN MOBILITY	Encouraging the use of green public transport	0,19 CO2 kg / euro
	Promotion of alternative mobility, with a focus on cycling and walking	0,44 CO2 kg / euro
	Traffic congestion relief of major boulevards and crossroads	0,53 CO2 kg / euro
	TOTAL CO2 REDUCTION / CAPITAL INVESTED	**TONS CO2 / FINANCIAL SUM** 179.759,95 tons CO2 / € 622.130.000
GREEN INFRASTRUCTURE AND NATURE BASED SOLUTIONS	Expansion and modernization of green areas for carbon capture and storage	4,08 CO2 kg / euro
	Creating a metropolitan network of green-blue corridors	3,86 CO2 kg / euro
	TOTAL CO2 REDUCTION / CAPITAL INVESTED	**TONS CO2 / FINANCIAL SUM** 142.847,71 tons CO2 / € 35.990.000
WASTE AND CIRCULAR ECONOMY	Developing a functional circular economy ecosystem	0,11 CO2 kg / euro
	TOTAL CO2 REDUCTION / CAPITAL INVESTED	**TONS CO2 / FINANCIAL SUM** 1.250,01 tons CO2 / € 10.950.000
BUILT ENVIRONMENT	Increasing the energy efficiency of public buildings	0,13 CO2 kg / euro
	Increasing the energy efficiency of residential buildings	7,01 CO2 kg / euro
	Implementing the nZEB+ standards for new public buildings	0,02 CO2 kg / euro
	TOTAL CO2 REDUCTION / CAPITAL INVESTED	**TONS CO2 / FINANCIAL SUM** 97.756,26 tons CO2 / € 413.331.000
ENERGY SYSTEMS	Increasing the efficiency and attractiveness of the district heating system	1,03 CO2 kg / euro
	Consolidation of local capacities for renewable energy production	1,12 CO2 kg / euro
	Modernisation of public lighting	0,04 CO2 kg / euro
	Supply of green energy for electric vehicles	0,97 CO2 kg / euro
	TOTAL CO2 REDUCTION / CAPITAL INVESTED	**TONS CO2 / FINANCIAL SUM** 112.623,61 tons CO2 / € 224.300.000
SOFT INTERVENTIONS (GOVERNANCE INNOVATION AND SOCIAL INNOVATION)	Enhancing local commitment for climate neutrality	47,78 CO2 kg / euro
	Promotion and support of climate neutral behavioural changes	76,14 CO2 kg / euro
	Consolidation of local governance for climate neutrality	8,77 CO2 kg / euro
	TOTAL CO2 REDUCTION / CAPITAL INVESTED	**TONS CO2 / FINANCIAL SUM** 131.765,91 tons CO2 / € 2.450.000,00

CLIMATE POLICIES FOR CAPITAL FORMATION AND DEPLOYMENT

Shortly describe the climate policies you will develop and use for capital accumulation and deployment.

Most of the climate policies implemented so far at local level were the result of the thematic concentration within the Cohesion Policy. The city budget for capital expenditure depends on EU and National funding. In this context, the large share of EU funding allocated to climate change mitigation and adaptation in the last two programming periods had a direct impact on the local priorities. For this reason, the local administration has prioritised public interventions in areas such as energy renovation, public transport, urban renewal or green infrastructure.

The vision for the next few years is to switch to a development concept in which climate neutrality becomes the backbone of any local policies and the main competitive advantage of the city in its pursuit for new talents and capital. In order to achieve this ambition goal, public funding should constantly be channelled towards climate intervention together with the support of extensive private contributions.

TABLE 40 CLIMATE POLICIES TO ENABLE CAPITAL DEPLOYMENT

CLIMATE POLICY	DESCRIPTION OF THE POLICY	INTENDED OUTCOME FOR CAPITAL FORMATION
REFORM OF LOCAL TAXATION POLICIES	The transition to climate neutrality requires additional public and private funding to be mobilised. The current taxation policies adopted at the local level do not provide enough incentives for the individuals and companies that are ready to contribute to climate neutrality through their behaviour and actions. Tax reliefs for those that invest in the energy renovation of their buildings, produce renewable energy, replace polluting cars with EVs or recycle their waste will be implemented. On the other hand, punitive fiscal measures will be introduced to encourage late adopters to contribute.	Mobilisation of private funding and additional taxes collected by the local budget
GREEN BUDGETING	The Municipality intends to implement a set of climate KPIs to be monitored with the support of a web platform. This initiative is closely linked to the concept of green budgeting. The environmental contribution of each budgetary item will be identified and assessed with respect to these KPIs.	Better aligning of the municipal budgetary policies and climate neutrality goals; sufficient allocation of public funding for the implementation of the Action Plan
GREEN PROCUREMENT	A large share of the local budget is allocated to the purchase of various goods and services for current use of the local administration, including fuels, electricity, office supplies etc. By implementing environmental standards in the public procurement procedures the Municipality can ease the achievement of its climate goals and contribute to the development of a local market for green products and services.	Increase of tax base for the local budget by creating new jobs in the green industry
DEVELOPMENT OF A STRONG CIRCULAR ECONOMY AT MUNICIPAL AND METROPOLITAN LEVEL	By investing in the public infrastructure and services for separate waste collection, the Municipality sets a strong foundation for the development of a sustainable circular economy capable of creating jobs and generating new business opportunities.	Increase of tax base for the local budget by creating new jobs in the circular economy

CLIMATE POLICY	DESCRIPTION OF THE POLICY	INTENDED OUTCOME FOR CAPITAL FORMATION
PRIVATE CAPITAL MOBILISATION	As already mentioned, mobilizing the private sector's capital for climate neutrality will occur through targeted pathways, structured by stakeholder categories: CITIZENS: • Co-financing the energy renovation projects for the residential buildings through the Homeowners Associations, enabling the tenants to contribute directly to improving the energy efficiency of the multi-apartment residential blocks where they live. • Replacing the old personal vehicles with electric vehicles, supported by awareness campaigns and incentive alignment with the existing grant programs. • Participating in civic engagement activities and crowdfunding initiatives to support small-scale green projects within their communities. PRIVATE COMPANIES: • Transitioning the commercial and operational fleets from old vehicles to electric vehicles to reduce the polluting emissions from the companies' mobility. • Reducing the operational carbon footprints through: adoption of green energy and circular economy practices, improving the energy efficiency of the company-owned buildings, greening the headquarters and workplace surroundings. • Engaging in green donations and CSR campaigns to support the local climate neutrality actions. • Aligning with the ESG standards by investing in the local climate actions, particularly for the companies with an international presence. REAL ESTATE DEVELOPERS: • Adopting climate neutrality measures in the new projects. • Replicating the local best practices, such as those implemented by Iulius, to integrate climate neutrality solutions across the developments. • Greening the public and semi-public spaces within their developments to contribute to the local carbon reduction efforts. The CNAP foresees multiple soft interventions to encourage the private sector's participation, among which: • Civic engagement programs to raise awareness. • Platforms for crowdfunding to finance community-led green initiatives. • Leveraging models like the Programme for Civic Involvement and Innovation (PIIC) and Climathon by CIVICA to inspire the stakeholders' participation and innovation in financing green projects.	Mobilisation of private funding for climate neutrality interventions

OUTLOOK AND NEXT STEPS

Provide a short overview of the future steps for the Action Plan, including the methods, tools, frequency, and milestones for implementation, monitoring, updating and improvement.

- ➔ **Mention the main implementation thresholds and areas requiring future improvement of documentation, including the envisioned approach for addressing them.**
- ➔ **Make note of periodic iteration and review sessions.**

The actions developed by Iași Municipality and IMA IDA to achieve climate neutrality by 2030 and further scale the emission reductions by 2035 have been strategically designed and structured to enable an efficient, coordinated approach at both the local and metropolitan levels. The next steps delineated below correspond to four key pillars for the Plan's success: implementation, monitoring, updating, and improvement.

IMPLEMENTATION

In 2025, the main objective pursued by Iași Municipality was the **accession to the M100 National Hub**, the Romanian Mirror Mission of the EU Mission for Smart and Climate-Neutral Cities. Through this affiliation, the Municipality aims to access the forthcoming national initiatives that could support its transition to climate neutrality. Furthermore, by leveraging this hub, the Municipality intends to engage in collaborative projects with the other cities that are part of the M100 framework and also to absorb know-how from the three Romanian cities which are engaged in the EU Mission for Climate-Neutral and Smart Cities. Within the framework of M100, Iași Municipality will also focus on fostering strategic partnerships with the ministries represented in the M100 Committee, namely the Ministry of Investments and European Projects, the Ministry of Research, Innovation, and Digitalization, the Ministry of Development, Public Works, and Administration, the Ministry of Energy, the Ministry of Environment, Waters, and Forests, and the Ministry of Education.

Until 2026, the public administration will be **advancing the climate neutrality investment projects** initiated under the National Recovery and Resilience Plan. Moreover, until 2027-2029, the Municipality will develop and execute investment projects focused on competitiveness, sustainability, resilience, and inclusivity, through the North-East Regional Programme. Concurrently, the administration will also access the financial resources that will be available through other relevant National Programmes (e.g., Sustainable Development OP, Transport OP, Education and Employment OP, Health OP, and Inclusion and Social Dignity OP).

Subsequent to the conclusion of the current programming period (in 2027-2029) and extending through 2030, both the local and the metropolitan efforts will focus on securing additional public and private funds, in order to cover the financing needed for the envisaged climate neutrality actions.

By 2035, the attention will move towards replicating and expanding the climate neutrality projects developed within Iași Municipality to the other localities within the Iași Metropolitan Area. The close collaboration between Iași Municipality and IMA IDA will ensure the pursuit of this objective, coupled with a comprehensive assistance provided to the other metropolitan public administrations. This support will be provided through dialogue, knowledge exchanges, attraction of external resources, and advocacy efforts across the national and European platforms.

Throughout this entire period, IMA IDA will diligently work to empower the other public administrations within the Iași Metropolitan Area to actively contribute to achieving metropolitan-level climate neutrality, by following the model established by Iași.

The Iasi2035.ro web platform, will document the activities organized under the umbrella of the NetZero Coalition, will provide resources developed to assist the Coalition Members to achieve thei climate goals, and help collect feed-back from interested actors. In addition, established social media presence over several platforms (Facebook, Instangram, WhatsApp, LinkedIn) will facilitate the organization of meetings, technical workshops, hackatons, or incubation events.

The NetZero Coalition will also help cross-polynate across other areas of interest (e.g. competitiveness), and will promote smart design approaches (New European Bauhaus informed).

MONITORING

The monitoring process will be conducted annually by the Implementation and Monitoring Working Group, which was originally established for the GCAP and subsequently expanded to also coordinate the climate neutrality actions. The results of the monitoring will be documented through annual reports, which will detail the progress and outcomes achieved in terms of actions, targets (as per the Impact Pathways), and indicators — both MEL and financial. The representatives from the NetZeroCity Local Coalition will provide additional field input and feedback. The final monitoring reports will be submitted for approval to the Supervisory Board, which will determine the next steps, that may include course corrections (if necessary) and proposals of new actions (in conjunction with or parallel to those already outlined in the Climate Neutrality Action Plan). Throughout this process, IMA IDA will actively provide information and insights that reflect the metropolitan-level situation. A technical workshop has already been organized to discuss with the NetZero Coalition Members approaches for proper monitoring of GHG emissions, and such technical workshops will be organized periodically. The following people will have a lead role in the coordination of monitoring activities:

Iași City Hall:

- Oana Chiru (oana.chiru@primaria-iasi.ro)
- Mihaela Popisa (mihaela.popisa@primaria-iasi.ro)

Iași Metropolitan Area:

- Grigore Nepotu (grigore.nepotu@zmi.ro)

Civil society:

- Alexandrina Dinga (alexandrina.dinga@asociatiacivica.ro)
- Crina Penteleychuk (crina.penteleychuk@crilia.ro)

UPDATING

The Climate Neutrality Action Plan will be updated every two years, by the Implementation and Monitoring Working Group, with support from the NetZeroCity Local Coalition, which will contribute with field-specific content. If necessary, updates may occur more frequently. The final decisions regarding the updates will be approved by the Supervisory Board. All the updates will incorporate the completed actions, the new interventions, and the evolving contextual factors, ensuring that the Plan reflects the local changes, while also remaining aligned with the European and national climate

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directives. Throughout this process, IMA IDA will ensure the integration of the metropolitan dimension into the updates.

IMPROVEMENT

Both the monitoring and updating processes will inherently yield multiple improvements to the Climate Neutrality Action Plan, as it is a dynamic document that will evolve with the progress made at the local and metropolitan levels. However, it is important to acknowledge that both the staff of Iaşi City Hall and IMA IDA are currently encountering some challenges that may hinder their efforts to achieve climate neutrality. Nonetheless, these challenges, particularly the deficiencies identified in the Assistance Needs section, but also other aspects related to the administrative capacity (such as data collection and management, monitoring tools, and innovative approaches), will be systematically addressed over time. As such, the main improvements will stem from the experiential learning gained during the implementation of the Action Plan's interventions, as well as by capitalising on the opportunities that will emerge throughout the journey towards climate neutrality.

Throughout this process, both the Municipality and IMA IDA will continue to implement the projects outlined in the other local strategies and plans, particularly those from IUDS, GCAP, SECAP, and SUMP. They will also seek additional opportunities (financing, training, cooperation, visibility) to support the transition towards climate neutrality. Simultaneously, the two entities will advocate for more ambitious climate neutrality targets among their Romanian and European counterparts, while also leading the citizens they represent and collaborating with the local private sector throughout this ambition.

In each of the above phases, both the Iași Municipality and the IMA IDA will consider their marginalised communities, ensuring that their needs are duly addressed throughout the implementation of this Action Plan. Finally, consistent with their dedication to climate neutrality, Iași Municipality and IMA IDA will simultaneously increase their climate resilience efforts, striving for a cohesive integration between the climate mitigation and adaptation actions.