

OUTPUT FACTSHEET

Project index number	CE0100067	Acronym	Ready4Heat		
Output type (“x” to be included)	Strategy/ action plan	X	Pilot action		Solution
Output number (O.xx)	O 1.1	Output title	Municipal heat strategies and action plan for mitigation of the heat waves		
If the output target is > 1 in the AF, please specify the output(s) described in the factsheet	Municipal heat strategy and action plan for the Municipality of Maribor was jointly developed through active participation of all PPs in co-working groups and by subcontractor Energy and Climate Agency of Podravje and external key stakeholders.				
Output delivery date	16.10.2024				
Project website	https://www.interreg-central.eu/projects/ready4heat/				

Summary description of the output

Please present the output by addressing the following topics.

Territorial challenges and needs in the regions specifically addressed by the output

(max. 700 characters)

Maribor is in a temperate warm zone and has a temperate continental climate of eastern Slovenia, also known as a sub-pannonian climate. Maribor's climate is characterised by sunny days. Data for Maribor show that the heat stress will increase in the future. By mid-century, significant climate change will be observed. The number of hot days will almost double and tropical nights, which are currently rare, will become more frequent. The increasing number of consecutive hot days portends longer heat waves, increasing the risk of heat stress, especially for vulnerable groups. More summer days indicate shorter seasons and faster transitions from winter to summer, which may bring additional challenges for the environment and the population. Majority of city population is the middle-aged generation, while the number of older inhabitants is gradually increasing. This increase has important implications for the planning of urban services and infrastructure, especially considering increased vulnerability of this group during heat waves.

Main aim(s) of the output and how it contributes to tackle the identified challenge(s)

(max. 500 characters)

The aim of the Strategy and Heat Action Plan of the Municipality of Maribor is to increase the municipality's resilience to heat waves and to protect people's health and provide them with suitable living and working conditions. The strategy focuses on identifying and protecting the most vulnerable groups, such as the elderly, children, pregnant women, infants and outdoor workers, as well as people with pre-existing medical conditions, and on implementing measures that can be implemented in the given circumstances.

Technical description of the output (e.g. scope, main features, innovative elements etc.)

(max. 1500 characters)

The output O.1.1 Strategy and Heat Action Plan is prepared to improve mitigation and prevention of the negative effects of heat waves in the Municipality of Maribor (MOM), to ensure the health and well-being of the inhabitants and to provide suitable living and working conditions, which will enable the sustainable development of the municipality in the years to come. This will be achieved by implementing short, medium and long-term measures which, in addition to information and education, include greening the municipality and designing adequately cooled and ventilated public spaces.

Heat protection measures for the Municipality of Maribor:

- HEAT WARNING SYSTEM
- PUBLICLY ACCESSIBLE PLACES TO COOL DOWN DURING HEAT WAVES
- TEMPORARY SHADE AND COOLING FOR OUTDOOR PUBLIC AREAS
- DRINKING WATER IN PUBLIC SPACES
- GUIDELINES FOR THE PROTECTION OF VULNERABLE GROUPS DURING HEAT WAVES
- RAISING AWARENESS AMONG THE POPULATION
- EDUCATION AND TRAINING
- URBAN PLANNING
- IMPROVING INSULATION OF BUILDINGS
- INDOOR COOLING
- PLANTING NEW TREES TO INCREASE GREENING
- URBAN GREENING PLAN AND REDUCTION OF CONCRETE SURFACES AND SHADING
- WATER SAVING
- ROOFTOP SOLAR POWER AND ENERGY STORAGE
- MONITORING THE INCREASE IN MORBIDITY AND MORTALITY DURING HEAT WAVES

Involvement of target groups during output development and/or implementation

(max. 700 characters)

The Municipality of Maribor cooperated with stakeholders in the preparation phase of the Action Plan to mitigate and prevent the negative effects of heat waves during workshops and by answering questionnaires, where stakeholders were informed about the impacts of heat waves and involved in the discussion on the necessary measures. Stakeholders will be involved with specific responsibilities in the implementation of short- and medium- nad long-term measures.

The implementation is coordinated by the Municipal Heat Action Plan Steering Group in cooperation with relevant departments. Health care institutions and organisations (health centres, emergency services, children's clinics, counselling centres, social welfare institutions) are key to providing medical advice and treatment during heat waves. Community and voluntary organisations such as pensioners' associations, various associations of the elderly, disability associations, voluntary fire brigades, the Red Cross and other humanitarian organisations, and civil protection will help disseminate information and support vulnerable groups during heat waves.

Cooperation dimension of the output, i.e. joint development within the partnership and, if applicable, joint implementation (see output indicator definitions in chapter 1.3.3 and Annex 2 of the programme manual)

(max. 700 characters)

Partners of Ready4Heat project were involved in the preparation of Maribor Strategy and heat action plan development. Partner city Worms presented their strategy and action plan, which was an excellent example for Maribor administration to prepare the document. The prepared Strategy and action plan concept development (D.1.1.1) served as base to draft the document for Maribor, especially the Collection of heat protection measures was very useful for prepare measures for Maribor. We discussed with other project partners in workshops and project meetings diverse measures, how to implement them, how to communicate with stakeholders, the leadership and how to achieve expected results. Maribor Strategy and heat action plan was checked also by the lead partner who gave comments.

In the frame of the joint activities (as part of the online or project meeting sessions) the partners jointly worked on the action plan development, stakeholder involvement practices and evaluation of the strategy. The joint sessions were carried out in the group work where partners interexchanged the ideas. The strategy of Maribor was already reviewed by PP4 - Climate alliance which is the knowledgeable and experienced partner in the consortium and the initiator of transferring the Worms idea to other central European cities.

Results - expected change and lasting effects in the territories generated specifically by the output, its uptake by relevant organisations and benefits for target groups

(max. 1000 characters)

Results are the establishment of a system for the collection and analysis of data that will serve as a basis for the improvement and adaptation of future actions. The implementation of the actions of this action plan shall be reported annually to the Municipal Council in the framework of the reporting on the implementation of the Local Energy and Climate Concept for the Municipality of Maribor.

Educational workshops and distribution of information material will raise awareness of adaptation measures and protection against heat waves.

Local heat warning system for vulnerable groups will be established.

Green spaces register: maintaining a register of all green spaces in the city, including information on the type and condition of green spaces, their size and location.

Distance of residents from green spaces: improving the accessibility of green spaces.

Cooling devices will be installed for cooling in buildings.

Health indicators: Monitoring of the number of hospital visits related to heat waves to assess the health impacts and effectiveness of measures to protect the health of the population.

In the framework of the Strategy and Heat Action Plan for the Municipality of Maribor, an annex "List of Maribor tree species" has been prepared about urban tree species for Maribor that, according to different criteria, can thrive well in different urban locations such as: parks, other public green spaces, roadside areas, car parks and other areas in Maribor. The material also contains requirements for tree seedlings, main guidelines for execution of planting and maintenance of young urban trees, number of newly planted trees and other plants which will be monitored to help assess progress in greening urban areas.

Ownership and durability of the output after the project end, considering financial and institutional support including, if applicable, maintenance
(max. 700 characters)

The Municipality of Maribor has the ownership of the document, the City Council will adopt the document at the City Council Session. The Maribor Strategy and heat action plan will be implemented in the following years, its durability will be on-going. The municipal administration - relevant departments were contributing inputs for measures during the preparation phase, the Mayor strongly supports the document and the measures to be implemented.

Transferability of the output to other territories, sectors or target groups and planned measures for supporting such transfer
(max. 700 characters)

Transferability of the Strategy and Heat Action plan will be delivered by the Slovene Association of municipalities. The representative of the association attended the stakeholders kick off meeting and shared already informaton about Ready4Heat project with other municipalities on webpage. National Institute for Public Health is interested in sharing information about measures of Maribor Strategy and Heat Action plan with other regions in Slovenia to expand measures in other municipalities. Within the network of Healthy cities in Slovenia, the project results, good practices and outputs will be shared among municipilaties and relevant departments at Slovene municipalities to transfer the output and gained knowledge.

Related final deliverable(s) (Number(s) and title(s) to be included)	D.1.3.2: Development of the strategy and action plan
Output web link (if applicable)	
GPS coordinates (if applicable)	