

#### **OUTPUT FACTSHEET**

Project index number	CE0100067	Acronym	Ready4Heat			
Output type ("x" to be included)	Strategy/ action plan	х	Pilot action		Solution	
Output number (0.xx)	0.1.1	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	Hajdúböszörmény which is particularly vulnerable to extreme heat due to its flat terrain and urban heat island effect is dealing with the effects of climate change by combining short-term measures like cooling centres and UV warnings with long-term strategies such as sustainable urban planning, green spaces, and public education. This is all part of the Heat and health action plan (HHAP), which is designed to protect vulnerable populations and enhance climate resilience.					
Output delivery date	28.11.2024					
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)

Hajdúböszörmény has three major heat island areas and several hotspots that present significant territorial challenges due to extreme heat and UV radiation. The city centre, especially near Baltazár Dezső Street, gets really hot because of all the buildings, pavements and lack of green space. This affects important places like schools and hospitals. The southern zone along Road 35 is affected by a continuous heat island effect in high-traffic areas, with no cooling measures in place. Similarly, the Eastern Industrial Area, which is full of large halls and paved surfaces, gets really hot, which affects nearby residential zones and institutions like the Csillagvár Nursery and Kindergarten.

These challenges are made worse by the increasing number and intensity of heatwaves, which pose a serious health risk, especially to vulnerable groups like the elderly, people with long-term illnesses, and those who work outside. To tackle these issues, we need to come up with bespoke solutions. This could include setting up warning systems, putting together heat action plans and promoting green urban planning initiatives like increasing shading and vegetation. These measures are vital for reducing health risks, building community resilience and making sure we can adapt to climate change in the long term.

## Main aim(s) of the output and how it contributes to tackle the identified challenge(s) (max. 500 characters)

The main aim of the "Municipal heat strategy and action plan for mitigation of heatwaves" is to establish adaptable short-, medium-, and long-term measures to address heat-related challenges. Initially, it focuses on implementing an effective heat and UV warning system, alongside evolving urban projects designed to mitigate heatwaves and reduce heat island effects. In the long term, the plan aims to achieve CO2 reduction, climate neutrality, and improved public health, tailored to local needs and opportunities.

# Technical description of the output (e.g. scope, main features, innovative elements etc.) (max. 1500 characters)

The "Municipal heat strategy and action plan for mitigation of heatwaves" in Hajdúböszörmény is a plan to help people stay healthy in extreme heat and UV exposure. The plan combines short-, medium- and long-term measures to make cities more resilient, reduce heat risks and encourage sustainable development. The plan focuses on making urban spaces greener, improving urban planning and promoting sustainable transport.

One of the main parts of the strategy is developing green infrastructure. This includes building 47 green islands with shade, which we're monitoring to see how well they reduce heat stress. We're also focusing on planting trees in urban areas, integrating trees into paved areas to increase green coverage and help mitigate urban heat island effects. Additionally, we're renovating the Csónakázótó area to enhance its cooling and recreational functions, providing residents with accessible spaces to cool down during heatwayes.

The plan also looks at ways to make public spaces cooler. Green facades, vertical wall gardens and climbing plants on public buildings will improve cooling and air quality. Insulation and shading techniques, such as shutters and awnings, will make it cooler inside and improve living conditions during heatwaves. There is also a heat warning system and guidelines to protect vulnerable groups.

The plan also promotes sustainable ways of getting around. This includes building more bike paths and making workplaces more cycle-friendly. Access to drinking water and water-saving measures, as well as renewable energy solutions like solar power and energy storage, help the city cope with climate challenges. The strategy also includes public education and awareness-raising. This helps people understand how to adapt to and mitigate the impacts of heatwaves.

The plan combines these initiatives to create a climate-adapted, sustainable urban environment that mitigates the risks of extreme heat and supports residents' well-being. Monitoring health impacts ensures the strategy remains responsive and effective.

### Involvement of target groups during output development and/or implementation (max. 700 characters)

The Ready4Heat project in Hajdúböszörmény shows how we can work with target groups in a structured and inclusive way. It facilitates to engage key stakeholders and vulnerable populations to tackle the negative effects of heatwaves. During the preparation phase, we got target groups involved through training sessions and awareness campaigns. This helped us to work together to identify challenges and discuss what we needed to do to overcome them. We used workshops and questionnaires to get key stakeholders involved in the discussions and make sure their input was included in the action plan. We're talking about specific target groups here, like people with long-term illnesses or health conditions that make them vulnerable to heat risks, older people (especially those living alone or with health issues), pregnant women, breastfeeding mothers, parents of young children, and outdoor workers exposed to direct sunlight during summer months.

The Municipal heat action plan steering group is in charge of making sure everything is done as it should be, working with the right people in the local council and community groups. On top of that, outdoor events, community tree planting and interactive lessons help to get people involved.

We're also running a big awareness campaign with short films, PR articles and an info page to teach people in the community about the risks of heatwaves and how to deal with them. These activities, backed by joint planning and a structured approach, are designed to make our cities more resilient while building a community that's well-informed and ready to tackle extreme heat.

Cooperation dimension of the output, i.e. joint development within the partnership and, if applicable, joint implementation (see output indicator definitions in chapter I.3.3 and Annex 2 of the programme manual)

(max. 700 characters)

Partners collaborated effectively throughout the project, sharing ideas on heat protection measures, stakeholder involvement practices and strategy evaluation during workshops, online sessions and project meetings. The discussions covered methods for implementing specific actions, communicating effectively with stakeholders, and achieving expected results. Input from other project partners, such as the strategy and action plan presented by Worms, was instrumental in shaping Hajdúböszörmény's approach. The collection of heat protection measures developed during the project also provided a valuable reference point for the design of bespoke solutions for the municipality.

The development of the strategy was enhanced by peer reviews within the consortium, including feedback (and several online meetings) from the lead partner and contributions from experienced organisations like Climate Alliance (PP4). This joint effort ensured the strategies met high standards and supported the transfer of best practices, such as Worms' exemplary model. While collaborating and using the expertise of all partners, the project delivered comprehensive and community-oriented solutions to mitigate the effects of heatwaves effectively.

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)

The implementation of the municipal heat strategies and action plans is expected to yield several lasting effects and benefits. Firstly, there will be a greener urban landscape as the city adopts more sustainable and heat-resistant vegetation and shading structures. This transition will improve air quality and provide cooler, more comfortable public spaces. Secondly, promoting active transport options such as cycling will encourage a more active population, reducing reliance on vehicles and contributing to better overall health outcomes. Over time, these changes will lead to a slight improvement in public health, particularly by decreasing heat-related illnesses and enhancing general wellbeing. Additionally, local microclimates will show measurable improvement, especially in urban areas affected by the heat island effect, reducing extreme temperatures during heatwaves. Finally, there will likely be fewer heat-related complaints in workplaces and public institutions, indicating a successful adaptation to increased heat resilience. This strategic approach ensures that vulnerable groups, such as the elderly and those with health conditions, are better protected against heatwaves, promoting a safer and healthier community.

Ownership and durability of the output after the project end, considering financial and institutional support including, if applicable, maintenance

(max. 700 characters)

After the project ends, the municipality will ensure the durability and ownership of the output through several measures. A dedicated team of skilled urban gardeners and laborers will maintain the greenery and shading elements, ensuring they remain effective against heatwaves. Sustainability experts will be continuously involved in urban planning and development, providing ongoing expertise and recommendations. The promotion of multimodal and cycling transportation will be sustained to encourage lasting behavioral and lifestyle changes among residents, fostering a resilient and heat-adapted community.

Transferability of the output to other territories, sectors or target groups and planned measures for supporting such transfer

(max. 700 characters)

The output is highly transferable to other regions, sectors, and target groups by promoting green aesthetics and sustainable living. As green thinking becomes more fashionable, other sectors, such as education, healthcare, and urban development, may adopt similar practices. The aim is to positively influence public attitudes and lifestyles, fostering a culture of sustainability. To support this transfer, there will be ongoing efforts to raise awareness, share success stories, and provide guidance on implementing these strategies in diverse settings.

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)	