



EUROPEAN UNION



# EU MISSIONS

ADAPTATION TO CLIMATE CHANGE



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## Surveying citizens for climate adaptation in Central Macedonia

### Addressing the gap between citizen awareness and engagement

*A Survey gathered 218 responses to broaden the knowledge to achieve local climate change adaptation.*

#### Key Learnings

- **Awareness and perceptions:** The overall awareness of different environmental concepts varied. The citizens mostly recognised the concepts of 'Sustainability' and 'Regional development', while they knew less about 'Climate resilience'. Women and younger individuals had more concerns about climate change impacts.
- **Regional priorities:** The survey respondents ranked different topics according to their perception of urgency. The respondents, for example, prioritised effective water management and sustainable consumption, but categorised coastal protection and public health systems as lower priorities, highlighting a need for targeted awareness campaigns.
- **Demographics influence perceptions and actions:** The survey identified significant gender and age differences in climate perception and action. To address these, increased public education and engagement are essential. Future surveys should aim for better demographic representation and refine data collection methodologies to enhance data reliability and inclusivity.
- **Importance of involving regional authorities:** The project team conducted the survey remotely which required the involvement of local authorities to enhance credibility and commitment.

## About the region

Central Macedonia is one of thirteen Greek regions, located in the northern part of the country and bordering Western and Eastern Macedonia. The region covers an area of approximately 18,800 km<sup>2</sup> and has about 1.9 million inhabitants. The landscape includes plains, rivers, mountainous areas and coastlines with sandy beaches. The region is known for a mix of agricultural areas and tourist attractions.

## Climate Hazards

Flooding, Water Scarcity

## Sector

Tourism, Transport, Water Management

## Key System

Critical Infrastructure, Water Management



Map of Central Macedonia. Image Credit: <https://wikimedia.org/>

## Climate Threats

Over the last five years, Central Macedonia in Greece has experienced persistent flooding, alongside challenges in transport infrastructure and high energy consumption of public buildings, demonstrating the region's vulnerability to the effects of climate change. To better address regional vulnerabilities and recognise the importance of citizen perspectives in shaping effective actions taken by Central Macedonia, a citizen survey was conducted in the region aiming to assess citizen awareness of climate risks, including hazards, exposure, and vulnerability, and to gauge the need for climate resilience in the region.

## Citizen Engagement for Climate Change Adaptation

In Central Macedonia, the citizen survey marked a key step in advancing climate change adaptation efforts, helping to assess public awareness of climate change and its associated risks while preparing for its impacts more effectively. Involving citizens from the beginning in the adaptation process and filling knowledge gaps, increases the acceptance of adaptation measures and leads to more effective implementation.

The survey aimed to assess citizen awareness of climate risks, including hazards, exposure, and vulnerability, and to gauge the need for climate resilience in Central Macedonia. The [REGILIENCE](#) project team conducted the survey online. The target audience comprised individuals aged 18 or over living in Central Macedonia fluent in Greek or English. The 218 valid responses revealed that social media, the internet, and television are the main sources of information about the environment and climate change in Central Macedonia. These findings highlight effective channels for reaching a broad audience with climate change adaptation campaigns. Central Macedonia's Regional Development Fund facilitated conducting the survey. The region encouraged the local citizens to participate in the survey and the project team promoted the survey through social media, local organisations and direct email invitations.

*"This citizen survey played a crucial role in understanding the level of citizens' awareness about climate change. Findings demonstrate that awareness levels vary significantly across different climate-related concepts and demographic groups, highlighting the need for targeted public education campaigns. By involving regional authorities in the survey process, we enhanced credibility and fostered a stronger sense of ownership and commitment to addressing climate challenges."*

*Diana Guardado, Citizen Survey Coordinator*

## **Overall Awareness of Concepts and Regional Perception of Climate Change Hazards**

Overall citizen awareness of the different environmental concepts varied with the citizens who mostly recognised 'Sustainability' and 'Regional development' but knew less about 'Climate resilience'. Women and younger individuals had more concerns about climate change impacts. Citizens in Central Macedonia are aware and concerned about the effects of climate change. Heat waves emerged as the biggest concern, followed by a general change in air temperature and droughts increasing the threat of wildfires. On the contrary, the survey revealed low public awareness regarding heavy precipitation and coastal floods, as many respondents selected the option "I don't know". This knowledge about awareness and perceptions creates an opportunity to enhance climate education in the region and increase public awareness of possible adaptation measures.

## **Regional Actions to address climate challenges**

The survey respondents consider "effective water management and conservation" as the most important climate change adaptation measure in their region. Encouraging sustainable consumption and production is in second place and integrating climate considerations into urban planning in third place. Despite Central Macedonia comprising vast coastal areas, protecting them due to their vulnerability to sea-level rise is one of the lowest priorities of the citizens.

## **Individual Climate Change Adaptation Actions**

The results of the survey on personal actions to adapt to climate change reveal intriguing insights across various demographic segments.

Females and individuals aged between 35 and 44 years have a higher tendency to take individual climate change actions. These actions are mainly focused on climate change mitigation rather than adaptation, with key efforts including waste management and recycling, using sustainable transport and adopting sustainable consumption practices.

Survey results highlighted that individual actions are taken but also emphasised the importance of considering demographic variables when developing regional strategies to promote and facilitate personal initiatives for climate change adaptation.

## **Addressing the gap between citizen awareness and engagement**

The survey highlights the importance of citizen engagement in shaping effective regional climate adaptation strategies and creating informed adaptation policies. To address the gaps, it is essential to:

1. Enhance public awareness by improving how citizens are informed about climate change adaptation.
2. Support and empower citizens to actively take climate adaptation actions and encourage them to be more engaged.
3. Consider socio-economic factors while mainstreaming climate change adaptation.

## Summary

The citizen survey highlights the importance of involving citizens in climate resilience efforts and reveals the varying levels of awareness and engagement across demographics. The survey also revealed regional differences in prioritising climate action. These insights are crucial for shaping effective, inclusive public policies and fostering sustainable practices within European regions.

## Further information

The work presented in this adaptation story is part of the [REGILIENCE](#) project.

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The Citizen Survey Report – Central Macedonia ([https://regilience.eu/wp-content/uploads/2023/11/D1.5 Engagement of citizens V1.pdf](https://regilience.eu/wp-content/uploads/2023/11/D1.5_Engagement_of_citizens_V1.pdf), chapter 7.1)

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