Climate adaptation and citizen participation - What do citizens think of climate adaptation measures?

Cross-border Citizen Summit to discuss climate adaptation measures in the Euregion Meuse-Rhine – euregional Online-Event

Dear euregional Policymakers,

Citizens want tangible actions, better emergency coordination, and stronger public infrastructure to adapt to climate change. Euregional policymakers must work together to ensure accessible, cross-border solutions that protect all residents.

These priorities emerged from the first euregional Citizen Summit, held as part of the euPrevent ACP (Active Citizenship Participation) project.

Based on the insights gathered, the following key actions are essential for strengthening climate adaptation in the Euregio Meuse-Rhine (EMR):

1. Improve Access to Public Cooling and Drinking Water Facilities

Citizens highlighted a lack of freely accessible drinking water fountains, shaded areas, and cool indoor spaces, especially for vulnerable groups.

Action Points:

- Install more public drinking water fountains across cities, rural areas, and transport hubs.
- Increase green spaces and shaded areas, particularly in newly built urban areas.
- Ensure public cooling spaces (e.g., libraries, city halls) are accessible during extreme heatwaves and widely advertised.

2. Strengthen Cross-Border Emergency Preparedness

Participants lacked clear information during past extreme weather events and saw gaps in flood prevention measures and emergency coordination across borders.

Action Points:

- Create a euregional warning and information system for extreme weather events (e.g., heatwaves, floods).

- Improve cross-border emergency coordination, ensuring shared flood prevention strategies and real-time information exchange between Belgium, Germany, and the Netherlands.
- Offer free emergency apps and awareness campaigns to help citizens prepare for climate risks.

3. Enhance Citizen Participation and Accessibility in Climate Policy

The summit revealed that not all voices are equally represented, and engagement methods (like long surveys) may exclude some groups.

Action Points:

- Develop more inclusive participation formats, ensuring representation across different social, economic, and regional backgrounds.
- Make climate engagement multilingual to reach all citizens in the Euregio.
- Increase transparency on how citizen input influences policymaking to boost trust and participation.

Dear Participants and supporters of the euregional online summit,

We would like to thank you for your pioneering spirit. Thank you for making the effort to attend our event on adaptation measures to the consequences of climate change and for taking the time to be part of this important discussion. We greatly appreciate your valuable contributions on how to respond to the challenges of a changing climate. We have summarized your opinions and experiences on the topic under “Results”.

The ACP project is a pioneering initiative in the field of cross-border citizen participation. We would like to thank Maastricht University (UM), represented by Juliët Beuken, for being one of the first to support this important project. By starting with the key topic of climate change and health, UM has demonstrated a strong commitment to addressing urgent societal challenges. We hope this is the start of building a sustainable system for citizen participation across the Euregio Meuse-Rhine.

Recruitment & Structure of participants

The euregional Citizens' Summit on December 4, 2024 was attended by 10 people aged 17 - 70. 2 people residing in Germany, 4 people residing in the Netherlands and 4 people residing in Belgium. All of the participants visit neighbouring countries in the Euregion at least several times a year, and oftentimes more than that.

The participants were recruited through several channels. With the support of “Cloth Kreativbureau,” the project group launched a social media campaign that included advertising the summit on the LinkedIn channel of euPrevent and the Facebook channel of the EMR. Additionally, Maastricht University sent out invitations to around 700 students from internationally focused study programs, such as European Public Health, who likely have an interest in cross-border climate issues. These students were contacted by program coordinators through notifications on their learning platform. Maastricht University is one of the most international universities in the Netherlands, with a large number of students from the Euregio Meuse-Rhine. The project group also reached out to their personal and professional networks to recruit participants.

Participants could register via an online form on the euPrevent website. Two days before the event, each participant received a personalized reminder with the Zoom link and login information. Out of 11 registrations, one participant did not attend.

After the event, participants received a €20 voucher for a shop in their country of residence.

The summit took place online via Zoom on December 4, 2024, from 7 to 9 p.m. The meeting language was English. This decision was made based on the project group’s experience with previous euregional online events, where simultaneous translation hindered active discussion. Participants in those events also mentioned that they would prefer English as a common language for similar events in the future.

Who's in charge of the project?

The GGD Zuid Limburg, together with partners from the entire Euregio Meuse-Rhine, is carrying out a cross-border project (euPrevent Active Citizenship Participation / ACP). Your place of residence is also part of the Euregio Meuse-Rhine.

The project aims to promote cross-border citizen participation in the Euregio Meuse-Rhine. As a first topic, we would like to know how citizens feel about various climate change adaptation measures in their communities and what protective measures they would like to see implemented in the entire Euroregion. Participation events and an online version of the survey instrument are being used throughout the border region and are available in four languages: Dutch, German and French, as well as English.

The tool is based on the German survey instrument “StadtRaumMonitor” and was adapted to the situation in the border region.

The project is funded under Common Ground, a project of the Robert Bosch Stiftung GmbH.

More information can be found on: https://euprevent.eu/project-euprevent-acp/

What happens with your information?

We will process your data anonymously. The results will be handled in accordance with the European General Data Protection Regulation (GDPR).

After the project ends in September 2025, your results – in combination with those of all participants – will be published on the project homepage. We will also present the opinions and wishes of the citizens in the Euregio Meuse-Rhine to politicians and administrations.

Thank you for your support!

Gefinancierd in het kader van Common Ground, een project van Robert Bosch Stiftung GmbH
Gefördert im Rahmen von Common Ground, einem Projekt der Robert Bosch Stiftung GmbH
Soutenu dans le cadre de Common Ground, un projet de la Robert Bosch Stiftung GmbH

Results

Summary

The participants exhibit a diverse range of professional and personal interests and perspectives on participating in a euregional citizen summit regarding climate change and health:

1. **Personal Connection:**
    - Experiencing climate change firsthand, connecting their lived experiences with its health impacts.
    - Having interest in the topic of climate change but with the feeling of climate change being an abstract topic and with such discussions helping to make it a bit more palatable.
2. **Professionally Motivated:**
    - Having a professional focus on infection control and seeing climate change as both a professional and personal interest.
    - Having academic expertise and interest in in cross-border healthcare.
    - Witnessing climate change's effects on health in their practice as a healthcare workers

The results of the summit can be summarized as following:

- **Insights into Cross-Border Differences and Shared Challenges:**
  Participants highlighted significant differences in infrastructure, climate resilience, and public amenities across the Euregio (Netherlands, Belgium, Germany). The Netherlands was praised for better public drinking water facilities, shaded outdoor areas, and cycling infrastructure. Germany's emergency preparedness and volunteer systems were commended, while Belgium showed promise in improving bike lanes and providing information on public drinking water in urban areas. However, the lack of cross-border coordination during extreme weather events, such as flooding, was a shared concern.

- **Diverse Perspectives on Local Climate Resilience and Access to Resources:**
  Attendees shared varying levels of access to cooling spaces, public drinking water, and protection against extreme weather. Some neighborhoods had several shaded or cool indoor spaces, while others lacked basic facilities like public fountains or green spaces. Rural and urban areas faced distinct challenges, with rural participants noting insufficient flood management and urban participants experiencing overcrowded or inaccessible cooling areas. Personal experiences with extreme weather, such as flooding,

emphasized the need for improved infrastructure, information sharing, and cross-border solutions.

Results of the individual discussion points

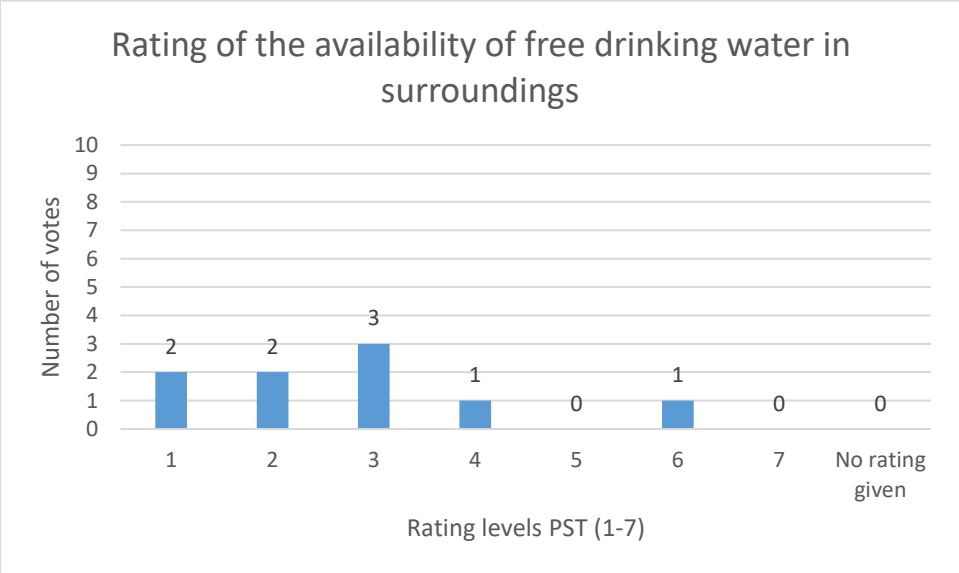
(Presented in absolute figures)

Drinking water

Due to climate change, it is often more hot and dry. Especially during the summer, it is important for your health to drink plenty of water - also when you're away from home. In the Euregio Meuse-Rhine, tap water is of very good quality. Free, easily accessible and appealing drinking water supplies, such as public fountains, can therefore be very helpful.

How do I rate the availability of free drinking water in my surroundings?

Participants assigned a rating with a number between **1 = very bad** and **7 = very good**



Participants rate the availability of free drinking water as rather bad.

Feedback:

1. **Limited Access in Most Areas:**
   Participants reported a lack of public drinking water facilities in their immediate

neighborhoods. Rural areas and small villages, in particular, were highlighted as having little to no access to public drinking water points

2. **Mixed Availability in Urban Areas:**
   Urban residents (Aachen & Maastricht) experienced slightly better access, with some areas having public drinking water fountains in public buildings or leisure spaces. However, accessibility remains inconsistent, with some cities offering only a few spots or none at all in residential streets

3. **Positive Outliers and Accessibility Concerns:**
   Participants noted significant improvements in inner cities, with several tap points available. However, they raised concerns about usability, mentioning issues like hard-to-push buttons and fountains being too high for wheelchair users.

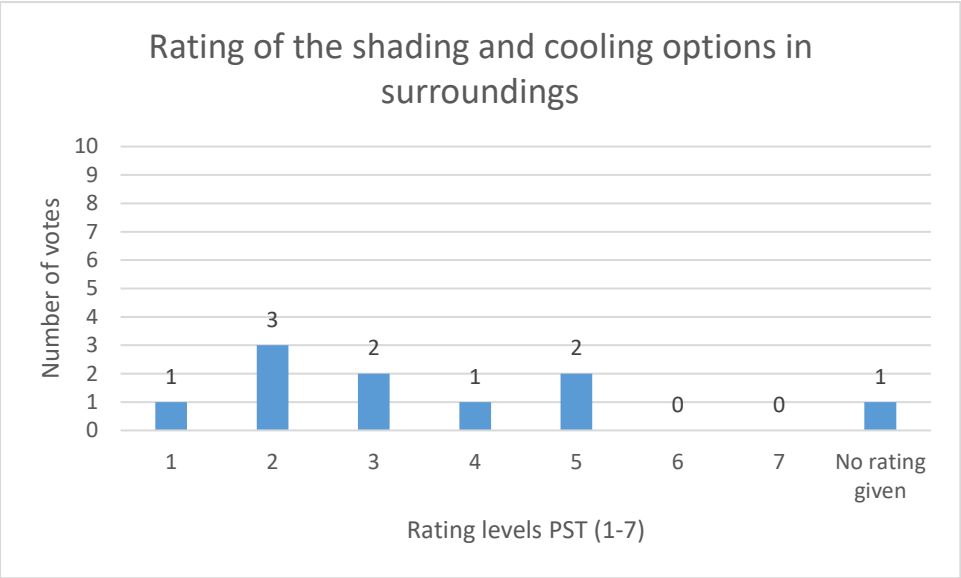
Overall, there is a need for greater consistency in public drinking water access across regions, with specific attention to rural areas and improving accessibility for all.

Cooling Outside

Our cities and communities are becoming warmer due to climate change - especially where buildings are close together. Green spaces and water features as well as sunshades and the like help to cool the environment.

How do I rate the shading and cooling options in my neighbourhood?

Participants assigned a rating with a number between **1 = very bad** and **7 = very good**



Participants rate the shading and cooling options in their surroundings as rather bad. One participant found it challenging to assign a rating level. However, this participant gave qualitative input which is taken into account in the summary below.

Feedback:

1. **Limited and Unequal Access to Cooling Spaces:**
   Participants expressed dissatisfaction with the shading and cooling options in their neighborhoods. They highlighted issues such as the removal of trees, limited parks, and lack of proper green spaces, especially in urban and newly developed areas. These spaces were often poorly distributed, with greenery located next to roads, making them unappealing for relaxation. Some rural areas had nearby forests or national parks but lacked local options for shading or swimming.

2. **Barriers to Cooling Facilities:**
   Also, participants noted the exclusivity of cooling facilities, such as pools requiring memberships or rivers and lakes without sufficient infrastructure for safe use. This exclusivity was a source of frustration, particularly in areas with limited public options. Concerns were also raised about young people's limited swimming skills due to the lack of accessible swimming locations.

3. **Positive Experiences in Privileged Areas and Mixed Reviews:**
   Participants living in suburbs or near churches and historical sites reported good access to shaded areas, parks, and green spaces. However, even those with better access expressed frustration about having to pay for cooling options like pools. One participant found it difficult to assign a number but was critical of the lack of greenery in newly built areas and the need to purchase items (e.g., drinks) to use shaded spaces like terraces.

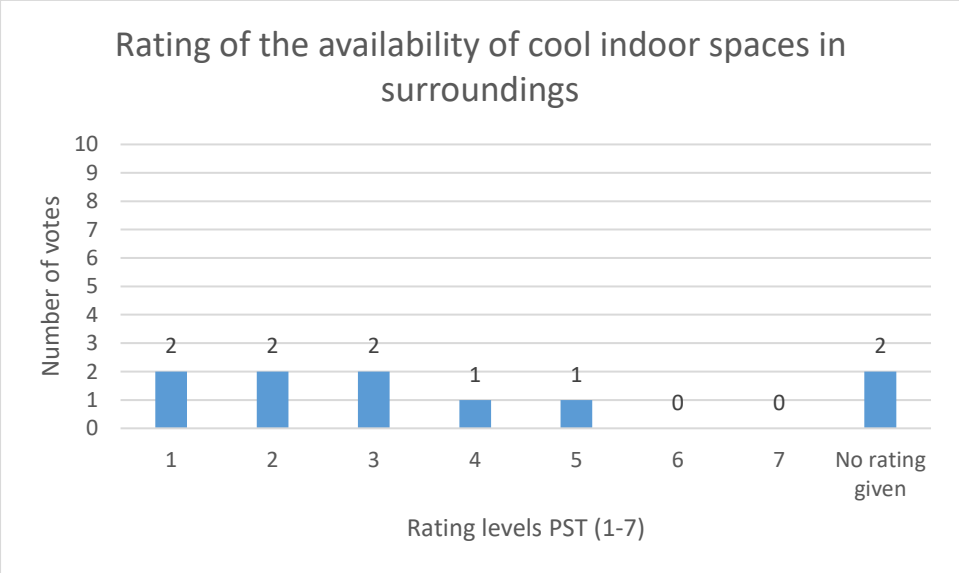
In summary, there is a broad consensus that shading and cooling options are unevenly distributed, with rural and disadvantaged urban areas lacking sufficient infrastructure, while more privileged neighborhoods fare better. Concerns about accessibility and exclusivity were prominent, alongside a critical view of urban development trends neglecting green spaces.

Cooling Inside

When it gets hot, cool public indoor spaces can also help in the short term when you are away from home. However, cool public spaces should be available, open and freely accessible during the day.

How do I assess the availability of cool indoor space in my neighbourhood?

Participants assigned a rating with a number between **1 = very bad** and **7 = very good**



Participants rate the availability of cool indoor spaces as rather bad. Two participants found it challenging to assign a rating level. However, these participants gave qualitative input which is taken into account in the summary below.

Feedback:

1. **Limited Availability and Accessibility of Cool Indoor Spaces:**
   Participants expressed concerns about the lack of accessible cool indoor spaces in their neighborhoods, particularly in rural areas and small villages. These areas lacked shopping malls, libraries, or gathering places, leaving older residents to rely on air conditioning at home. Even in urban settings, spaces like libraries, museums, or churches were not always open, and some required entrance fees, which posed barriers to access.

2. **Mixed Experiences in Urban Areas:**
   Urban residents generally had more options, with supermarkets, churches, and public buildings providing relief from heat. However, these spaces were often described as insufficient to meet community needs during heat waves. Some participants mentioned feeling forced to create cooling solutions at home due to the limited capacity of public spaces. While some locations, such as Catholic churches in Germany, offered free access, participants highlighted that public libraries or other cooling spaces were not consistently available.

3. **Critical Reflections on Public Access and Personal Solutions:**
   One participant found it difficult to assign a number but criticized the uncertainty around whether public buildings were willing or prepared to host large numbers of people seeking relief from the heat. Another participant also did not assign a number but shared how a north-facing room and a museum card allowed for personal cooling strategies but emphasized that these were privileges not universally accessible.

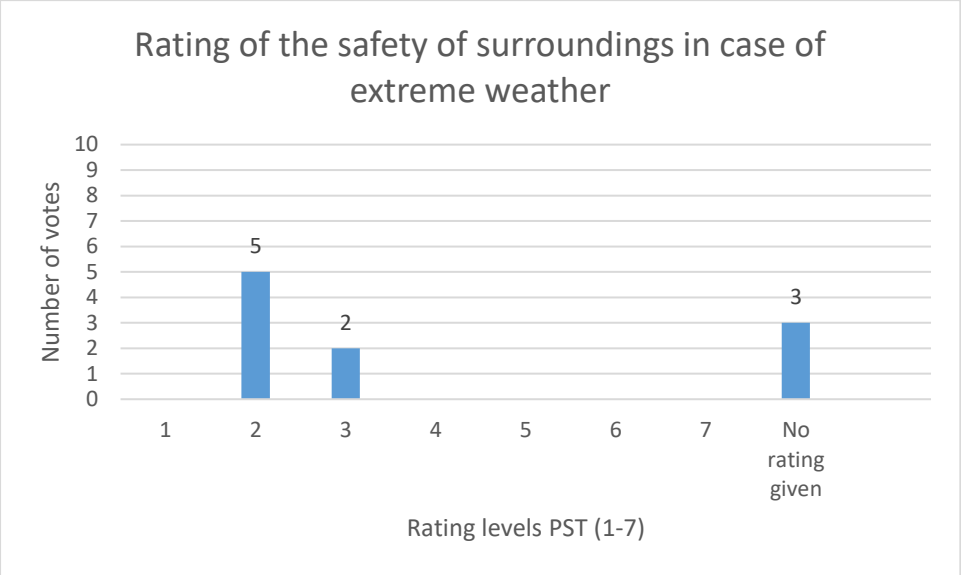
In summary, participants highlighted the inconsistent availability of cool indoor spaces, with rural areas being particularly underserved. While urban areas offered more options, accessibility issues such as entrance fees, limited hours, and insufficient capacity remained significant concerns.

Extreme weather protection

In addition to heat, climate change often leads to other extreme natural events such as storms, heavy rain or flooding. We cannot completely prevent these. And they often happen quite suddenly. However, good preparation can reduce the risks and minimize the damage.

How do I assess the safety of my surroundings in the event of heavy rain, flooding and storms?

Participants assigned a rating with a number between **1 = very bad** and **7 = very good**



Participants rate the safety of their surroundings in case of extreme weather as rather bad. Three participants found it challenging to assign a rating level. However, these participants gave qualitative input which is taken into account in the summary below.

Feedback:

1. **Vulnerability to Flooding and Safety Concerns:**
   Participants expressed concerns about the safety of their surroundings in the event of heavy rain, flooding, or storms. Several noted that their areas were prone to flooding, especially those living close to fields, rivers, or farmland. Issues with inadequate sewage systems, paving over natural buffer areas, and frequent flooding of basements were highlighted as serious concerns.

2. **Mixed Feelings on Preparedness and Information Availability:**
   While some participants felt relatively safe, they still acknowledged the limitations of local infrastructure, such as slippery streets and insufficient sewage capacity. The participants emphasized the need for better communication and information during extreme weather events, citing a lack of cross-border coordination and inconsistent warning systems. Also, they expressed a sense of unease due to inadequate national and local information during past events like the 2021 floods.

3. **Concerns About Personal Preparedness:**
   Participants mentioned taking personal precautions, such as preparing for emergencies,

storing drinking water, and ensuring their basement is secured, as a response to feeling uncertain about the safety of their surroundings.

In summary, while some participants felt relatively safe, there was a shared concern about inadequate infrastructure, flood risks, and the lack of timely, cross-border communication in extreme weather situations. Personal preparedness efforts were mentioned, alongside calls for more coordinated and transparent information systems to better protect citizens.

Situation in neighboring EMR countries

Thinking back to visits in the neighboring EMR countries:

What did you like about one or more of these issues there: **drinking water, cooling outside & inside,** and **extreme weather protection**? And what did you find less good?

For this part, no rating was given. The discussion was purely qualitative.

Feedback:

1. **Drinking Water Availability:**
   The Netherlands is generally perceived as doing the best job in terms of public drinking water availability, with better facilities compared to Belgium and Germany. Some participants noted that Belgian metro stations provide information on public drinking water, but overall, Belgium was seen as lagging behind.

2. **Cooling and Outdoor Infrastructure:**
   The Netherlands also received positive feedback for having more shaded areas, particularly in Maastricht compared to Liège. However, Germany and Belgium were noted for having more national parks and pools, offering different cooling options. Cycling infrastructure was an important factor for some participants, with South Limburg (NL) being preferred over Aachen (DE), while Belgian bike paths were criticized for being in poor condition.

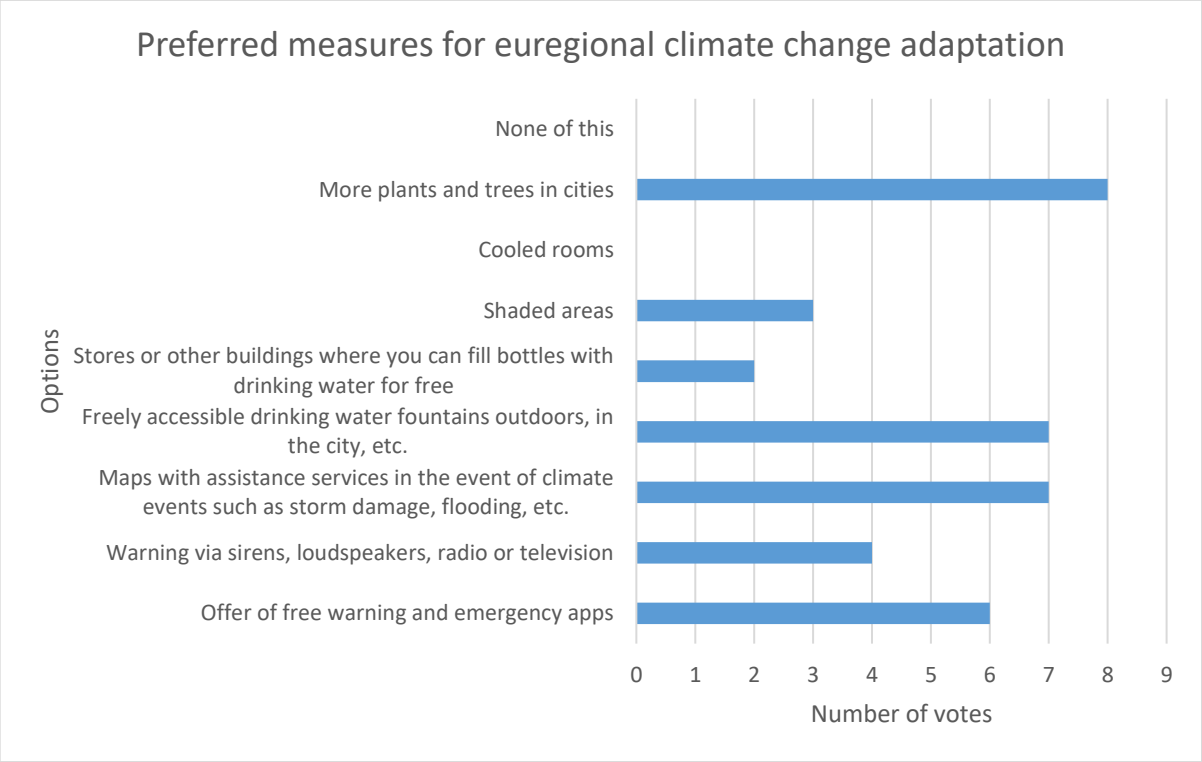
3. **Extreme Weather Protection & Emergency Preparedness:**
   Germany was viewed as having the best emergency preparedness, especially in terms of volunteer systems and technical readiness. Some participants felt that the Netherlands could learn from Germany in this regard, but doubted whether the Dutch system could match Germany's level of preparedness. The response to extreme weather events in neighboring countries, particularly emergency assistance and cross-border help, was seen as impressive. However, concerns were raised about the lack of coordination and

differences in healthcare accessibility, which often led people to travel across borders for services.

Overall, the Netherlands was praised for its drinking water and shaded areas, Germany for its emergency preparedness, and Belgium for some improvements in infrastructure, though concerns remained about its biking paths and traffic culture.

Assessment of various measures that can be used to respond to the consequences of climate change in your area.

Participants anonymously selected up to 4 answers via the Zoom poll tool.



The bar chart illustrates the preferred measures for climate change adaptation in the Euregio Meuse-Rhine (EMR) region based on the number of votes each measure received. Key takeaways from the assessment include:

1. **Most Preferred Measures:**
    - **More plants and trees in cities** received the highest support, with nearly 9 votes, indicating a strong preference for increasing urban greenery as a way to combat climate change effects.

- **Freely accessible drinking water fountains** and **offering free warning and emergency apps** also received significant support, with around 6 votes each. These measures highlight concerns about heat resilience and emergency preparedness.

2. **Moderately Preferred Measures:**

   - **Maps with assistance services in the region** and **warnings via sirens, loudspeakers, radio, or other means** both received around 5 votes, showing that many residents value better information distribution during climate-related emergencies.

   - **Shaded areas** were also seen as beneficial, though to a lesser extent (around 3 votes), suggesting some demand for additional cooling infrastructure.

3. **Least Preferred Measures:**

   - **Cooled rooms** and **stores or other buildings where people can seek refuge** received minimal support (around 1-2 votes), indicating that they are not seen as primary solutions or may not be widely available in the region.

   - **"None of this"** received no votes, suggesting that all proposed measures were seen as useful by at least some participants.

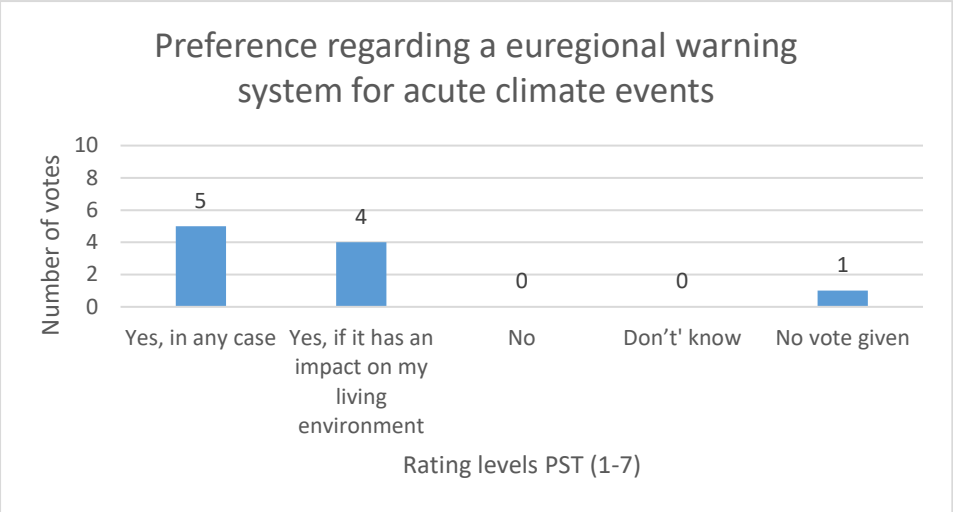
Conclusion:

The results suggest that residents of the EMR region prioritize natural solutions like increasing urban greenery, alongside practical adaptations such as free water access and digital emergency tools. There is also moderate interest in improved communication and warning systems, while cooled indoor spaces and businesses providing shelter are seen as less critical.

Assessment of cross-border warning systems

Would you like a warning system (e.g. an app) that informs the entire Euregio Meuse Rhine when acute climate events are imminent? (e.g. heat, storms, flooding)

Participants anonymously selected one answer via the Zoom poll tool.



The chart presents the assessment of the need for a **euregional warning system** in case of **acute climate events**, based on the number of votes given for different options.

Key Insights:

Strong Support for a Warning System:

- The majority of participants (5 votes) believe that such a system is necessary **in any case**, suggesting broad support for improved climate-related warnings across the region.
- An additional **4 votes** support a warning system **if it has an impact on their living environment**, indicating that while some may see it as conditionally relevant, they still recognize its potential importance.

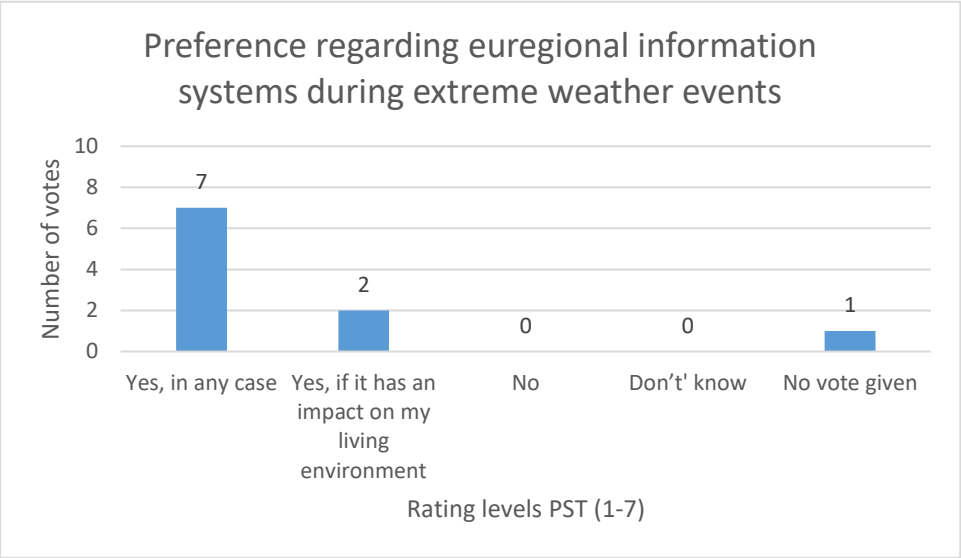
Conclusion:

The discussion shows **clear support** for a **euregional warning system** for climate emergencies, with most respondents favoring its implementation either universally or conditionally based on local impact. This indicates a perceived need for **cross-border coordination and improved communication** in response to extreme weather events.

Assessment of cross-border information systems during extreme weather events

Would you like an information system (e.g. an app) that informs people throughout the Euregio Meuse-Rhine where they can get support services or help in an emergency when such extreme weather events occur?

Participants anonymously selected one answer via the Zoom poll tool.



The chart presents the assessment of the need for a euregional information support system in case of acute climate events, based on the number of votes given for different options.

Key Insights:

Strong Support for an Information Support System:

A significant majority (7 votes) believe such a system is necessary in any case, highlighting a broad recognition of the need for cross-border coordination and timely information during climate emergencies.

2 votes support the system only if it impacts their living environment, indicating some conditional support but still a general acknowledgment of its importance.

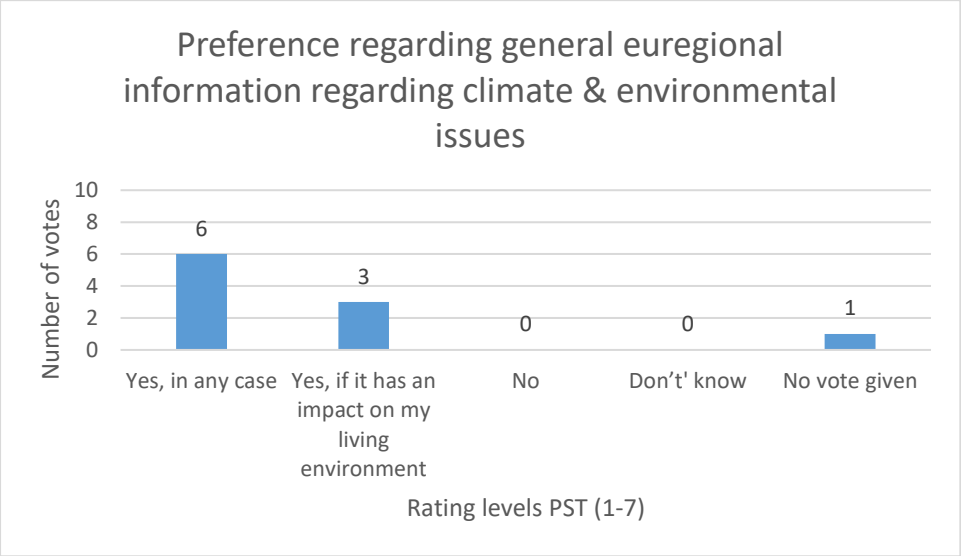
Conclusion:

The results show overwhelming agreement on the necessity of a euregional information support system for acute climate events. Most respondents see it as essential, while a smaller group considers it relevant only when directly affecting their surroundings. The absence of opposition or uncertainty reinforces the importance of improving cross-border communication and coordination to manage climate-related crises effectively.

Assessment of cross-border information systems regarding general information regarding climate and environmental issues

Would you like to receive general information about current environmental or climate issues in the Euregio Meuse-Rhine?

Participants anonymously selected one answer via the Zoom poll tool.



The charts reflects the assessment of the need for a **general euregional information system** on **environmental and climate issues**, based on the votes given for different options.

Key Insights:

Strong Support for a General Information System:

A majority (6 votes) believe that such a system is needed in any case, emphasizing the importance of accessible, cross-border climate and environmental information.

3 votes support the system only if it impacts their living environment, indicating some conditional support but still acknowledging its relevance.

Conclusion:

The results show broad agreement on the need for a general euregional information system on environmental and climate issues. Most participants see it as essential, while a smaller group considers it important only when it directly affects their surroundings. The absence of opposition or uncertainty further underscores the demand for better cross-border communication and information-sharing on climate and environmental matters.

General reflection citizen summit – participants' perspective

The participants reflect on the past two hours and discuss their impressions, suggestions for improvement and feedback on the tool.

Participants shared a mix of reflections on the usefulness, representativeness, and impact of the summit.

Key Takeaways:

1. **Not Representative but Valuable Discussions**
    - Several participants noted that eight people cannot fully represent the entire EMR population, but they appreciated the depth of discussions and the opportunity to hear different perspectives.
2. **Cross-Border Learning and Engagement**
    - Many found it valuable to learn about climate issues beyond their own country and exchange perspectives across borders.
    - Citizen participation on a cross-border level was seen as constructive and impactful.
3. **Concerns About Privilege and Accessibility**
    - Multiple participants recognized that the group was privileged in terms of education and economic background, raising concerns about whether a diverse range of voices were included.
    - Some felt that the questionnaire was too long and difficult which may discourage broader participation.
4. **Personal Reflections and Emotional Impact**
    - One participant mentioned that climate knowledge can increase anxiety, but engaging in discussions helped alleviate some of that stress.
    - Others were positively surprised by the discussions and felt that hearing real stories had a strong personal impact.
5. **Suggestions for Improvement**
    - There was a call for multilingual support to make participation more accessible.

- Recognizing the privileged nature of the group, some saw room for future improvement in inclusivity.

Conclusion:

While the summit was not seen as fully representative, participants found valuable insights, personal impact, and cross-border learning to be key strengths. The main areas for improvement include broadening accessibility, making participation easier and more inclusive, and ensuring a wider range of voices are heard in future discussions.

General reflection citizen summit – project groups' perspective

Despite broad advertising efforts to attract a diverse range of participants, the summit did not yield a fully representative group. The participants were engaged and provided valuable insights, but many recognized that the group was relatively small and privileged in terms of education and economic background.

The evaluation can be summarized in three main topics:

1. Participation & Representation

- While participants appreciated the cross-border exchange, the small group size (10 people) was seen as a limitation.
- The lack of socio-economic diversity meant that some perspectives were missing.
- Choosing English as the meeting language creates an additional bias, as people might not feel comfortable expressing themselves in a second language.

Future Action: More targeted outreach is needed to ensure broader representation, including different age groups, rural vs. urban residents, and varying socio-economic backgrounds. Providing multilingual support can help make participation more inclusive.

2. Key Climate Adaptation Concerns

- Strong demand for more green spaces, shaded areas, and freely accessible drinking water fountains.
- Limited availability of cool indoor spaces (e.g., libraries, churches, supermarkets), with concerns about accessibility and costs.
- Flooding and extreme weather preparedness were major concerns, with calls for better cross-border coordination in emergency response.
- The Netherlands was perceived as performing better in infrastructure and drinking water access, while Belgium and Germany had strengths in other areas like emergency volunteering and national parks.

Future Action: These insights should be used to advocate for practical improvements such as more shade, accessible cooling spaces, and better flood prevention measures. Cross-border emergency communication and coordination should be prioritized.

3. Engagement & Communication Challenges

- Some found the survey too long or complex, which may have discouraged full participation.

- There was uncertainty about the impact of the summit, leading to hesitation in voting on certain topics.
- Climate discussions triggered anxiety for some participants, but they also found it helpful to share their concerns.
- Compared to offline summits, the project group noticed that an online event can limit active exchange. The moderator needs to put in more effort to encourage interaction between participants, as opposed to simply having them provide input one after another.

Future Action:

- Simplify engagement methods (shorter surveys, interactive formats, live polling).
- Clearly communicate how participants' input will be used to increase motivation.
- Consider adding well-being aspects (e.g., workshops on climate resilience) to help address climate anxiety.

Final Thought:

The summit provided valuable insights into citizens' climate adaptation concerns, but to make a greater impact, future events should focus on broader participation, clearer engagement methods, and stronger cross-border collaboration.