

WHERE: **Skopje, North Macedonia**

WHAT: **Citizens' Assembly**

WHEN: **17 February – 27 April 2024**

NORTH MACEDONIA CLIMATE ASSEMBLY ON REDUCING AIR POLLUTION IN SKOPJE

North Macedonia has a high rate of air-pollution-related deaths and its capital, Skopje, often ranks as the world's most polluted city. This poor air quality is a result of deep environmental, social, and political issues in the country. The main causes of air pollution in Skopje are industrial emissions, old vehicles, inadequate public transport infrastructure, fuelwood heating, burning of agricultural residues and illegal waste incineration.

To address these challenges, the first Citizens' Assembly in North Macedonia was organised by [ZIP Institute](#), a local civil society organisation working on improving democratic processes in the country, with the support of the [nexus Institute](#), which has expertise in deliberative methodologies and facilitation techniques, and the [EU research project REAL DEAL](#).

In six sessions spanning February to April 2024, 65 citizens from 9 municipalities in Skopje discussed strategies for tackling air pollution. As this major environmental problem is strongly connected to issues of climate change, the initiative was termed a Climate Assembly.

Participants of the Climate Assembly



BEFORE THE EVENT: PREPARATION

TOPIC FRAMING

The climate emergency has prompted policymakers in North Macedonia to take action towards a fossil-free society. As an official candidate for EU accession, North Macedonia is expected to implement the energy, climate and related acquis for the strategic design and operationalisation of common goals leading to a low-carbon society. Unfortunately, the ongoing energy crisis has been a real test of the country's pledge to phase out coal by 2040. The project team's initial idea was to focus on the issue of energy poverty and energy communities as a possible measure to 'solve' this problem. However, as energy provision and energy consumption can be very abstract topics to discuss, the issue was embedded in the topic of air pollution, which affects everyone in the City of Skopje, regardless of social status or income. In this way, the recommendations were not limited to the field of energy policy, but could be linked to other issues.

The key question that participants were asked to consider was: **what can the government do to reduce air pollution in Skopje?**

RECRUITMENT

To ensure a representative and inclusive applicant pool, candidates were recruited through a stratified **random selection process** across all ten municipalities of Skopje. Due to confidentiality issues, it was not possible to collect individuals' personal information, such as names and addresses, from the municipalities' voter registration records. Instead, the team utilised the website of the [Agency for Real Estate Cadastre](#) and recorded the addresses for every other house on every other street, amassing around 10,000 addresses (approximately 500–1,000 addresses per municipality). While this was somewhat cumbersome, it shows there are alternative means of collecting addresses in the absence of access to official data. Selected households then received hand-delivered invitations, as it was not possible to send out letters via regular mail without an addressee.

Presentation by a public health expert (Session 4)



Leveraging data from the most recent census (2022), demographic statistics pertaining to residence, gender, age, ethnicity, education level, and employment status were analysed. These data formed the foundation for determining the required composition of the Assembly. Those who received an invitation and were interested could then complete a questionnaire providing data for participant selection. The selection process itself was carried out by sortition software (Magic Sortition) provided by the [Centre for Blue Democracy](#).

KNOWLEDGE PREPARATION: FOCUS GROUPS AND GROUP DELPHI

To support informed deliberation, the Climate Assembly was preceded by two Focus Groups and a Group Delphi:

- The Focus Groups were conducted in November 2023 in Saraj, a rural, majority-ethnic Albanian municipality of Skopje with a high level of energy poverty among its inhabitants. The Focus Groups showed that important fields of action are energy and mobility, public health and energy poverty. Accordingly, the Climate Assembly sessions and recommendations were structured around the themes of energy, transport and public health.
- A Group Delphi was organised in February 2024 with 13 experts from the relevant fields, including climate change, energy policy, air pollution and environmental policymaking. This special format serves to provide an overview of the plurality of expert views on the topics at stake; to explore and identify those areas and questions where expert consensus exists or where convergence of views can be achieved; and those issues where differences of opinion remain. The Delphi yielded insightful consensus on effective strategies, such as: renewable energy subsidies, energy efficiency programmes, carbon tax revenues, policies and approaches for regulated energy prices, fossil fuel phase-out timelines, urban planning with citizen participation, raising awareness about the health costs of air pollution, emission taxes, and prioritising green heating systems. The experts agreed less on the effectiveness and necessity of establishing independent agencies or advisory committees for monitoring and addressing energy poverty, and on the impact of climate plans on air pollution reduction.

DURING THE EVENT

A total of six meetings were convened, each held in-person on a Saturday at two-week intervals from February to April 2024. Each meeting lasted approximately six hours. Of the original 65 participants, four withdrew during the course of the Assembly. The initial session served as an introduction to familiarise participants with the process.

The three subsequent sessions each addressed a single topic:

- **Session 2:** Energy
- **Session 3:** Mobility
- **Session 4:** Public health

Recommendations were drafted during the fifth session, and then voted on in the concluding sixth session at the end of April.

KNOWLEDGE BUILDING

Each of the sessions commenced with 3–4 inputs from experts, who provided information, data and potential solutions to the given topic.

After each round of inputs, the participants collected questions for the experts in breakout groups, followed by a Q&A session with the experts. Additional material was made available to the participants in a group chat established on the Viber platform.



“The assembly was a blessing in the true sense of the word. Everyone expressed their opinion, suggestions and personal experiences. A nice experience that I would recommend to anyone who is interested in participating in the future.”

FACILITATION AND INTERACTION

The deliberative format combined plenary sessions with smaller breakout groups, facilitated by professional moderators who had undergone prior briefing.

Sessions 2–4 had the following structure:

Duration	Content
20 minutes	Welcome and short reflection on the previous session
60 minutes	Expert inputs and Q&A
60 minutes	Breakout groups: Identify most pressing problems and goals
60 minutes	<i>Break</i>
30 minutes	Expert inputs and Q&A
90 minutes	Deliberating policy options for three different scenarios
30 minutes	Summary of results in plenary and outlook on next session

When deliberating on potential policy options, breakout groups were asked to consider three scenarios. Each scenario consisted of three parts: a description of the situation; benefits of the proposed set of measures/policies; and possible trade-offs for the political process. Participants were tasked with commenting on the scenarios and discussing the preferred option

As a final task, each participant individually assessed the scenarios using five green and five red tokens (adhesive dots) according to whether they found an aspect of a scenario desirable or not for tackling air pollution in Skopje.

Deliberating and voting on scenarios



RECOMMENDATIONS

During the fifth session, participants were organised into six groups (i.e., tables of 8–9 participants each), with two groups each focused on recommendations regarding energy, transport and public health. Each group, with the help of an expert, had 60 minutes to deliver (at least 5) recommendations on the assigned topic. On the principles of rotation, each group had an additional 30 minutes to add their recommendations on the other two topics. In this way, every participant had the opportunity to share their opinion regardless of their initial grouping. At the end of the session, the participants received three voting cards: red, yellow, and green. Red represented a vote AGAINST a recommendation; yellow an abstention; and green card a vote FOR a recommendation. All recommendations that received 50% +1 green votes proceeded to the following stage of the Assembly.

All the recommendations that qualified for the second round of voting were further discussed by three groups (one for each topic); however, this time, each participant chose their preferred topic. The participants analysed each recommendation through several questions:

- Is the recommendation clear? Is it possible?
- Is the implementation of the recommendation feasible?
- Which institution is responsible for realising the recommendation?
- Is it legally permissible?
- What are the costs of its realisation?

In the final vote (sixth session) a recommendation was only passed if it reached a two-thirds majority, resulting in the participants endorsing 33 recommendations (see Annex).

Voting



AFTER THE EVENT

DOCUMENTATION AND FEEDBACK

After the Assembly a [report](#) provided an overview of the preparation, the Assembly sessions, and its recommendations. The report was handed to newly elected Prime Minister Hristijan Mickoski of North Macedonia by a participant of the Climate Assembly, Eleonora Jovanovikj, at the Macedonian Energy Forum in June 2024.

FOLLOW-UP PROCESS

From the outset, it was envisaged that local politicians would provide feedback on the recommendations. After the Assembly, the ZIP institute meticulously followed-up with Skopje City Council, sending each councillor a personalised letter emphasising the Assembly's independence and legitimacy stemming from randomly selected citizens and urging the councillors to support the report.

Skopje City Council unanimously adopted 19 of the Climate Assembly's recommendations as a single set, as they were identified as directly relevant to the city's competencies and jurisdiction. The remaining 14 recommendations were not included in the vote because they fall outside the city's authority. The adoption of the recommendations by the city council marks a historic turning point, as it succeeded in bringing all stakeholders back to the table after a prolonged period of non-cooperation. While this achievement is a significant milestone for tackling air pollution in Skopje, the implementation phase presents a forthcoming and even greater challenge.

"The best and most efficient way to solve the same problems and achieve the same goals is through a Citizens' Assembly."



A participant of the Climate Assembly hands over the report to Prime Minister Mickoski

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In the REAL DEAL project, researchers and civil society organisations worked together on green transition and democracy. They conducted research on deliberative methods to find out what works best for involving citizens on the European Green Deal.



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RECOMMENDATIONS

CLIMATE ASSEMBLY ON REDUCING AIR POLLUTION IN SKOPJE

(February–April 2024)

More information about the recommendations is provided in the [Assembly report](#).

ENERGY

1. Expand the Environmental Inspectorate workforce to ensure comprehensive coverage of duties and field visits.
2. Scale up the availability of waste separation containers to be within a maximum radius of 250 meters from all residential buildings.
3. Develop a plan to equip all public buildings with energy-efficient facades. Execute the plan in accordance with annual deadlines. Install photovoltaic systems to power public buildings already equipped with energy-efficient facades.
4. Install solar panels for street lighting, to harness the Sun's free energy.
5. Extend the central hot water heating network and facilitate the connection of households in wood-heated areas of Skopje.
6. Update the heating billing system and provide subsidies to install heating meters in every household.
7. Provide subsidies for improving thermal insulation through heating, renovation, rehabilitation and facade restoration projects, based on successful implementations with positive outcomes.
8. Increase investment in renewable energy projects but prohibit the installation of photovoltaic systems on fertile soil.
9. Install automatic 24-hour monitoring instruments at all emission points for entities holding A or B integrated environmental permits¹.
10. Introduce legal amendments mandating all new residential buildings to include a central heating connection during construction, irrespective of the presence of a thermal energy heating system.
11. Implement rigorous monitoring of firewood stockpiles to improve wood quality, moisture levels and traceability of sources.
12. Adopt regulations to facilitate enforcement of the Law on Energy Efficiency.
13. Review the monopoly status of EVN (a local energy provider) and simplify bureaucratic processes for applying for photovoltaic installations.
14. Construct a waste-to-energy plant (incinerator) to generate clean energy. It should be designed to prevent the release of pollutants into the air, soil, and water; minimise odours and noise; and safeguard people's health and well-being.

¹ In North Macedonia, integrated environmental permit types A and B are part of the country's efforts to regulate industrial emissions and align with European Union environmental standards

TRANSPORT

1. Integrate the current railway infrastructure into Skopje's public transportation system in four stages.
2. Expand the network of bicycle and pedestrian paths locally and nationally through a two-phase plan.
3. Schedule Communal Hygiene and Parks & Greenery activities, along with loading and unloading of goods from public/commercial trucks, outside of peak traffic hours. Implement city-level regulations for this purpose.
4. Implement more pedestrian zones around educational facilities in three phases.
5. Clear pedestrian and bicycle paths of obstructions such as stalls, billboards, advertising panels, bars and terraces.
6. Reactivate the bicycle rental project.
7. Restrict the core of the city to public transport only, with neighbourhood streets designated exclusively for residents' vehicles. Implement recommendations in two stages.
8. Establish an information office in the City of Skopje to provide analyses and communication channels with citizens.

PUBLIC HEALTH

1. Implement a systematic, intensive and consistent street-cleaning regimen.
2. Increase urban greenery, including park-forests, parks, green squares, tree-lined streets, green corridors, and protective vegetation, tailored to Skopje's climate, geography, and citizen's specific needs, including settlement patterns and allergens. Prioritise greenery maintenance and the installation of green facades.
3. Implement regular and large-scale afforestation initiatives with active citizen involvement, alongside efforts to clean and green the area known as "Dumpsite Vardarishte".
4. Allocate micro-spaces for recreation.
5. Improve and expand the bicycle network by establishing robust infrastructure.
6. Install microsensors capable of measuring ambient air pollution, noise levels, temperature, and humidity.
7. Construct a municipal wastewater treatment plant in the City of Skopje.
8. Boost the development of the Drisla sanitary landfill and implement a programme for separate collection of municipal waste to facilitate recycling initiatives.
9. Launch health and environmental awareness campaigns aimed at disseminating crucial information and promoting public health improvement.
10. Enforce stricter adherence to existing legislation and regulations while also proposing amendments to laws on urban greenery and food safety.
11. Conduct human biomonitoring of occupationally exposed or high-risk segments of the population, bolster and expand current initiatives outlined in the National Public Health Program, and lessen indoor air pollution, particularly in educational institutions such as kindergartens and schools.

