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# Recommendations for Democratic Local Climate Change Governance

TESEV Briefs aim to share with the public different opinions and recommendations on issues that are under TESEV's working areas.





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Climate change is a global phenomenon, yet most measures that need to be taken are local. Accounting for 70% of global greenhouse gas emissions (IPCC, 2022), cities are inevitably vulnerable to disasters and their effects including droughts, heat waves, urban heat islands, and extreme rainfall caused by the climate crisis. Even when their authority, resources, and capacity are not always sufficient, local governments must find solutions to the day-to-day consequences of climate change, minimize the underlying causes of the climate crisis in their cities, and manage climate change locally.

Global warming is referred to as a crisis for reasons beyond environmental and weather abnormalities. Inequalities caused by these abnormalities and their impact on society are also integral parts of the crisis. Communities that are socially, economically, culturally, politically, demographically, and geographically vulnerable are typically the ones least responsible for climate change, and yet they are the most negatively affected by its consequences. These groups are often overlooked when decisions are made, their voices are rarely heard, and they face the greatest challenges. For instance, the excessive carbon emissions generated by the world’s wealthiest 1% contribute to climate-related conditions that result in the premature deaths of millions of people living in poverty and precarious circumstances (Oxfam 2024). The intersectionality of vulnerabilities further exacerbates inequality. When tackling climate change, decision-makers are expected to be aware of these inequalities, adopt policies to address them, ensure accountability, and design inclusive practices and participatory processes.



**For municipalities, the key priorities include using data-driven decision-making processes to inform climate change policies, promoting transparency, and accountability within the institution, establishing partnerships with city stakeholders for the implementation of policies, and enabling civic engagement mechanisms.**

This policy approach, conceptualized as climate justice, requires careful planning and implementation at the local level. Some of these processes must be prioritized and executed by municipalities, while others will be implemented by city stakeholders. For municipalities, the key priorities include using data-driven decision-making processes to inform climate change policies, promoting transparency, and accountability within the institution, establishing partnerships with city stakeholders for the implementation of policies, and enabling civic engagement mechanisms.

On the other hand, civil society must generate alternative knowledge that will inform municipal climate change policies. It must also engage with democratic participation mechanisms in an informed manner, ground advocacy in knowledge, and play an active role in city-level climate action plans.

The Turkish Economic and Social Studies Foundation (TESEV) devised pilot solutions to

strengthen the above-mentioned processes in its ***Civic Engagement for Local Climate Change Governance*** project in partnership with Maltepe Municipality in the framework of Civic Engagement Small Grants Programme funded by the European Union. This policy brief presents the tools developed and piloted under the project for democratic local climate change governance and offers recommendations based on this experience.

### **Strengthening Data-Driven Decision-Making: The Climate Justice Map**

Strengthening data-driven decision-making processes appears to be the most appropriate pathway for fulfilling the fundamental requirements of democratic governance including effective, just, and innovative allocation of public resources, inclusive urban service planning, monitoring and evaluation, ensuring accountability, transparency, as well as

internal and external institutional cooperation. The planning, collection, analysis, and sharing of inclusive, mutually reinforcing and inclusive data sets inevitably drive all these processes. Municipalities with robust data-driven decision-making processes can make more accurate, unique, innovative, monitorable, and equitable decisions across sectors.

For this reason, to strengthen democratic urban governance, TESEV has been developing tools to improve municipalities' data-driven decision-making processes in areas including (early) childhood, gender equality, migration management, disaster management, as well as their intersections. Maltepe Municipality is among the municipalities that has registered progress in democratizing and strengthening its decision-making processes by deploying these tools in various programs over the years.

Maltepe is a district with high climate and disaster vulnerability due to its geographical features- including Başbüyük Forest, coastal areas along the Marmara Sea, riverbeds, densely populated areas, and the North Anatolian Fault. Given its demographic profile including a significant portion relative to the overall population in the city of elderly, migrants, and people with disabilities who

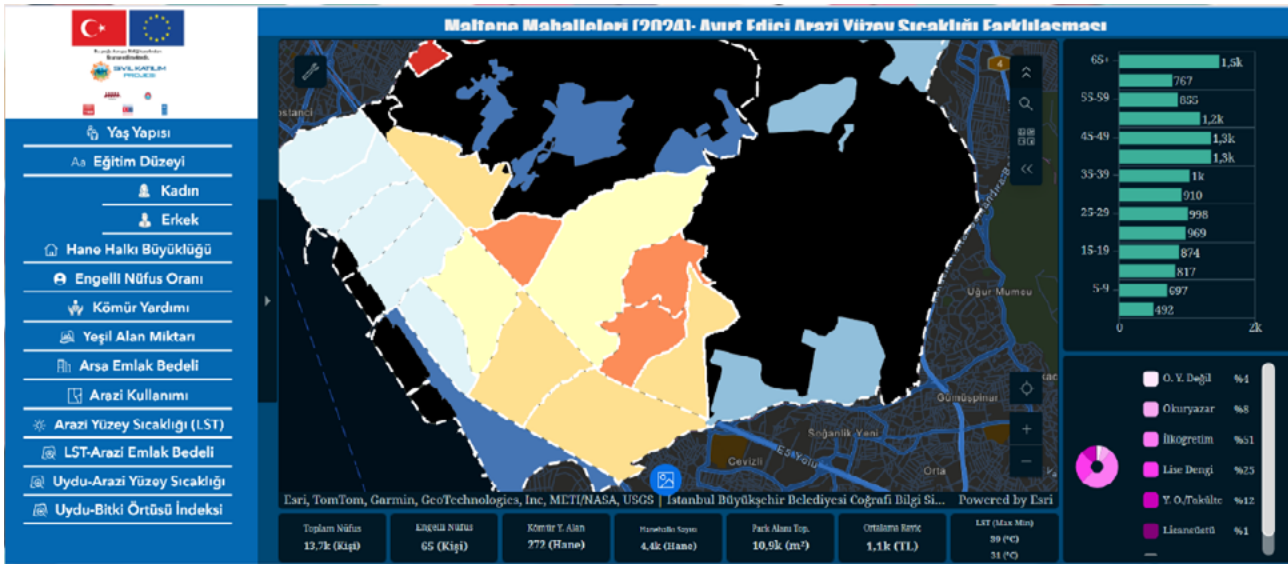
are in need of services such as health, infrastructure, housing, and accessibility, as well as the spatial segregation between the poor and the wealthy, the district of Maltepe must carefully manage its urban planning and service provision through a climate justice lens.

Building on previous experiences, TESEV and Maltepe Municipality joined forces and created an interactive Climate Justice Map for Maltepe to strengthen data-driven decision-making processes towards a democratic climate governance. Such a climate vulnerability map can shed light on the municipality's decisions regarding spatial climate policies by examining climate vulnerabilities at the neighbourhood (and street level), showing the effects of climate change on different demographic groups, and enabling comparisons across neighbourhoods and their relative status compared to the district.

The Climate Justice Map portal draws from neighbourhood-level TURKSTAT data, municipal records, and open data sources to analyse data across 13 demographic, economic, ecological, and physical indicators, resulting in an online interactive platform comprising 13 thematic maps—an unprecedented initiative in this format.



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### What is Featured in the Climate Justice Map?

The Climate Justice Map is publicly available on the Maltepe Municipality website under the city guide section. By selecting a neighbourhood in the district, it is possible to access data breakdowns by age, education level by gender, household size, number of citizens with disabilities, number of households receiving coal assistance, green space per neighbourhood, land property value, land use, as well as data from the European Environment Agency's City Atlas as of June 14, 2024. The

map also provides satellite-based land surface temperature and normalized vegetation index data with a resolution of 15x15 meters. The map illustrates areas without settlements, such as military zones, in dark colours.

Demographic data can be used to query specific profiles predominantly living in each neighbourhood in Maltepe. For instance, it is possible to make queries about the education levels of residents in neighbourhoods with high land property values. The land surface temperature (LST) map allows for the examination of surface temperature

distribution at the neighbourhood level in the district of Maltepe. The map legend shows that surface temperature decreases over a spectrum ranging from red to blue tones. The satellite-land surface temperature map allows comparison of surface temperature to satellite imagery by means of curves. Red areas indicate urban heat islands, whereas blue areas point to cold islands. Temperatures in the red areas reach up to 42.5 degrees, while temperatures in the blue areas drop down to 21 degrees.

Similarly, the curve on the vegetation diversity map enables a comparison of satellite imagery and vegetation diversity at the neighbourhood level. Red areas represent locations with the least vegetation diversity, while green areas indicate the most diverse locations. The map reveals that urban heat islands form in areas with low vegetation diversity.

### What Does the Climate Justice Map Tell Us?

The Climate Justice Map facilitates interactive queries of analysed data, enabling municipality's climate policy making, as well as all residents of Maltepe and public at large, to make various queries on the topic and access to data-driven answers.

The synthesized maps clearly demonstrate the district's climate vulnerabilities. For instance, the synthesized map of land surface temperature and property value illustrates the correlation between the average property values in different neighbourhoods and surface

temperature. An examination of this synthesis map reveals that neighbourhoods with higher property values in the coastal area to the south of the E-5 highway have lower surface temperatures. When the size of green spaces is queried on the same map, it becomes evident that these neighbourhoods have more green spaces. The map also shows this [coastal] area is predominantly inhabited by people with a high level of education.

In contrast, neighbourhoods with higher surface temperatures tend to have lower property values, less green space, and larger households. From a climate justice perspective, it is evident that poorer individuals are disproportionately impacted by heat. These patterns underscore the necessity of prioritizing public resource allocations for green space planning in these neighbourhoods.

Another example of climate vulnerability spatially indicated by the map emerges when examining the distribution of citizens with disabilities and the number of households receiving coal assistance. In the Gülsuyu and Güleusu neighbourhoods, for instance, the distribution of households receiving coal assistance and people with disabilities is more concentrated when compared to other neighbourhoods and to the district.

Monitoring the municipal council's decisions related to climate change and incorporating them into the map could also facilitate access to decisions taken in this policy area. The monthly monitoring done in this project showed that

the council decided on issues like urban transformation, healthcare, environmental cleaning, solid waste, disadvantaged housing, civic engagement, wastewater, disasters, public spaces, and green spaces. However, a significant portion of council decisions related to climate are district-wide policies that cannot be attributed to a specific neighbourhood or geographic coordinate. Operational services covering the entire district cannot be spatially disaggregated. For instance, the tender for “Vehicle Rental for Environmental Cleaning and Solid Waste Collection” referenced in Decision No. 2024/52 encompasses all neighbourhoods. Since this data is not spatial, it cannot be included in the maps.

Similarly, due to the absence of spatial boundaries, the municipality’s relationships with civil society, including any protocols concluded, cannot be reflected in the map. However, the exercise of monitoring council decisions demonstrates the municipality’s policy in civic engagement.

The Climate Justice Map uses 13 thematic maps covering 18 neighbourhoods based on 13 indicators to illustrate how climate vulnerabilities arise in different neighbourhoods, presenting spatial and data-driven comparisons

between neighbourhoods and suggesting pathways to address inequalities. As such, the map facilitates the municipality’s decision-making process, ensuring that climate justice remains an essential part of its local climate policy. Maltepe Municipality has made this map publicly available on its website. This means that the municipality shares the spatial data analysis that it will use for its local climate policies with civil society. Such a transparent approach enhances civil society’s capacity for evidence-based advocacy and informed participation in decision-making processes for climate justice. It also opens a space through which the municipality can encourage civic engagement in local climate policies.

### **Strengthening Civic Engagement: MoDeL, Local Climate Policy Monitoring and Participation Tool**

As in all urban policy areas, civic engagement is an indispensable element of democratic climate change governance at the local level. From a climate justice perspective, it is of pivotal importance that vulnerable groups and/or those advocating on their behalf are engaged in decision-making processes. The international governance standards established



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by the United Nations Framework Convention on Climate Change (UNFCCC) and the Paris Agreement, to which Turkey is a party, do also emphasize the participation of civil society and vulnerable groups in local decision-making processes.

For civic engagement to be meaningful, governance processes must have clearly defined stages, and civil society must be knowledgeable and aware of its democratic role and responsibilities. The more clearly the participatory governance process is defined—from access to information, to collaboration, monitoring and evaluation—and the more accessible the communication channels are, the more effective civic engagement becomes.

The second solution implemented within the framework of the *Civic Engagement for Local Climate Change Governance* project particularly addresses the specific gap in this area. As part of the project, TESEV updated the MoDeL website to strengthen communication between local civil society and the municipality in the monitoring of municipality's climate policies and identification of opportunities for cooperation. This website was initially developed within the framework of TESEV's Empowering Civil Society for a More Democratic

Local Governance project between 2018 and 2020, with the financial assistance of the European Union, where Maltepe was among the beneficiary municipalities.

The MoDeL website serves two main functions towards fostering civic engagement. First, it increases access to information through an interactive interface, facilitating civil society's exposure to and understanding of the municipality's strategic plan. The user-friendly website allows visitors to easily track municipal plans over a five-year time, as well as its objectives, targets, performance indicators, estimated costs, and planned activities. As the municipality makes progress on its indicators and feeds this up-to-date data into the website, citizens can monitor the municipality's progress.

The updated MoDeL for climate change now allows users to query the strategic plan of the project partner Maltepe Municipality with a climate filter where they can only see the climate related content. While updating the website, metropolitan municipalities of Adana, Eskişehir, Istanbul, and Izmir that adopt the principle of participatory governance and that actively use TESEV's digital policy tools have also been additionally included for expanding the impact of the project.

This monitoring function is not limited to tracking the municipality's progress toward its goals. Civil society organizations, universities, private sector and other city stakeholders who generate information, reflect on, and advocate for climate change can inform the municipality of missing, excessive, or insufficient indicators in its planning. These stakeholders can also submit opinions on alternatives or improvements. This type of informed civil participation may improve the municipality's climate policy and make it more effective. Through this function, MoDeL also facilitates the local level application of the principles of transparency and inclusiveness emphasized by the Framework Convention on Climate Change and the Paris Agreement.

The other function of MoDeL is to strengthen cooperation between the municipality and civil society. In the city's combat against climate change, it is vitally important for municipalities, which have limited resources, to join their forces with various stakeholders including universities, chambers, the private sector, other public institutions, neighbourhood networks, citizen networks, and civil society organizations, to leverage their knowledge, skills, connections, and financial capacities.

Collaborations proposed by civil society to the municipality, however, may not always address the city's needs. Following the strategic plan structure on the MoDeL website, users can list various activities and projects under climate

goals and submit a collaboration proposal to the relevant unit for each planned activity. Clicking on the submit proposal button opens a user-friendly form. Once it is filled out, an automatically generated e-petition is sent to the unit responsible for that activity in an appropriate format and language that municipalities will evaluate. In this way, city stakeholders who are unsure of whom to contact at the municipality can send a collaboration proposal to the right unit. In their proposals, they should clearly state how they can contribute to achieving the municipality's goal through a specific task. This practice may strengthen communication and cooperation between the municipality and civil society, which is essential for meaningful civic engagement.

For instance, during a meeting with mukhtars (neighbourhoods' elected governors) in Maltepe, it was noted that civic engagement in the district regarding the climate crisis is currently progressing through individual requests. However, the district also has the potential for collective action. If neighbourhood-level spatial data on civic engagement is made publicly available in the future, it can also be incorporated in the Maltepe Climate Justice Map, which can further facilitate interaction among city stakeholders.

## **Strengthening Civic Engagement: Monitoring and Evaluation Guide**

The final project output for strengthening civil participation in local democratic climate change governance is a Monitoring and Evaluation Guide. Monitoring and evaluation is an essential element of informed participation and can foster civil participation in climate change governance at local level when defined in concrete terms and when a jointly agreed-upon monitoring plan is in place. From a climate justice perspective, it is crucial to carry out a diligent monitoring process so that civil society can trace whether vulnerable groups and places are covered, their needs are met, and inequalities are reduced. This will also allow the municipality to draw from meaningful suggestions in its decision-making processes.

For this purpose, a joint workshop was held to bring together the strategic planning unit managers of the Maltepe Municipality and other municipalities included on the MoDeL website, as well as civil society representatives from the respective cities. As part of the workshop, municipality and civil society representatives first attended a training session on monitoring and evaluation and later worked together on a monitoring and evaluation guide.

This workshop provided civil society with the chance to raise questions about the municipal climate change policies and the municipality

with the opportunity to clarify its policies and solicit feedback from civil society. The draft was finalized by incorporating topics that were highlighted during separate meetings with Maltepe's mukhtars. The Monitoring and Evaluation Guide features technical and practical information on rights, units and individuals, processes, documents, timelines, and language. The guide also includes recommended courses of action, as well as a sample plan on waste management, a theme that particularly stood out during the workshop.

Maltepe Municipality included in its working agenda holding an annual local climate change policy meeting with civil society. Such a meeting might serve as a gathering of municipality and civil society where the later might learn on municipality's work and achievements in this field, communicate its evaluation and submit proposals for collaboration. Most importantly, such gatherings might open space for participation of the climate vulnerable groups to ultimately help climate justice.

## **Recommendations for Democratic Climate Governance at the Local Level**

The Civic Engagement for Local Climate Change Governance project approaches the climate change policies of municipalities through the lenses of democratic governance and climate

justice. The interactive Climate Justice Map and the local climate policy monitoring and participation tool - MoDeL, developed and piloted as part of the project, in partnership with Maltepe Municipality can contribute to reducing climate vulnerabilities and inequalities in the city. These pilot e-democracy solutions can be adopted and replicated by all municipalities to strengthen their democratic climate change governance. The following recommendations for democratic climate change governance at the local level are based on key lessons learned throughout the project:

### **Municipalities Should Adopt Climate Justice as a Guiding Principle in Their Climate Policies**

- Climate change should not be limited to environmental and weather anomalies. Climate vulnerabilities and climate inequalities should be explicitly recognized and addressed.
- Municipalities should be transparent and accountable in their climate change policies.
- Participation mechanisms should be clearly defined, and city stakeholders should be systematically informed and engaged.
- Monitoring and evaluation processes should be conducted both internally and in collaboration with city stakeholders.

*Good practice: Maltepe Municipality has included in its working agenda planning an annual local climate change policy meeting with civil society in the last month of each year.*

### **Municipalities Should Adopt Data-Driven Decision-Making Processes in Climate Change Policy Making**

- Data on climate-related services and assistance—whether related to causes or effect—should be spatially collected to make visible climate vulnerabilities at the neighbourhood and street levels.
- For the same reason, decisions made by municipal councils, the statutory decision-making body of municipalities, should also be spatially defined at the neighbourhood level to the extent possible.
- Climate-related datasets should be compatible and interoperable with the datasets maintained by other municipal departments responsible for service planning, delivery and social assistance.
- To ensure climate justice, municipalities should conduct integrated analyses of their improved data.
- Data related to climate vulnerabilities should be shared transparently both within the municipality and with the public at large, preferably as open data.

*Good practice: The Climate Justice Map prepared as part of this project is publicly available on Maltepe Municipality's website.*

### Municipalities Should Leverage the Capacity of City Stakeholders for the Public Benefit

- Interaction between the municipal council and civil society should be revitalized.
- Communication with civil society should be institutionalized and continuous, rather than limited to short-term or project-based interactions.
- Municipalities should designate staff to review, synthesize, and integrate the expertise and information generated and voluntarily offered by civil society into policy processes.

### Civil Society Should Increase its Democratic Capacity

- It should position itself as an active stakeholder in democratic climate change governance.
- It should produce and disseminate independent information on climate vulnerabilities and climate justice and engage in evidence-based advocacy.
- It should plan its collaborations with municipalities within a climate justice framework.

- Citizen councils should serve as platforms for bringing together the municipality and civil society, creating space for innovative ideas, and ensuring monitoring and evaluation.

*Good practice: Municipal performance indicators can be monitored through MoDeL, a tool for monitoring local climate policies, facilitating cooperation, and proposing concrete activities for collaboration. The Monitoring and Evaluation Guide prepared by this project can be consulted.*

### The European Union Should Continue Its Support to the Democratization of Climate Change Governance

- The EU should prioritize climate justice within its climate change policy frameworks.
- Resources should be allocated to scale up and replicate successful practices.

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