

COP BUR DUR

TOWN HALL COP ON CLIMATE CHANGE REPORT

#climatecrisis

Cities in the Face of the Climate Crisis, Drought and Water Management



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Town Hall COP on Climate Change – Report

Cities in the Face of the Climate Crisis, Drought and Water Management

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FORWARD

The climate crisis, which is intensifying on a global scale, is no longer solely an environmental issue; it has become a multidimensional reality affecting social, economic, and political structures. Climate change lies at the root of many of today's environmental challenges, while access to water, food, energy, and healthy ecosystems is becoming increasingly critical with each passing day. With this awareness, it is imperative to take decisive action at the local level to build healthier and more resilient cities. In this context, we believe that local governments must assume a more active and effective role in combating the climate crisis. At a time when centralized approaches and nationally focused policies make the implementation of global decisions increasingly difficult, the leadership of cities has become more valuable than ever.



For this reason, as the Healthy Cities National Network of Türkiye, we are expanding Town Hall COPs in order to identify local vulnerabilities and initiate rapid action. Town Hall COPs are climate summits inspired by the United Nations Climate Change Conferences (UNFCCC) but designed to address local realities. Developed by ICLEI – Local Governments for Sustainability, these conferences aim to translate climate commitments into concrete action at the local level. They are designed as innovative stakeholder engagement mechanisms that support national climate mobilization and contribute to Nationally Determined Contributions (NDC 3.0). Through these initiatives, we seek to bring together all local stakeholders under a single umbrella to address the increasingly severe impacts of the climate crisis, raise awareness, and take collective action toward building strong local consensus.

The Town Hall COP organized in Burdur demonstrated that the city, with its environmentally conscious and engaged citizens, possesses significant potential for transformation. The climate crisis is not limited to rising temperatures or carbon emissions; it produces far-reaching effects on food security, public health, agriculture, and social justice. Water resources are under severe stress, agricultural lands are becoming increasingly vulnerable, unhealthy food production is expanding, and overall public health is at risk. This situation represents not only an environmental challenge but also a profound social issue. For this reason, in Burdur–located in Türkiye's Lakes Region–drought and water management were identified as the primary focus areas.

As the Healthy Cities National Network of Türkiye, we adopt a governance approach that establishes concrete goals, develops implementable action plans together with our member municipalities, and works diligently to put these plans into practice. We aim for these efforts to serve as a model for other cities in Türkiye and beyond.

Last November, we represented the Healthy Cities National Network of Türkiye at the COP30 United Nations Climate Conference held in Brazil, where we shared our experiences and initiatives with international stakeholders. As we prepare for the COP31 United Nations Climate Conference to be hosted by Türkiye, we firmly believe that contributing to global solutions is only possible through decisive and coordinated action at the local level.

No matter how great the challenges ahead may be, there is no obstacle that cannot be overcome through strategies grounded in scientific knowledge and implemented with determination. As long as we do not give up. I would like to extend my sincere gratitude to Burdur Municipality and to all institutions and individuals who contributed to this process, and to reaffirm our commitment to advancing with resolve in our shared struggle for a healthier, more resilient world and Türkiye.



As the Healthy Cities National Network of Türkiye, in this new period we have embraced not only the objective of ensuring that our cities are physically and socially healthy, but also the responsibility of preventing human-induced environmental degradation as a fundamental field of action.

With this understanding, we decided to initiate comprehensive awareness-raising efforts aimed at increasing public consciousness and developing solution-oriented approaches to environmental threats, particularly the climate crisis.

In line with this decision, we launched the “Town Hall COP” initiative in order to bring together local stakeholders, discuss region-specific challenges on site, raise strong local awareness, and establish a collective voice

extending from the local to the national level. The first of these Town Hall COP meetings was held in Burdur.

Due to its geographic location, Burdur is among the cities situated within a zone where the impacts of the global climate crisis are felt most intensely. The continuous decline in the water level of Lake Burdur, the rapid depletion of groundwater resources, and the transformation of drought into a persistent disaster in the region constituted the primary agenda items of the Town Hall COP meeting held in Burdur. This situation represents a serious warning not only for Burdur, but also for the future of our country and the world.

At the Town Hall COP meeting we organized, we aimed to build a shared understanding by bringing together academics, mayors, representatives of public institutions, bureaucrats, civil society organizations, volunteers, and environmentally responsible citizens. Our goal was to examine existing problems from a multidimensional perspective through the convergence of diverse disciplines and experiences, and to reach common conclusions based on scientific data.

As a result of this meeting, it became clear that water is a strategic and vital resource, that the impacts of the global climate crisis are deepening with each passing day, and that concrete action in the field of water management must be taken without delay.

We have entered a period in which it is no longer sufficient merely to speak about environmental risks threatening our province, our country, and ultimately the entire world. Instead, it has become essential to act together and move rapidly toward implementation.

The Town Hall COP held in Burdur was recorded as a highly productive meeting in which scientific realities were clearly articulated, broadly accepted by all stakeholders, and accompanied by feasible solution proposals.

In line with our objective of consolidating the outcomes of Town Hall COPs into a stronger and more comprehensive roadmap, we will continue our work with determination.

I would like to extend my sincere thanks to everyone who contributed to the realization of this meaningful and guiding process—especially the Mayor of İzmir Metropolitan Municipality and President of the Healthy Cities National Network of Türkiye, Dr. Cemil Tuğay; our fellow administrators; Network staff; and all supporters who contributed to raising awareness.



Ali Orkun ERCENGİZ
Mayor of Burdur

06.12.2025

CITIES IN THE FACE OF THE CLIMATE CRISIS, DROUGHT AND WATER MANAGEMENT

01

1. OPENING SPEECHES

In order to address the issue of combating drought and water management, which is one of the most critical topics in the fight against the climate crisis, at the local level, a Town Hall COP (COP Burdur) was organized on December 6, 2025, through the partnership of the Healthy Cities National Network of Türkiye and the Municipality of Burdur.

Organized under the title "Cities in the Face of the Climate Crisis, Drought, and Water Management," COP Burdur is of great importance both in terms of revealing the potential of local governments to shape climate policies and in drawing attention to climate pressures on water resources.





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Organized under the title “Cities in the Face of the Climate Crisis, Drought, and Water Management,” COP Burdur is of great importance both in terms of revealing the potential of local governments to shape climate policies and in drawing attention to climate pressures on water resources.

Delivering the opening speeches, Mayor of Burdur Ali Orkun Ercengiz drew attention to water management, public health, and waste management, and made the following evaluations: “Today, starting from the local level and extending to the general level, we will discuss water management, drought, and what kind of Burdur or what kind of Türkiye we are designing for future generations. The biggest problem we are experiencing is how we will use water, where we will direct water in the next step, and whether we will be able to find water in the future. As people who carry the concern of a difficult process and who know what awaits us in the near future, today we will initiate a discussion from the local to the general level. As you know, the COP31 United Nations Climate Change Conference will take place in Türkiye in November 2026. As the Healthy Cities Network, we will try to convey to the entire world the problems we experience in local governments; the problems Türkiye is experiencing; Türkiye’s water management, its need for water, and what it can do.”

Emphasizing that since taking office in 2014 he has carried out activities aimed at making the water crisis in Lake Burdur known and stopping it, Mayor Ercengiz said, “Frankly, our concern is great. Today, Salda—one of the lakes we must protect the most—has receded by over five meters. Lake Burdur has exceeded twenty meters and has lost 48% of its surface area. The loss of lakes does not only mean that they have lost their water; the ecological balance of the region is also being disrupted. We have begun to lose endemic species, migratory birds, and plants that grow in wetlands. This is because we build barriers in front of all the channels that feed the lake, build dams, and change the watershed. This problem is not only Burdur’s problem. However, Burdur is now a much hotter and much drier city than it used to be.”



Delivering the opening speech of the session titled “Cities in the Face of the Climate Crisis, Drought, and Water Management,” Mayor of İzmir Metropolitan Municipality and President of the Healthy Cities National Network of Türkiye, Dr. Cemil Tugay, stated that the Town Hall COPs that were organized emerged as a result of a vision and that Burdur is one of Türkiye’s pioneering cities in this regard, and said, “When we ask what Türkiye’s most important problem is, most of us list poverty, unemployment, and economic problems. However, even if we were to find a resource that would eliminate poverty and provide the investments that would eliminate unemployment, when we ask what would remain on the agenda as a program, we are confronted with the climate crisis and its consequences. This is an issue that is very difficult to correct and whose weight will continue to increase over the years. For this reason, we need awareness and efforts in which all segments of society participate; we need action plans.”

Referring to the scope of the United Nations Climate Change Conference (COP) planned to be held in Türkiye in 2026, Mayor Dr. Tugay stated that global climate diplomacy has difficulty establishing a common will even on the most fundamental issues such as fossil fuels, and said: “However, when we look at this year’s summit, we see that local governments have demonstrated a clear stance and adopted a solution-oriented position. The voice of the local level is no longer only heard, but is turning into a voice that is taken into account. From this, we can conclude that local policies are at the foundation of future climate governance.”



Making evaluations regarding the causes and consequences of the climate crisis, Mayor Dr. Tugay said, “The process that caused this began with the development of industry and manufacturing; it is the effect of carbon and greenhouse gases released by the burning of fossil resources such as coal and petroleum products. These greenhouse gases must be stopped. However, countries that have industries based on fossil fuels do not want to give this up. If this continues, we will lose our natural beauty and resources and become desertified. We are working to seek the answer to the question of whether it is possible to protect ourselves against this situation. First, even if our ability to prevent the climate crisis or stop its progression is limited, what can we do? Second, and more importantly, how will we take precautions against the new situation that will emerge and how will we adapt? If we do not approach this situation consciously, a very frightening picture will emerge for us, our children, and future generations.”

Stating that the Healthy Cities National Network of Türkiye carries out many activities on this issue in cooperation with its member cities, Mayor Dr. Tugay said, “Everyone has something they can do and a responsibility they must assume. At the very least, consuming less electricity is an important contribution. In Türkiye, approximately 70% of electricity is generated from oil and coal, and a very large portion of the coal is imported. Every unit of electricity consumed excessively is both money lost from our pockets and pollution left to the world. We are working on food systems. The farther away what we eat and drink comes from, the greater the pollution it creates. For this reason, we should prefer products that are produced locally or nearby whenever possible. We should aim to become self-sufficient cities and self-sufficient countries. This would be good economically and is a very important necessity from a climate perspective. Our country needs development, growth, and economic progress. However, we must learn to do this without harming the environment and without damaging the health of people and other living beings. The world is talking about green transformation. This is possible and must absolutely be done.”

Stating that one of the fundamental problems of our country is that administrations become blind as they become more centralized, Mayor Dr. Tugay emphasized that those who know the local level best are the institutions of that locality, and pointed out that it is important to strengthen local climate action by providing municipalities with more authority and resources in order to make correct planning aimed at addressing local problems and needs in the fight against the climate crisis.

Finally, emphasizing the issue of energy efficiency and consumption awareness, Mayor Dr. Tugay said, "COP31, which will take place in Türkiye next year, is an important opportunity both for raising awareness in our country and for enabling Türkiye to make its voice heard to the world. Our country has a self-confidence problem. For a long time, we have been told that Türkiye is not a sufficiently developed country and that it will remain backward as if condemned to fate. I object to this. Our country has one of the strongest cultures in the world. The resources we need are also within reach."

02

2. NOTES FROM THE PANEL

İklim Krizi Karşısında Kentler, Kuraklık ve Su Yönetimi

Moderatör: **Prof. Dr. İskender GÜLLE**, Advisory Board Member of the Healthy Cities National Network of Türkiye, Department of Biology, Faculty of Science and Letters, Mehmet Akif Ersoy University

Katılımcılar: **Prof. Dr. Mustafa SARI**, Member of the Advisory Board of the Healthy Cities National Network of Türkiye, Dean of the Faculty of Maritime Studies, Bandırma Onyedi Eylül University, Head of the Department of Water Resources Management

Prof. Dr. Şehnaz ŞENER, Department of Geological Engineering, Süleyman Demirel University

Prof. Dr. Gül SAYAN ATANUR, Member of the Advisory Board of the Healthy Cities National Network of Türkiye, Dean of the Faculty of Architecture and Design, Bursa Technical University, Head of the Department of Landscape Architecture, Faculty of Forestry

Vet. Dr. Öztürk SARICA, Lisinia Nature Project



Prof. Dr. Mustafa SARI, Head of the Department of Water Resources Management, Bandırma Onyedi Eylül University

Prof. Dr. Mustafa Sarı began his presentation titled “The Life of Water” by framing the theme of “persistence and determination to protect nature” through the struggle he carried out between 1991 and 2016 in Van to protect the pearl mullet. By turning the pearl mullet’s effort to swim against the current and overcome waterfalls into a metaphor of “not giving up,” he stated that he learned not to retreat from environmental struggles from this species.

Prof. Dr. Sarı emphasized that for the past ten years he has been dealing with larger-scale problems in Bandırma, primarily the Sea of Marmara and mucilage; however, even as the scale grows, the core issue (protecting nature) does not change. He stated that accurately explaining the big picture increases the capacity to produce solutions and expressed that the fundamental condition for overcoming crises is “knowing water.”

Pointing out that although the world is called the “blue planet” because three-quarters of it is covered with water, the amount of freshwater that humans can directly use is less than 1%, Prof. Dr. Sarı said that despite this, we consume water as if it were infinite, deepening the water crisis. In this context, he argued that seas are not merely bodies of water but the infrastructure of life; that approximately half of oxygen comes from phytoplankton in the seas; and that seas function as carbon sinks by absorbing most human-induced CO₂, and he drew attention to the role of ocean currents in energy transfer within the formation of the climate system.

Prof. Dr. Sarı explained that viewing water as an inanimate commodity is a fundamental mindset problem, stating that water is full of life at the microscopic level (phytoplankton/zooplankton). By describing bottled drinking water as “deprived of life” and giving the example that life can multiply in natural water, he emphasized that ecosystem health is not limited to visible outputs through fisheries. He stated that the food web extends from phytoplankton to fish; for example, that behind 1 kg of bluefish arriving at the table, thousands of species must function healthily, yet society is distant from knowledge of this food web. He then listed the main forms of destruction in society’s relationship with water: pollution, excessive and improper use, habitat destruction, alteration of flows, “land grabbing” from the sea, river transfers, and invasive species.

He stated that due to dams and water structures, the majority of migrating fish have disappeared; and that “fish passage” solutions remain ineffective in many places. He also criticized the practice of “expelling” stream beds with walls (e.g., Bozkurt and Rize), stating that as precipitation regimes deteriorate, the damage will increase, and that although this has long been known, it has not been reflected in practice.

Prof. Dr. Sarı, in the continuation of his speech, made water pollution visible through concrete examples. Through the examples of Nilüfer Stream and Gönen Stream, he shared how urbanization and Organized Industrial Zone impacts have reduced oxygen levels in the water to zero, and despite this, agricultural irrigation continues along with claims of “organic” labeled production. He stated that the climate crisis and drought are being turned into excuses to cover up mistakes in water management; that Türkiye is located in a semi-arid belt; therefore, attempting to adapt water management models from geographies without arid conditions to Türkiye renders water insufficient for agriculture, cities, and industry.

In the final part of his speech, Prof. Dr. Sarı presented a clear solution: “Our priority should not be the water flowing from the tap, but managing water resources at the basin scale with a holistic approach.” He criticized the promotion of water-intensive crops (e.g., corn, alfalfa) despite agriculture bearing the main burden of water use. Using the examples of Acıgöl, Akgöl, Yarıklı, Salda, and Burdur Lake in the Burdur Basin, he underlined the magnitude of the loss and described the lack of results despite numerous studies and action plans as a failure of implementation. Prof. Dr. Sarı concluded his speech by emphasizing that “it is time to take immediate action” and stating that “if institutional structures are established that manage fish, agriculture, industry, and cities together in a manner appropriate to every stage of the water cycle, the impact of the water crisis can be reduced.”

Prof. Dr. Şehnaz ŞENER, Department of Geological Engineering, Süleyman Demirel University

Prof. Dr. Şehnaz Şener began her presentation titled “Water Resources Under the Climate Crisis: Hydrogeological Dynamics, Drought Trends, and Increasing Challenges in Water Management” by emphasizing that the reality of “failure to manage water” in Türkiye has now become the main theme of such meetings. She then stated that, specifically in Burdur, field studies conducted over the last 20–25 years mostly detected pollution in groundwater and surface waters; however, in recent years, at the same locations, resources have dried up, and significant coastal retreat in lakes and marked declines in groundwater levels have been observed. For this reason, she said that in sustainable water management, instead of the balance of “quality and quantity,” quantity has now come to the forefront with a crisis management agenda.

Prof. Dr. Şener stated that Burdur is a semi-arid transition basin within the “Lakes Region” and has become one of the cities where climate impacts are felt most severely, especially with the regression of wetlands such as Burdur Lake, Yarışlı, and Karataş. She noted that Burdur Lake has experienced approximately a 50% loss of surface area in a short period of time, and that declines exceeding 20 meters in water levels have been detected over the last 50 years. She emphasized that this picture is not surprising due to decreased precipitation, increased evaporation, and the weakening of the lake’s surface runoff and groundwater recharge.

Detailing the hydrogeological framework technically, Prof. Dr. Şener classified the region’s main water reservoirs as alluvial and karstic aquifers. She explained that the alluvial aquifers in the Burdur Plain and surrounding plains, and the karstic systems formed by carbonate rocks (e.g., Ağlasun–Sagalassos, Tefenni–Kemer–Pamucaklı belt, Bucak–Çeltikçi) are critical. She stated that measurements around the lake show groundwater levels varying between 3.5 m and 43.5 m, and that groundwater flow occurs toward the lake; therefore, the lake–groundwater relationship is structurally very strong.

Describing the greatest problem in groundwater management as the lack of knowledge about well inventory and abstraction amounts, Prof. Dr. Şener stated that in the DSİ (State Hydraulic Works) 2016 Master Plan, 2,809 wells were identified in the region; however, over the approximately 10 years since then, especially unlicensed/illegal wells have increased, raising the number to much higher levels. Emphasizing that this uncertainty weakens both water budget calculations and monitoring capacity, Prof. Dr. Şener also stated, based on observed data, that “as groundwater use increases, lake levels decline,” arguing that there is a direct connection between the two to a degree that cannot be dismissed as “no relationship.”

Stating that climate and drought indicators point to the permanence of the crisis, Prof. Dr. Şener shared that according to a mathematical modeling scenario they conducted regarding groundwater conditions, they assumed that groundwater recharge would decrease by 40% in the coming years while water use would double, and within this scope, they projected a decline of approximately 8 to 15 meters in groundwater levels. She then continued her speech based on data: “Data from the last 30–40 years show a decrease in precipitation, an increase in temperature, and a corresponding increase in evaporation; with the irregularity of precipitation, the extremes of ‘very intense rainfall–rainless periods’ are becoming more pronounced. Over the last 10–12 years, precipitation has decreased by approximately 7%, while temperatures have increased by about 8.5% with above-average trends since 2014; analyses conducted at 6–48 month scales show that continuous drought periods have become prominent over the last 10 years. According to 2030–2050 projections, an additional 10–15% decrease in annual precipitation, a +1–2°C increase in summer temperatures, and a corresponding significant rise in evaporation are expected; meanwhile, a

20–30% decrease in renewable groundwater amounts is projected,” she stated. Warning that if these trends continue, lake levels will decline further and that with the expansion of dried areas, salinity increases, dust transport, and potential heavy metal risks may grow, Prof. Dr. Şener stated that the city’s dependence on groundwater at a rate of 75–80% for water supply—including drinking-domestic and agricultural irrigation—increases vulnerability; while demand grows with population increase and agricultural expansion, supply remains insufficient. She also stated that inefficient irrigation, water losses and leakage, and social and economic resistance to transitioning to crop patterns suitable for arid conditions increase pressure on water management.

Finally, Prof. Dr. Şener emphasized that the implementation, inspection, and monitoring chain remains weak. She stated that if intense withdrawals continue in the lakes, quality deteriorations such as increases in TDS and chlorine observed in some wells may become widespread, which would mean that the alluvial aquifer would become unusable. In summary, she delivered the following message: “In Burdur, the problem is no longer only pollution; it is a quantity crisis growing with climate pressure and uncontrolled groundwater abstraction. In order for existing action plans to be rapidly reflected in the field, urgent and holistic implementation capacity is needed, from measurement, inventory, and inspection to agricultural demand management and basin-scale monitoring,” she said.

Prof. Dr. Gül SAYAN ATANUR, Dean of the Faculty of Architecture and Design, Bursa Technical University, Head of the Department of Landscape Architecture, Faculty of Forestry

Prof. Dr. Gül Sayan Atanur began her presentation titled “Green Infrastructure as a Tool for Climate Change Mitigation and Adaptation” by emphasizing that “we now need to change our perspective,” and spoke about the need to see concrete outputs from such meetings. Beginning her remarks by stating that the city–nature duality has changed from a landscape architecture perspective, she noted that cities are living spaces that must be designed together with nature, and stated that she found this panel important in terms of bringing together actors who speak about nature and the city on the same ground.

Prof. Dr. Atanur continued her talk built around the concept of “green infrastructure” by using the concepts of “mutation” and “metamorphosis” as metaphors referencing familiar landscapes created by urban transformation in Türkiye (e.g., Fikirtepe, Doğanbey). She then emphasized, through the example of the city of Utrecht as a good practice, that cities affect the environment not only through the area they occupy but through a much larger ecological footprint, and that today all cities face a serious problem of land and resource optimization.

By comparing Utrecht’s 2020 current situation and 2040 targets through its “city barcode” approach, she concretized what green infrastructure encompasses: “a holistic system that is not limited to parks and medians, but addresses components such as natural/semi-natural areas, public open spaces, water management, and sustainable transportation as a network.” She stated that Utrecht’s 2040 targets aim to narrow roads, increase bicycle lanes, transform parking areas, strengthen functional open spaces such as shading, socialization, and exercise areas, and ensure that rainwater participates in the water cycle rather than being transferred away.



Stating that green infrastructure must be planned at multiple scales, from 1/100,000 scale Environmental Master Plans to urban design applications at the stream and neighborhood scale, Prof. Dr. Atanur proposed a three-stage path for this: “The first stage is to redefine green space not only in terms of square meters, but through strategic objectives such as resilience, health, and inclusiveness, with clear targets or common principles at the vision–mission level. The second stage is the development of policies and programs to realize these targets (e.g., green network plans, urban open space plans, urban biodiversity programs, playgrounds), and the discussion of quality and accessibility criteria alongside quantity. The third stage is the implementation of rapid and visible application projects in pilot areas (e.g., Barcelona superblocks).”

Prof. Dr. Atanur emphasized that indicators such as 10 m² of green space per capita are not sufficient on their own; and that small but accessible green spaces at the neighborhood scale can sometimes be more functional than large urban forests at the city periphery. As another good practice example, she noted that the city of Barcelona highlights three principles in the Mediterranean context: protecting and improving existing green spaces, creating more green spaces, increasing biodiversity, and doing all of this together with citizens and for citizens through a “participatory” approach. Prof. Dr. Atanur stated that this approach has two pillars: “evidence-based design and governance (measurable, data-based).” She added that traffic-reduction-oriented programs such as superblocks, together with sub-strategies like tree inventories and tree management plans, can help reclaim public space, and noted that European Union funds are an important resource for capacity building and implementation.

At the end of her presentation, Prof. Dr. Atanur emphasized the multidimensional benefits of green infrastructure, touching upon increased social value in cities (enhanced public life, equality, satisfaction), positive impacts on health (increased mobility), ecosystem services such as water, oxygen, and carbon retention, and economic gains (increased commercial activity). Stating that there are also good examples of green space initiatives in Türkiye, Prof. Dr. Atanur drew attention to implementations in Bursa Osmangazi, İzmir, and Istanbul. However, she also referred to examples in today’s urban transformation practices in Türkiye where stream beds are buried under buildings and small green elements at the neighborhood scale disappear, arguing that it is critical for green infrastructure to meet planning on the ground.

Finally, Prof. Dr. Atanur concluded her speech by stating that within the scope of green infrastructure applications, simple, low-cost solutions that collect roof water and reuse it on-site instead of discharging rainwater into the sewer system (e.g., rain gardens) can be rapidly implemented in Türkiye as well.

Vet. Hekim. Öztürk SARICA, Lisinia Nature Project

Sharing the Lisinia Nature Project, a good practice example implemented in Burdur, Veterinarian Öztürk Sarica began his remarks by emphasizing that they address human health together with ecosystem health, highlighting the parallel between “degradation in nature” and “degradation in human nature.” In this context, stating that they have implemented 9 main projects and 83 sub-projects and received 23 national/international awards, Sarica noted that they have created a strong social impact with their projects, hosting over 2 million visitors and 5,300 volunteers.

Sarica stated that within the scope of their projects, they implement universal solutions together with volunteers, noting that ecological production, recycling, and renewable energy practices stand out in the project area; he emphasized that they meet all of their energy needs from the sun, particularly through solar power plant investments. He also stated that they took part in Expo processes in Antalya, Thailand, and Taiwan; that they have also received an invitation to the 2026 Thailand Expo, and that they are planning an exhibition space design to present their projects for six months.

Stating that one of the main reasons for the rapid retreat of Burdur Lake is “agricultural irrigation pressure,” especially due to corn and alfalfa production, Sarica explained that they renewed the production leg of their projects in line with this reality: “small ruminant livestock instead of cattle, rose production with water-saving irrigation, and a model of medicinal-aromatic plants grown without irrigation.”

Emphasizing that the aim of this project is “to show that an alternative is possible,” Sarica stated that another pillar of their production models is to create sustainable income by transforming agricultural products not only as raw materials but into final products, and positioned “lavender” as the symbolic product of this transformation. He explained that lavender activities that began in 2013 have spread throughout Türkiye; however, the model is not based solely on lavender, that they work with 34 different aromatic plants, that they generate a significant portion of their income from this production, and that they sustain project financing through export sales made possible by the fact that approximately 90% of production is organic. He added that although it has an important place in the region’s historical culture, they increased rose cultivation to approximately 700 decares in order to revive this culture, which had seen fields uprooted in 2011, but that convincing producers was difficult.

Sarica presented the “green-free silage” technique as a strategic tool for livestock compatible with water scarcity. He stated that by ensiling rain-fed crops such as barley and wheat, dependence on corn and alfalfa could be reduced; and that although this technique is widespread in Europe, it remains limited in Türkiye. For this reason, emphasizing that cattle breeders in particular need to be taught the critical importance of green silage in terms of water, Sarica said, “Green silage is a lifeline for saving Türkiye’s waters.” He also stated that within the scope of the project, they try to direct producers toward alternative production models with medicinal aromatic plants such as lavender, thyme, and sage; however, they have not received sufficient feedback in the field.

Addressing the risk dimension, Sarıca stated that because Burdur Lake is a closed basin, pollutants that accumulate after water withdrawal pose a health threat in the form of chemical dust. Therefore, he said that producing feed crops such as corn and alfalfa around the lake and their consumption by animals increases the risk of harmful chemicals being transferred to humans through meat and milk; whereas it has been demonstrated that when oils are extracted from medicinal aromatic plants through distillation, harmful chemicals do not critically pass into the oil. For this reason, he argued that production around the lake can only be meaningful with appropriate crop selection and correct processing methods. Finally, emphasizing that “rain-fed agriculture” has methods that can vary according to local conditions, Sarıca concluded his speech by underlining that techniques such as dry farming, channel opening, and subsoiling, which can retain rainwater in the soil, need to be rapidly taught to producers.

BURDUR PERSPECTIVE

- Moderatör:** **Prof. Dr. Gül Sayan Atanur**, Member of the Advisory Board of the Healthy Cities National Network of Türkiye, Dean of the Faculty of Architecture and Design, Bursa Technical University, Head of the Department of Landscape Architecture, Faculty of Forestry
- Katılımcılar:** **Gökhan GÖKÇE**, Head of the Water and Sewerage Department, Burdur Municipality
Sezen İŞLAK, Environmental Engineer, Burdur Municipality
Serdar KESKİN, Head of the Parks and Gardens Department, Burdur Municipality
Tülay KONAK, Project Coordinator of the Healthy Cities National Network of Türkiye, Burdur Municipality



Gökhan GÖKÇE, Head of the Water and Sewerage Department, Burdur Municipality

As the first panelist of the second session focusing on the Burdur local perspective, Gökhan Gökçe began his speech by outlining a framework from the general to the local through water consumption data: “Türkiye’s annual precipitation potential is approximately 450 billion m³, of which 112 billion m³ can be stored in groundwater and surface water resources, and 61 billion m³ of water is consumed annually. In the distribution of consumption, agriculture leads with 78%, followed by industry with 14%

and drinking-domestic water with an 8% share. In recent years, especially during the summer months, serious water shortages have been experienced in surrounding provinces; however, thanks to the work we have carried out in Burdur, no interruptions have occurred," he said.

As a solution to the 14% water use in industry, Gökçe drew attention to the strategic importance of the Advanced Biological Wastewater Treatment Plant completed by Burdur Municipality approximately 10 years ago, stating that by using the water discharged from the plant as process water, it is significant for cities in terms of reducing part of the pressure of industrial water use on drinking-domestic water.

Stating that Burdur supplies water locally from 23 drilling wells, Gökçe expressed that each year, due to drilling depths increasing by 20-30 meters and approaching the limestone layer, the lime content and hardness of the water increase. In response to this problem, he added that the drinking water treatment and softening plant commissioned two years ago has been actively operating for approximately one year, and that water hardness at the treatment outlet has been reduced from 96 French degrees to 21 French degrees; however, as drilling depth increases, additional measures will be mandatory due to the risk of raw water hardness rising to levels of 110-120 in the coming years.

Within this scope, Gökçe stated that the "lake crossing project" planned within the Burdur Lake Basin is critical, noting that with the project, which has reached the tender stage, approximately 300 liters of water per second will be supplied from the town of Çenik, and that this water, with approximately 24 French degrees of hardness and a suitable elevation difference, can be supplied directly to the network without the need for a treatment plant. He emphasized that the new source will also be important in terms of resting continuously operating wells and maintenance planning.

Stating that Burdur Municipality is carrying out intensive work on reducing water losses and leakage, line maintenance, and combating illegal water use, Gökçe noted that through field inspections, illegal use was detected in approximately 550 subscribers within one year; and that merely by preventing illegal use, water savings of 5-6% were achieved.

Expanding his remarks with proposals for "reuse" and integration into building design at the urban scale, Gökçe reminded that approximately one-third of household water consumption is used in toilets, stating that if water discharged from advanced biological treatment is used in toilet cisterns, there is a potential saving of up to 44% in household consumption. For this reason, he argued that the separation of drinking water and utility water, rainwater harvesting, and related installations should be made mandatory at the permitting/construction stage.

Stating that Burdur Municipality is progressing with an approach of "technology, correct calculations, and on-site inspection," Gökçe said that they have reduced the water loss-leakage rate to around 45%, with a target of below 40%, and concluded his speech by stating that they are working on both infrastructure investments and behavioral and regulatory measures for water needs in the short, medium, and long term.

Sezen IŞLAK, Environmental Engineer, Burdur Municipality

Beginning her presentation by emphasizing that combating the climate crisis is possible through cooperation between science, local governments, and society, Sezen Işlak summarized Burdur Municipality's roadmap toward sustainability, resilience, and renewable energy based on the Advanced Biological Wastewater Treatment Plant, the Integrated Solid Waste Disposal Facility, the municipality's renewable energy projects, and their related financing, operation, and future plans.

Defining the main purpose of the Advanced Biological Wastewater Treatment Plant as discharging treated water to Burdur Lake by meeting high discharge standards that protect the environment and living health and contributing to the prevention of eutrophication in the lake, Işlak stated that the facility, which began receiving wastewater in 2022, is a two-stage project with an average capacity of 20,000 m³/day; that capacity is expected to reach 27,632 m³/day by 2050, at which point new solution searches will come onto the agenda. She stated that the facility treats the wastewater of a population of 98,000; that its heat and electricity energy capacity, odor control, and remote monitoring are regularly overseen by the Ministry. Işlak emphasized that the elements that technically distinguish “advanced biological treatment” are nitrogen–phosphorus removal, nitrification/bio phosphorus basins, and the cogeneration (heat and electricity) system additionally planned for the facility.

As the second topic, Işlak stated that the example of the Integrated Solid Waste Disposal Facility ended “wild dumping,” which had been a common problem of provincial/district municipalities across Burdur, and rehabilitated the sites. She noted that an average of 200 tons/day of waste arrives at the facility, that landfill gas is produced; and that there are three transfer stations in Karamanlı, Çeltikçi, and Gölhisar, as well as four closed reactors to generate energy from animal sludge.

Işlak clearly outlined the role of sanitary landfills in combating climate change and drought: when sanitary landfilling is not carried out, methane is released into the atmosphere; methane has a greenhouse gas effect 28 times stronger than carbon dioxide; and leachate can be collected in ponds and treated and disposed of as industrial wastewater. She also stated that irregular disposal of one ton of waste can generate 0.25 tons of methane, corresponding to approximately 7 tons of carbon dioxide equivalent, emphasizing that waste management is a direct emission reduction tool. Işlak conveyed the message that while the focus on water management has increased in recent years within the climate crisis, greenhouse gas management should not be neglected.

Işlak continued her presentation with three project examples implemented since 2014 within the renewable energy roadmap: (i) a 600 kW rooftop solar power plant installed over an area of 5,000 m² at the Sultandere Infiltration Campus (meeting 18% of the municipality’s energy expenditures), (ii) energy generation from landfill gas (daily average 250 kW; at a scale of 1.5 MW), (iii) the cogeneration unit of the Advanced Biological Treatment Plant (433 kW electrical and 502 kW thermal energy designed from treatment sludge).

Emphasizing methane pollution originating from cattle as another important issue, Işlak stated that project portfolios are continuously expanded and that climate finance sources (EU Green Deal funds, World Bank Climate-Friendly Cities Program, Ministry supports, etc.) are closely monitored. She grouped future application areas under the heading of “nature-based solutions and climate resilience”: “green corridors, afforestation to reduce the urban heat island effect, rain gardens and permeable surfaces, micro-scale flood mitigation interventions, green roof, vertical garden and white roof programs, nature-based water management in lake shoreline retreat zones, sedimentation basins and habitat restoration, as well as rooftop/land solar power plants and distributed solar energy models.”

At the end of her presentation, drawing attention to living life around the lake with a Burdur Lake photograph themed “the tears of the lake,” taken in 2024 by photographer Fatih Yılmaz and receiving international awards, Işlak reminded the audience of the sensitivity of wetlands and called for social media sharing for awareness using the hashtag “Burdur Lake must not dry up.”

Serdar KESKİN, Head of the Parks and Gardens Department, Burdur Municipality

Sharing the xeriscape (drought-tolerant landscaping) approach in Burdur and the practices they have implemented, Serdar Keskin emphasized that climate change, the decrease in water resources, and increasing maintenance costs necessitate more sustainable and long-lasting solutions in green space management; and that xeriscaping offers a strong alternative both environmentally and economically.

Highlighting the rapid decline in groundwater levels as the most critical justification for xeriscaping, Keskin stated that while active water levels in irrigation drilling wells were around 50 meters until a few years ago, they have dropped to 110–120 meters in recent years. He noted that this situation both makes water supply more difficult and increases irrigation costs; therefore, they have focused on xeriscaping to use groundwater more efficiently, particularly selecting high water-consuming intersections and steeply sloped areas as priority application sites.

Stating that an average of 400 tons of water is consumed per month at a single intersection, Keskin said that a significant portion of this water flows onto the roadway without benefiting plants. He explained that they started by making arrangements in pilot intersections selected as application areas, in a way that does not endanger life and property safety on routes heavily used by 112 emergency vehicles; and that they scaled up the applications based on the results obtained. He stated that this approach provided savings of up to TRY 2.5 million to the municipality within 2025.

In his presentation, Keskin stated that xeriscaping is not only a water-saving measure but also an adaptation tool against biotic risks triggered by the climate crisis. He noted that with rising temperatures in the city, changes have been observed in insect species and densities; and that especially in municipal special forest areas, in Black Pine and Red Pine zones, the rate of tree disease and drying has increased. He stated that despite interventions, they are lagging behind natural processes; therefore, in order to reduce water demand and increase resilience, they have focused on more resilient species such as olive trees and stone pine, and aim to expand applications over larger areas in the coming period.

Keskin stated that within the scope of works that began in 2024, they transitioned to xeriscaping applications at 12 intersections and medians, and that they continued in remaining sections in 2025. He noted that the applications prioritize techniques such as minimal intervention to existing plants, effective use of medians, and especially mulching to retain soil moisture for longer periods; and that in some areas, lighting designs providing different visual effects during day and night were implemented. Pointing to the Fakir Baykurt Intersection as an example of an application that combines xeriscaping with cultural narrative and public aesthetics, Keskin concluded his presentation with the screening of a short clip.

During the question-and-answer section of the panel, Prof. Dr. Gül Sayan Atanur took the floor and stated that some xeriscaping practices cannot be described as ecological or sustainable because laying plastic grids underneath and combining them with hard surfaces creates a reflection effect known as terrestrial radiation. Instead, Atanur stated that intersections could be kept green with local plant species that use less water rather than turf, and said that infrastructure problems related to water flow at intersections need to be resolved.

Additionally, stating that xeriscaping has been encouraged in Türkiye with the Presidential Circular titled “Procedures and Principles Regarding Xeriscaping Practices” published in 2025, Atanur emphasized that especially for increasing biodiversity at the local level, this issue should be given more thought and xeriscaping practices should be used to the extent necessary, before yielding the floor to the final speaker.

Tülay KONAK, Project Coordinator of the Healthy Cities National Network of Türkiye,
Burdur Municipality

Centering her speech on the question “What will we do after becoming a healthy city?”, Tülay Konak emphasized the importance of making children and young people active participants in this process.

In this context, Konak stated that they set out with the idea of sending young people aged 18–30 abroad for one year through the “European Solidarity Program” to receive foreign language and sustainable development–focused education; and that they aimed for young people to observe good practices around the world on site, participate in training programs, establish contact with different countries, and transform the experience they gain into concrete practices in their own cities.

Stating that a research and program design process was initiated in this direction, Konak noted that with the support of foreign institutions and civil society, they were initially able to reach one thousand young people at zero cost, and subsequently secured a budget of approximately 500,000 euros to run the program in a sustainable manner. Konak stated that within the scope of the project, for which applications were managed via email, participants’ basic needs such as transportation, accommodation, and food were covered, and that applications from young people especially in and around Burdur and Burdur University were encouraged.

Konak invited a participant who had just returned from Spain, where they had received six months of training, to share their experiences. The participant explained that within the scope of the project, they took part in hands-on environmental activities in the field such as tree planting, greening, habitat cleaning and maintenance, ocean shoreline clean-ups, and pruning and maintenance in public spaces, and emphasized that this process provided not only technical skills but also a learning experience involving direct contact with a different culture and climate. The participant highlighted two points regarding their experience in Spain: first, that due to heavy rainfall in the region, water scarcity was not visible and the wasteful flow of natural water resources was considered “normal”; and second, the possibility that young people who gain experience in different countries at the end of the project can offer new solutions to problems in their own countries.

As one of the most concrete “good practice” examples from their experience, the participant described the waste management system in the place they were based; stating that by separately collecting and processing organic waste, both natural fertilizer was produced and energy was generated from methane gas; and that this constitutes a strong model especially for green production processes.

Taking the floor again afterward, Konak concluded her speech with the message that the expansion of such programs that increase young people’s capacities will help local governments adapt more quickly to innovative practices in the fields of climate, water, and sustainability through ideas coming from young people.

OPEN FORUM

Moderatör: **Prof. Dr. İskender GÜLLE**, Advisory Board Member of the Healthy Cities National Network of Türkiye, Mehmet Akif Ersoy University, Faculty of Arts and Sciences, Department of Biology



Moderating the final session, the Open Forum, Prof. Dr. İskender Gülle addressed the audience before opening the floor to questions, stating: “I personally have a line of thought that I have developed: One of Türkiye’s fundamental questions today is water. The population is increasing, demand is increasing; however, the amount of water provided by nature does not meet this demand. Under these circumstances, we have to use the available water in the most efficient way. Yet I am technically distant from the concept of ‘water management.’ Because we cannot increase rainfall, we cannot make rivers flow uphill, and we cannot prevent evaporation. Therefore, I believe that what we need to manage is not water, but human behavior. The concepts of drought and water scarcity are also frequently confused. Drought is a climatic condition; water scarcity, on the other hand, is related to the sharing of existing water and over-consumption. I believe this distinction needs to be clearly defined.”

Taking the floor during the open forum, a landscape architect participant emphasized that the Burdur region is experiencing severe water scarcity and intense climate change, noting that they had carried out a project as the Chamber of Agriculture in 2011. The participant underlined that one of the reasons for the high number of cancer cases in Burdur is the dust that has emerged with the retreat of the lake and spread to the city center and villages, stating: “For this reason, we developed a project aimed at planting only species that can be sustained solely by rainwater in these areas. Unfortunately, however, no sufficient progress has been made on this issue since 2011.” Following this, Menderes Neighborhood Headman Onur Oşar took the floor and expressed his thanks regarding the panel content and the water and landscape efforts of Burdur Municipality.

Artist Ercan Kesal, who participated in the panel, took the floor to evaluate the discussion: “We are all standing on the same ground, and the ground we are standing on is about to collapse. There is no escape from this. We are all responsible. We are obliged to do what falls to us. There is a metaphor I often use; it is a quote from Tarkovsky. The talents people possess, what they know and what they have learned, do not grant them privilege. On the contrary, they impose responsibility. They must fulfill the requirements of this responsibility. Tarkovsky says this when describing artists; however, this approach applies to everyone. Whether from top to bottom or from right to left, it makes no difference; we are all people of the same land, parts of the same whole. We are obliged to offer what we know, what we have learned, and what we are capable of doing. There is no other Earth. We are all guests of the same Earth and relatives of one another. This is an issue beyond art, religions, languages, and ethnic identities. The Earth is crying out. In my relatively short life, at the age of 65, I have personally witnessed how geography has changed. Seeing this deeply affects a person. Let us leave a more beautiful world to our children.”

A participant attending the meeting on behalf of TEMA emphasized that water, soil, and air must be evaluated as a whole, stating: “Our soils are rapidly being degraded due to erosion, pollution, and improper use. The ecosystem is a whole. If we cannot protect the soil, we cannot protect water or air either. Concretization prevents water from infiltrating the soil; pesticide use leads to water pollution. I believe that protecting the soil must be the priority for healthy cities.”

Prof. Dr. Numan Oğuz, faculty member of the Department of Animal Nutrition and Nutritional Diseases at MAKÜ Faculty of Veterinary Medicine, took the floor and shared three examples that have recently drawn his attention: “The first example is the desert greening projects initiated in China starting in the 1970s. Vast afforestation areas were created; however, it later became clear that groundwater resources were largely depleted in the process, making it unsustainable. Incorrect planning driven by political decisions led to the exhaustion of water reserves. The second example is the Cape region of South Africa. Thousands of pine trees were cut down there. The reason is that while the native vegetation feeds the aquifers, the subsequently introduced pine trees consumed water resources. Another example comes from Siberia. It has been scientifically demonstrated that forests absorb more solar radiation, whereas grasslands reflect light, reducing warming and limiting global warming. For this reason, in some regions, protecting grasslands rather than forests has come to the forefront. In the heart of Anatolia, we have vast steppe areas. The steppe is not a negative ecosystem as commonly believed; on the contrary, a protected steppe covers the soil like a carpet and hosts hundreds of plant species. Therefore, we need science-based, rational, and consistent planning. Afforestation where afforestation is needed, and protection of the steppe where the steppe needs to be protected, is essential. Finally, I would like to share an observation of mine. If we divide Türkiye in two along the İzmir–Van line, I observe that the climate north of this line has become more humid, while south of it experiences drought lasting 7–8 months. For this reason, agriculture, livestock, and crop planning need to be reconsidered in this context. However, institutional structures capable of making such long-term planning are also important. In this regard, the closure of the State Planning Organization is a separate issue worthy of evaluation.”

Prof. Oğuz specifically emphasized that large-scale cattle farming should be reduced in Burdur, stating: “We need to reduce animal numbers and decrease the cultivation of corn and alfalfa, including sugar beet. I think it would be appropriate to shift sugar beet farming to Gölhisar as the most suitable area and relocate the sugar factory there. It is essential to create a water budget for the water we have, to adhere to this budget, and to conduct agricultural activities accordingly with proper crop planning.”

Subsequently taking the floor, moderator Prof. Dr. İskender Gülle drew attention to implementation challenges in all proposals and invited Burdur Mayor Ali Orkun Ercengiz to the podium for the closing remarks. Addressing consumer habits related to water use, Mayor Ercengiz shared an example from South Africa: “In 2018, in Cape Town, South Africa, it was announced that only one week of water remained and that water would no longer be supplied to the city after a certain date, and a ‘Day Zero’ was declared. However, ‘Day Zero’ never actually occurred in Cape Town. After the municipality made this announcement, citizens experienced a moment of awareness and reduced their water use. While the global average daily per capita water consumption is approximately 120 liters, per capita daily consumption in Cape Town dropped to around 50 liters. Since 2018, the city has not experienced any water cuts.

It is said that the local government’s warning that ‘water is running out’ and its cut-off planning had a positive effect on reducing citizens’ water use. Our municipalities’ advisors, psychologists, and sociologists could examine this effect.”

Stating that the panel clearly demonstrated that the water and climate crisis is no longer merely a technical discussion but a shared area of responsibility, Mayor Ercengiz drew attention to the absence of many invited stakeholders, reminding that solutions cannot be produced solely through the efforts of local governments or those who think about the issue; rather, the matter must be addressed on a scale that includes society, central institutions, the production sector, and the media. He noted that the “I pay for it, so I use it” approach seen during periods of water scarcity weakens solidarity and public interest awareness, emphasizing that crisis management must also address the dimension of citizen behavior.

He further stated that it is clearly seen that measures taken based on household consumption will remain limited, and that the main focus of “water management” discussions must shift toward the proper management of “agricultural and livestock policies.” He noted that water consumption has come under even greater pressure in recent years due to changes in crop patterns (the expansion of water-intensive crops such as corn, sugar beet, and alfalfa) and the growth of livestock-based agricultural models. For this reason, he said that reassessing the country’s protein needs and discussing alternative protein models has emerged as one of the strategic agendas that directly shape water management.

Mayor Ercengiz stated that the common message from academics throughout the meeting was also clear: “We are not at a point where we can say ‘Do not worry’; the situation is worsening every year. It is evident that with rising temperatures, the effect of evaporation will multiply, and that in the case of Burdur Lake, the retreat has accelerated dramatically since 2016. Explaining the problem solely through ‘evaporation’ obscures human-driven determinants such as the cutting off of the sources feeding the lake and the strategic-scale consumption of groundwater. The lake has always evaporated; what has changed today is the reduction of its inflow and the increase in extraction pressure.”

Expressing that the most important outcome of the sessions was the clear articulation of concern and the presentation of concrete proposals, Mayor Ercengiz stated: “We are now in a period where we have no option to stand back; to ensure that truths are heard and proposals are implemented, communication, ownership, and implementation capacity must be expanded simultaneously. For this reason, it is of critical importance that all local stakeholders, especially the media, keep the issue on the agenda, and that decision-makers rapidly put into effect holistic steps extending from production patterns to oversight, from water management to social awareness, rather than settling for short-term measures.”

Emphasizing that the Healthy Cities National Network of Türkiye establishing a stronger action line focused on the health of the country as a whole during this period, and making the issues visible among stakeholders through this panel in Burdur, constituted an important threshold, Mayor Ercengiz concluded: “Today, a discussion platform has been established that can shed light not only on the next few years of Burdur, but on the next 50–100 years; an infrastructure has been created that brings together our concerns, data, and solution proposals. In the continuation of this process, it is essential that what is discussed here be connected to implementation and monitoring mechanisms. I thank all institutions, academics, our Union secretariat, and all participants who took the time to contribute to this collective wisdom, and once again emphasize that the next stage is a transition from ‘talking to implementation.’ It is good that you are here; thank you, be well.”

03

3. COP BURDUR CLIMATE DECLARATION

The fact that climate change, a natural process, has today reached crisis proportions is fundamentally human-induced. The consequences of this crisis—such as rising global temperatures, the observed increase in the frequency and severity of extreme weather events, and the depletion of water and food resources—directly threaten the basic needs of all living beings. The impacts of this globally experienced crisis are felt at the local level in a far more concrete and destructive manner, with dimensions of climate injustice. Therefore, in the fight against the climate crisis, alongside global and national policies, “localized policies” must also be developed, and cities assume a critical role in this process.

Each year, the Conference of the Parties on Climate Change (COP) demonstrates that the climate crisis has become a problem too complex and multi-layered to be addressed as the responsibility of a single ministry or a single country. This struggle, which requires the effective participation and cooperation of all stakeholders, also makes it imperative that decisions be implementable at the local level. In this context, the responsibility of cities as implementing actors is substantial. National climate action plans and climate action carried out at the local level must align with one another and mutually reinforce each other.

At the point reached today, Burdur aims to develop concrete and implementable local action plans against the climate crisis and to convey these experiences to the COP31 process to be held in Türkiye in 2026. Within the scope of COP Burdur, two panels and one open forum session were held under the theme “Cities in the Face of the Climate Crisis, Drought and Water Management,” and a strong will was demonstrated to participatorily develop Burdur’s holistic position against the climate crisis. Within this framework, we—at a time when water and ecosystems in Burdur are rapidly becoming more fragile—as representatives of local governments, public institutions, universities, professional organizations, democratic mass organizations, and civil society organizations, under the guidance of science;

Bu kapsamda, bizler; Burdur’da suyun ve ekosistemlerin hızla kırılganlaştığı bu dönemde, yerel yönetimler, kamu kurumları, üniversiteler, meslek kuruluşları, demokratik kitle örgütleri ve sivil toplum kuruluşları temsilcileri olarak, bilimin rehberliğinde;

1. Shared governance at the basin scale: the establishment of a “multi-stakeholder platform” for the Burdur Lake Basin and the Lakes Region that addresses water together with agriculture, cities, industry, and ecosystems, meets regularly, and monitors decisions,

2. Groundwater inventory and monitoring: the preparation of an up-to-date inventory of all water wells; the installation of meters on wells, measurement, effective inspection of wells, transparent monitoring, and data-based water budget management,

3. Protection of wetlands and lakes: reducing interventions that weaken the feeding of lakes and wetlands in the basin, primarily Burdur Lake; implementing the principle of “ecosystem health first” against pollution, habitat destruction, and the disruption of water flows,

4. Agricultural water management and crop pattern transformation: implementing drought-resilient crop patterns, regenerative agriculture, and efficient irrigation techniques that reduce dependence on high water-consuming crops; developing training and incentive mechanisms for producers; transitioning from water-intensive fodder crops to lower water-consuming agricultural production, and in this context promoting small ruminant husbandry instead of large ruminant livestock,

5. Reuse and dual water systems: the reuse of advanced treatment effluents in industry and urban uses; integrating solutions such as rainwater harvesting in new buildings, greywater reuse infrastructure, and the separation of drinking and utility water into building permit and licensing processes,

6. Prevention of losses, leakages, and illegal use: continuous improvement and strict inspection to reduce losses and leakages in the network, manage pressure, renew pipelines, and prevent illegal water use,

7. Green infrastructure and nature-based solutions: addressing practices such as shading, afforestation, xeriscaping, permeable surfaces, rain gardens, green corridors, flood-surface runoff management, and ecosystem restoration in drawdown areas as an integrated “green infrastructure system,” from upper-scale plans down to the neighborhood scale,

8. The principle of “local species and biodiversity” in xeriscaping: while ensuring water savings in landscape applications, avoiding methods that weaken ecological sustainability; adopting landscape solutions that protect soil health and enhance biodiversity through locally adapted species,

9. Health focus and pollutant management: strengthening integrated monitoring of air, water, and soil, early warning systems, protective public health measures for vulnerable groups, and risk communication mechanisms against increasing dust transport and potential pollutant risks resulting from lake recession; encouraging vegetation practices around the lake to prevent such pollution,

10. Social mobilization and behavior change: acknowledging the need to manage human behavior in water conservation; supporting models that ensure active participation of citizens and youth, such as campaigns and education programs to increase “water literacy” in households, schools, workplaces, and production areas,

11. Climate change mitigation and the circular economy: addressing water and climate agendas together in areas such as methane reduction in waste, separation of organic waste, composting, renewable energy investments, and energy efficiency in municipal services,

12. Implementation and accountability: monitoring the implementation process through annual progress reports, indicators (water budget, groundwater level, loss-leakage rate, etc.), and transparent monitoring meetings by relevant stakeholders (e.g., the multi-stakeholder platform).

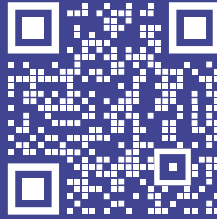


COP BURDUR

TOWN HALL COP ON CLIMATE CHANGE REPORT

#climatecrisis

Cities in the Face of the Climate Crisis, Drought and Water Management



HEALTHY CITIES NATIONAL NETWORK OF TÜRKİYE

