



# CLIMATE VISION OF ISTANBUL



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***In line with the "Deadline 2020" Commitment, the Revised Climate Change Action Plan has been prepared for Istanbul to become a Carbon Neutral and Resilient City by 2050.***

## **THE CLIMATE**

### **VISION OF ISTANBUL**

## **COMES TO LIFE**

As is the case in the whole world, Istanbul also faces severe climate-related risks. If temperature rises are not limited to 1,5 to 2 degrees in the upcoming period, cities will face more disasters and cross the irreversible threshold. The 6th Report of the Intergovernmental Panel on Climate Change (IPCC) also states that global warming is unprecedented. The recent natural disasters such as wildfires, drought, and floods in Turkey have also been indicators of this.

***The sea snot problem caused by 2-2.5 degrees Celsius warming of seawater and uncontrolled wastes have led to risks that will end life in the Sea of Marmara...***

***The Marmara and the Black Sea climate characteristics observed in Istanbul have also started to change due to the climate crisis.***

***The current Corona pandemic has shown us the reality of how important it is to preserve the natural balance and that our cities are not yet ready for this.***

These processes have made it better understood the importance and the function of local administrations in keeping global warming under control. In this regard, the Climate and Environment Vision preparation for Istanbul was started, and the Istanbul Climate Change Action Plan was announced. Therefore, a much stronger fight against the problems considered of vital importance for Istanbul has begun.

The former Istanbul Climate Change Action Plan targeted limited progress

in carbon emissions, such as a 33% reduction from the increase arrived at in 2030; in line with our Deadline 2020 commitment, the Climate Action Plan revision works have begun. During this process, data was collected, current situation analysis was made, and future scenarios were modeled. Additionally, two separate internal stakeholder workshops were organized to prioritize climate change mitigation and adaptation strategies at the sectoral level. As a result of the workshops, strategic goals and actions have been determined. These workshops were followed by the external workshops held with academics, civil society organizations, professional associations, private sector representatives, public institutions, and organizations. As a result of this process, new targets and adaptation policies have been determined for transport, fixed energy, and waste based on a scenario for Istanbul to become a resilient city.

To this end, the Istanbul Climate Change Action Plan has been prepared to set more comprehensive and concrete goals, and it is in line with Istanbul's international commitments. Additionally, as a result of the studies initiated a year and a half ago and with the technical support of the C40 network free of charge, all of the steps that will make Istanbul a carbon-neutral city resilient to the climate crisis by 2050 have been identified, and a concrete roadmap has been defined.

The Istanbul Climate Change Action Plan, which has unique characteristics concerning population density and goals among European cities, comes to life with policy documents such as:

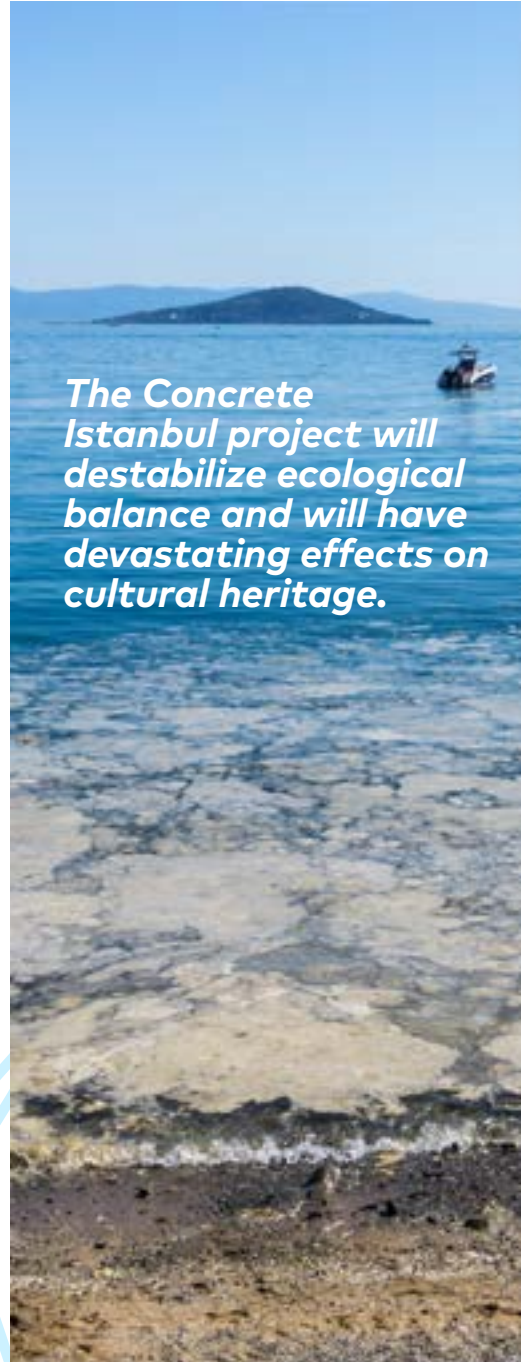
- Sustainable Energy Action Plan (SECAP),
- Sustainable Urban Mobility Plan (SUMP) and
- Istanbul Waste Management Plan

Additionally, it should be mentioned that the Istanbul Climate Change Vision is an essential and integral part of the Istanbul 2050 Vision document prepared by the Istanbul Planning Agency. The strategic goal has been defined as ensuring climate justice by carrying out all the plans and works of the IMM attaching priority to climate action and serving Sustainable Development Goals. In this context, the reduction percentages have been defined as follows to achieve the Carbon Neutral target by 2050:

- 52% absolute reduction by 2030,
- 89% absolute reduction by 2040,
- By 2050, we have set an absolute reduction of 100%.

If Istanbul does not take the concrete steps described in the vision and action plan announced and become a city resilient to the climate crisis, the following challenges will be faced:

- Diseases associated with increasing temperature will multiply, especially in vulnerable groups such as the elderly and children.
- There will be a shortage of food and water supplies.
- More disasters such as wildfires due to heatwaves will be faced.
- The risk of sea-level rise between 45 and 75 centimeters in the Istanbul Strait will emerge.
- On the one hand, Istanbul's average annual precipitation will decrease by 12 percent, while precipitation intensity may increase by up to 59 percent.
- The floods created by this will pose a significant risk to critical infrastructure and transport systems.



***The Concrete  
Istanbul project will  
destabilize ecological  
balance and will have  
devastating effects on  
cultural heritage.***



- Biodiversity will decrease in Istanbul, and new pests and invasive species will emerge.

The dangers posed by Canal Istanbul will be added on top of all these. The Canal project will destabilize the ecological balance completely, have devastating effects on the cultural heritage acquired over thousands of years, and increase disaster risks. It will be a project that ignores the right of the urban society usurping the right to life of people and all living things. In short, the Kanal Istanbul project will be not only an urban but also a regional and global climate threat and will involve risks of reversing the efforts related to climate change.

Istanbul is the hub of Turkey from an economic and social point of view. The impact of the adverse effects on Istanbul's climate will be national, even global. For this reason, we have identified five basic strategies within the framework of Istanbul climate vision in order not to experience the risky picture that scientists put in front of us. Five primary goals have been identified within the framework of the Istanbul Climate Change Action Plan. These goals include:

- Reducing greenhouse gas emissions and increasing climate crisis adaptation capacity;
- Ensuring climate justice and reducing the social and economic impacts of the climate crisis;
- Developing institutional capacity for the climate crisis and environment management;
- Preserving Istanbul's authentic ecology and natural resources, rehabilitating and repairing its nature;
- Supporting its life cycle, reducing pollution and carbon footprint.





In line with this vision, the major changes to be implemented by 2050 to achieve these fundamental strategies are as follows:

- All cars and taxis will become electric vehicles gradually;
- 35% of inner-city trips to be made by public transport;
- Increasing the rate of sea transport to 10%;
- 50% of daily trips are to be made on foot and by bike;
- Reduction of water losses and leaks by 18% in 2030 and 32% in 2050;
- 11% reduction in per capita water use by 2040;
- Recovery of organic waste such as food and garden waste by at least 50%;
- Ensuring 100% energy efficiency in urban equipment;
- 55% of the energy supply to be generated from renewable resources;
- 95% of the landfill gas generated by the waste disposed of is to be converted to energy;
- 100% recycling of organic waste by composting;
- 100% recycling of paper and packaging waste;
- Generating power for all IMM buildings from renewable sources, implementing the zero waste approach;
- The IETT bus fleet to become 100% electric.

***We wrote the climate constitution of the city based on the will of Istanbulites and guided by science.***

Istanbul is a city capable of achieving all these and becoming climate crisis resilient by 2050. We know that common sense and science should guide our actions based on a climate justice vision and a human-oriented approach.

In the light of this vision:

- Works have started to increase Istanbul's resilience in the face of disasters.
- Rainwater tunnels were refurbished.
- The risk of flooding in many parts of Istanbul has been reduced.
- Free seedlings have been distributed to farmers to start production again in farmlands.
- The sustainable zero waste approach has a broader coverage with the use of compost fertilizer in seedling production.
- Green energy and circular economy processes have been developed.
- Within the scope of the awareness-raising and training efforts, the Climate and Energy Museum, one of the few examples in the world, was established in the field we are in.
- Creek edges have started to transform into valleys of life.
- The construction of 10 metro lines has started at the same time to reduce inner-city carbon emissions.
- The goal has been set to increase the length of metro lines from 233 kilometers to 630 kilometers.
- The Park & Go areas are being enlarged.
- The total length of the bike lanes will increase from 350 km to 650 km.
- Biodiversity and agricultural practices have been developed.

- There is increasing focus on alternative projects to reduce waste incineration and disposal by regular storage.

In addition to these, IMM will start operating three new facilities in November for a cleaner environment. These are as follows:

- The Kemerburgaz Biomethanization Facility, which will open on November 9, will be the first facility in our country where organic wastes sorted at the source will be processed with a daily capacity of 130 tons. Our facility will generate 1.4 MW of power from the obtained biogas by producing biogas in an oxygen-free environment from organic waste. It will also generate 40 tons of organic compost per day.
- On November 16, the Emirli Phase II Drinking Water Treatment Facility will start to operate. Our facility is situated within Ömerli Drinking Water Treatment Facilities. The water treated in the plant will meet the water needs of the entire Anatolian Side as well as Fatih, Bakırköy, Beşiktaş, Sarıyer, and Zeytinburnu, just like the other facilities located in the Ömerli Drinking Water Treatment Facilities.
- The Domestic Waste Thermal Disposal and Energy Generation Facility with a 3000-ton/day capacity in the Neighborhood of Eyüpsultan Işıklar will officially open on November 26. It will meet the power needs of approximately 1.4 million people with its power generation capacity of 85 MW. In addition, 1.38 million tons of CO<sub>2</sub>-equivalent emission reduction will be achieved.

In short, to save the future of Istanbul and our people, the Istanbul Metropolitan Municipality took a serious initiative and prepared this country's most comprehensive, human-oriented vision and initiated a total climate change mobi-

lization. In line with this mobilization, 25 projects will be completed with a total budget of 866 million euros, including 387.5 million by 2030 and 478.5 million by 2050.

Since the strategies included in the action plan require broad interdisciplinary coordination and continuity, it was proposed to establish a Climate Change Unit under the Istanbul Metropolitan Municipality (IMM) Directorate of Environment Protection as a monitoring mechanism to combat the climate crisis. The Istanbul Metropolitan City Council has approved this. In addition, climate responsibilities were defined in other units to monitor the process related to climate change. In other words, as a requirement of taking ownership at a corporate level, the fight against climate change was made part of corporate culture and was defined as a fundamental component of relevant fields. We believe that the whole process could be completed successfully if a spirit of total mobilization governs the entire process. The IMM is ready to share experience and know-how with everyone, including central and local administrations, and offer guidance in climate change.

### **ISTANBUL IS AT COP26...**

To give information about the work done to date and share Istanbul's climate vision, Mayor Ekrem İmamoğlu will participate in the United Nations Climate Conference COP26 activities in Glasgow on behalf of our city, which aims to become a carbon-neutral city by 2050. The virtual exhibition titled "Global Cities Climate Action Exhibition" prepared in collaboration with Arup and C40 will present good examples and projects on climate action from 11 global cities. Our experts attending the summit since the first day follow discussions closely. COP26 live broadcasts can be followed through the screen set up in the area in Müze Gazhane. The venue





also hosts the activities and fora of local climate activists. On the other hand, we follow the steps taken to combat the climate crisis globally and nationally. In particular, the actions taken after the Grand National Assembly of Turkey ratified the Paris Agreement such as updating the National Declaration of Contribution and setting the timetable for exiting coal are monitored carefully.

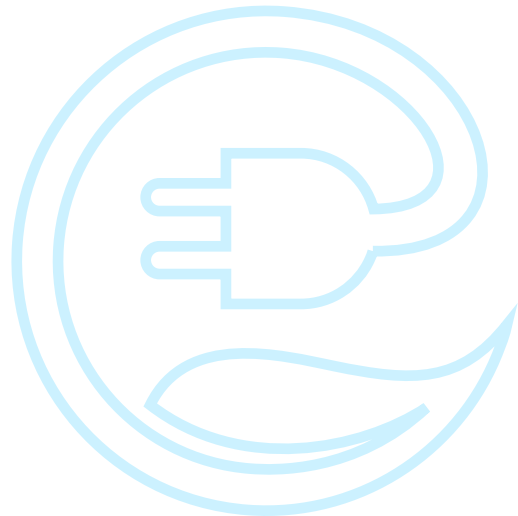
We believe that the targets set in the Istanbul Climate Change Action Plan Vision can be achieved with the participation of 16 million Istanbulites and especially the youth sensitive to climate change issues.

With this plan, IMM makes a commitment for a brave and robust plan. However, to achieve this, all our people, including public institutions at the national and local level, civil society, the city council, and academia, have to show the will altogether. To this end, the "Climate Platform" is being created by the Vision 2050 Office in the Istanbul Planning Agency. This platform will serve as a compass for all the steps to be taken in line with this target set. It will serve as the guarantee of the success, monitoring, and sustainability of the process.

***The "Climate Platform" is to be set up under the roof of our Vision 2050 office.***

Preserving the climate of Istanbul, raising the city we live in to a position to overcome climate crises is a vital issue that should be excluded from daily political conflicts. It should be emphasized that the issue of climate is an urgent issue not only for Istanbul but also for our country. Therefore, all these efforts correspond to the demands for a climate emergency. This process will be shared with the public in a transparent, understandable, and up-to-date manner, and it will be a dynamic one encouraging participation. Our duty to

our children, Istanbul, Turkey, and our planet is to fulfill our responsibilities in this regard by taking concrete and courageous steps. We invite all relevant institutions and organizations to take action together against the climate crisis.









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