Konak Municipality Local Climate Adaptation Action Plan

CONTENTS

1. INTRODUCTION

1.1 Objective and Scope

This plan, which aims to increase the capacity of Konak district in the process of adapting to climate change, seeks to create a sustainable model with the participation of the private sector by supporting disadvantaged groups. Children, youth, women, people with disabilities, and persons under temporary protection have been identified as specific target groups, and the active participation of local stakeholders in the process has been encouraged. The plan was prepared using a participatory approach, drawing on training and workshop outputs, as part of the CLocalization: Localization for Climate Change Adaptation Project, funded by the European Union and the Ministry of Environment, Urbanization and Climate Change of the Republic of Turkey, and implemented by Konak Municipality and the Social Climate Association.

The project aims to develop climate adaptation strategies for sectoral and vulnerable groups in the Konak district and to guide local planning at the national level with these strategies. In the process that began in 2023, good practice examples in the European Union were examined, and municipalities were guided through the Climate Change Adaptation Strategy Preparation Guide. The needs of vulnerable groups and the private sector were identified, and the creation of climate adaptation strategies and action plans was encouraged.

In this context, two important workshops were organized, taking into account the needs of different segments of society. The Horizontal Adaptation Workshop enabled women, children, young people, people with disabilities, migrants, and persons under temporary protection to come together to discuss the individual and societal impacts of the climate crisis and develop proposed solutions. With 77 participants, the workshop provided a process of shared learning and experience through activities carried out at different stations. The Private Sector Climate Adaptation Workshop, attended by 48 participants, brought together private sector representatives to address the challenges they face related to climate change and develop feasible solutions. This workshop aimed to increase sectoral resilience and strengthen the role of the private sector in Konak's climate adaptation strategy.

The outcomes of both workshops contributed to the creation of a comprehensive roadmap to make Konak more resilient to the climate crisis. The strategy, developed based on the problems and proposed solutions directly identified by the target groups, plays a critical role in increasing the city's climate adaptation capacity. The unique solutions produced by taking local dynamics into account will not only increase the effectiveness of strategic and action plans, but will also make Konak a more resilient and sustainable city against the climate crisis. In this process, the plan is presented as a guide for Konak to become a pioneering model in the field of climate adaptation.

Climate Change Adaptation Grant Program

The Climate Change Adaptation Grant Program (CCAGP) is designed to support the implementation of climate change adaptation projects at the local and regional levels in Turkey. The CCAGP aims to increase the resilience of communities, protect natural resources and ecosystems, and develop the adaptation capacity of vulnerable social groups, cities, and economic sectors. The Final Beneficiary of the program is the Climate Change Directorate of the Ministry of Environment, Urbanization and Climate Change (MEUCC) of the Republic of Turkey, and the Contracting Authority for the Grant Program is the Directorate General for European Union and Foreign Relations, Directorate of European Union Investments of MEUCC.

Konak Municipality Directorate of Foreign Relations

The Konak Municipality Directorate of Foreign Relations operates with the aim of making municipal services more effective, innovative, and sustainable. The main task of the Directorate is to support data-driven decision-making processes in local government work, coordinate strategic planning, and develop projects.

The Foreign Relations Directorate, which carries out projects in areas such as climate change, environmental sustainability, social development, and digitalization, prepares grant projects by utilizing national and international resources, increases the institutional capacity of the municipality, and develops multi-stakeholder collaborations.

The Foreign Relations Directorate, which played an active role in preparing the Konak Climate Adaptation Action Plan, ensured that the plan was shaped in line with scientific evidence and local needs. The directorate's work contributes significantly to Konak's vision of becoming a sustainable and resilient city.

Social Climate Association

The Social Climate Association is a civil society organization that carries out rights-based work with a focus on nature, encourages the democratic participation of young people, women, and children, and aims to strengthen social resilience against the climate crisis. Founded in Izmir in 2014 by young people, the association works to develop a culture of dialogue among young people and to support their participation in social life and civil society.

The Social Climate Association acts with the awareness that the climate crisis is not just an environmental problem, but a multidimensional crisis that deepens social inequalities and disproportionately affects vulnerable groups in particular. In this regard, it prioritizes the construction of inclusive and climate-resilient community structures and supports the effective participation of young people, women, and children in decision-making processes.

1.2 Political and Legal Framework (high-level policy documents)

The Konak Climate Adaptation Action Plan (KCAAP) has been prepared in a structure that is integrated with national and international climate policies. The plan provides a strategic reference framework that takes into account both the responsibilities of municipalities and cooperation with central government and international partners in the climate change adaptation process.

In this context, the key policy documents on which the plan is based are summarized below:

● **Paris Agreement:**The Paris Agreement, to which Turkey became a party in 2021, aims to limit global temperature increase to 1.5°C; it also aims to strengthen adaptation capacity against the adverse effects of climate change and support sustainable development. The Agreement assigns responsibility to the signatory countries to reduce greenhouse gas emissions and develop climate change adaptation actions in line with their nationally determined contributions (NDCs). In this context, increasing resilience to the harmful effects of climate change and ensuring the sustainability of ecosystems are among the priority objectives. Within this framework, KCAAP aims to contribute to the construction of cities that are resilient to the climate crisis and have high adaptation capacity at the local level.

● **Turkey Climate Change Strategy and Action Plan (2023–2030):** This document, prepared at the national level, comprehensively outlines climate change mitigation and adaptation targets; it identifies increasing the planning and implementation capacities of local governments regarding the climate crisis as one of the priority areas.

● **National Climate Change Adaptation Strategy and Action Plan (NCCSAP):** In line with NCCSAP, adaptation policies for vulnerable groups, risk reduction measures, and nature-based solutions have been prioritized in the plan.

● **Climate Change Adaptation Grant Program (CCAGP):** This program, carried out in cooperation between the European Union and the Republic of Turkey, aims to develop climate adaptation capacities at the local and regional levels. KCAAP was prepared based on the outputs of the CLocalization: Localization for Climate Change Adaptation Project developed by Konak Municipality within the scope of this program's grant support.

● **Laws Governing Municipalities (Laws No. 5216 and 5393):**

The institutional basis of KCAAP is based on Law No. 5216 on Metropolitan Municipalities and Law No. 5393 on Municipalities, which define the environmental responsibilities of local governments. These laws define the duties and authorities of municipalities in combating climate change, environmental protection, disaster risk management, and sustainable urbanism. Thus, the legal basis for climate action at the local level is established, ensuring the feasibility of plans such as KCAAP.

● **Izmir Metropolitan Municipality Sustainable Energy and Climate Action Plan (İZBB SECAP):** The SECAP document, which aims to create comprehensive resilience against climate change throughout Izmir, was considered a high-level guiding document in the preparation of the KCAAP; strategies specific to the Konak district were developed by adapting it to the local scale.

During the development of the plan, the following were also taken into consideration:

- The European Green Deal,
- The United Nations Sustainable Development Goals (SDGs),
- IPCC reports and international best practices. This resulted in an effective climate adaptation strategy for Konak district, both in a global and local context.

1.3 Methodology

The Konak Climate Adaptation Action Plan (KCAAP) was prepared using a participatory and holistic approach. Both qualitative and quantitative methods were used in developing the plan; local knowledge, field data, and stakeholder contributions were combined to create a strategic roadmap. The working process included the following stages:

- Literature Review: National and international policy documents, academic studies, good practice examples, and guidance documents on climate change adaptation were analyzed. The Paris Agreement, Turkey's Climate Change Action Plan, Izmir Metropolitan Municipality SECAP, and relevant sectoral plans were evaluated in this context.

- Climate Change Adaptation Strategy Preparation Guide: The "Climate Change Adaptation Strategy Preparation Guide" developed within the scope of the project was used as the basic methodological framework during the planning process. This guide, which defines the stages of strategic planning step by step, ensured that the process progressed in a systematic, traceable, and evaluable manner. At the same time, with its structure that includes risk and opportunity analyses and monitoring-evaluation mechanisms, it contributed to the development of effective and applicable climate adaptation strategies by local governments.

- Current Situation and Vulnerability Analysis: The potential impacts of climate change were identified by analyzing the climate data, socio-economic structure, and infrastructure status of the Konak district. Current data from institutions such as the General Directorate of Meteorology, AFAD, and the Ministry of Environment, Urbanization, and Climate Change were utilized.

- Participatory Workshops: One of the most important components of the plan is the workshops to which different stakeholders contributed directly. In this context;

🌕 Horizontal Adaptation Workshop was held with the participation of disadvantaged groups such as women, youth, children, persons under temporary protection, and persons with disabilities, and the needs, risks, and solution proposals of these groups were directly obtained.

🌕 Private Sector Climate Adaptation Workshop, with the contribution of representatives from the livestock, fisheries, agriculture, biodiversity and ecosystems, urban development, public health, social development, tourism, cultural heritage, industry, transportation, and communication sectors, ensured the identification of sectoral risks and solution strategies.

- Stakeholder Meetings: Multifaceted assessments were conducted through one-on-one meetings with local governments, civil society organizations, academic institutions, and private sector representatives.

- Horizontal Alignment and Problem Identification and Strategy Development Workshops in Private Sector Training: Workshop outputs from the training were analyzed to

determine sectoral and thematic priorities, and strategies and action plans were developed under each heading.

- Data Analysis and Reporting: All data obtained was tabulated, analyzed according to thematic headings, and action plans were structured based on these findings. Performance indicators for the strategies were determined, and a monitoring and evaluation mechanism was established.

Thanks to this methodological structure, KCAAP has been transformed into a plan that is responsive to local needs, inclusive, implementable, and monitorable.

2. CURRENT SITUATION AND VULNERABILITY ANALYSIS

2.1 Effects of Climate Change on Konak

Izmir Province is located in Western Anatolia between 37° 45' - 39° 15' north latitude and 26° 15' - 28° 20' east longitude. Izmir, Turkey's third largest city, is approximately 200 km long from north to south and 180 km wide from east to west. With its coastline, agricultural areas, natural ecosystems, and cultural richness, Izmir Province is one of the important centers of the Aegean Region.

Konak district is located in the city center of Izmir and forms the heart of the city both administratively and socio-culturally. With its population density, historical and cultural heritage, coastline, trade and transportation axes, Konak is one of the most strategic districts of Izmir and is also one of the most vulnerable areas to the effects of climate change.

Located in the Mediterranean climate zone, Konak district has begun to strongly feel the regional effects of climate change. Effects such as rising temperatures, changing rainfall patterns, drought risk, and sea level rise directly affect the district's social structure, infrastructure, ecosystems, and economic activities.

Below, the effects of climate change observed in Konak and Izmir are presented with concrete data:

Rising temperatures: According to 2024 data from the Ministry of Environment, Urbanization, and Climate Change, the annual average temperature across Turkey was 15.6°C, exceeding the 1991–2020 average of 13.9°C by 1.7°C. This value is the highest temperature recorded in the 1971–2024 period, exceeding the previous record of 15.5°C set in 2010. Long-term temperature trends indicate that the warming process is accelerating across the country.

According to 2024 data from the General Directorate of Meteorology, the annual average temperature in Izmir has increased by approximately 1.5°C over the last 50 years. The duration of heat waves in the city has increased by 30% compared to previous years, and the

number of extremely hot days has increased significantly. The increase in maximum temperatures has been calculated at 1.2°C over 100 years.

The annual average temperature in Konak district is 18.7°C. During the summer months, temperatures frequently exceed 35°C, and on some days even reach above 40°C. This poses serious health risks, particularly for the elderly, children, and individuals with chronic illnesses. According to IPCC projections coordinated by the World Meteorological Organization (WMO) and the United Nations Environment Programme (UNEP), temperatures in Izmir and its surroundings are expected to increase by 1.5–2.0°C under the RCP 4.5 scenario and by 2.5–3.0°C under the RCP 8.5 scenario by the end of the century. In addition, a significant increase in the frequency and intensity of heat waves is predicted. 2

Heavy rainfall and flooding: In recent years, rainfall in Izmir has been occurring more intensely and in shorter periods of time. In particular, in 2021, 90 mm of rainfall fell per square meter in the Konak district within a few hours, causing flooding in Kemeraltı and Konak Square. While a 25% increase in flash floods was observed across Izmir in 2023, a general decrease in rainfall was recorded in 2024. The annual average rainfall in the Konak district has been determined to be 669.8 mm.

According to projections by the General Directorate of Meteorology, under the RCP8.5 scenario, the total annual rainfall in Turkey is expected to vary between +3% and -12% during the 2016-2099 period. This indicates that irregularities in rainfall patterns will increase. Assessments for Izmir indicate that while no significant decrease in annual rainfall is expected, an increase of around 15 kg/m² may occur by the end of the century. However, seasonal increases of up to 140-150 mm and decreases of up to 240-250 mm are also projected.

According to AFAD 2024 data, the most common meteorological and climate change-related disasters in Izmir between 2019 and 2023 were heavy rainfall and the resulting floods and flash floods. In addition, storms, tornadoes, lightning, and hail events have also affected the city. The districts most affected by these disasters include Konak, Karabağlar, and Urla. These data show that the risk of heavy rainfall and flooding has increased in Izmir, particularly in the Konak district, and clearly demonstrate the effects of climate change on the region.

Drought and depletion of water resources: The water levels in the dams that supply Izmir's drinking water have been declining in recent years. According to AFAD data, there have been 23 dry years in Izmir over the 70-year period analyzed. Looking at the distribution of these years, 2 years were classified as exceptionally dry, 3 years as very severe dry, 2 years as severe dry, 8 years as moderately dry, and 8 years as mildly dry. The driest year on record was 1972. On the other hand, while 23 years were at normal levels, 24 years were very humid. In the distribution of humid years, 1 year was exceptionally humid, 3 years were extremely humid, 1 year was very humid, 12 years were moderately humid, and 7 years were slightly humid. The risk of drought both hinders public access to water and threatens sectors that depend on water for production. 3

1 General Directorate of Meteorology (MGM). (2024). Turkey 2023-2024 Climate Report and Projections. https://www.mgm.gov.tr

2.UNEP (United Nations Environment Programme) & WMO (World Meteorological Organization). (2023). State of the Global Climate Report 2023. https://www.unep.org | https://www.wmo.int

3 AFAD (Disaster and Emergency Management Presidency). (2024). Turkey Disaster Risk Map and Meteorological Disaster Reports. https://www.afad.gov.tr

Sea level rise: Sea level rise is a significant factor increasing the risk of coastal flooding, erosion, and infrastructure damage in the Gulf of İzmir. Coastal areas such as Alsancak Port, Kordonboyu, and Konak Pier are among the areas that may be affected by this change.

According to IPCC projections, sea level rise in the Aegean Sea is expected to occur near the upper limit of the specified range, which could have long-term effects on coastal ecosystems and urban infrastructure.4

Biodiversity loss: Climate change leads to problems such as the extinction of local species and the spread of invasive species. The Gulf of Izmir has become an environmental risk area where the effects of the global climate crisis combine with long-standing pollution problems. In particular, the mass fish deaths on the Bayraklı-Turan coast in August 2023 were a striking indicator of rising water temperatures, falling oxygen levels, and intense pollution. According to Prof. Dr. Tansel Tanrıkul, Dean of the Faculty of Fisheries at Izmir Katip Celebi University, these deaths were most prevalent among bottom-dwelling fish such as sargos, sea bream, lidaki, isparoz, sole, and mırmır, and even mullet and rockfish, which are normally resistant to environmental pressures, were unable to survive. This situation highlights the critical extent of the pollution, leading to consequences such as decreased biodiversity, weakened fish populations, and disruption of the ecosystem balance in the Gulf of İzmir. It has been emphasized that dead fish carry chemical and microbiological loads, and it has been stated that consuming these species could pose serious risks to public health.

Urban heat island effect: In densely built-up areas located in the northeast, east, and central east of Konak (areas where LCZ 2 - Compact Midrise and LCZ 3 - Compact Lowrise classes are prevalent), surface temperatures (LST) exceed 41°C due to the decrease in permeable surfaces and limited green areas. On the other hand, a positive urban heat island effect is also observed in the southwestern part of Konak district. These areas attract attention with their high temperature values; they increase heat accumulation in the city center, deepening the urban heat island effect, which poses a risk to public health and increases energy consumption (especially cooling needs). Another significant impact of climate change is on cultural heritage assets in the Konak district. Rising temperatures, humidity changes, heavy rainfall, and flooding cause material deterioration, surface erosion, and structural wear in historical buildings, monuments, and open-air heritage sites. Rising sea levels threaten ancient heritage sites in coastal areas, increasing the risk of some structures becoming submerged. In addition, air pollution and oxidation processes cause long-term damage to stone, metal, and wooden building materials.

In this context, the Izmir Historic City Center, which includes Kemeraltı and its surroundings, has a unique value both architecturally and socio-culturally. This area, which is on the UNESCO World Heritage Tentative List, has a multi-layered historical structure with hans, mosques, churches, synagogues, fountains, baths, and a traditional commercial fabric. However, this rich heritage area is also highly sensitive to the effects of the climate crisis. Increasing humidity levels and sudden rainfall, in particular, cause deterioration in the original materials of the structures, while flooding strains the infrastructure system and threatens the historical fabric.

4 Intergovernmental Panel on Climate Change (IPCC). (2021). Sixth Assessment Report (AR6). https://www.ipcc.ch

5.Izmir Katip Celebi University Faculty of Fisheries. (2023). Assessment Report on Fish Deaths in the Gulf of Izmir. (Compiled from statements by Prof. Dr. Tansel Tanrikul.)

Pressure on infrastructure systems: The capacity of stormwater drainage systems is insufficient to cope with sudden weather events; residential areas, workplaces, and transportation infrastructure are being damaged. In key documents such as the Izmir Metropolitan Municipality's Climate Change Action Plan (2021), IZSU Strategic Plans, and Disaster Risk Reduction Plan, the Konak district has been identified as a priority intervention area due to flood risk, infrastructure capacity issues, and urban density.6

These impacts necessitate that the Konak district transition to a structure that is resilient to climate change and aligned with nature-based and socially inclusive solutions.

Impacts on cultural heritage sites: Another significant impact of climate change is on cultural heritage assets in the Konak district. Rising temperatures, humidity changes, heavy rainfall, and flooding events cause material deterioration, surface erosion, and structural wear in historic buildings, monuments, and open-air heritage sites. Rising sea levels threaten ancient heritage sites in coastal areas, increasing the risk of some structures becoming submerged. In addition, air pollution and oxidation processes cause long-term damage to stone, metal, and wooden building materials.

In this context, the Historic City Center of Izmir, which includes Kemeraltı and its surroundings, has a unique value both architecturally and socio-culturally. This region, which is on the UNESCO World Heritage Tentative List, has a multi-layered historical structure with hans, mosques, churches, synagogues, fountains, baths, and a traditional trade fabric. However, this rich heritage area is also highly sensitive to the effects of the climate crisis. Increasing humidity levels and sudden rainfall, in particular, cause deterioration in the original materials of the structures, while flooding strains the infrastructure system and threatens the historical fabric.

2.2 Problems and Solutions for Disadvantaged Groups

The climate crisis is more than just environmental change; it is a crisis that deeply affects social structures and has serious and lasting effects, especially on disadvantaged groups. Therefore, the climate crisis must be approached not only as an environmental issue but also as a matter of justice and human rights. This approach is shaped by the concept of climate justice, which requires comprehensive policies that focus on the rights and needs of groups that are most affected by the climate crisis but have contributed the least to it.

Disadvantaged groups such as women, children, youth, persons with disabilities, migrants, persons under temporary protection, and refugees face much greater risks due to disasters caused by climate change, displacement, health problems, and increasing social inequalities. Gender inequalities make women more vulnerable to disasters, while children and young people represent the generations that will be exposed to the long-term effects of the climate crisis. Disruptions to education and physical and psychological health problems directly affect the development processes of these groups.

Migrants and persons under temporary protection face serious challenges in accessing basic needs such as climate-induced displacement, temporary shelter, health, and security. People with disabilities face not only physical barriers in the face of disasters, but also multi-layered barriers such as communication, evacuation, access to health services, and

6 İzmir Metropolitan Municipality. (2021). Sustainable Energy and Climate Action Plan (SECAP).

social isolation. This situation necessitates the development of specific adaptation strategies.

In this context, the principle of climate justice should be fundamental in the processes of combating climate change and adaptation; strategies that are sensitive to the needs of disadvantaged groups, fair, inclusive, and participatory should be developed and implemented. These strategies should target not only environmental but also social resilience and equality. Adopting a participatory approach enables these groups to generate solutions based on their own experiences, thereby making the process more effective, fair, and sustainable.

The active participation of disadvantaged groups in climate change adaptation strategies contributes to building resilient cities by creating not only environmental resilience but also social solidarity. Resilient cities strengthen social cohesion through strategies that ensure equal participation of every individual by establishing structures that are not only physically but also socially resilient against the climate crisis.

The data obtained from the “Horizontal Adaptation Workshops” conducted within the scope of the project has been converted into a table containing the risk factors faced by each group and proposed solutions to these risks. This table will shed light on the development of more targeted adaptation strategies centered on climate justice, focusing on the unique challenges and needs of disadvantaged groups. The table below serves as an important guide for future steps, presenting the concrete outcomes of this process.

Groups	**Local Issue**	**Risks**	**Suggested Solutions**
Youth	There are no safe, accessible, and climate-resilient social spaces for young people and women.	-Insufficient safe and accessible social spaces -Social spaces are not nature-friendly (lack of recycling bins, green designs, natural materials). -Lack of areas that provide opportunities to learn from nature and spend time in nature. -Absence of environmentally friendly practices in social spaces. -Social spaces do not support the social development of young people and women. -Difficulties in accessing environmentally friendly areas, increasing social inequality and	- Increasing safe and nature-friendly social spaces for young people and implementing environmentally compatible standards. -Creating nature-based social spaces and educational corners within these spaces. -Using sustainable high-tech solutions in the design of social spaces. - Designing sustainable social spaces that contribute to combating the climate crisis, together with young people and women; adding nature-friendly playgrounds, healthy living stations, and social interaction areas. -Encouraging the development of projects that contribute to combating the climate crisis for young people and women.

		preventing equal access to these areas.	
Women	In Konak, climate change makes it difficult for women to access basic services such as water, income, health, and education; the underrepresentation of women in all climate-related planning and decision-making processes leads to a weakening of adaptation capacity and a decline in quality of life.	-Drought, floods, and extreme weather events caused by climate change make it difficult for women to access water and basic resources. -Climate-related disasters and environmental changes significantly reduce the incomes of women who earn their livelihoods primarily through agriculture and small-scale economic activities; this undermines women's economic independence and makes it difficult for them to maintain their living standards. -Air pollution, extreme temperatures, and environmental stress factors are leading to an increase in respiratory diseases and other chronic health problems among women and children .	-To strengthen women's economic independence, implement training programs on climate-resilient agricultural techniques and sustainable production methods; encourage women's entrepreneurship through microfinance and credit support. -To protect women against extreme weather events and disasters, the state and relevant institutions should provide women with special disaster relief, shelter, and basic necessities; post-disaster psychosocial support services should be provided. -Facilitate access to health services for women and children to reduce climate-related health risks; implement preventive health policies to mitigate the harmful effects of air pollution and environmental factors. -To mitigate the effects of climate change and improve the living standards of low-income families, the state

		-Women who lose their homes due to disasters such as floods, storms, and fires face serious risks in terms of safety, hygiene, and privacy in temporary shelters. -The lack of representation of women in disaster management and climate policies results in their needs not being adequately considered and appropriate support mechanisms not being developed. -Due to the additional burdens created by the climate crisis, girls and young women's access to education is becoming more difficult, deepening long-term social inequalities.	should establish climate-resilient aid programs and social support mechanisms. -To ensure the effective participation of women in climate change and disaster management policy processes, enacting legal regulations to increase women's representation in decision-making mechanisms and organizing leadership and capacity-building training. -Developing scholarship programs and support services to enable girls and young women to continue their education; also, expanding social services that will reduce the additional care burden brought about by the climate crisis. -Increasing the number of enclosed social spaces equipped with climate-friendly designs that protect against air pollution to safeguard women's health and adapt to climate change.

Persons under temporary protection	Environmental pressures caused by climate change, such as the rapid depletion of water resources, declining agricultural productivity, and increasing extreme temperatures, are further aggravating the living conditions of persons under temporary protection and seriously limiting their access to basic needs. -Extreme weather events and environmental degradation linked to climate change increase the risk of displacement among persons under temporary protection and host communities; this leads to the loss of living spaces through both temporary and permanent displacement, social integration problems, and difficulties in meeting humanitarian needs.	-Environmental crises caused by climate change negatively affect the livelihoods of persons under temporary protection, increasing unemployment and loss of income. -Inappropriate construction and increased environmental risks, contrary to planning decisions, limit the availability of affordable and safe housing, forcing persons under temporary protection to stay in unsafe and unhealthy places. -The rapid depletion of water resources caused by climate change severely restricts access to hygiene and clean drinking water for persons under temporary protection, making their living conditions difficult. -The decline in food production and the deterioration of agricultural conditions due to the effects of climate change make it difficult for persons under temporary	-Providing support such as hygiene kits to enable persons under temporary protection to meet their basic hygiene needs, particularly improving the quality of life in areas with limited water resources. -Organizing clean water lines and increasing accessibility to reduce the difficulties faced by persons under temporary protection in accessing water, improving health and hygiene conditions. -Collecting rainwater and utilizing it in various areas such as agriculture and drinking water to counter the increasing water resource shortages caused by climate change. -Increasing socio-economic support packages for persons under temporary protection facing the economic impacts of climate change to enable them to maintain their living standards. -Organizing awareness campaigns and training sessions for persons under temporary protection on the effects of climate change. -Supporting individual food production to enable persons under temporary protection to meet their own food needs .

		protection to access reliable food and cause them to face major obstacles in terms of healthy nutrition. -The lack of green spaces and rising temperatures in the areas where persons under temporary protection live further complicate their living conditions.	-Creating opportunities for participation and empowerment for women under temporary protection against increasing gender inequality due to climate change. -Carrying out afforestation activities in streets and neighborhoods in order to improve environmental conditions in areas where persons under temporary protection live, reducing the heat island effect.
Children	The climate crisis, environmental pollution, and damaged ecosystems threaten children's rights to healthy growth and development, while also putting their physical, psychological, and economic security at risk. This situation weakens children's connection to their natural environment and jeopardizes the sustainability of their education and living spaces. —---------- The climate crisis, environmental pollution, and damaged ecosystems threaten children's rights to healthy growth and development, while also	-Increasing environmental pollution threatens children's right to grow up and play in a healthy environment. -The degradation of marine ecosystems reduces children's opportunities to connect with nature and develop environmental awareness. -The decline in marine life and the impact on livelihoods expose children to the indirect risk of economic deprivation and food insecurity. -The decline in biodiversity limits children's	- Increasing afforestation activities to enhance children's opportunities to connect with nature. -To protect children's health and create climate-resilient living spaces, playgrounds should be built in areas free from environmental risks and with safe materials that do not contain harmful substances. Supporting local ecosystems to protect biodiversity, enabling children to spend more time in nature. -Protecting marine ecosystems and increasing their resilience to the effects of acidification. -Strengthening local government oversight to protect coastal areas and

	putting their physical, psychological, and economic security at risk. This situation weakens children's connection to their natural environment and jeopardizes the sustainability of their education and living spaces. On the other hand, children's insufficient participation in decision-making processes related to the climate crisis reduces the visibility of the problems they face, deepens these problems, and makes it difficult to develop effective solutions.	opportunities for nature education and gaining ecological awareness. -An increase in forest fires hinders children's access to clean air and natural areas, increasing psychosocial stress and anxiety. -Environmental degradation such as erosion and desertification threatens the sustainability of children's future living spaces and puts their life safety at risk. -The intensification of solar radiation is causing health problems for children during outdoor activities. -Harmful gases and particles released into the atmosphere as a result of industrial activities and human-induced effects make children more susceptible to respiratory diseases. The social and environmental impacts of the climate crisis increase anxiety levels in children, reinforce	ensure children spend time in safe marine environments. -Protecting endemic species and ensuring the preservation of natural areas where children can receive environmental education. -Increasing pedestrian and bicycle paths around schools, enabling children to move around in a safe and clean air environment. -Establishing rainwater harvesting systems in schools to ensure children have uninterrupted access to clean water against the risk of drought. -Increasing green spaces around schools to combat air pollution, ensuring children breathe clean air. -Organizing training to strengthen children's environmental awareness. -Disseminating educational materials and digital platforms to increase children's environmental responsibility. -Establishing participation mechanisms or strengthening existing mechanisms to enable children to have a more resilient present and future.

		feelings of uncertainty about the future, and threaten their psychosocial well-being. -Natural disasters such as floods, storms, and landslides, which are increasing due to the climate crisis, directly threaten children's safety. -The failure to adequately establish children's right to participate in decision-making processes related to the climate crisis prevents their voices from being heard and their needs from being met. -Solutions to the climate crisis are not sufficiently fair and inclusive for children. -The climate crisis threatens children's right to uninterrupted and safe access to education through environmental risks.	-+

People with Disabilities	In Konak, natural disasters triggered by climate change and inadequate infrastructure seriously hinder the access of persons with disabilities to basic services and their safe evacuation. Rising temperatures and transportation systems that are unable to adapt to the climate deepen the social isolation of persons with disabilities, negatively affecting their quality of life.	-The risk of persons with disabilities being unable to access their basic needs during a disaster, and the difficulty of safely evacuating persons with disabilities due to deficiencies in access and transportation infrastructure. -The impact of natural disasters, which are increasing due to climate change, on people with disabilities is exacerbated during crises due to inadequate infrastructure in their living areas. -People with disabilities, especially older individuals and those with limited mobility, are more affected by extreme temperatures and heat island effects. -Transportation systems in cities failing to adapt to climate change, leading to greater isolation for people with disabilities. -The reduction in social spaces accessible to people	-Rapidly informing individuals with disabilities by establishing emergency communication and radio lines. -Local authorities communicating with each other to exchange information about people with disabilities during disasters. -Creating shaded, cool areas for people with disabilities and providing accessible air conditioning systems. -Providing flood-resistant, waterproof, and easily accessible sheltered areas with effective drainage systems to protect people with disabilities from heavy rainfall. -Making public transportation accessible and providing special transportation services for people with disabilities. -Increasing accessible green spaces and nature-friendly areas, designing suitable social spaces for people with disabilities. -Establishing transportation and housing infrastructure designed according to the needs of individuals with disabilities and resilient to climate change.

		with disabilities and the increased difficulty of interacting with nature.	

3. Collaboration with the Private Sector and Stakeholders

Konak district, as the economic and commercial center of Izmir, has a dynamic structure where a wide variety of sectors operate. This region, where trade, services, and tourism sectors are concentrated, plays critical roles in climate change adaptation processes. Building resilience against the environmental, social, and economic transformations brought about by climate change requires these sectors to act with a sustainability mindset. The private sector's development of climate adaptation-focused strategies will both ensure the sustainability of the local economy and support the community's adaptation to changing environmental conditions. The active participation of the private sector in this process will minimize long-term risks for the business world and increase social welfare throughout the city.

Although the agriculture and livestock sectors are limited in the Konak district, the private sector plays an important role in food production and the supply chain. To minimize the potential effects of climate change on food security, the private sector should invest in technologies that increase water efficiency and adopt sustainable production and logistics processes. Furthermore, it can make the region's food supply chain more resilient by developing innovative business models for the supply of climate-resilient agricultural products. Due to its urban structure, Konak district is of particular importance in terms of protecting ecosystems and supporting biodiversity. Intensive urbanization leads to a reduction in natural areas and further exacerbates the effects of climate change. In this context, it is necessary to increase green areas, encourage urban agriculture practices, and develop nature-based solutions. The private sector can play an important role in this process by investing in green roof systems, carbon sinks, and sustainable landscape designs.

Urbanization and industry present both opportunities and challenges in the process of adapting to climate change. Prioritizing climate-resilient, socially equitable, and nature-based solutions in the urban transformation practices of the Konak district, promoting energy-efficient building designs, and more effectively utilizing renewable energy sources in industrial facilities will create a climate-friendly city model. Adopting circular economy principles in the industrial sector, increasing recycling rates, and transitioning to low-carbon production techniques will both ensure environmental sustainability and increase economic competitiveness. In this process, the private sector should develop innovative technologies to encourage low-carbon production in industry and make long-term plans for sustainable growth.

The private sector is also positioned as a critical actor in integrating disadvantaged groups in the city into the climate adaptation process. Investing in more accessible and resilient infrastructure solutions for low-income groups, the elderly, and people with disabilities, who

are most affected by climate change, will increase social sustainability. By developing labor force policies in line with the climate change adaptation process, the private sector can create green job opportunities and develop support programs for those most affected by this transformation. For example, it can provide financial incentives for energy-efficient appliances to facilitate access to energy efficiency applications for low-income groups or create climate-friendly employment programs.

The transportation and communication sectors are undergoing a significant transformation process in the fight against climate change. In a densely populated district such as Konak, promoting low-emission transportation alternatives, improving public transportation systems, and expanding smart city applications will help reduce carbon emissions within the city. In particular, increasing bicycle lanes, encouraging the use of electric vehicles, and adopting sustainable transportation policies will accelerate climate adaptation processes.

Tourism and cultural heritage are among Konak's most important economic and social assets. However, climate change is placing serious pressures on this sector. Rising temperatures, increased erosion risks in coastal areas, and rising sea levels threaten tourism infrastructure and historical heritage sites. The adoption of sustainable tourism policies, the promotion of environmentally conscious business models, and the implementation of projects aimed at protecting natural heritage are among the main measures that can be taken against these threats. By supporting ecotourism and sustainable tourism practices, the private sector can both ensure sustainable economic development and preserve cultural heritage.

Social development and public health constitute the social dimension of the climate adaptation process. Extreme weather events, air pollution, and the depletion of water resources caused by climate change affect the most vulnerable segments of society more severely. Developing strategies to combat climate-related diseases, strengthening social solidarity networks, and encouraging climate-sensitive lifestyles are crucial for protecting public health. The private sector can develop innovative solutions for the health sector and contribute to the creation of climate-sensitive health infrastructure.

Climate adaptation projects carried out in Konak district in collaboration with the private sector and stakeholders will not only ensure environmental sustainability but also increase economic and social resilience. Joint action by the public sector, private sector, and civil society organizations will enable the development of innovative and comprehensive solutions. In this process, the adoption of climate-friendly technologies, the strengthening of sectoral collaborations, and the implementation of long-term adaptation policies will prepare Konak for the future as a climate-resilient city.

The findings obtained from the private sector workshop conducted within the scope of the project have been converted into a table containing the risks faced by each sector and the proposed solutions to these risks. The table below provides a concrete presentation of these findings and proposed solutions, while serving as a guiding resource for future strategic steps.

Group	Local Issues and Risks	Solution Recommendations
Transportation and Communication	**Transportation:** - Inadequacy and irregularity of public transportation routes. - Increased carbon emissions due to traffic congestion. - Insufficient public transportation during peak hours. - Lack of bicycle lanes and their use being tourism-oriented. - Inadequate infrastructure during heavy rainfall, risk of flooding and road closures. - Melting of asphalt in extreme heat and re-asphalting works that increase carbon emissions. - Lack of oversight regarding the use of disaster assembly areas for purposes other than those specified in zoning plans. - Communication infrastructure failure during disasters. - Inadequate electrical infrastructure and low energy efficiency. - Incorrect watering and water waste in refuges. - Lack of green spaces and shaded areas within the city. - Infrastructure deficiencies in rainwater management. **Disaster Management:** inadequacy.	**Transportation and Infrastructure Solutions:** - Increasing public transportation routes and implementing differentiated pricing policies, especially during peak hours . - Widespread use of electric buses and promotion of green transportation systems. - Converting bus stops into green shaded areas and planning sustainable maintenance processes. - Expanding bicycle lanes, encouraging bicycle use, and creating secure bicycle parking areas. **Green Space and Natural Resource Use:** - Widespread use of smart irrigation systems and regular maintenance. - Use of permeable surface materials on pedestrian paths, parking lots, and green infrastructure systems. - Launching a green space campaign for every building by the municipality. **Disaster Management** - Increasing the number of disaster assembly areas and ensuring they are not used for purposes other than disasters. - Strengthening telecommunications infrastructure and adapting

		it to disaster situations. - Establishment of climate simulation and disaster awareness centers. - Organizing awareness campaigns (billboards, public service announcements, social media) to raise public awareness about climate change ( ). - Simplifying the terminology used in awareness campaigns and presenting it in a language that the public can understand. - Encouraging competitions between universities for climate change and climate adaptation projects.
Livestock, Fisheries, Agriculture, Biodiversity, and Ecosystems **Tourism, Cultural Heritage, and Industry**	The increase in sea water temperatures in the Gulf of Izmir is causing fish deaths and foul odors, negatively affecting the tourism sector. -Frequent flooding in the Konak region due to excessive rainfall. -Concreting of streams in Izmir reduces water circulation and damages the ecosystem -Problems in sharing responsibility among institutions, resulting in delays in finding solutions -Lack of public awareness on environmental issues. -Low awareness of environmental cleanliness and lack of incentives for recycling	Detailed measurement studies to identify water warming and pollution problems in the Gulf - Municipalities and universities should collaborate to ensure regular cleaning of the bay -Establishing technical teams and strengthening infrastructure for better management of rainwater -Preserving the natural structure of streams and avoiding concreting - Clarifying the sharing of responsibilities among institutions and initiating solution-oriented work - Raising public environmental awareness through regular information

		sharing - Cultivating environmentally conscious individuals by organizing award-winning cleanliness competitions -Collaborating with the private sector to increase recycling rates and making climate adaptation certification mandatory
Tourism, Cultural Heritage, and Industry	-The negative impact of Gulf pollution on tourism -Risk of ancient cities being submerged -Damage to cultural heritage due to rising temperatures and climate change -Effects such as material deterioration and oxidation observed in cultural heritage sites -Lack of data and insufficient risk assessment studies in cultural heritage areas -Seasonal changes negatively affecting tourist activities and concept tourism -Air and environmental pollution caused by industry (smoke emissions, use of non-ecological materials) -Environmental impacts of	-Digitization of waste separation systems in hotels and monitoring them with cloud technology -Digitization of cultural heritage sites and their protection through augmented reality (AR) applications -Making cultural heritage sites 360-degree navigable to ensure the sustainability of tourism in the digital environment -Developing digital waste management applications and apps specific to the tourism sector -Implementing incentive policies to relocate industrial activities away from social living areas -Creating new industrial zones and planning licensing processes in a

	exhaust emissions and their negative effects on public health -Lack of control over chemical substances and service materials used in the tourism sector -Inadequacy of recycling systems and waste management in the tourism sector ( ) -Environmental pollution caused by the intermingling of social and production areas -Environmental impacts of unplanned construction in areas with high irregular migration -Infrastructure and superstructure inadequacies reducing resilience to the climate crisis	climate-friendly manner -Increasing environmental monitoring after industrial areas are relocated and protecting social benefits -Tracking recycling processes with mobile applications and spreading them to other sectors -Conducting risk analyses of cultural heritage sites and addressing data gaps -Increasing projects aimed at protecting cultural heritage through local and international collaborations -Promoting concept tourism by localizing remote tourism opportunities -Developing tourism programs sensitive to seasonal changes
Urban Development, Public Health, and Social Development:	-Frequent flooding and overflowing due to increased rainfall. -Infrastructure deficiencies in the Kemeraltı and Konak districts triggering floods. -Flood events reaching levels that could cause loss of life. -Gulf pollution negatively affecting coastal areas and	-Improving infrastructure against flood and runoff risks. -Strengthening rainwater drainage systems. -Implementing comprehensive urban planning that addresses climate risks. -Using permeable surface materials instead of asphalt.

	businesses. -Damage to the regional economy due to the pollution of coastal areas. -Heat waves affecting public health, posing a health risk, especially for individuals with chronic illnesses. -Irregular urban development hindering urban transformation. -Unplanned construction violating planning decisions creating negative impacts on disadvantaged groups. -Lack of coordination between the public and private sectors. -Local governments' inability to develop adequate projections against climate-related risks. -Failure to develop adequate projections.	-Increasing green spaces and carbon sinks. -Requiring tree planting for new buildings. -Identifying vulnerable groups and taking special measures. -Raising public awareness about climate-related risks. -Preparing local climate scenarios. -Directing municipal resources to climate adaptation projects. -Creating and making emergency plans inclusive.

4. STRATEGIES AND ACTION PLANS

1. Urban Resilience and Resilient Cities

Strategy	Action	Responsible Institutions	Duration

Increasing climate-friendly public spaces	Developing neighborhood-based green space projects to create climate-friendly parks, shaded rest areas, and carbon sink points	Konak Municipality, Private Sector	2025-2030
Infrastructure reinforcement works against floods and storms	Establishing rainwater management systems to recover water, increase permeable surfaces, and make infrastructure more resilient	Konak Municipality, NGOs	2025-2030
Accessible and resilient urban transportation systems	Making all sidewalks accessible, strengthening transportation networks to be resilient against the climate crisis	Konak Municipality	2025-2028
Protecting historical and cultural heritage sites against climate change	Launching climate-focused conservation programs for the restoration of historical structures and strengthening them against natural disasters	Konak Municipality, Cultural Institutions	2025-2030
Supporting the water cycle by protecting the natural structure of streams	Rehabilitation of concreted streams and implementation of ecosystem-based stream management plans	Konak Municipality, NGOs	2025-2030

2. Social Participation, Public Health, and Education

Strategy	**Action**	**Responsible Institutions**	**Duration**
Building climate awareness among children	Developing and disseminating comprehensive climate change education programs in schools	Ministry of National Education, Konak Municipality, Social Climate Association	2025-2030
Enhancing women's climate resilience	Supporting and promoting climate-sensitive production models through women's cooperatives	Konak Municipality, NGOs	2025-2028
Climate resilience programs for people with disabilities	Preparing accessible disaster management plans, establishing post-disaster support mechanisms	Konak Municipality, Social Climate Association	2025-2030

Raising awareness of climate health	Conducting awareness campaigns on health risks caused by air pollution, extreme rainfall and temperatures, heat waves, and other climate change factors	Konak Municipality, Health Institutions	2025-2028
Increasing environmental awareness in the private sector	Recycling awareness and environmental awareness campaigns, award-winning cleanliness competitions, and public information events	Konak Municipality, Private Sector Representatives, Social Climate Association	2025-2028

3. Water Management

Strategy	**Action**	**Responsible Institutions**	**Duration**
Rainwater harvesting and reuse	Promoting rainwater harvesting systems in residential and commercial buildings and implementing projects for reuse	Konak Municipality, Private Sector	2025-2030
Adapting the urban water drainage infrastructure to climate change	Strengthening existing rainwater drainage lines and constructing new ones.	Konak Municipality, IZSU	2025-2030
Protection of underground water resources	Increasing inspections against illegal water use and pollution, preparing sustainable water management plans	Konak Municipality, Ministry of Environment, Urbanization and Climate Change	2025-2028
Reducing water losses	Implementation of infrastructure improvement projects aimed at reducing loss and illegal use rates in water networks	Konak Municipality, IZSU	2025-2030
Climate-friendly irrigation methods	Promoting efficient methods such as drip irrigation and sprinkler irrigation in agricultural irrigation	Konak Municipality, Ministry of Agriculture and Forestry	2025-2028
Monitoring of Gulf pollution and water	Monitoring of Gulf pollution and water temperature changes	Konak Municipality, Izmir	2025-2030

temperature changes		Metropolitan Municipality, Ministry of Environment, Urbanization, and Climate Change	

4. Agriculture and Food Security

Strategy	**Action**	**Responsible Institutions**	**Duration**
Promoting urban agriculture and community gardens	Supporting food security and increasing local production through urban agriculture projects	Konak Municipality, NGOs	2025-2030
Protecting agricultural areas from climate impacts	Developing agricultural infrastructure planning and supportive climate adaptation practices to reduce flood and runoff risks	Konak Municipality, Ministry of Environment, Urbanization and Climate Change	2025-2030
Strengthening local food markets	Supporting small-scale farmers through cooperatives and encouraging sustainable production	Konak Municipality, Agricultural Cooperatives	2025-2030
Reducing food waste to combat food scarcity	Reassessing food waste through inter-municipal cooperation,	Konak Municipality, Private Sector	2025-2028
Promoting drought-resistant agricultural techniques	Providing training to local producers on methods to combat drought	Konak Municipality	2025-2030

5. Biodiversity and Nature Conservation

Strategy	**Action**	**Responsible Institutions**	**Duration**

Increasing urban biodiversity	Creating ecological corridors for the protection and propagation of local plant species -Improving rainwater management and reducing the heat island effect by using permeable surface materials on transportation routes	Konak Municipality, NGOs, Social Climate Association	2025-2030
Protection of natural habitats	Increasing urban green spaces and preventing the development of existing natural areas -Introducing a green space requirement for new developments and launching a "green space campaign" with a minimum green space target for each building -Promoting natural surface applications instead of concrete infrastructure; encouraging urban ecological corridors	Konak Municipality	2025-2028
Supporting ecosystem-based adaptation projects	Implementing scientific research and projects to help local ecosystems adapt to climate change	Konak Municipality, Universities, Social Climate Association	2025-2030
Climate-sensitive landscape planning	Promoting the use of climate-resilient plants and spreading sustainable landscape practices	Konak Municipality	2025-2028
Protection of ecosystems and ensuring the continuation of underwater biodiversity	Cleaning activities and measurement studies aimed at reducing Gulf pollution; protection of natural habitats	Konak Municipality, Ministry of Environment, Urbanization, and Climate Change	2025-2028

6. Protection of Cultural Heritage

Strategy	Action	Responsible Institutions	Duration
Enhancing the durability of historical structures	Developing sustainable restoration practices in cultural heritage areas	Konak Municipality, Ministry of Culture	2025-2030
Climate change-adaptive conservation methods	Promoting the use of climate-resistant materials for historical structures Analysis of risk situations in cultural heritage areas and addressing data gaps	Konak Municipality	2025-2028
Green space applications in cultural heritage areas	Promoting sustainable green space projects in historic areas Strengthening cultural areas against environmental impacts to combat pollution in the Gulf and surrounding areas	Konak Municipality	2025-2030
Increasing accessible and sustainable digital experiences in cultural heritage areas	Making cultural heritage sites in Konak and its surroundings accessible in a 360-degree digital tour format Digitizing cultural heritage elements and promoting them using augmented reality (AR) technologies	Konak Municipality, Ministry of Culture and Tourism	2025-2030
Enhancing the tourism sector's capacity to adapt to climate change	Preparing climate-sensitive concept tourism programs and integrating them into the sector Localizing and expanding remote tourism opportunities	Konak Municipality, Ministry of Culture and Tourism	2025-2030
Raising social awareness	Creating programs to raise public awareness for the preservation of cultural heritage	Konak Municipality, NGOs	2025-2028

7. Local Government Collaborations

Strategy	Action	Responsible Institutions	Duration
Development of regional partnerships	Implementation of joint climate adaptation projects with neighboring municipalities	Konak Municipality, Izmir Metropolitan Municipality	2025-2030

Participation in international climate resilience networks	Collaboration with cities that ensure climate adaptation on a global scale	Konak Municipality	2025-2030
Developing joint projects with civil society	Collaborating with NGOs on climate-friendly projects	Konak Municipality, NGOs	2025-2028
Strengthening private sector partnerships	Promoting sustainable urban development projects that adapt to climate change	Konak Municipality, Private Sector	2025-2030
Strengthening inter-institutional coordination	Clarifying responsibility sharing, increasing municipality-university-private sector collaborations	Konak Municipality, NGOs	2025-2028

8. Preparedness for Natural Disasters

Strategy	**Action**	**Responsible Institutions**	**Duration**
Strengthening disaster risk management systems	Expanding disaster early warning systems	Konak Municipality, AFAD	2025-2030
Community-based disaster awareness programs	Organizing neighborhood-based disaster training and raising public awareness	Konak Municipality, NGOs	2025-2028
Enhancing post-disaster resilience	Developing crisis management strategies and updating emergency response plans	Konak Municipality, AFAD	2025-2030
Resilient infrastructure projects	Urban infrastructure applications resistant to disasters such as earthquakes and floods	Konak Municipality	2025-2030

5. MONITORING, EVALUATION, AND UPDATING

The effective implementation of the Konak Climate Adaptation Strategic Action Plan is not limited to the implementation of strategies and actions; it also requires the systematic monitoring, evaluation, and updating of these applications when necessary. Monitoring and evaluation processes enable measuring the effectiveness of the plan, determining the extent to which the targeted outputs have been achieved, and continuously improving the adaptation process.

In this context, the plan is supported by a comprehensive monitoring and evaluation system that includes **indicators, reporting mechanisms, stakeholder participation, and update processes** to assess the performance of the defined strategies and actions.

5.1 Performance Indicators (KPIs)

Performance Indicator	Description / Target
Urban green space ratio	*10% increase target (between 2025 and 2030)*
Amount of newly created green space	*Measured in total annual m²*
Number of people benefiting from post-disaster support services	*Number of people receiving support after a disaster each year*
Number of people participating in training programs	*Number of individuals benefiting from climate change and adaptation-themed training (broken down by women, children, youth, and persons with disabilities)*
Recycling rate	*Ratio of recyclable waste collected by the municipality to total waste*
Number of climate adaptation projects implemented	*Number of concrete projects implemented under the plan*
Urban infrastructure improvement rate	*Length of improved rainwater drainage system (meters/km)*
Number of reforested areas	*Amount of newly afforested area (m²/hectare)*
Number of awareness campaigns	*Number of annual awareness campaigns*

5.2 Monitoring Method and Update Mechanism: (Target 2030)

A multi-layered monitoring and update system has been adopted to ensure that the plan's implementation process proceeds in a transparent and participatory manner. This mechanism includes the following steps:

- **Annual Monitoring Reports:** Each year, the actions carried out under the plan and the outputs of these actions will be systematically reported and shared with the public by the relevant units. Reports will be evaluated based on performance indicators, and progress will be analyzed.
- **Evaluation Meetings with Stakeholder Participation:** The monitoring process will not be merely a technical evaluation; it will be continuously developed through **monitoring workshops and evaluation meetings** with the participation of representatives from public institutions, the private sector, NGOs, and disadvantaged groups.

- **Feedback Mechanism:** The experience, needs, and difficulties encountered during the implementation of the action plan will be regularly collected and integrated into the evaluation processes through the feedback system.
- **Policy and Action Updates:** Based on the outputs obtained in the monitoring and evaluation processes, strategies and actions **will be updated as necessary**, and the plan will be strengthened with new applications. In particular, in the event of increased climate change impacts, the adaptation plan will be flexibly revised in line with local climate scenarios.
- **Mid-Term Review Towards the 2030 Target:** Until 2030, the final target year of the plan, **mid-term review reports** will be prepared **every two years** to review the direction of the plan and make updates in line with new priorities.
- **Digital Monitoring Systems:** Monitoring tools integrated with the municipality's digital infrastructure (e.g., online dashboard, mobile application, etc.) will be developed to track the plan's progress in a transparent and accessible manner.
- **Implementation and Impact Monitoring:** Both the level of implementation of the plan and its social and environmental impacts will be monitored, and the development process of climate adaptation capacity will be continuously monitored.

6. CONCLUSION

The Konak Climate Adaptation Strategic Action Plan has been prepared to increase environmental, social, and economic resilience against the climate crisis. The plan offers a comprehensive approach, ranging from reducing flood and flood risks to green infrastructure applications, from protecting cultural heritage to sustainable production systems.

The strategy and actions aim to strengthen local adaptation capacity to climate change and are planned to be implemented with the active participation of all stakeholders. Protecting disadvantaged groups, nature-based solutions, and participatory approaches have been adopted as fundamental principles in the planning process. In this context, integrating the private sector into climate adaptation processes, increasing implementation capacity, and promoting sustainable business models are considered important.

The success of the plan depends not only on the existence of strategies and actions but also on effective implementation, evaluation, and updating processes. In this regard, performance indicators and regular monitoring systems are of critical importance.

In line with Konak Municipality's vision of creating a sustainable, resilient, and equitable urban structure, this plan aims to achieve the 2030 targets through a participatory and holistic approach.

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