



Karşıyaka Municipality

Sustainable Energy and Climate Action Plan

2021

2022 PROGRESS REPORT

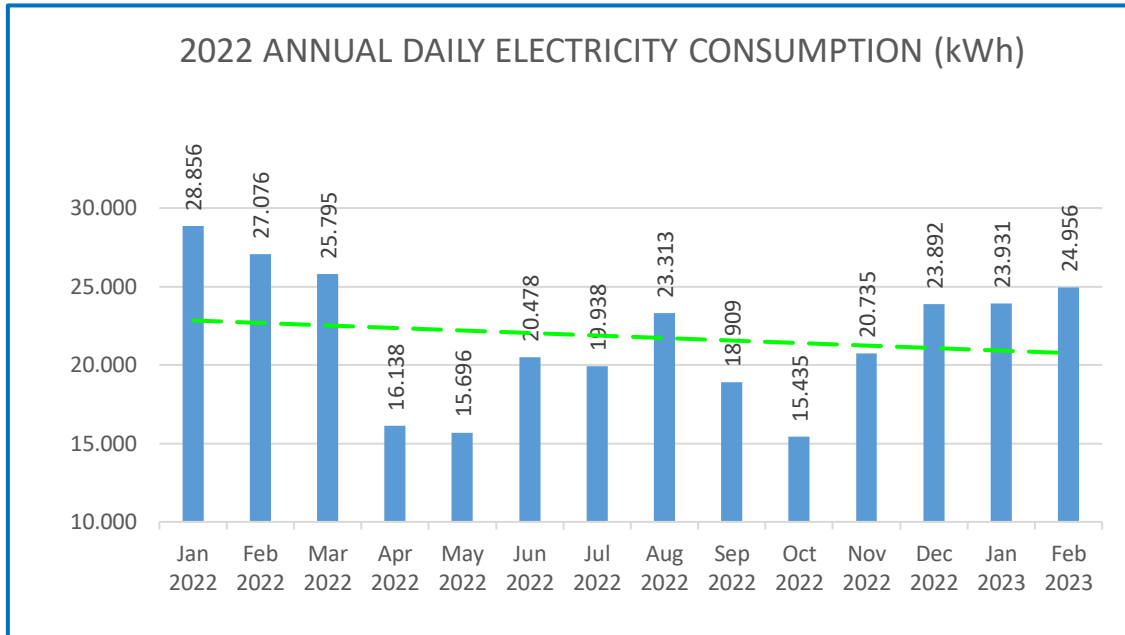
KARSIYAKA MUNICIPALITY
SUSTAINABLE ENERGY AND CLIMATE ACTION PLAN
2022 PROGRESS REPORT

At the end of 2021, we published our Sustainable Energy and Climate Action Plan and set our 2030 targets. We established our Climate Change directorate in January 2022 and started working in line with these targets. We started activities in 29 of the 32 actions determined.

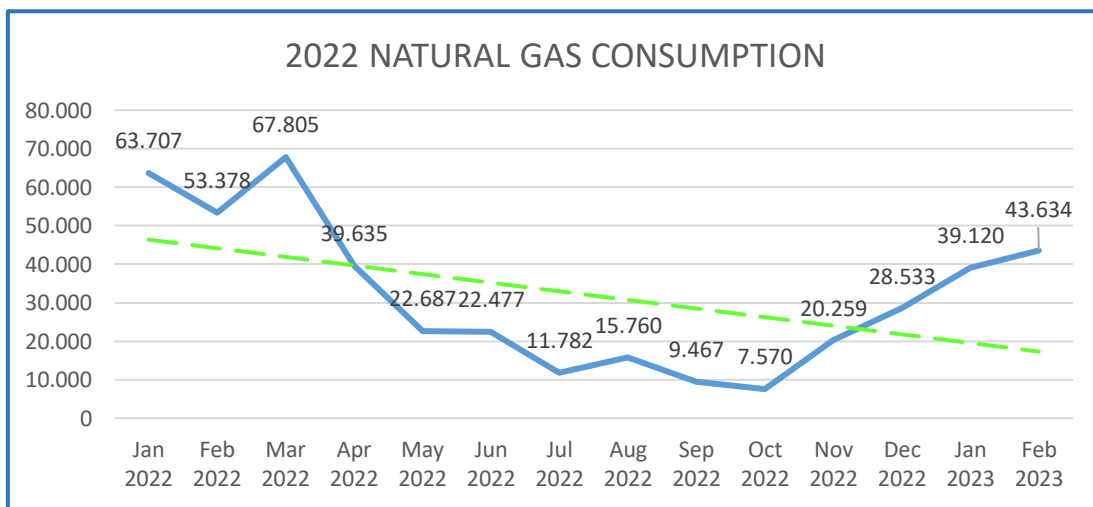
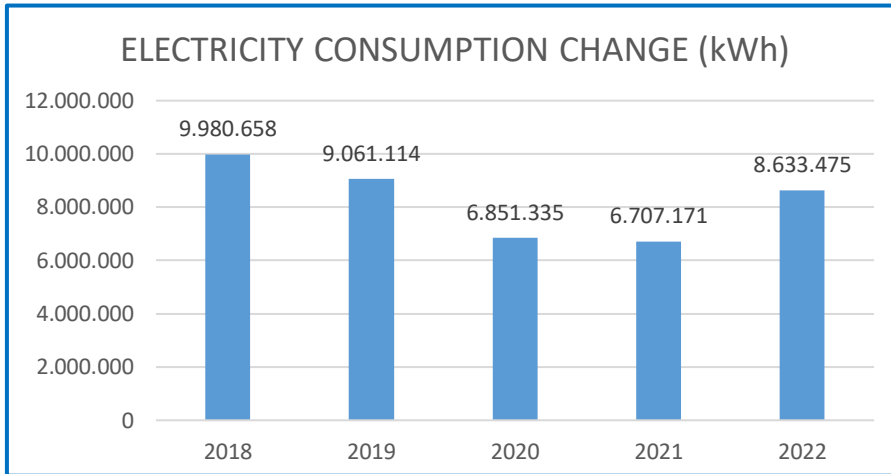
B1 – Conducting and Implementing Energy Efficiency Studies in Municipal Buildings

Electricity and natural gas subscribers of all units of our municipality started to be monitored from a single platform. Preliminary energy studies of the 5 buildings with the highest consumption, detailed energy efficiency studies of the Municipality Main Service Building and Mustafa Kemal Atatürk Sports Hall were made and a report containing investment recommendations was prepared.

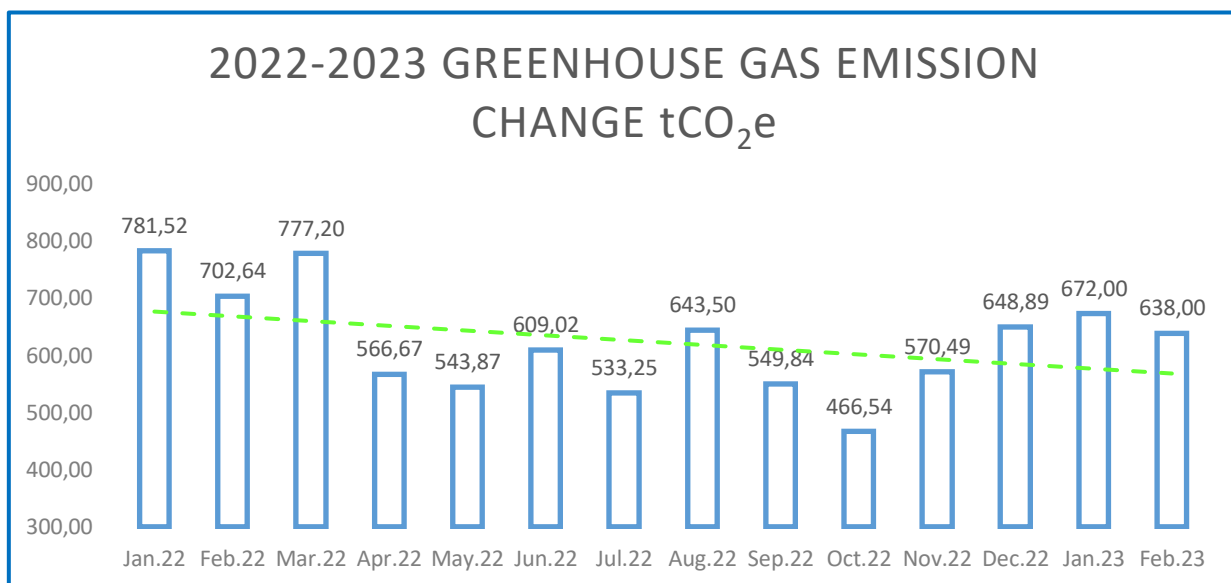
Throughout the year, trainings were given on the acquisition of efficient usage habits related to in-house consumption. The increase in efficiency in usage habits led to a decrease in the daily electrical energy used during the year.



We cannot compare 2020 and 2021 due to the pandemic. However, less electrical energy was consumed in 2022 compared to 2018 and 2019.



The monitoring platform also calculates our corporate greenhouse gas emissions. There is also a decreasing trend in our greenhouse gas emissions.



B2 – Increasing the Detail Level of Geographic Information System for Building Inventory

The transition to the digital archive system was achieved in 2022 and played an important role in the creation of our building inventory. The BELNET System, which contains the map and data of our District, which is maintained by the IT Directorate, provides access to information such as the license date of the buildings, the energy source used, the heating types, the properties and technology of the building elements used in the manufacture for all buildings.

B3 – Developing Near Zero Energy Policy and Strategy for New Town Halls

In our Municipality's Alzheimer's Counseling and Solidarity House with a 460 m² living area, which was completed and started to serve in 2022, 5 cm XPS thermal insulation boards were used on the walls. The heat losses of the building are reduced by making heat and water insulation on the foundation and on the terrace. The windows in the building are 6+16+6 cm thick, with tempered heat and solar control coating. Aluminum joinery used on the exterior is heat insulated joinery. Energy saving LED lighting is used in the building. Water-saving taps and toilet system are used. By providing fresh air to the air conditioners, heat and energy savings are achieved. This building has a Class B energy performance certificate.

Ensuring energy efficiency in new corporate buildings is taken as a basis.

B4 – Identification of Reference Buildings and Implementation of Energy Efficiency Improvement steps to take Energy Inventory of the District

B5 – Recommending and Promoting Thermal Insulation in Existing Residences

B6 – Recommending and Promoting the Use of Energy Efficient Lighting Devices in Existing Residences

B7 – Insulation of Commercial and Other Institutional Buildings

B8 – Use of Energy Efficient Lighting Devices in Commercial and Other Institutional Buildings

E2 – Ensuring the Expansion of Solar Energy Facilities

E5 – Encouraging and Facilitating the Transition of Coal Consumers to More Renewable and/or Clean Energy Sources

Below are the activities covering the above actions.

An energy efficiency panel was built in existing buildings. Bursa Municipality, Professional Chambers of TMMOB(Union of Chambers of Turkish Engineers and Architects) and Green Finance expert under the main heading of energy efficiency in buildings, thermal insulation and energy efficient buildings, domestic electrical devices and smart homes, sustainable built environment approach, energy efficiency practices in public buildings, access to green finance, in buildings. In this panel, suggestions and information were presented to the participants on the importance of thermal insulation and the reduction in carbon emissions of the building, as well as its economic benefits to investors.

A Green Building, Green Site and Green Business Guide was prepared under the coordination of the Climate Change and Zero Waste Directorate and to encourage our citizens. Under the title of ENERGY USE AND PERFORMANCE for all existing and new buildings, incentive supports have been issued for the improvements to be made regarding the subjects such as Transition to Low and Zero Emission Energy Sources, Energy Performance Certificate (EKB), Thermal Insulation and Sheathing, Use of Renewable Energy Resources, Energy Efficient Lighting Fixtures, Energy Efficient Elevators, Energy Efficient White Goods and Heating Appliances and Recording of Energy Use.

Climate and Environment Volunteer Training was organized with the participation of the public. Training was provided by expert trainers on the topics of "Environment and Climate Volunteer Awareness, Global Warming and Greenhouse Gases, Global Climate Crisis and Its Effects, Energy Policies and Use of Renewable Energy Resources, Energy Efficiency Principles in Buildings, Energy Saving in Houses" within the scope of the above actions,

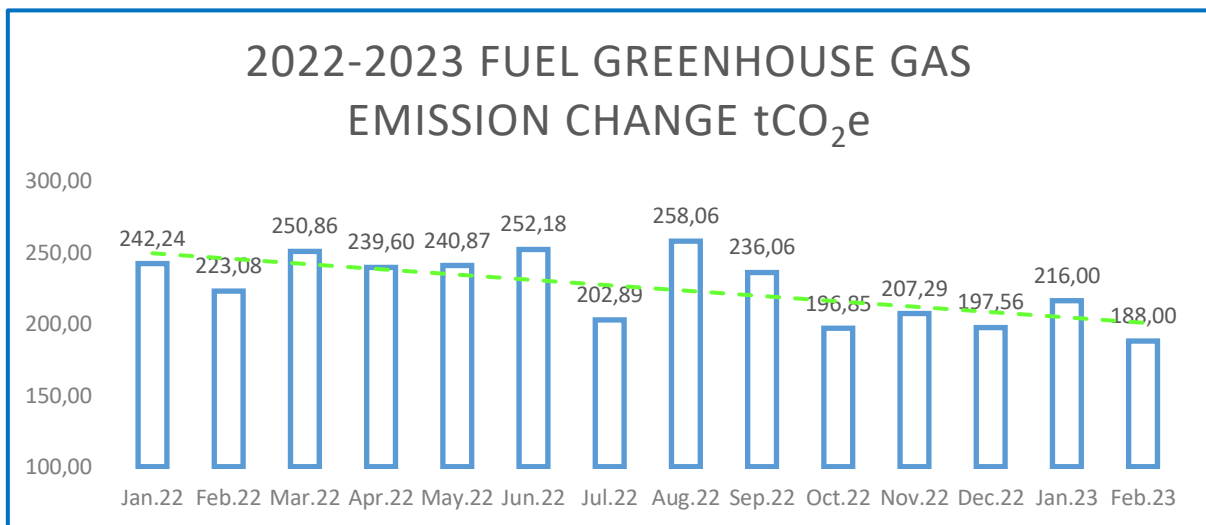
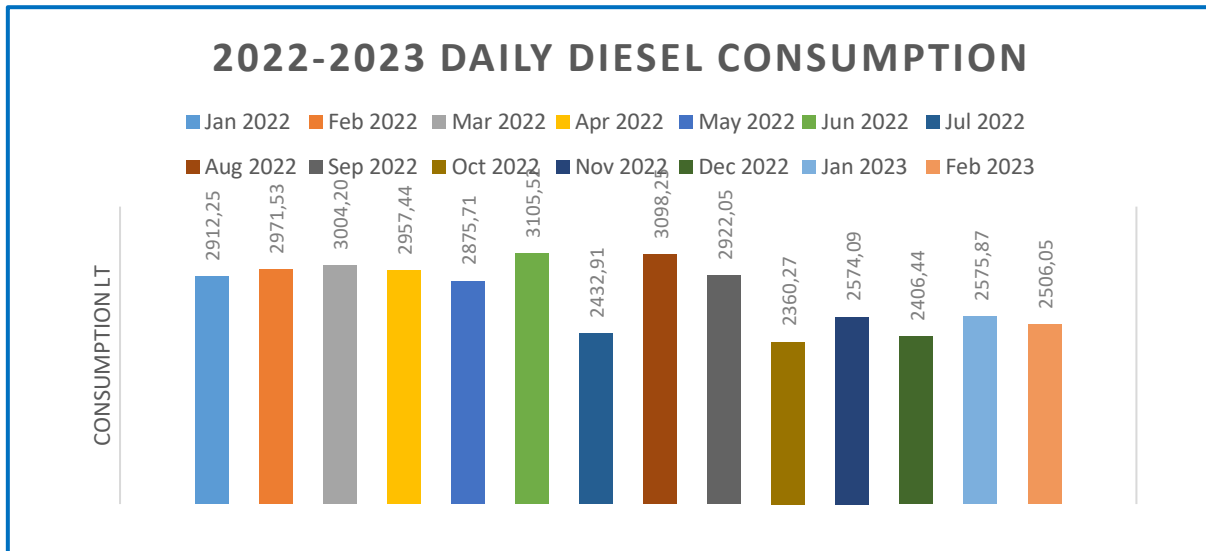
Urban Design Directorate: The automatic characterization of positive energy regions (PED-ACT)- EU project for digital references for iterative process optimization has started, and CELSIUS-Co-creation of energy Efficiency solutions for Long and Short term approaches fostering Inclusion in Urban regeneration Strategies project application and IMPETUS Citizen Science-Disaster resilient public space design Horizon project application has been made within the scope of the above actions,

The purpose of these project calls is to be cities that produce their own energy, to explain the economic and ecological benefits of energy efficiency applications to the public, to support what can be done in the short, medium and long term, and to create energy communities.

A 'Green Page' was created in the Municipality's media organ, Gazete Karşıyaka. The 146th of the newspaper was published and 6 thousand copies were printed every week. The newspaper, which is distributed free of charge, provides information on the effects of the climate crisis and ways to protect it, with news and columns.

U1 – Energy Efficiency in Municipal Vehicle Fleet and Rented Vehicles

In 2022, the fuel consumption of all our service vehicles, including construction machines and generators, the fuel consumed per 100 km, and the greenhouse gas emissions of each vehicle were monitored. Directorates of high consumption vehicles have been informed. A downward trend has been achieved with efficiency studies applied in daily fuel consumption and greenhouse gas emissions.



Support Services Directorate, for low greenhouse gas emissions; It is preferred that the leased vehicles are high-model vehicles with new generation engines. The engine emission rates of the new model vehicles are lower than the old model.

In addition, 2 electric utility vehicles were purchased to be used in short distances in the city.

Cleaning Affairs Directorate:

In the car rental business carried out in 2021-2022, the model year of the leased vehicles is at least 2018, and for the rental vehicles that will be used in 2023-2024, the minimum model year is 2020. Thus, vehicles using euro6 and adblue were rented within the scope of EU Emission Standards. The purpose of this is to reduce the emission of greenhouse gases (nitrogen oxide, carbon monoxide, hydrocarbons) and particulate matter emissions.

1 100% electric road sweeper in 2022 and 1 100% electric road sweeper in 2023 was leased within the scope of the tender and operates on behalf of our municipality. It is aimed to reduce fuel consumption by using electric vehicles. It is aimed to use energy resources efficiently, to reduce the amount of emissions and to create less noise pollution with this method.

In order to position them in social areas and parking lots open to the public, 6 electric charging stations were pre-protocol in 2022. This number, which is the beginning, will increase by evaluating the demands received in 2023.

U2 – More Sustainable Urban Mobility: Public Transport and Local Mobility

Plan Project Directorate: Our application for the Project of Preparation of Urban Research, Analysis, Synthesis and Strategy Zoning in 10 Neighborhoods in Karşıyaka, within the scope of İzmir Development Agency 1st Term Technical Assistance Program for 2022, has been accepted. It is aimed to obtain a sustainable, qualified and creative urban space that is resistant to disasters and climate change in the urban area including Yalı, Atakent, Şemikler, Fikri Altay, Demirköprü, Dedebaşı, Goncalar, Nergiz, Mavişehir and Bostanlı neighborhoods within the scope of the project,. It is aimed to prepare urban research, analysis, synthesis and strategy zoning with a scientific, innovative and participatory methodology, and the project continues.

Traffic circulation plans have started to be prepared in stages within the borders of Karşıyaka district. UKOME(Transportation Coordination Center) decisions were taken in 2 stages of the project, which will be carried out in 15 stages. The applications will be carried out by the Izmir Metropolitan Municipality.

Projects regarding geometric arrangements have been prepared for the expansion of pavement areas in various streets and avenues.

A geometric intersection arrangement was made to solve the congestion problem and provide mobility by connecting Kemal Baysak Boulevard and Ordu Boulevard to Anadolu Avenue,

Directorate of Women and Family Services: Fancy Women's Cycling Tour was organized in order to improve accessibility in the district and to encourage high quality and sustainable mobility and transportation in urban areas. (September 18, 2022)

In order to ensure high quality and sustainable mobility in urban areas, the street is Yours – We Carry Life to the Street event was held on a designated street every week by cutting off the traffic flow. (in total 10 neighborhoods in summer)

(29 June Cumhuriyet Mahallesi, 6 July Ornekköy District, 20 July Alaybey District, 27 July Latife Hanım District, 3 August Şemikler District, 10 August Bostanlı District, 17 August Tuna District, 31 August Mustafa Kemal District, 14 September Yalı District, 22 September İnönü District)

Urban Design Directorate: As part of this goal, the Street for Kids Leadership Accelerator Program application, "Move in Safe Together!" Fund Project application has been made; Walkability index study, Child Friendly and Playable Karşıyaka Project, Explore Your City Project - Bostanlı Mahallesi and Cittaslow Metropol Project (Demirköprü neighborhood) in partnership with IMM have been completed; Open public spaces Disaster Resilience Master Plan studies have started.

Sports Affairs Directorate: Our “Turn Your Old Bike For Good” project was launched in June 2021. In the process that starts with our citizens delivering their unused old bicycles to us, we are renewed and delivered to the children of families in need. As of March 2023, a total of 130 bicycles have been repaired, and a total of 117 of them have been distributed to the children of earthquake-affected families who settled in the regions of Disaster Houses, Zübeyde Hanım Mahallesi, Alaybey Mahallesi, İnönü Mahallesi and finally our city. 141 women who did not know how to ride were given bicycle riding training with the Bicycle Ambassador Association,

The walking track built in 2022 is 2423,75 m2..

No	PARK NAME	NEIGHBORHOOD	REVISED FUNCTION	MEASUREMENTS
1	6718 Street Forestation Area	İNÖNÜ	Walking Track	225 m length x 2,00 m width = 450 m ²
2	6753/2 Street Walking Track	Mustafa Kemal	Walking Track	500 m length x 2,00 m width = 1.000 m ²
3	Semra Aksu Park Walking Track	Mavişehir	Walking Track	475 m length x 2,05 m width = 973,75 m ²
			Total Walking Track Amount	2423,75 m ²

E1 – Expanding the Use of Solar Energy in Municipal Assets and Lands such as Municipal Buildings, Marketplaces

In 2022, 1.720.480.56 KWh of electrical energy was produced in our 2 photovoltaic solar power plants with 1.63 MWp power. 22.7% of our corporate electrical energy consumption was met and 860.2 tons of CO2 equivalent greenhouse gas emissions were reduced.

In 2022, Gediz Elektrik A.Ş. Call Letters and Connection Permit applications were made for 5 Roof Type SPP applications to be placed on our service buildings in Turkey. 3 Roof type SPP applications were accepted. Our power plants, which currently have a power of 1.63 MWp, will increase to 2.6 MWp, and we will be producing approximately 40% of our corporate electrical energy consumption ourselves.

E6 – Participating in Twinning Programs with Cities and Organizing Joint Events

Participation in the program titled city twinning and energy efficiency in buildings, organized by the **Climate Change and Zero Waste Directorate** under the direction of the Energy Cities Organization. Our municipality carried out its work in conjunction with the Municipality of Mostar in Bosnia and Herzegovina.

It is aimed to increase the level of knowledge and awareness among the participants through the trainings on energy efficiency studies organized by the Energy Cities organization with various municipalities from around the world and the method of sharing their experiences between municipalities.

Karşıyaka Municipality and Mostar Municipality were matched. Both municipalities share energy efficiency and renewable energy applications in their municipal buildings within the scope of the project,. In addition, 3-4 day meeting and workshop programs were organized in both cities as part of the Energy Cities budget. The level of knowledge and awareness of both municipalities about energy efficiency in buildings has been increased with the conclusion of this project.

Provisions of the protocol signed by Karşıyaka Municipality regarding the sister city relationship established with Bosnia and Herzegovina Sarajevo Novi Grad Municipality and Bosnia and Herzegovina Sarajevo Stari Grad municipalities in 2022 can be evaluated under this action article. In the future, joint studies and applications can be planned.

E7 – Implementation of an Environmental Labeling Program for Private Enterprises in the City

Private Enterprises in the City are encouraged for ecosystem sensitive improvements and practices in the Green Building, Green Site and Green Business Directory.

The guide includes applications that protect the ecosystem that businesses can do after they start their service with the construction or revision. In the guide prepared by a multidisciplinary technical team, improvements are listed under 11 headings and the services that our municipality will benefit from free of charge for the buildings, sites and businesses that make these improvements..

IMPROVEMENT CRITERIA EVALUATION TABLE	
IMPROVEMENT CLASSES	PIECE
ENERGY USE AND PERFORMANCE	23
WATER AND WASTEWATER MANAGEMENT	20
INDOOR QUALITY	3
GREEN INFRASTRUCTURE APPLICATIONS	10
TRANSPORTATION	6
WASTE MANAGEMENT	11
LIGHT POLLUTION	1
DISASTER MANAGEMENT AND FIRE PROTECTION	3
MATERIALS AND RESOURCES	8
SUSTAINABILITY	2
VOLUNTEER PARTICIPATION AND INNOVATION	4
TOTAL IMPROVEMENT PROPOSAL	91

E8 – Replacing Park/Garden and Street Lighting with LED

In 2022, a total of 75 gas discharge and low efficiency lighting fixtures in park/garden and street lighting facilities were replaced with high efficiency and low energy consumption LED lighting elements.

Our Directorate of Technical Works and Facilities uses LED lighting elements in all new projects and those that need to be changed in the current.

A1 – Extending the Practices of Separate Collection of Packaging Waste at Source

The Waste Collectors Circular No. 2022/6 has been issued by the Ministry regarding the citizens who collect recyclable wastes such as plastic, paper and metal without being affiliated with any enterprise. The working principles and procedures of the independent zero waste collectors operating within the service boundaries of Karşıyaka Municipality, which was prepared in accordance with the 1st article of the circular, passed our Municipal Assembly with the decision dated 01.09.2022

and numbered 227. Licensed waste collection company, through the cooperative (İZROM-KOOP) established with the support of Karşıyaka Municipality, included street garbage collectors, which previously worked under unfavorable conditions and without insurance, into the municipal waste collection system . They serve with 7 electric motorcycles for the purpose of collecting waste within the boundaries of the district.

The "Environment and Climate Volunteer" training, which we started as the Climate Change and Zero Waste Directorate in order to create both social and individual awareness, has been completed in cooperation with the professional chambers, Aegean Forest Foundation and Foresters Association. The training, which was given to a group of 30 people at Karşıyaka Municipality Zero Waste Carbon Point, between 6-22 December 2022, lasted approximately 3 weeks. Effects and causes of climate crisis in education, energy policies and renewable energy sources, energy efficiency in buildings, energy and water saving in residences, carbon-water-ecological footprint, benefits of forests to ecosystem, urban heat island, xeric landscape practices, waste management in Karşıyaka Municipality, organic issues such as waste, compost applications in the home-garden, preparation for natural disasters, and an end to food waste were put on the agenda.

Cloth bags were given as gifts to our citizens who brought at least 10 recyclable materials to our stand, which was set up in the Bostanlı Marketplace on June 04, between 13:00 and 16:00 within the scope of World Environment Day week in 2022. A 'Recycling Workshop' was held with Çevko between 12:00 and 14:00 at the Bostanlı Market place on June 05. On 09 June, Prof. Dr. 'Compost Preparation Workshop' was held with Cenk Durmuşkahya at 10:00 in Karşıyaka Municipality Örnekköy Construction Site.

In May, a 'Waste Electrical and Electronic Equipment Collection Campaign' was organized between private and public schools within the boundaries of the District, and 15 July Martyrs Anatolian High School, which collected 340 kg of waste, was ranked 1st.

36 collection equipment has been positioned in the safe areas determined within the boundaries of the district within the scope of the contract signed between our municipality and Nestle Nescafe Express brand for the separate collection of beverage cans. A skateboard track will be built in 2023 with the waste collected at the end of the campaign,.

WASTE EQUIPMENT NUMBER:

-Vegetable Waste Oil Collection Bin: 118

-Glass Piggy Bank :307

-Expired medicine collection box: 25

-Mixed packaging collection container: 80 (sites, schools) 140 (streets and avenues)

-Waste battery collection box: 690

-Textile waste collection box :170

In order to reduce waste and encourage the use of 2nd Hand Goods in the society, a special 2nd Hand Market is organized for adults and children, where products such as toys, clothes, stationery and accessories are sold.

According to the data of the Directorate of Cleaning Affairs, the amount of domestic non-recyclable solid waste collected in 2021 was 122,300 tons and it was 114,931 tons collected in 2022. The people of Karşıyaka have reduced the amount of household waste they send to landfill by 6%, and they have supported the circular economy by recycling or composting.

A2 – Developing a Program for Separate Collection and Composting of Domestic Organic Wastes, Marketplace Wastes and Park and Garden Wastes

The Park and Garden Directorate composts the landscape wastes to enrich the soil in the Urban Forest.

Directorate of Agricultural Services: Numerous practical trainings were organized on composting in order to evaluate and recycle the household waste of the people.

A4 – Implementation of Intelligent Recyclable Waste Collection System Digital Application

KOMŞU KART(NEIGHBOR CARD), which is an award-based project aiming to collect packaging waste from households at the source and collect them without mixing with garbage, was started by the Climate Change and Zero Waste Directorate on 09.09.2022. Within the scope of the project, 3 pilot neighborhoods (Demirköprü, Tersane, Denizci) and 20 personnel who will take an active role in the field were determined within the boundaries of the district.

When your packaging wastes such as paper, glass, metal and plastic are collected and delivered to our Municipality, a certain amount of money points will be assigned to your Karşıyaka Neighbor Card.

The money points accumulated on the cards can be easily spent in all businesses where the VISA card is valid..

A5 – Route Optimization for Reducing Greenhouse Gas Emissions from Domestic Waste Collection/Transport, Increasing Underground Containers

Cleaning Works Directorate: Considering the uninterrupted progress of environmental cleaning and garbage collection services by our Directorate, route optimization studies are carried out continuously. Moreover;

In 2021, there were 156 new 5000-liter system underground, 229 3000-liter new system above ground, 4550 770-liter galvanized standard garbage containers within our district borders. In 2022, 280 new 5000-liter system underground, 249 new 3000-liter system above ground and 2700 770 liter galvanized standard garbage containers has been renewed. Thus, we continue to work on route optimization and greenhouse gas emission reduction by reducing the number of small-volume garbage collection vehicles operating in the region.

S1 – Making Regulations Regarding Water Management for the Prevention of Floods and Floods

Parks and Gardens Directorate: The 'Karşıyaka City Forest' project, located in Mustafa Kemal Neighborhood, has been started and forest trees have been planted by making water holding ditches and crescents in this area. Tree planting is still ongoing.

Urban Design Directorate: Within the scope of this target, 58 m² parking area in Atakent Mahallesi 3642 Sokak Park Project was transformed into a permeable surface, and within the scope of Karşıyaka Çarşı District Kemal Paşa Street Renovation Project, the separation of rain water and sewage infrastructure systems and 55 m² permeable concrete application were made.

Plan and Project Directorate: Our application for the Preparation of Urban Research, Analysis, Synthesis and Strategy Zoning Project in 10 Neighborhoods in Karşıyaka has been accepted. Within the scope of the project, in the urban area including **Yalı, Atakent, Şemikler, Fikri Altay, Demirköprü, Dedebaşı, Goncalar, Nergiz, Mavişehir and Bostanlı** neighborhoods, in order to obtain a sustainable, qualified and creative urban space resistant to disasters and climate change, planning studies, scientific, It is aimed to prepare urban research, analysis, synthesis and strategy zoning with an innovative and participatory methodology, and the project continues.

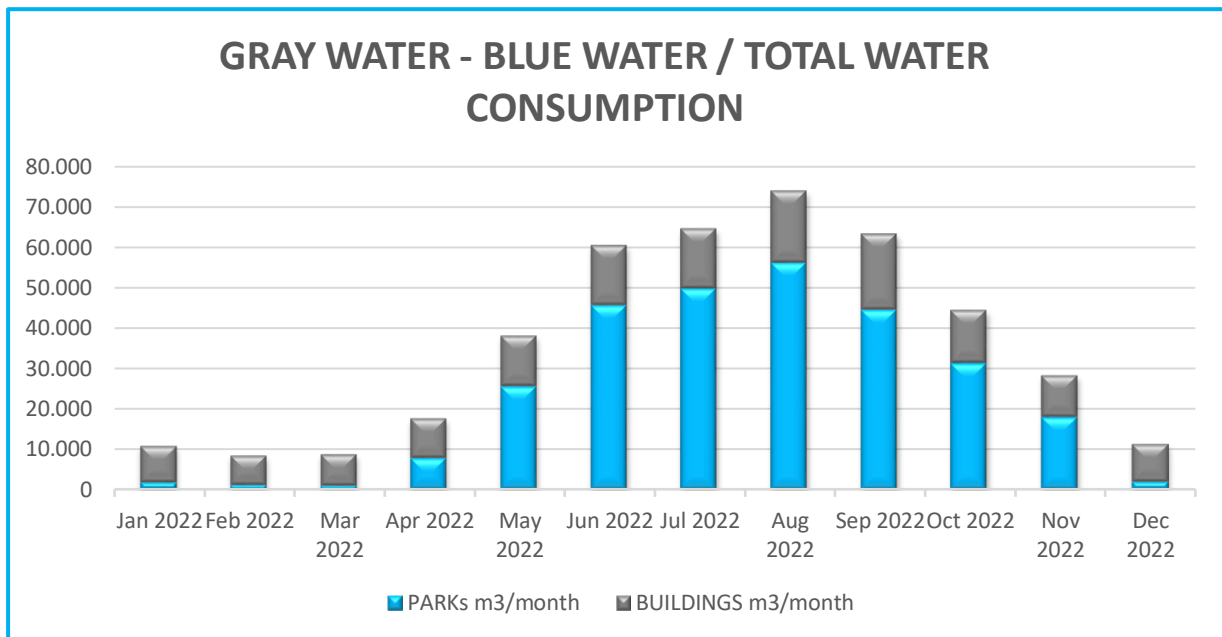
In the areas where Zoning Planning was carried out, streams and protection zones were transferred to the plan sheets in line with the opinions of the institution conveyed by İZSU, and the decisions regarding the protection and safety of the creek beds were taken into consideration with the plan notes.

S2 – Efficient Use of Water and Actions for Water Saving

We have established a subscriber-based monitoring system for the efficient use of in-house water. As Enterprises and Parks, we monitor subscriber consumption. We monitor unexpected

consumptions daily, day and night. We have detected dozens of lost and illegal water consumption. We bought separate irrigation subscriptions for businesses with green field irrigation. We replaced some of the old meters with remotely monitored digital meters.

A total of 431,264 m³ of water was consumed, 146,005 m³ of water was used in enterprises and we sent it to the treatment plant as gray water, we used 285,256 m³ of blue water. **66.4% of our water consumption is green field irrigation.**



We switched to new taps with sensors in 85% of the taps we use in-house. Most of the things we do not pass are those that we think will not be healthy use, such as kindergartens.

Parks and Gardens Directorate: An automatic irrigation system was established by making 31 new subscriptions in 2022, and water losses due to manual irrigation were minimized.

Irrigation installations in 37 existing parks were renewed and optimum water use was ensured.

In our existing and newly built parks, a drip irrigation system has been installed in areas with suitable vegetation.

The permeable surface (key cobblestone application) arranged in parks and green areas in 2022 is 7082 m².

S3 –Awareness and Awareness Raising Studies on Water Use

Within the scope of Environment and Climate Volunteer training, trainings on water conservation, water footprint, water cycle and drought were given by the Climate Change and Zero

Waste Directorate. In addition, in the Green Site, Green Building Guide, which was prepared under the coordination of our directorate, it was aimed to raise awareness about water use and encourage it.

Directorate of Women and Family Services: Information studies on water management were carried out in the units affiliated to the Directorate.

SA1 – Determining the Impacts of Climate Change on Public Health and Taking Protective Measures

Vulnerable Groups Evaluation Reports are prepared within the scope of this objective by the Urban Design Directorate and the Citizen Participation Unit.

Directorate of Health Affairs: In the seminar named “Climate Change and Human Health Symposium”, information was given on the factors causing climate change, changing climate conditions and the effects of this change on human health.

The impact of climate change has also been emphasized in our public health programs such as Obesity, Anger Control, Heart Health, What Is Atherosclerosis, How Can I Protect It, and First Aid Trainings?

SA2 – Taking Protective Measures to Mitigate the Effects of Climate Change on Advanced Age Public Health

“Alzheimer Day Care Center” was put into service in 2022.

The 3rd Age University program was held for our advanced age citizens.

Directorate of Health Affairs: She made explanations about HT, the negative effects of HT on human health and the effects of environmental and personal factors on HT with the training titled “Living Healthy with HT”.

In the training called "Life with Parkinson's Education", general information about the disease was given, and the adaptation of these patients to the environment and the effects of the environment on the disease were explained.

In conjunction with the “Age Friendly Karşıyaka Workshop” project, an event was organized with the participation of our elderly people about common diseases, healthy aging and socialization, the target group of which is over 65 years old, within the scope of the week of the elderly.

What is Alzheimer's?, Dementia and Alzheimer's Care Trainings in Karşıyaka, Mental Health Seminar in Old Age, Why Are Day Care Centers Important in Alzheimer's Disease? We believe that Life with

Menopause Seminar, Healthy Aging Activities will help to become individuals with strong adaptability to the negative effects of the health effects of climate change.

AF – Establishing a Climate Change Resistant Disaster Management System

Support Services Directorate:

*The number of ATA (Emergency Assembly Areas) within the borders of Karşıyaka District has been increased from 115 to 120, and new ATA detection studies are continuing in some Neighborhoods.

* Again, in the case of a possible natural disaster within the boundaries of the District, 3 places have been determined to be used as Tent City and Shelter Area; It is also referred to as a Sheltering Area within the scope of TAMP (Turkey Disaster Response Plan).

* Within the scope of hanging posters showing the nearest 3 ATA (Emergency Assembly Areas), 2860 posters were hung in 21 of 27 Neighborhoods in our District. The poster making and distribution process continues for 6 Neighborhoods.

Urban Design Directorate: Within the scope of this objective, mapping of Ecosystem services and environmental report, Karşıyaka District Urban Heat Island Effect and Fragile Groups Evaluation Report, "Together Karşıyaka" - Citizen Science Data and Information Systems Digitalization Project, Climate Resistant Street Citizen Design science workshop, Bahar Park Citizen Citizen Design science Workshop, UNDP Collaborative Public Space Transformation, Integration of ecological data into BELNET system, Community Resilience Lab (Core Lab) - Horizon Project application, Karşıyaka Digital Disaster Center - İZKA Project application Horizon project application in nature has been completed. Open public spaces Disaster Resilience Master Plan studies were carried out.

ST – Supporting Sustainable Agriculture with Climate Friendly Agricultural Techniques, Preserving Local Crop Patterns

Directorate of Agricultural Services: In order to expand local production, the seeds of Yamanlar tomato, a tomato variety unique to Karşıyaka district, are distributed to those who request it.

The Local Seed Center was opened to support the dissemination of local seeds. Here, seed exchange and seed producer meetings are held.

In order to support locality, protect the future, facilitate access to good food, strengthen our bond with the soil, create an exemplary area for urban agricultural practices and at the same time

determine plant productivity, a vegetable garden was created in the Karşıyaka Municipality Ornekköy Construction Site Facility, and fruit gardens were created in the city for this purpose.

In order to shorten the food chain and support local production and consumption, a producer's market is established once a month by contacting the producers, cooperatives and agriculture district directorates in and around the district.

Producer Cooperatives were provided with the opportunity to participate in the established producer markets and sell their products.

Vegetable seeds and seedlings were distributed in order to encourage urban agricultural activities.

In the kindergartens of Karşıyaka Municipality, vegetable gardens were created and fruit saplings were planted.

Construction Site Garden – In the summer season, cucumber, eggplant, pepper and tomato seedlings were planted in an area of 850 square meters at the end of May. The harvest was sent to kindergartens in our municipality and used in children's nutrition programs. The total harvest is 1850 kilograms.

The total area was increased to 1170 square meters by increasing the number of parcels cultivated in the winter season. Celery, leek, white cabbage, red cabbage, broccoli, cauliflower, spinach, radish, carrot, chard, beet, parsley, cress and arugula were grown in 37 plots. Local seed planting and seedling planting practices were carried out in the parcels in the area. Since it was aimed to obtain local seeds from the grown plants, no harvest was made in this period.

At the same time, hot compost was made on one of the existing parcels.

It has been tried to determine which varieties are compatible with the climate of Karşıyaka by planting vegetables.

Next to the Rose Garden Orchard - Yalı neighborhood 6518/9. Different kinds of fruit saplings were planted within the scope of urban agriculture practices on 3 parcels divided by pedestrian roads in the green area following the rose garden on the street. In this context, tangerine, orange, grapefruit, apple, pear and oleaster seedlings were planted in the area. A total of 51 fruit saplings were planted. Raspberry, rosehip and aronia seedlings were planted around the plots. Thus, a natural fence and fruit corridor was created. The total number of seedlings planted is 235. A total of 286 plants were planted in the area. Vermicompost was used during planting.

In the project area, aquaculture will be carried out using natural methods, without the use of synthetic fertilizers, herbicides and pesticides. Natural solutions will be applied against plant pests.

In the Agricultural Policies and Urban Agriculture Panel organized by the Climate Change and Zero Waste Directorate; Presentations were made on the Impact of Agricultural Policies on Production and Its Reflection on Consumers, New Initiatives for Local Governments in the Field of Agricultural Food, Climate Crisis, Urban Agriculture and İzmir.

YA1 – Conducting Studies on Reducing the Urban Heat Island Effect

Urban Design Directorate: Within the scope of this goal, **Karsiyaka District Urban Heat Island Effect and Vulnerable Groups Evaluation Report**, Climate Resistant street citizen Design science workshop, Cemal Gürsel Street Climate Resistant Street project and Open public spaces Disaster Resilience Master Plan studies were carried out in partnership with IMM.

Plan and Project Directorate: In the 1st and 2nd Stage Planning Area of Cumhuriyet District, the use of open space and green space, which was determined as 8538 m² in the abolished plans directing the constructions in the region, has been approved. With the 1st and 2nd Stage Revision Zoning Plans, Cumhuriyet Neighborhood, which came into force, was increased by approximately 80% and determined to be 15340 m².

Plan decisions containing measures to reduce the urban heat island effect in the areas where zoning planning studies are carried out have been produced and are stipulated in the plan notes.

Flower and sapling festivals are held in autumn and spring.

YA2 – Rehabilitation and Increase of Green Areas and Afforestation Studies

Parks and Gardens Directorate

Total number of parks	390 pieces
Total park and afforestation area	1.483.117m²
The tree planted in and around the city in 2022	8726 pieces
The plant planted in and around the city in 2022	26.688 pieces

NEW PARKS AND GREEN AREAS IN 2022

No	PARK NAME	NEIGHBOORHOOD	FUNCTION	GREEN AREA	PERMEABLE SURFACE	OTHER AREA	TOTAL AREA
1	2041/5 Street Green Area	Mavişehir	----	1.925 m2	----	----	1.925 m2
2	Miyawaki Forest	Mavişehir	----	630 m2	----	----	630 m2
3	6324 Street Green Area	Yalı	----	550 m2	----	----	550 m2
4	Pumptrack	Yalı	Bicycle Track	2.150 m2	----	540 m2 (asphalt surface)	2.690 m2
5	6238 Street Park	Fikri Altay	----	185 m2	163 m2 (cobblestone)	2 m2 (pool)	350 m2
6	1595-6086 Street Intersection Green Area	İmbatlı	----	480 m2	----	----	480 m2
7	Örnekköy Neighborhood Center	Örnekköy	----	1.250 m2	1.909 m2 (cobblestone)	96 m2 (children playground)	3.255 m2
8	7402/4 Street Green Areas	Örnekköy	----	673 m2	----	----	673 m2
9	Above Nazım Hikmet Boulevard Green Area	Örnekköy	----	414 m2	20 m2 (cobblestone)	----	434 m2
10	Kedili Avlu (1670/2 Street)	Tersane	----	110 m2	138 m2 (cobblestone)	12 m2 (transformer)	260 m2
11	Emre Zeyrek Park (1669 Street) (UNDB)	Tersane	----	80 m2	420 m2 (cobblestone)	----	500 m2
12	6110 Street Park (Gazi Park)	Dedebaşı	-----	150 m2	597 m2 (cobblestone)	3 m2 (pool)	750 m2
13	6025 Street Parking Lot	Goncalar	Parking Lot	65 m2	335 m2 (cobblestone)	----	400 m2
14	6011/2 Street and 6142 Street Intersection Parking Lot	Dedebaşı	Parking Lot	175 m2	525 m2 (cobblestone)	----	700 m2
15	İnönü Neighborhood Nursery Garden	İnönü	Children Playground	225 m2	155 m2 (cobblestone)	70 m2 (children playground)	450 m2
16	1671 Street and Şehit İbrahim Er Street Intersection Parking Lot	Bahçelievler	Parking Lot	165 m2	2.700 m2 (cobblestone)	----	2.865 m2
17	6116/1 Street Park	Dedebaşı	Basketball, Children Playground	280 m2	120 m2 (cobblestone)	150 m2 (basketball court), 140 m2 (children playground)	690 m2
TOTAL				9.507 m2	7.082 m2	1.013 m2	17.602 m2

PARKS REVISED IN 2022

No	PARK NAME	NEIGHBORHOOD
1	80. Yıl Cumhuriyet Park	Bahçelievler
2	8 Mart Park	Goncalar
3	6718 Street Middle Refuge Work	İnönü
4	Nuri Yesugay Park	Zübeyde Hanım
5	6753/2 Street Forestation Area	Mustafa Kemal
6	7447/13 Street Park	Zübeyde Hanım
7	Güzel Sanatlar Park	Bostanlı Mahallesi
8	Walking Track next to Semra Aksu Park	Mavişehir
9	Şehit İbrahim Er Street Park	Bahçelievler

Urban Design Directorate: Karsiyaka District Urban Heat Island Effect and Fragile Groups Assessment Report and Ecosystem services mapping and environmental report studies were carried out within the scope of this target,

Plan and Project Directorate : The zoning planning studies of Karşıyaka City Forest, which was designed within the borders of Mustafa Kemal District, were completed and entered into force.

KA – Sustaining Forest Existence, Protecting Wetlands, Researching Sustainable Production Models of Forest Products with High Value Added

Urban Design Directorate: Upon the creation of the urban forest areas of the idle area inventory in Karşıyaka District, an evaluation report was prepared in which the areas that could be **Tiny Forest** were determined.

Parks and Gardens Directorate: The 'Karşıyaka City Forest' project, located in Mustafa Kemal Neighborhood, has been started, and forest trees have been planted by making water holding ditches and crescents in this area. Tree planting is still ongoing.
Analysis bases for zoning planning studies in Yamanlar District have been prepared.

GG – Reducing the Negative Impacts of Climate Change on Food Safety and Security

Directorate of Women and Family Services:

Breast milk was encouraged through Breast Milk Workshops and Breastfeeding Counseling services, and the importance of breast milk for the healthy development of babies was explained to young mothers.

Directorate of Agricultural Services:

In order to create Karşıyaka Food Strategy Document, the "**From the Field to the Fork Food, Cities and Local Governments**" Symposium and the "**Food Strategy**" Workshop were held with the common mind and the participation of all stakeholders (public institutions, professional chambers, non-governmental organizations, academics and citizens).

The food strategy document to be created; It aims at a human rights-oriented system where everyone living in the city and its periphery can access cheap, healthy, diverse and culturally appropriate food without any discrimination. It aims to identify environmentally friendly and stable local food systems with joint decision-making mechanisms.

In order to raise public awareness, trainings on urban agriculture (micro-sprouts, heirloom seeds, compost making) are organized. In order to ensure that children have access to safe food, the book "Children and Food Safety", which is a guide for parents, is distributed.

The main goal of our garden work in kindergartens in our municipality is to bring children together with the soil and to familiarize them with the stories of agricultural products they consume in their daily lives. It was ensured that they practically observed the plant nutrients they consumed in their daily life from the seedling stage to the harvest time. It is aimed to contribute to the development of nature and environmental awareness.

In this direction, mini-garden areas have been created in Kindergartens and Short-Term Disabled Recreation Center of our municipality. Winter vegetable seedlings (Broccoli, Cauliflower, Celery, White Cabbage, Red Cabbage, Flat Lettuce, Ice Berg, Curly Lettuce) have been planted in our orchards. Sewing was carried out with kindergarten students. Checks continue regularly. Within the scope of the "Street is Yours" Project carried out by the Women and Family Directorate of our Municipality, corn, arugula, lettuce and cress seed planting activity was carried out with children in Şemikler, Bostanlı, Tuna, Mustafa Kemal, İnönü and Yalı neighborhoods by the Agricultural Services Directorate.