

# **SUSTAINABILITY REPORT AKMERKEZ 2022**

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# Activities and Actions – HR Department - 1

Investments in employees (education, development policies), compensation, fringe benefits, right to unionize, work/life balance solutions and talent management are included in the employee rights policy.

In 2022, "Emotional resilience, Analytical thinking, Design-oriented thinking, Asking the right questions, Active listening, Critical thinking, Emotional intelligence, Basic communication rules, Influencing and persuasion, Effective time management, Creative problem solving techniques, Self-management, Result orientation, Online behavioral competency trainings titled "Proactivity, Professional stance, Stress management" were given to all employees. In addition, the development needs of the employees are met throughout the year with trainings such as English and Safe Driving Techniques.

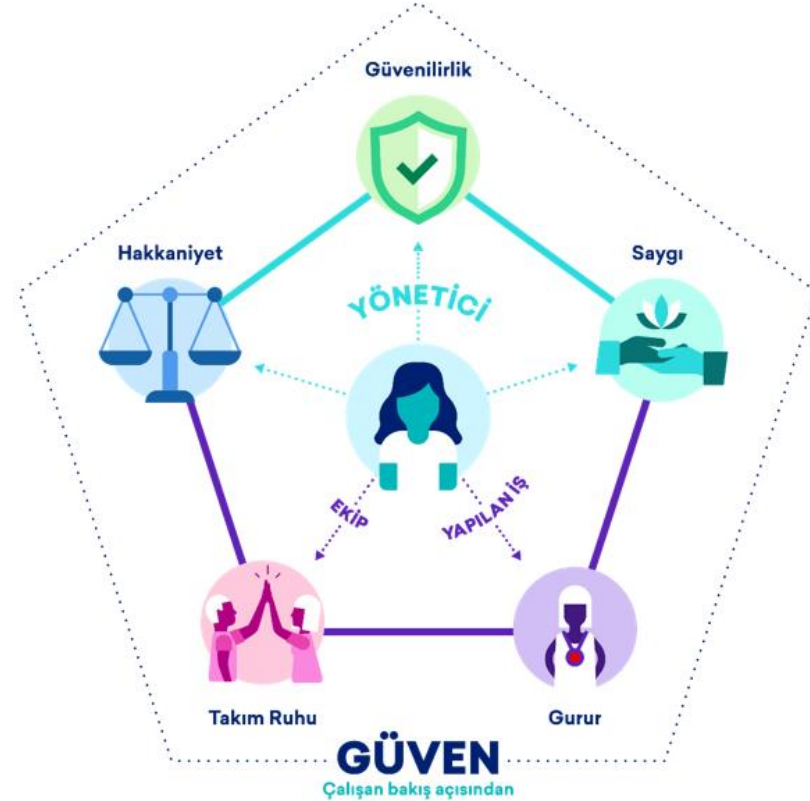
In order to maintain the balance between private life and work life, employees can work remotely for 2 days with the hybrid working application. In addition, with the flexible working hours application, it is aimed that the employees can determine their own entry and exit times.



# Activities and Actions – HR Department – 2

Within the reported period to ensure employee satisfaction activities are made public.

Focusing on the Reliability, Respect, Fairness, Pride and Team Spirit dimensions of our working life, Akmerkez REIC has an Employee Engagement Survey conducted with the Great Place to Work (GPTW), an independent and contemporary management tool that draws the picture of our current situation in these areas with the "Trust Index". In line with the feedback received from our employees, applications that create satisfaction and happiness are developed with the "Volunteer Employee Team" and "Sponsor consisting of Managers" according to our focus areas and priorities. Our goal is to improve the happy environment where our employees are securely attached, proud of their work and workplace, and where they work in harmony and cooperation with their colleagues, on the way to becoming the "Best Place to Work". In 2021, the opinions and suggestions of the employees on different subjects were obtained through pulse surveys, and actions were implemented in 2022 in line with the meetings in which the volunteer team offered action suggestions.



# Activities and Actions – HR Department – 3

Information meetings and training programs were organized for employees on ESG policies and practices.

In 2022, online trainings consisting of gamified videos titled “Sustainability” were completed by all employees. It is aimed to raise awareness of employees through these videos that are both entertaining and teaching.



# Activities and Actions – Marketing Department

With a brief summary of the activities and actions taken within the scope of sustainability; In this context, the topics that overlap with UNDP sustainable development goals are presented below.



## WWF World Time

We dim our lights on March 28 every year by supporting WWF's Earth Hour project. We are trying to create public opinion on the climate crisis and the loss of natural resources by sharing relevant content on our social media accounts.



# Activities and Actions – Marketing Department



## Akmerkez Terrace Agriculture Project

In order to show that agriculture can be done in the city without using chemicals and that a sustainable and healthy life is possible in the city, we implemented the Terrace Agriculture project in an area of approximately 750 square meters in 2017. Our aims and applications:

- Enriching the soil and promoting biodiversity,
- Reducing our carbon footprint,
- Making alternative agricultural practices with aquaponic and hydroponic systems
- Saving water with a rainwater storage system and mulching
- Managing waste with compost,
- To raise awareness on the subject by providing trainings on food, agriculture, production and sustainability of resources,
- To announce and convey these values to the masses by cooperating with universities, high schools, primary schools, NGOs and opinion leaders.

During 2022, we organized various events and projects for this purpose.

- We continued the 'Volunteer Program', where our guests work in our garden and experience urban agriculture.
- In order to teach sustainable agriculture in the city, we cooperated with gastronomy students of universities and non-governmental organizations and gave them training. (USLA, Fiba Holding, Medipol University, KEP Kindergarten, Beşiktaş Municipality, Bahçelievler Municipality) We held conversations with entrepreneurs, food and agriculture communities.

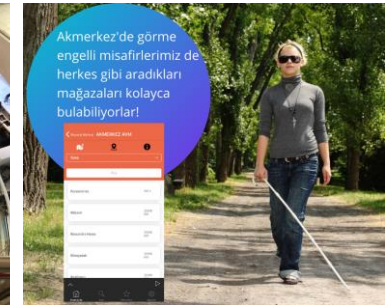


# Activities and Actions – Marketing Department



## Other Sustainability Projects

- We continue to offer navigation services to our visually impaired guests at Akmerkez with the "My Companion" add-on included in the My Dream Companion application, which we run together with Turkcell.
- Every year, on Autism Awareness Day, we turn our exterior lights blue and post about it on social media.
- We regularly organize free events for disadvantaged children with down syndrome and provide a playground for them at the Mother Child Meeting Center where we provide free space on our ground floor.
- We organize free and open sports activities at Üçgen Terrace with our tenants such as the sports brand Mars Athletic Club and Decathlon.
- On the International Day of the Girl Child, the donation images of the Koruncuk Foundation were broadcast free of charge on our screens in the shopping mall for 1 week, and the foundation was supported by sharing on our social media accounts.



# Activities and Actions – Marketing Department



## Local Shopping Events

- We support local, ethical and natural food production, small producers and brands that make sustainable production in this way, and women entrepreneurs with regular market events such as Design Market, Boutique Taste Days, İpek Hanım Farm, Floral Fest, and Food For You, which we organize in our event area. We make it easy for both our guests and our staff working in the mall to access clean food and healthy products.





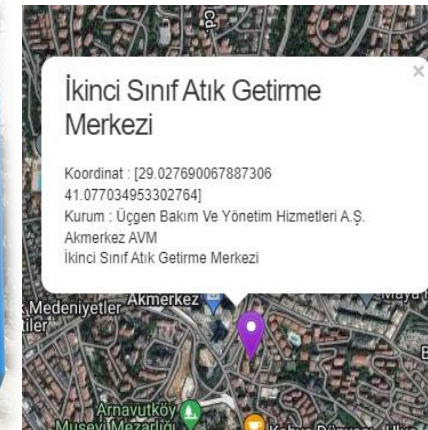
# Actions & Activities –Facility Management Department

A brief summary of actions and activities carried out regarding sustainability and UNDP sustainability development goals met through these activities are as follows:



## Zero Waste Management (ZWM)

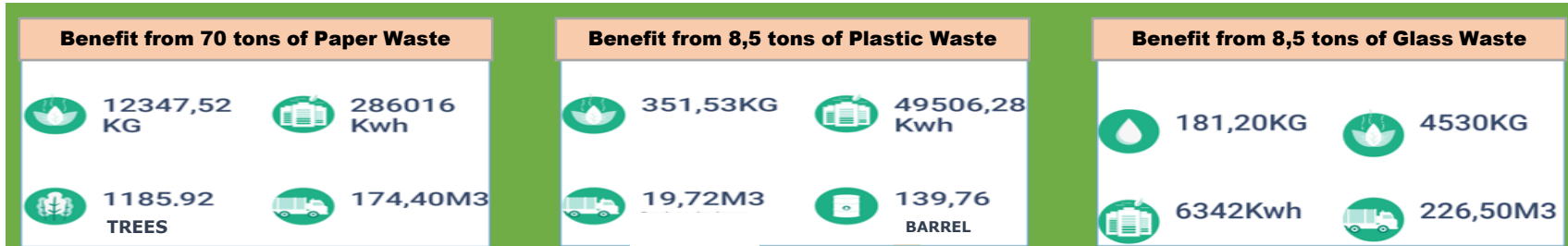
- Akmerkez; makes zero waste management in accordance with the zero waste regulation of the Ministry of Environment and Urbanization.
- In accordance with the zero waste regulation; Paper, plastic, metal, glass, battery and electronic wastes are separated at source and delivered to authorized recycling companies.
- Together with the waste collection units, the recycling rate has been increased by separating them at the source and developing storage areas.
- **Zero Waste Certificate was obtained.**
- **A 2nd Class Waste Retrieval Center was established.**



# Actions & Activities –Facility Management Department



## Waste Management Outputs and Achieved Environmental Benefits via ZWM -2022









Period	2021 (tons)	2022 (tons)	Gain increase %	Period	2021	2022	rate of change %
Paper	61	70	15%	Less greenhouse gas emission	12,532.45	17,229.05	37%
Plastic	7	8.5	21%	Storage Area Saving	221	420	90%
Glass	50	150	200%	Energy Saving	286916.56 Kwh	341,864.28 Kwh	19%

## Actions & Activities –Facility Management Department



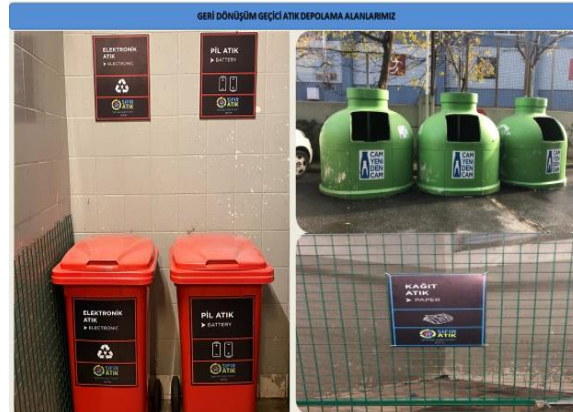
### ZWM – Results for 2021-2022 and Environmental Benefit Target & Actual

<b>2021</b>	 <b>12,532.45 kg</b> <b>Less greenhouse gas emission</b>	 <b>221,80 m3</b> <b>Storage Area Saving</b>	 <b>286,916,56 Kwh</b> <b>Energy Saving</b>
<b>2022</b>	 <b>17,229,05 kg</b> <b>Less greenhouse gas emission</b>	 <b>420,06 m3</b> <b>Storage Area Saving</b>	 <b>341,864,28 Kwh</b> <b>Energy Saving</b>
<i>The year 2021 is the first year of calculation.</i>	<i>2021 has been taken as the first calculation year and greenhouse gas emissions have been reduced by 37% in 2022 compared to the previous year.</i>	<i>An increase of 3% is targeted for 2022, an increase of 90% has been achieved</i>	<i>A 5% increase in savings was targeted for 2022, and savings of 84% were achieved.</i>

# Actions & Activities –Facility Management Department



## ZWM– 2022 Actions taken on the field





We work with companies that comply with national and international standards, can easily adapt to developing and changing conditions, work with environmental and living creatures-friendly product supply and service awareness, and have proven themselves in these areas.



<https://www.otisinvestors.com/2021esgrepor><https://www.otisinvestors.com/2021esgrepor>





# Faaliyet ve Aksiyonlar– Teknik Departman



- Within the scope of our companies' Energy policy, we are working on energy saving alternatives by using the energy required by the facility in the most efficient way without disrupting operational activities.



## ENERGY POLICY

Üçgen Bakım ve Yönetim Hizmetleri A.Ş. As all its employees, including its top management, we are committed to increasing energy efficiency by continuously improving the energy performance in buildings in Akmerkez Residence, Tower and Shopping Center, where we provide facility management and services, and to make our activities and services environmentally and economically sustainable.

The policy we have determined to realize this commitment is carried out in accordance with the energy use and consumption scale, in line with the following principles.

- To adopt our energy policy and goals by informing all our employees about energy efficiency with various communication tools and necessary trainings,
- To ensure full compliance with the applicable legal terms and requirements that we are obliged to comply with regarding energy use and efficiency,
- To prepare remedial action plans by systematically monitoring energy consumption in order to achieve our goals, periodically reviewing them and updating them when necessary,
- Developing and implementing supportive projects for the improvement of energy performance,
- To support the purchase of environmentally friendly and energy-efficient products and services to increase energy efficiency,
- To provide all necessary information and resources to achieve our goals and objectives,
- To systematically monitor and document the results of the created system and to ensure the continuity of the system by announcing it to all units of the institution,
- To develop and maintain all activities for the continuous improvement of energy performance and for increasing energy efficiency.


# Activities and Actions – Technical Department



- With the I-REC certificate, we obtained the electrical energy we used from renewable energy sources. Thus, we reset our carbon footprint due to electricity consumption.

## Renewable energy

- As Akmerkez, all of the electrical energy we use for air conditioning and common areas comes from renewable energy sources.
- This is documented by the I-REC certificate.



**THE INTERNATIONAL REC STANDARD**

This Redemption Statement has been produced for

**ÜÇĞEN BAKIM YÖNETİM HİZMETLERİ A.Ş.**

by

**SEPAŞ AKILLI ÇÖZÜMLER A.Ş.**

confirming the Redemption of

**6 000**

I-REC Certificates, representing 6 000 MWh of electricity generated from renewable sources

This Statement relates to electricity consumption located at or in

**NİSPETİYE CAD. AKMERKEZ TİCARET MERKEZİ E-3 KULE 1.OFİS KATI ETİLER - BEŞİKTAŞ-İSTANBUL**

**Turkey**

in respect of the reporting period

**2022-01-01 to 2022-12-31**

**sepaş AKILLI ÇÖZÜMLER**

**Evident**

**QR Code Verification**

Verify the status of this Redemption Statement by scanning the QR code on the left and entering in the Verification Key below

**Verification Key**

**6 1 4 7 8 8 9 0**

<https://evident.app/public/certificates/en?Qrmebid%3D%26GxTUX3GcCh5c2PPLD3kU6%3DqmeVxP%3D>

**Redeemed Certificates**

Production Device Details						
Device	Country of Origin	Energy Source	Technology	Supported	Commissioning Date	Carbon (CO <sub>2</sub> / MWh)
DORA3 JES	Turkey	Renewable heat: Geothermal	Organic Rankine cycle: CHP	No	2013-08-16	0.000

Redeemed Certificates					
From Certificate ID	To Certificate ID	Number of Certificates	Offset Attributes	Period of Production	Issuer
0000-0001-4200-0474	0000-0001-4200-6473	6 000	Inc	2021-03-07 - 2021-10-31	Foton

**Auditor Notes**

This statement is proof of the secure and unique redemption of the I-RECs stated above for the named beneficiary to be reported against consumption in the country during the reporting year stated. I-RECs are assigned to a beneficiary at redemption and cannot be further assigned to a third party. No other use of these I-RECs is valid under the I-REC Standard.

Where offset attributes are 'inc' the device registrant, who exclusively holds the environmental attribute rights, has undertaken never to release carbon offsets in association with these MWh; 'exc' means carbon offsets relating to these MWh may be traded independently at some point in the future.

For labelling scheme information please refer to the scheme's website. Labelling scheme listing may not be exhaustive.

Thermal plant emit carbon as part of the combustion process. Whilst this is not zero carbon, it is generally recognised as carbon neutral where the source is recent biomass.

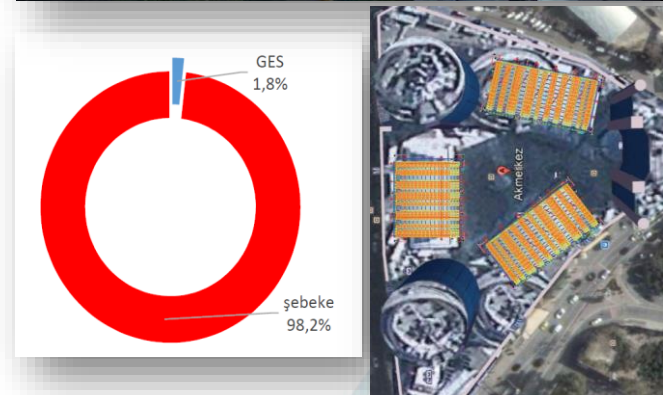
# Activities and Actions – Technical Department



- Within the scope of our energy policy, we are working on energy saving alternatives by using the energy needed by the facility in the most efficient way without disrupting operational activities.

## Renewable energy

- As Akmerkez; In order to reduce the amount of CO2 released to the environment and energy costs, studies were carried out to install solar panels on the Skylight roofs of the shopping mall in order to benefit from "Renewable Energy" sources.
- In this context, feasibility studies were made by companies with Solar Energy Systems expertise.
- As a result of these studies; It has been reported that the system will operate with low efficiency due to both the low solar potential as the Marmara region and the shadow of the buildings around the Skylight roof.
- As a result of the reports of the companies; It has been determined that the energy to be obtained from the system to be installed can meet 1-2% of the total need of the facility.
- Although the life of the system is 25 years, the return period of the investment cost is foreseen as 5-7 years.
- Due to these reasons, the investment has been postponed for now and is among the future plans.



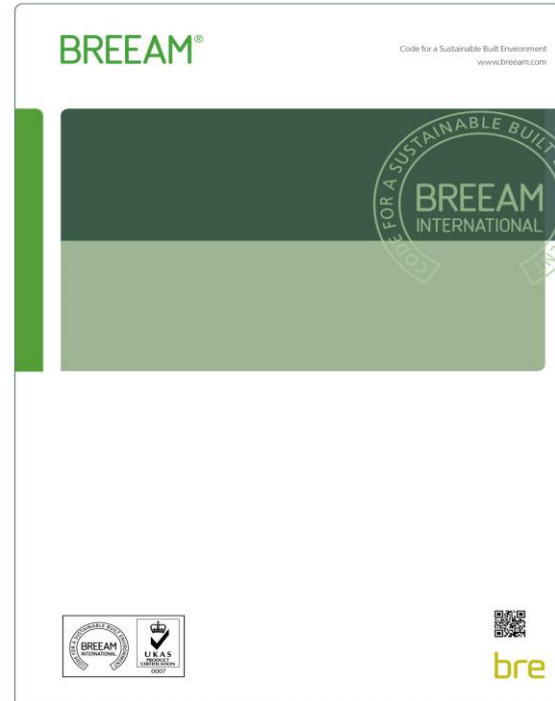


# Activities and Actions – Technical Department



- In 2018, we were entitled to receive the Bream certificate.

- As Akmerkez, all of the electrical energy we use for air conditioning and common areas comes from renewable energy sources..
- This is documented by the I-REC certificate.
- As Akmerkez AVM, we were certified in BREEAM, the world-famous environmental assessment system, which we applied in 2018, in our first application, as EXCELLENT for building performance and OUTSTANDING (the highest level) as Building Management.



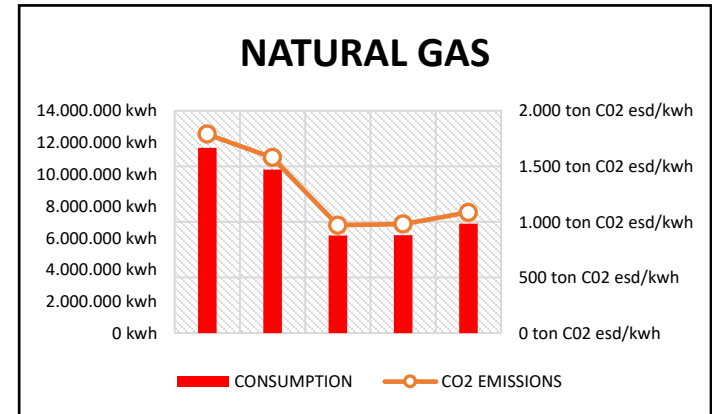
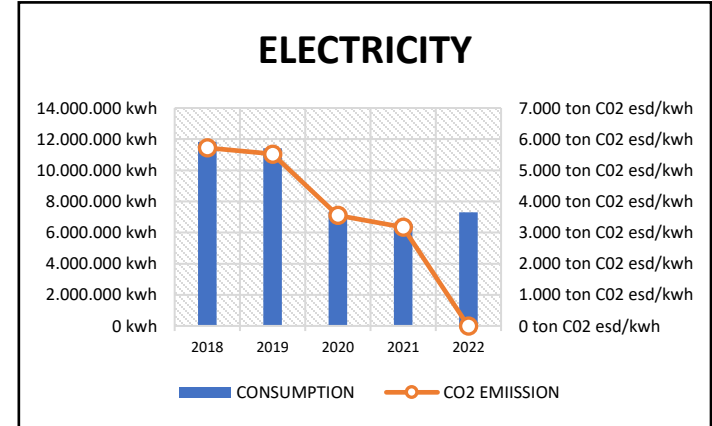
# Activities and Actions – Technical Department

With a brief summary of the activities and actions taken within the scope of sustainability; In this context, the topics that overlap with UNDP sustainable development goals are presented below.



## Energy Consumption

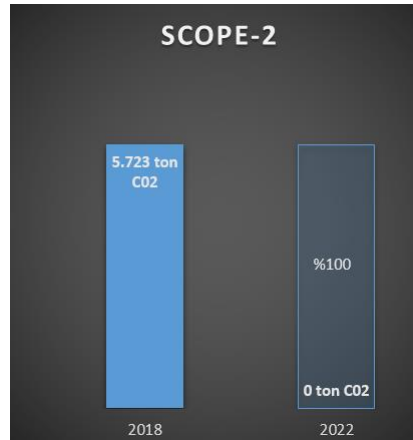
- Akmerkez purchases the energy it needs in order to carry out the operational activities of the facility in the form of electricity and natural gas from the relevant institutions.
- Cooling, ventilation, lighting, vertical circulation equipment, security, etc. Electricity consumption for needs, natural gas consumption for heating and hot water.
- For this reason, we keep the indirect CO2 emission specified in Scope-2 at the lowest level by using the energy we purchase in the most efficient way and by reducing the consumption with the actions we take every year.
- The energy consumption values and CO2 emission values of the facility for the last 2 years are given in the table on the right.
- Since 2022, it has been documented with the I-REC certificate that our electricity consumption is provided from renewable energy sources. For this reason, 3535 tons of CO2 emissions in electricity consumption have been zeroed.



# Activities and Actions – Technical Department



- Within the scope of our energy policy, by using the energy required by the facility in the most efficient way without disrupting operational activities, the CO2 emission resulting from energy use has been reduced to 1085 tons as stated below.



- With the decrease in our consumption of natural gas in Scope-1, CO2 emissions have decreased by 39% in the last 5 years to 1085 tons.
- With the I-REC certificate in Scope-2, the CO2 emission to be provided from renewable energy sources for electricity is zeroed.
- CO2 emissions from our total energy use decreased by 86% from 7511 tons to 1085 tons.

# Activities and Actions – Technical Department

12 RESPONSIBLE CONSUMPTION AND PRODUCTION

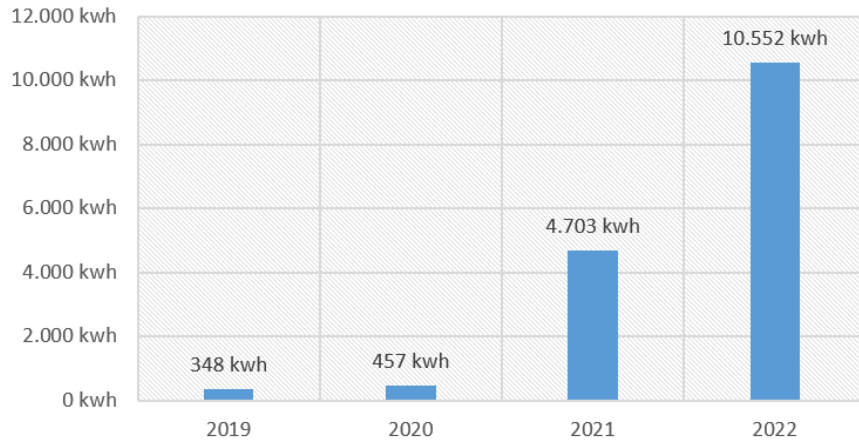


13 CLIMATE ACTION

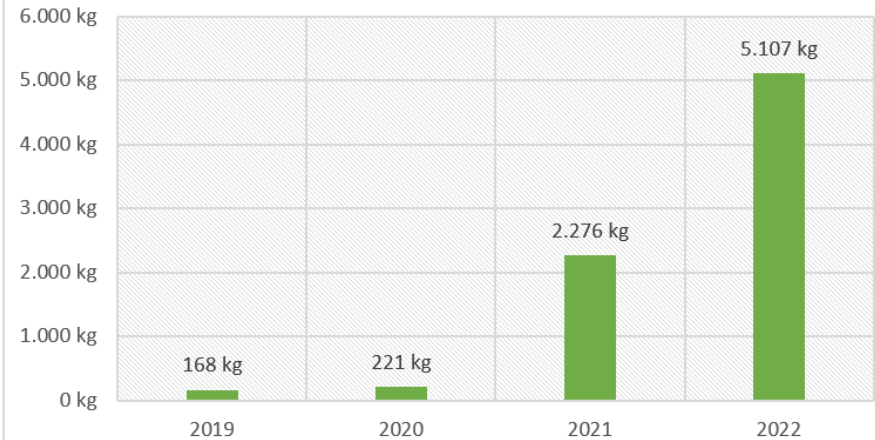


- C02 emissions from fossil fuels of vehicles have been reduced in 750 charging operations carried out in total at the vehicle charging stations located at the facility.

## AMOUNT OF ENERGY FOR USING CHARGED



## REDUCED C02 EMISSIONS



# Activities and Actions – Technical Department



Within the scope of our energy policy, it is to keep the CO<sub>2</sub> emissions we give to the environment at the lowest level by using the energy needed by the facility in the most efficient way without disrupting operational activities. In this context, the following studies have been carried out and these studies continue continuously.

Efforts have been initiated to obtain the Energy Management System **ISO 50001** and will be provided until the end of the period specified by the regulation.

## Energy Efficiency

- Installation of inverters on the motors of ventilation systems
- By-pass system between heating boilers
- Replacement of old chillers with new efficient groups
- Replacement of old cooling towers with new efficient towers
- Free-cooling regulation in cooling groups
- Building Automation System revisions
- Replacing inefficient lighting fixtures with efficient LED products
- Making necessary interventions by monitoring the energy by establishing an energy monitoring system
- Recognizing the deficiencies with energy studies and taking precautions
- CO<sub>2</sub> emissions, which were reduced by the improvements made between 2013 and 2022, are equal to the amount of CO<sub>2</sub> taken from the atmosphere by 19535 trees.

# Activities and Actions – Technical Department



Frequency converters were connected to air handling units and garage aspirators serving in Akmerkez, and energy savings were achieved by adjusting fan speeds according to capacity through automation. The frequency converters are connected to the building automation system and the speed is automatically regulated through automation. In this way, the negative impact of comfort is prevented.

1.562.232 kWh savings were achieved in 1.5 years in the air handling units and exhaust aspirators for which the project was implemented. When completed, it saved over 2,000,000 kWh annually. The project, which cost 110,000 TL and was worked by Akmerkez Technical personnel, paid for itself in 4 months.

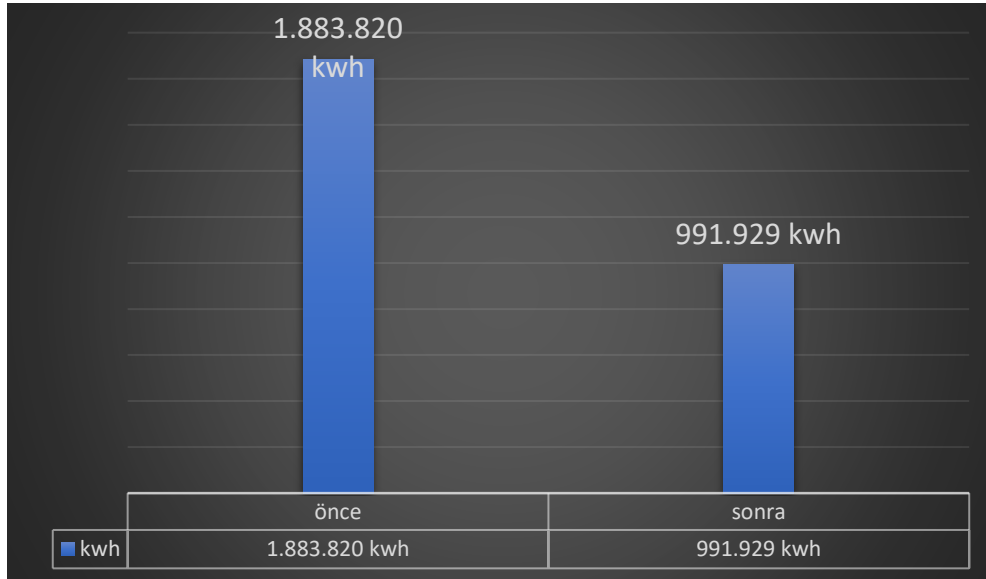
APPLICATION LOCATION	APPLICATION TIME	DECREASE IN CONSUMPTION
AIR HANDLING UNITS	January -June	1.293.672 kWh
GARAGE EGZOST	January - June	268.560 kWh
<b>TOTAL</b>		<b>1.562.232 kWh</b>



# Activities and Actions – Technical Department



Within the scope of our energy policy, halogen and fluorescent lighting equipment in the facility were replaced with new LED luminaires. The lighting system was also supported by the automation system and sensors, and the daily operation of the facility was used in the most efficient way without interruption, and serious gains were achieved.



# Activities and Actions – Technical Department



In addition, with the FREE-COOLING system which was established with the piping works, cooling was made with the effect of the outside air in the weather below 15 degrees, and approximately 2,000,000 kWh hours were saved annually.





# Activities and Actions – Technical Department



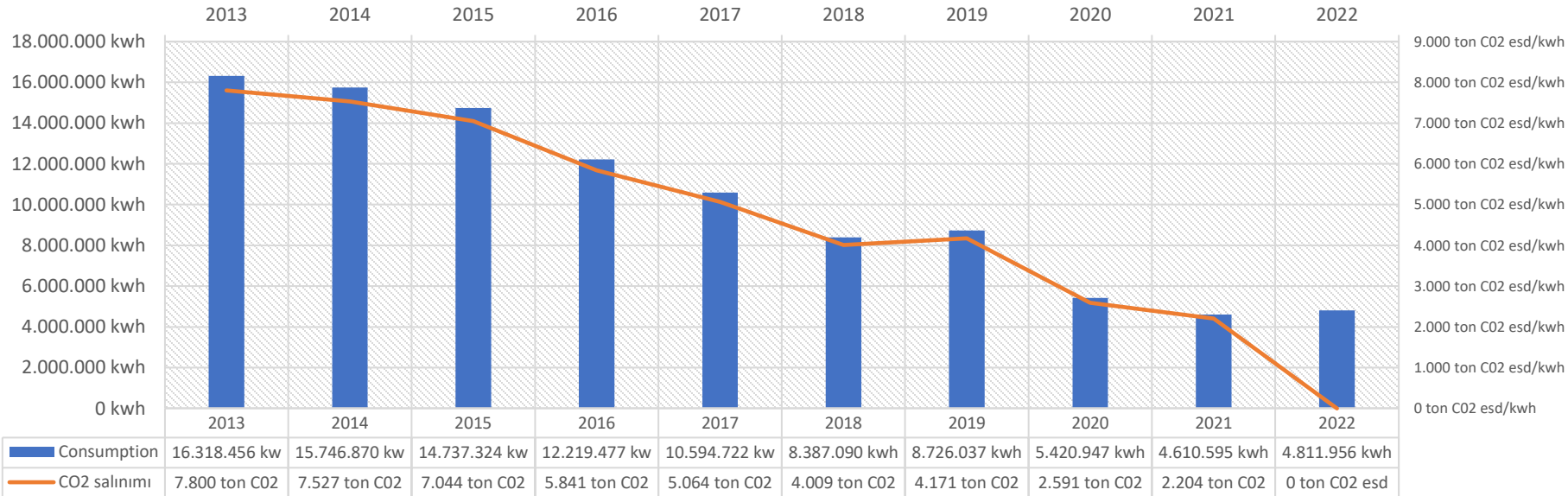
With the calorimeters which connected to the air handling units, the cost of cooling and heating per air handling unit has been made measurable.



# Activities and Actions – Technical Department



- As a result of these studies, 60% savings has been achieved in total consumption in the last 8 years. In this way; The emission, which was 7800 tons of CO<sub>2</sub> eq/kwh in 2013 due to electricity consumption, decreased to 2204 tons in 2021 due to the savings made and the effect of the pandemic, as the plant was closed for a limited time. Although the effect of the pandemic ended in 2022 and entered the full working period, it reached the level of 2300 tons of CO<sub>2</sub> eq/kwh and decreased to 0 with the transition to renewable energy.



Consumption CO2 salinimi



- According to our company's water policy; Studies and researches are carried out continuously in order to use water in the most efficient way.

## Water Consumption

- In accordance with our company's energy policy, as other energy sources; In order to use water in the most efficient way, studies and researches are carried out continuously and water saving alternatives are evaluated.

## WATER POLICY

Our principle is to keep the amount of water to a minimum to meet our needs and to benefit from external sources as much as possible.

- To ensure efficient and correct use of water,
- Practices to prevent pollution of water resources and our water itself,
- Development of technological water use tools,
- Developing methods to obtain effective water from precipitation,
- To determine our policy in line with the country's water policies
- To follow the latest technological developments in order to save water and to constantly renew our facility within this framework.

In this context, the results of the regulations that we will talk about below have been obtained.

- During the rain, the rain water coming from the drains accumulates in the rain cisterns in the garages. This accumulated water is used to irrigate green areas to save money.
- We take care that the thermostat setting in the hot water system is not too high. Trying to heat extremely hot water with cold water causes waste.
- Automatic sensor water armatures are used in WCs to prevent water wastage due to usage.
- Staff use high-efficiency shower fixtures and heads in the showers in the rest rooms.
- Smart technology, user-friendly, maintenance-free, ultrasonic sensor urinals are used in WCs throughout the shopping mall.
- All hot and cold water lines are insulated, thereby minimizing heat losses.
- GEBERIT BRAND reservoirs used throughout the shopping mall are double-staged and the levels have been reduced from 6/3 lt to 4.5/3 lt.

# Activities and Actions – Technical Department



- Our water consumption and rain water use by years are shown in the table according to the years.

## Water Consumption

- Our water needs are generally supplied from the grid.
- Apart from this, we collect the rain water in cisterns and use for the irrigation of the landscape areas. Their rates are indicated in the adjacent chart.
- Research and planning are continuing in order to use the rain water collected in the cisterns for other areas.

	2019	2020	2021	2022
TOTAL CONSUMPTION	97.255 m3	65.903 m3	72.256 m3	89.621 m3
NETWORK	95.486 m3	63.836 m3	68.373 m3	85.897 m3
RAIN WATER (LANDSCAPE IRRIGATION)	1.769 m3	2.067 m3	3.883 m3	3.724 m3
RATE	1,8%	3,1%	5,4%	4,2%

