

SUSTAINABILITY REPORT AKMERKEZ 2021

—



Actions & Activities – Marketing Department

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



WWF Earth Hour

As part of WWF's Earth Hour project, we turn off our outdoor lights every year on March 28th. We try to create public opinion in order to prevent the climate crisis and natural losses by sharing the relevant banners on our social media accounts.



Actions & Activities – Marketing Department



Sustainable Agriculture on Akmerkez Rooftop

In order show that a healthy life and sustainable urban farming without using chemicals is possible at the city center, we initiated 'Terasta Tarım' project in approximately 750m2 of space for urban farming on the rooftop of our food-court in 2017. We aimed to;

- Enrich the soil, promote biodiversity
- Reduce our carbon footprint;
- Save water through rainwater storage systems and hydroponic farming
- Manage waste with compost,
- Raise awareness on environment, the sustainability of food and agriculture

In 2021, we organized several events and projects to spread these values:

- Started 'Volunteer Program' that people work and experienced urban farming in our garden with permaculture specialists.
- Organize talks with the initiatives and food & agriculture communities
- Collaborate with universities, NGOs and Gastronomy students to teach them sustainable farming (USLA, TED College, Bilgi University)

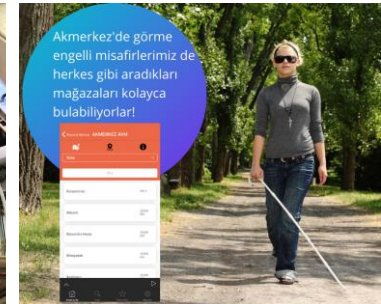


Actions & Activities – Marketing Department



Other Sustainability Projects

- We offer navigation services to our visually impaired guests at Akmerkez with the “My Travel Buddy” add on in the Turkcell’s ‘My Dream Companion’ application.
- Every year on Autism Awareness Day, we turn our exterior lights to blue and share a post on social media.
- At the Mother&Child Meeting Center, we organize activities for disadvantaged children with down syndrome, autism through the month. An also provide playing space at this center for free.
- We organize free sport activities with our sport brands such as Mars Athletic Club and Decathlon at our open air Triangle Terrace.



Actions & Activities – Marketing Department



Local Market Activities

- Through market events such as Design Market, Boutique Taste Days, İpek Hanım Farm, Floral Fest which we organize regularly, we support local, ethical and natural food production, small producers and brands that have sustainable production and also women entrepreneurs. We make it easy for both our guests and our staffs 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 carries out the waste process in accordance with zero waste management regulations. Waste classification and separation actions are carried out source based with a classification of "paper", "plastic", "metal", "glass", "battery and electronic waste" and delivered to authorized recycling companies.

Waste Management Outputs and Achieved Environmental Benefits via ZWM - 2021

 61 tons of Paper	 7 tons of Plastic	 50 tons of Glass	 0,4 ton of Metal	 0 ton Organik Atık
 1033 Trees	 16.5 tons of Petroleum	 59 tons of Raw Material	 0,4 ton of Raw Material	 0,1 ton of Compost
 12,532.45 kg Less greenhouse gas emission	 1,702.400 m3 Water Saving	 221,080 m3 Storage Area Saving	 286.916,56 kWh Energy Saving	

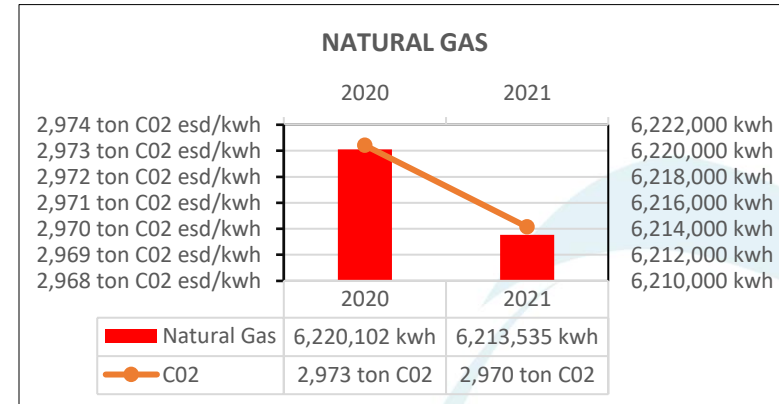
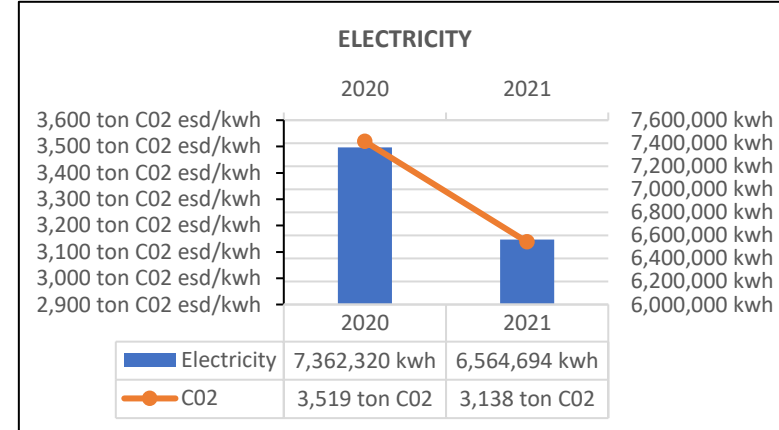
Actions & Activities – Technical Department

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



Energy Consumption

- Akmerkez provides electricity and natural gas from third party companies in order to run its facility operations
- Akmerkez facility consumes electricity for cooling and air conditioning, lighting, vertical circulation equipments, cleaning and security operations. And natural gas for heating and warm water.
- Akmerkez causes no green gas emission regarding his own facility operation
- Depending on the energy policy, we run the whole facility in an energy efficient way and also achieve to keep the carbondioxide emission as low as possible
- Energy Consumption figures and C02 emissions of the last 2 years of Akmerkez can be found in the graphics on the right





- Inline with the energy policy of Akmerkez; our aim is to run the whole Akmerkez facility in the most energy efficient way, without disrupting the operational flow and to keep the carbondioxide emission as low as possible. In order to achieve this goal; some actions which are already taken and those which will be continuously followed can be found below

Energy Efficiency

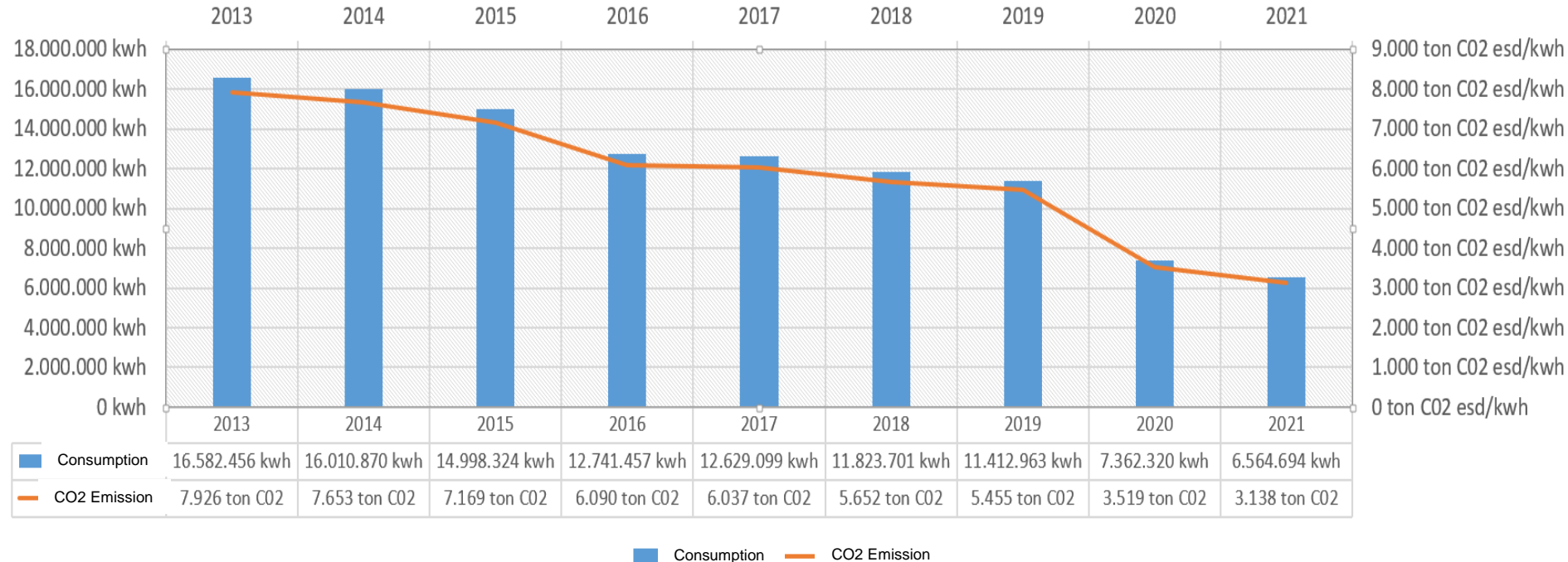
- Inverter installations for Air Conditioning Unit motors
- By-pass system installed between heating boiler
- Renewal of old cooling units with energy efficient ones
- Renewal of old cooling towers with energy efficient ones
- Free-cooling adjustments for the cooling units
- BMS system revisions
- Replacement of inefficient lighting units with LED units
- Installation of energy monitoring system
- Energy Monitoring and Reporting, actions taken via monitoring reports
- Through technical improvements and energy saving actions; the reduced CO₂ emission is equivalent to atmosphere cleaning contribution of 5820 trees

Actions & Activities – Technical Department



- With the help of the actions mentioned in the previous slide; the total energy consumption has been reduced almost 60% in the last 8 years, which helped us to achieve to reduce the CO2 emission; from 8920 tons of CO2 esd/kwh in 2012, to 5455 tons of CO2 esd/kwh in 2019, to 3519 ton CO2 esd/kwh in 2020, and to 3138 tons of CO2 esd/kwh in 2021

Energy Efficiency



Actions & Activities – Technical Department

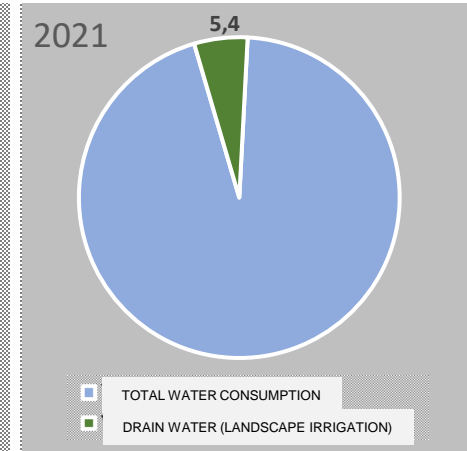
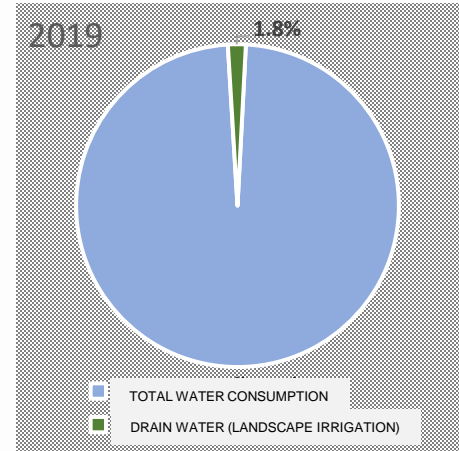


- Inline with the water policy of Akmerkez; our aim is to run the whole Akmerkez facility in the most energy efficient way regarding water consumption as well

Water Consumption

- Depending on the energy policy of Akmerkez, we run the whole facility in an energy efficient regarding water consumption as well and search for water saving alternatives
- Water demand of Akmerkez is provided by municipal water network
- With the help of the rainwater piping system installed, we regain and store rainwater and use it for landscape irrigation As an alternative source as shown with the graphics at the right

	2019	2021
TOTAL WATER CONSUMPTION	97.255 m ³	72.256 m ³
DRAIN WATER (LANDSCAPE IRRIGATION)	1.769 m ³	3.883 m ³
PERCENTAGE	1,8%	5,4%



Actions & Activities – Technical Department



- Inline with the energy policy of Akmerkez; our aim is to run the whole Akmerkez facility in the most energy efficient way, regarding electricity consumption as well and to work on consumption saving alternatives

Renewable Energy

- Depending on the energy policy of Akmerkez; in order to reduce energy costs and to reduce CO2 emissions, we made researches to use alternative renewable energy resources. One of the alternative was a solar system installation on the skylights
- The feasibility studies were carried out by various solar energy companies
- Due to lower regional solar potential of Marmara and shadow effect of the office and residence towers of the complex, the feasibility has shown us that efficiency of the system will be low. The total solar production can only supply %1-2 of the total electricity demand of the facility
- As well as the system lifetime is almost 25 years, ROI time is 5-7 years
- Depending on these feasibility outputs, the investment decision has been postponed for an uncertain time

