

Modelling Sustainable Cross-Campus Operations Program

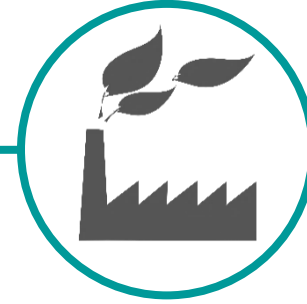
Sustainability Challenge



MSCOP Program



**KU Rumelifeneri
Campus**



**Siemens Gebze & Kartal
Manufacture Campuses**

*The program intends to establish partnerships with Koç University and Siemens Turkey to **develop a pool of sustainable knowledge** to address current campus life in order to **model and design solutions for low carbon emissions.***

Cross Campus Collaboration

Creating a new sustainable model for campus operations by sharing

Research

Experience

Skill Set



KU Rumelifeneri Campus

- ISO14001 Environmental Management System
- First Member of International Sustainable Campus

Siemens Gebze & Kartal Manufacture Campuses

- First in Turkey to Receive LEED Gold Certification

Koç University Campuses

Rumelifeneri Campus

- Student Center
- Library
- Sports Center
- Football Field
- Tennis Court
- Outdoor Pool
- 2 Auditoriums
- 4 Faculty Buildings
- 14 Conference Halls
- 28 Faculty Houses
- 96 Labs
- 98 Classrooms

West Campus

- Indoor Pool
- Gymnasium
- Conference Hall
- 7 Buildings



Koç University Campuses

■ İstinye Campus

- Conference Hall
- 4 Classrooms
- Cafeteria
- 20 Meeting Rooms
- 38 Rooms



■ School of Nursing

- Conference Hall
- Seminar Room
- Meeting Room
- Library
- 5 Labs
- 6 Classrooms



Koç University Campuses

Research Center for Anatolian Civilizations

- Conference Hall
- 3 Meeting Rooms
- 34 rooms



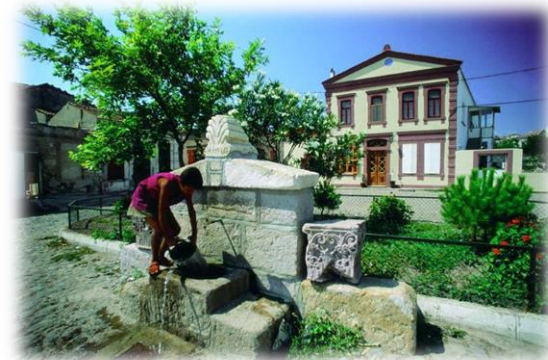
The Vehbi Koç and Ankara Research Center

- Conference Hall
- Library



Ayvalık Ottoman Summer School

- 2 Classrooms



Facts



- 6708 Student
- 10485 Graduate



- Founded in 1993

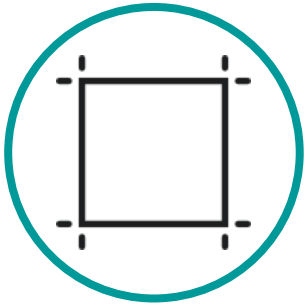


- 480 Academic Staff
- 407 Administrative Staff



- 2871 students
lives oncampus

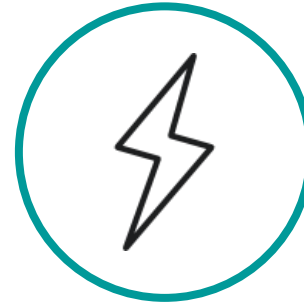
Facts



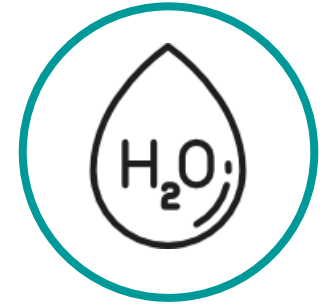
- 249801 m² total area=*238 football field*
- 153000 m² indoor area=*145 football field*



- Total waste disposed: 19,85 tons



- Total electricity used annually: 16.817.499 KWh=*A TV's energy consumption for 9,500 years.*



- Total water consumption 38. 731 m³ =*15,5 olympic swimming pool*

Campus Services

- *Call center*
- *Cleaning services*
- *Drivers and private transportation*
- *Events and organizations*
 - ✓ *Commencement ceremony*
 - ✓ *Overseers and board meetings*
- *External affairs*
- *Facility management and maintenance*
- *Food and beverage services*
- *Gardening and landscape Operations*
- *Hazardous and non-hazardous waste management*
- *Internal postal services*
- *Ice ring*
- *Indoor and outdoor pools*
- *Lease management*
- *Mobile Phones*
- *Office back up personnel allocations,*
- *Pest Control*
- *Photocopy and maintenance*
- *Scrap materials*
- *Snow team*
- *Staff and student shuttle services*
- *Storage and logistics*
- *Supply and distribution of drinking water*

KUSCOP aims to be the new sustainability platform to create sustainability practices and form environmental awareness.

Recycling



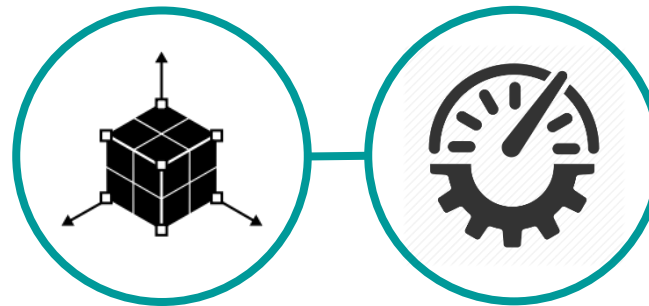
Solid Waste



Energy



Water



**Modelling
Impact**

**Sustainable
Growth**



Hazardous Waste



Transportation /Parking



Building



Landscaping

Sustainability Practices



Recycling & Circular Economy



Reducing Carbon Footprint



LIBRARY REUSE POINTS

*In Koc University, we observed that a portion of students in campus were using just one side of the paper, and it created a **great amount of waste that is reducable**.*

1

The KUSCOP Reuse Points were placed in the library so that people would share one side used papers.



2

In order to draw students' attention, poster including information about reusing and recycling has designed.

3

Consequently, KUSCOP provided draft paper to students in library and to reduce the usage of paper while, at the same time, presenting useful information about sustainability.



PRINTING SYSTEM PROJECT

Another big proportion of waste at Koc University comes from paper. Although paper is recyclable, Recycling paper generates **CO2 emissions and water usage**. Before the project, students had to pay the same amount of money whether they **print single sided or double sided**.



- In order to create awareness, KUSCOP changed the system to favor double-sided printers. In the new system, single-sided prints are charged 0.07TL while double-sided prints are charged only 0.10TL

- Moreover, KUSCOP provided printing manuals at the major printing locations, explaining how to print double-sided and how to print multiple slides on one page.

Sustainability Practices



Human Activities

KUSCOP

Bugünkü Kahveniz Yarına Katkı Olsun!

Karbon ayak izinizi azaltmanız için
favori termosunuz ya da
bardağınızla gelin;
bizden 1 yerine **2** damga kazanın.

Kampanya Caffè Nero Türkiye Uygulaması kullanılarak
yapılan alışverişlerde geçerli değildir.

CAFFÈ
NERO

KUSCOP
Sustainability
Commitment

KU GÖNÜLLÜLERİ
ÇEVRE GRUBU

gönüllüleri

GEC

NERO MUG PROJECT

*Through observations, we have seen that the cardboard coffee cups and holders result in a **huge amount of disposables**. Recycling rates was not sufficient to decrease the amount of disposables.*

- KUSCOP created a solution which results directly less consumption off paper coffee cups and holders .



- Nero was already given 1 free coffee for every 9 purchased coffee. In order to encourage students to use mugs, KUSCOP developed an agreement with Nero so that when someone buys a coffee with a mug, they receive 2 stamps on their card.

SHAKE AND FOLD

*After conducting a detailed research on segmentation of waste of Koç University, we found out that a major component was **drying towels**, that can only be used for once and **cannot be recycled**.*



➡ Solution: Showing people that they can dry their hands more successfully with less material.

We compared a number of paper towels bought in one year before the campaign (2015) and 2016. The reports showed us that the total usage of paper towels **decreased by 28%** while the number of students increased from 2015 to 2016. ⬅

REMOVE YOUR TRAY

Until 2014, it has been a long standing habit that students and staff left their food trays on tables while trays & waste were collected by cleaning staff.

Staff was not able to deal with piles of food trays and they were not able to separate valuable recycle material from other wastes due to time constraints.



Within the project students and staff were motivated to bring their food trays to tray holder. Also recycle bins of glass, metal and paper were located next to tray holders so that people can recycle their wastes on the way to tray holders.

This problem is now solved. This project was implemented and maintained successively for the last 2 years and the problem of piles of food trays on tables

Sustainability Practices

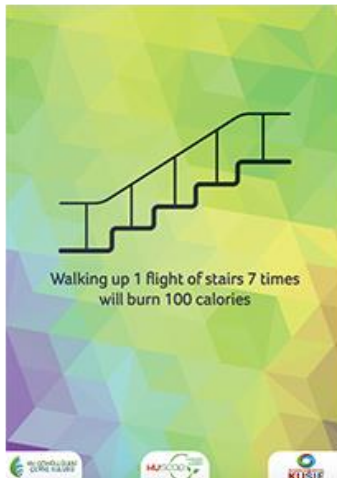


Energy and Building Technologies

ELEVATOR USAGE

*Getting on the elevator for 2 floors means we are wasting the amount of energy that we **could fully charge our phones**.*

- For this purpose, we observed the usage of elevators at different times in a day. KUSCOP analyzed which elevators are the most used ones.



- In order to take an action about elevator usage and save energy, we need to show the consequences of getting on the elevator. So, we designed some stickers that visualized facts about its energy consumption and motivates people not to use it.

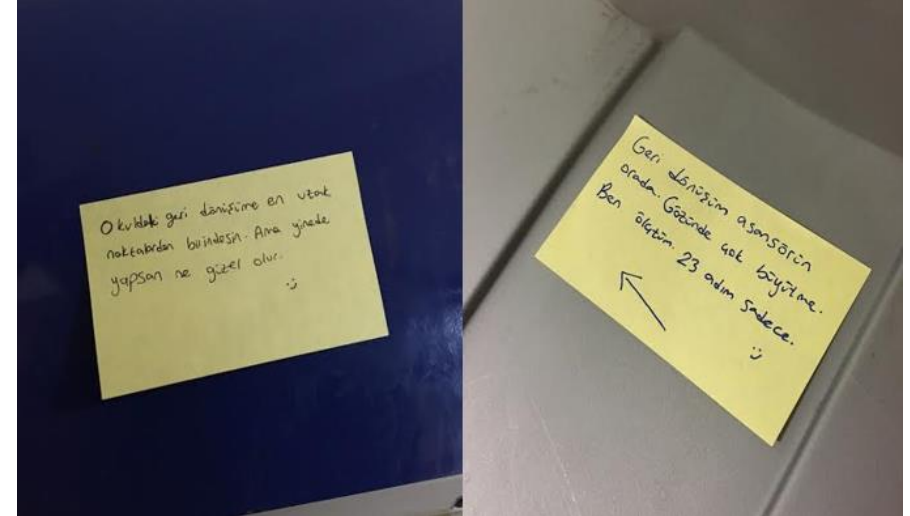
GLLP & OIP Projects



GLLP & OIP Projects



- The group made a plastic throne from using **plastic bottles** and exhibit it at the student center, in order to draw attention to **daily plastic bottle consumption**.



- By putting small post-its on garbage bins, project aims to **create awarness** and make students to use recycle bins more.

GLLP & OIP Projects

- GEC group **did 100+ depth interviews**, in order to understand the needs students for using glass bottle.



- After depth interviews, group understand that students have concerns about the **taste of refined water** in the school.



- Then the group decided to do a **blind water taste** challenge. At the end of the challenge many students could not differ the taste of refined water and bottled water.



Sustainability Challenge

Focus Areas:



Transportation



**Energy and Building
Technologies**



**Recycling & Circular
Economy**



**Industry 4.0 & IoT
& Digitalization**



Human Activities

Sustainability Challenge

Focus Areas:



Transportation



**Energy and Building
Technologies**



**Recycling & Circular
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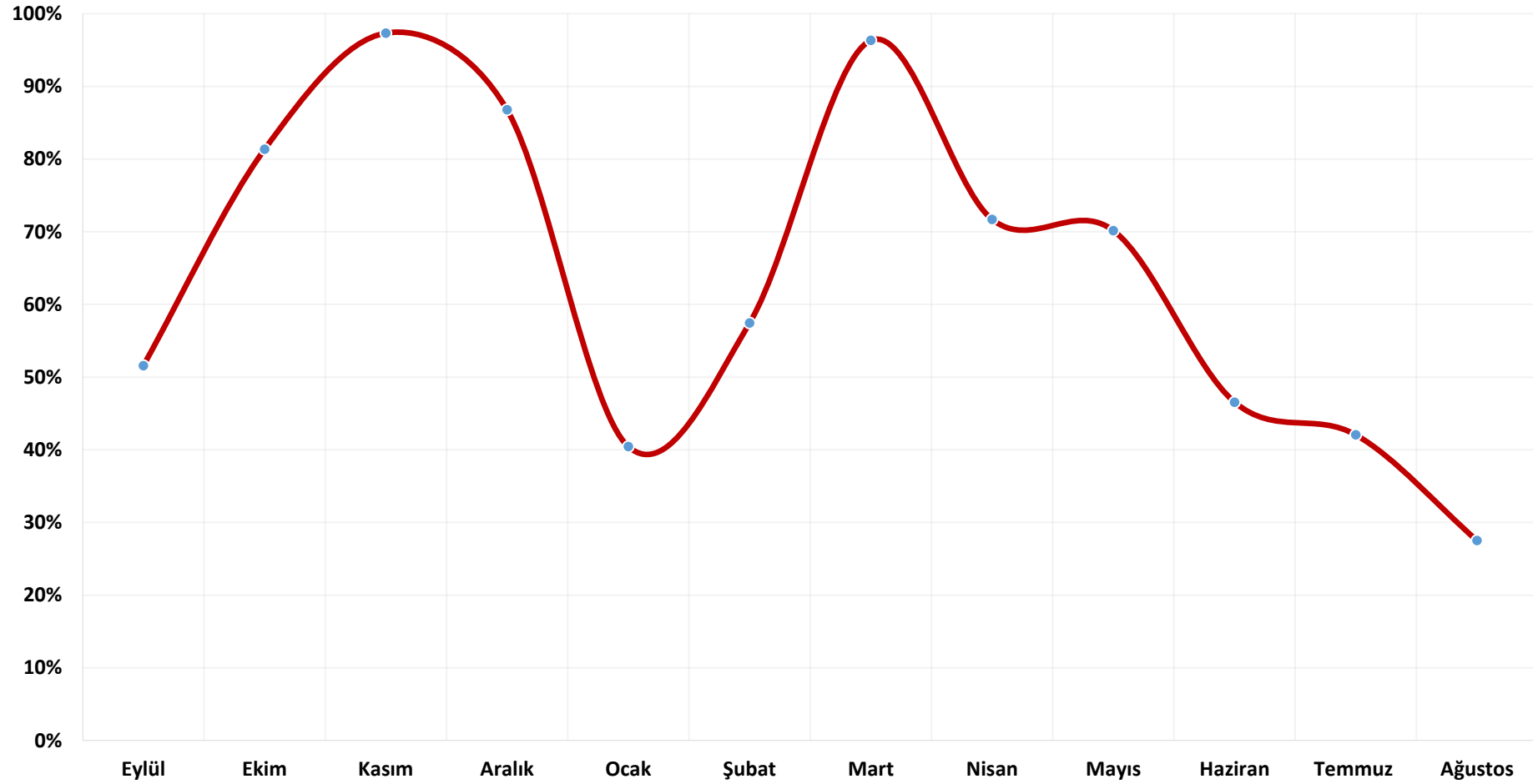


**Industry 4.0 & IoT
& Digitalization**



Human Activities

Life Cycle Analysis



Program Partners



Thank You

For Any Questions

Please contact us at mscop@ku.edu.tr

‘To Create Value Together’

