



**SULEYMAN DEMIREL UNIVERSITY  
SÜLEYMAN DERMİREL ÜNİVERSİTESİ**

**SUSTAINABILITY REPORT  
SÜRDÜRÜLEBİLİRLİK RAPORU**



OCTOBER 2020

## **HISTORY OF THE UNIVERSITY**

Attempts to open a university in Isparta first began in 1969, but the first step towards the opening of our university was the 1976 inauguration of the Isparta State Academy of Architecture and Engineering. However, the academic units operating in our university have been operating under the roof of other universities until 1992.

One of the most important steps taken by Isparta on the way to found a university is the Isparta Higher Education Foundation, which was founded in 1984. In 1984, the first construction foundations of our current campus were laid. In those days, Isparta Higher Education Foundation erected a signboard at the campus entrance that says "The Future University of Isparta". The faculty moved to its own campus in 1988 after the completion of the general administration building constructed by Göltaş A.Ş. under the leadership of Şevket Demirel.

Suleyman Demirel University (SDU) was officially established in 1992 by taking its name from Süleyman Demirel, the 9th President of the Turkish Republic. Thus, the efforts of founding a university in Isparta initiated in 1980s were embodied in 1992.

SDU has been among the leading universities of Turkey in academic, scientific and technological fields with its rapid growth momentum in qualitative and quantitative fields since 1992, its foundation year.

## **INTRODUCTION**

SDU pays attention to environmental and sustainability issues and focus to clear up them. SDU has identified its activities and goals in line with the Sustainable Development Goals. SDU aims to inform the local and national people, especially its students and staff, and the global World to raise the awareness about the importance of sustainability.

SDU has been included in the UI GreenMetric ranking and since 2017, SDU regularly reports its sustainability-related studies every year, evaluates its position at the international level, and is on its way to becoming a more sustainable university by making necessary improvements.

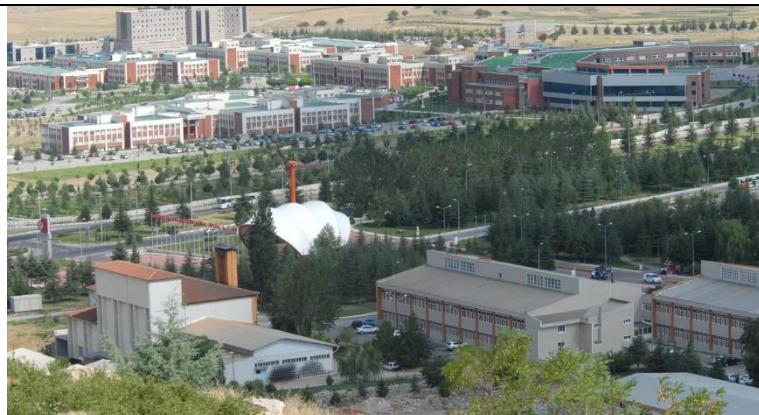
GreenMetric, which is evaluated by University of Indonesia, collects data based on sustainability between May and October and shares the results on December. The data are based on six main categories; Campus setting & infrastructure, Energy & Climate Change, Waste, Water, Transportation, and Education & Research. The results are announced based on the total scores of the six main categories.

## **UNIVERSITY'S CURRENT STATUS**

### **Campus Setting and Infrastructure**

SDU has four campuses around the city Isparta which is in the middle Mediterranean region of Turkey. The type of the university is comprehensive and Mediterranean climate is dominant in the region.

The main campus is located north of the city Isparta. Most of the building are placed in the base campus while in the other three campuses are only some vocational schools which are placed in the districts – Egirdir, Yalvac and Keciborlu – of the city Isparta.



**Base Campus**



**Yalvac Campus**



Eğirdir Campus



Keçiborlu Campus

Main Campus is located in a rural area with a high rate of forest cover and next to mountains. Main campus belongs to the city Isparta. The city Isparta has a total area of 773 km<sup>2</sup> and a total population of 264,426. This means a population density of 342 inhabitants per km<sup>2</sup>.



Main Campus Setting - Rural

The main campus area is about 3.43 km<sup>2</sup>. Total campus ground floor area of buildings is 162187 m<sup>2</sup> while the total building area is 354286m<sup>2</sup>. Based on this information, SDU has a ratio of open space to total area more than 95%.



About 433000 m<sup>2</sup> of the university area is covered with big trees and its biodiversity. This make a ratio of 12.5% of the total area. 30.3% of the total area is covered in planted vegetation, and about 9% of the total area, where no trees and vegetation are available, can absorb water.

SDU has 36590 students and 4551 staff which makes the population 41141. There are more than 70m<sup>2</sup> open space for each person in the university.

### **Energy and Climate Change**

Suleyman Demirel University intends to realize further energy savings by paying close attention to energy management. As a renewal policy, all conventional fluorescent lamps are going to be replaced when they fulfil their economic life with LED tubes for lighting. In addition, to overcome the problem with letting the lights on more than needed, lamps with detection are used. Some of the used computers and printers across the campus have Energy Star certification. The current ratio of the energy efficient appliances is about 11%.



Example of Energy Efficient Appliances Usage: University is replacing the conventional lamps with LEDs



Example of lamp with light detection



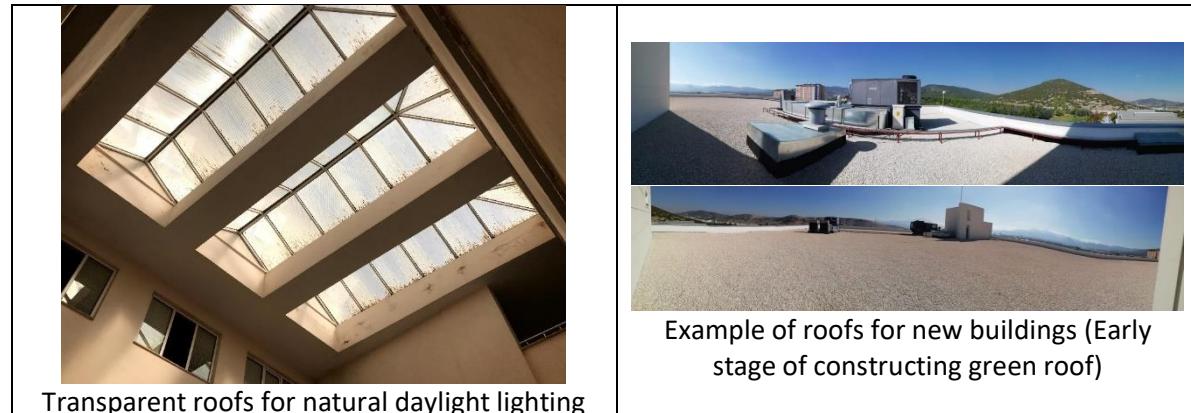
Example of Energy Efficient Appliances Usage: EnergyStar certified printer and computer usage



Solar absorbtion for heating the water used in school of medicine and swimming pool

However, SDU has adopted to build smart areas when building new buildings or renovations.

Current total space of smart building is 23701 m<sup>2</sup>, which is about 6.5% of the total building area. SDU uses the solar power for alternative energy and generates 2158526 kWh energy per year. Total usage of electricity is about 20 million kWh per year. This makes an electricity usage of about 480 kWh per person. 9.7% of the total energy is produced from solar systems.



Total carbon footprint caused by the university is about 18735 tonnes. This makes 0.45 metric ton per person. SDU is aware of the importance of the carbon footprint and makes improvements to decrease the footprint per person.

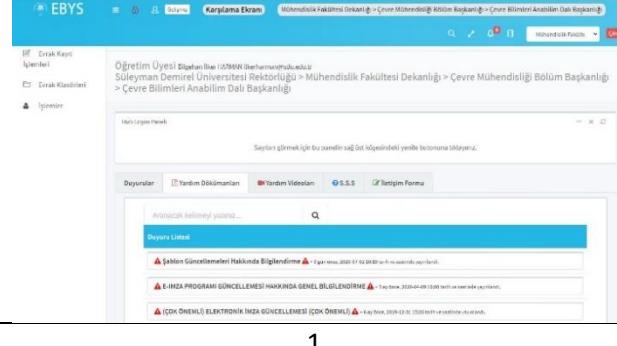
## Waste

SDU takes part of the national project "Zero Waste". "Zero Waste" project is important for Süleyman Demirel University. Süleyman Demirel University has waste boxes in many different parts of the campus for the recycling of glass, paper, plastic, metal waste and batteries. In addition, there are four recycle bins with QR codes on campus.



In SDU, there are lots of programs to reduce the use of paper and plastic on campus. For example, internal correspondence takes place in digital media, the use of thermos cups instead of paper and plastic cups is encouraged, the use of porcelain cups instead of paper and plastic cups is encouraged, water dispensers are used to reduce plastic and paper cup consumption and paper towel dispensers are used to reduce paper consumption

1. Internal correspondence takes place in digital media. SDU supports paperless system to reduce paper in daily workplace. It can reduce a lot of paper use that mean Suleyman Demirel University can reduce CO2 emissions and save the world.
2. The use of thermos cups instead of paper and plastic cups is encouraged.
3. The use of porcelain cups instead of paper and plastic cups is encouraged.
4. The use of cloth bag instead of plastic bag is encouraged.
5. Water dispensers are used to reduce plastic and paper cup consumption.
6. Paper towel dispensers are used to reduce paper consumption.

 <p>EBYS</p> <p>Oluşturma Sayfası / Mühendislik Fakültesi / Çevre Mühendisliği / Anabilim Dalı Başkanlığı</p> <p>Süleyman Demirel Üniversitesi Rektörlüğü &gt; Mühendislik Fakültesi Dekanlığı &gt; Çevre Mühendisliği Bölüm Başkanlığı &gt; Çevre Bilimleri Anabilim Dalı Başkanlığı</p> <p>Aranacak kelimeyi yazın... <input type="text"/></p> <p>Dosyalar <input type="checkbox"/> Yardım Dokümanları <input type="checkbox"/> Yardım Videoları <input type="checkbox"/> S.S.S <input type="checkbox"/> Bileşik Formular</p> <p><b>Dosya Listesi</b></p> <p>Şehir Güncellemeleri Hakkında Bilgilendirme <small>1 gün önce 2021/12/04 00:00:00 tarih ve saatinde güncellendi.</small></p> <p>E-HİZAY PROGRAMI GÜNCELLEMESİ HAKKINDA GENEL BİLGİLENDİRME <small>1 gün önce 2021/12/04 00:00:00 tarih ve saatinde güncellendi.</small></p> <p>(CDK ÖNEMLİ) ELEKTRONİK İMZƏ GÜNCELLEMESİ (CDK ÖNEMLİ) <small>1 gün önce 2019/12/31 15:00 tarih ve saatinde güncellendi.</small></p>	 <p>TÜBİTAK 2209 PROJEN <b>KABUL OLDUYSA TERMOS BARDAGINI ALMAYI UNUTMA!</b></p> <p>NEREDEN ALIRIM? SDÜ ULUSAL PROJE KOORDİNATÖRLÜĞÜ / REKTÖRLÜK BİNA www.sdu.edu.tr</p>
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Organic waste is converted with the equipment in the areas created for organic waste at Süleyman Demirel University in accordance with “Zero Waste” Project (See 3.1.Recycling program for university waste).



Battery Project: Süleyman Demirel University has waste bins (eg. waste battery boxes) in different parts of the campus to collect inorganic waste.



Example of waste battery collection

There are areas determined by SDU to collect toxic wastes (chemicals, medical wastes, etc.). These wastes are collected in areas designated as "Hazardous Waste Room", "Medical Waste Room". They are safely stored there until they are picked up from authorized company.

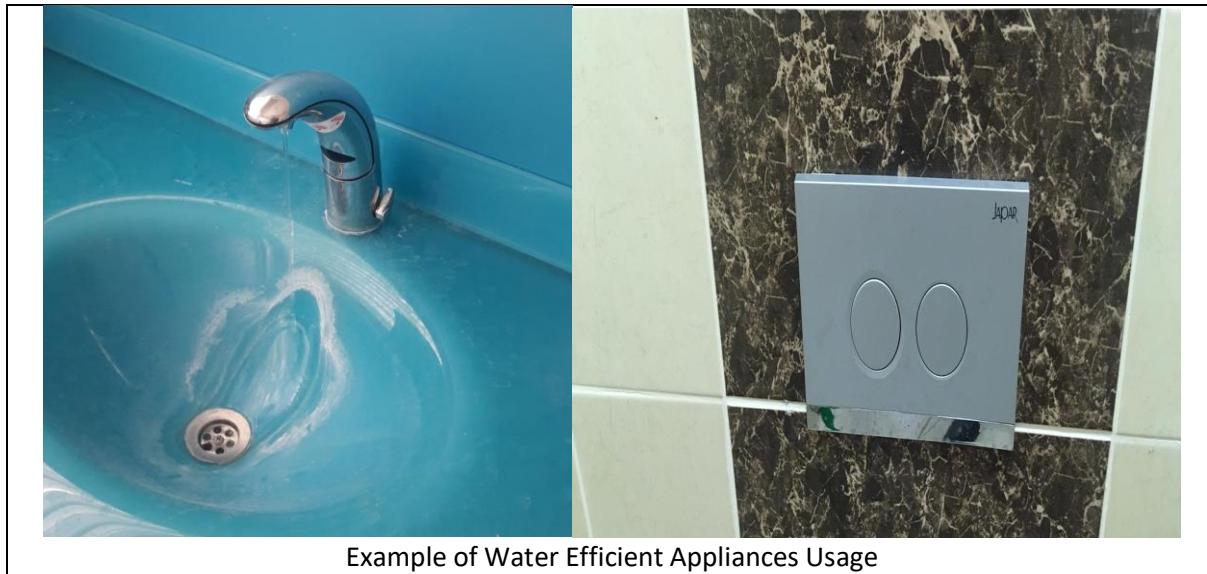


Example of Toxic Waste Treatment

The wastewater originated in the campus is collected with sewerage system/pipe network and received by Isparta Municipal Wastewater Treatment Plant for disposal.

## Water

SDU has started a new project named “Green Livable and Sustainable Campus Model Development” where sustainable developments about water will be realized through the project. For now, water efficient appliances are used in the wet areas of the university.



## Transportation

SDU has 48 cars actively used and managed by itself. These cars are used for transporting persons and goods. In addition, about 5200 cars and 800 motorcycles entering the university daily. This makes 0.146 vehicles per person. University sites in and around main campus are very well served by local buses run by the County Councils so there is very little demand for shuttle buses. However, busses provided from municipality are serving as free ring services at 7 different times (09:00, 10:00, 11:15, 13:00, 14:00, 15:00 and 16:00) in the campus are during weekdays.



One shuttle operates in the university and the average passenger number is about 16. All Suleyman Demirel University sites are cyclist and pedestrian friendly. All sites have cycle racks in a variety of designs. The University provides 400 free bikes to students. 0.009 bikes per person is available in the campus.



Two types of bicycles made available to the university population for free and a sample of pedestrian and bicycle road

Total parking area of the university is 99020 m<sup>2</sup>. The ratio of the parking area to total campus area is 2.8% and all the parking area is distributed around the campus. SDU aims to decrease the parking area on campus. Program is in preparation. For now, SDU provides free bikes and the campus area is easily accessible via local bus. The campus area is covered with pedestrian paths.

1. Separator between road for vehicle and cycle path (blue area) and the pedestrian path is separated using physically by constructing higher.
2. Crosswalks are placed in appropriate places for security of the pedestrians.
3. Ramps which have suitable design for pedestrian having physical disabilities.
4. Street lamp for pedestrian and cycles in night.



Example of pedestrian and cycle path and Street lamps

Example of pedestrian lamps

Example of pedestrian ramps

## **Education and Research**

SDU cares about the world and aims to use sustainable products. Moreover, SDU teaches its students about sustainability. 258 courses about sustainability are offered for the students. Total number of the courses are 23176. 1.1% of the total courses are sustainable related and SDU aims to increase the number of the sustainable courses. The ratio of the budget for sustainable research to the total research funding is about 1.2%.

Example of events related to environment and sustainability hosted or organized by the university in the academic year 2019-2020. Total number of sustainability/environment related events in 2017/2018 was 10 while 2018/2019 was 12 and at last 2019/2020 was 17. A total average per annum over the last 3 years of 13 events (e.g. conferences, workshops, awareness raising, practical training, etc.) with and yearly increase.



Examples of Events Related to Sustainability