KÜTAHYA DUMLUPINAR UNIVERSITY

SUSTAINABILITY REPORT

2023-2024

UNIVERSITAS INDONESIA

UI GreenMetric World University Rankings

Certificate

This certificate is awarded to

Kutahya Dumlupinar University

as The 254th World's Most Sustainable University in 2024 UI GreenMetric World University Rankings

CONTENTS

MESSAGE FROM THE RECTOR

Kütahya Dumlupınar University, which was established in 1992, is a university that is aware of its responsibilities towards the environment and society. This awareness can be observed in the results of all activities carried out within the framework of our university's institutional values and quality policies. In particular, the activities we carry out in line with the lifelong learning policy, social university policy and education and environmentally friendly campus policy clearly demonstrate the importance we attach to society and the environment.

Kütahya Dumlupınar University presents all the work it has done to contribute to sustainability to the information of its stakeholders through its sustainability report. Our first sustainability report was prepared in 2023 and presented to stakeholders. “Kütahya Dumlupınar University Sustainability Report 2023” is the fourth sustainability report of our university. As we mentioned earlier we plan to present Kütahya Dumlupınar University's sustainability contribution to our stakeholders through the sustainability reports that we will prepare in the following years.

I would like to thank firstly Associate Professor Hilmi YURDAKUL, who is DPU Quality Coordinator, for their valuable contributions during the preparation of this report. In addition, I would like to thank Associate Professor Onur KOŞAR, who is DPU Quality Coordinator Assistant, DPU Quality Coordination Team and all our stakeholders for their contributions in the preparation process of this report.

Professor Doctor Süleyman KIZILTOPRAK
Kütahya Dumlupinar University
Rector

MESSAGE FROM THE QUALITY COORDINATOR

"Kütahya Dumlupınar University Sustainability Report 2023" is the fourth sustainability report of our university. This report presents the sustainability efforts of Kütahya Dumlupınar University, which carries out its activities within the framework of sustainability policies, and the results of these efforts. In this report, the activities carried out within our university have been tried to be associated with the UN Sustainable Development Goals in terms of their impact on the environment and society.

Prepared in line with the GreenMetric University Sustainability Rating criteria and indicators, this report consists of 6 main sections: structure and infrastructure, energy and climate change, waste, water, transportation, education and research.

In the Building and Infrastructure section, information on green areas, maintenance activities, disabled-friendly university structures and practices, security and health services for students and staff, biodiversity and wildlife protection programs implemented by the university are included in the structure and infrastructure section.

In the Energy and Climate Change section, explanations are given about the use of energy, the degree of benefiting from renewable energy sources, greenhouse gas emission reduction programs and the programs implemented by the university to reduce climate change.

In the Waste section, it is explained how much of our university's organic, inorganic, toxic wastes and sewage wastes are disposed of or processed.

In the Water section, the programs implemented by the university on water saving, recycling and treated water consumption and the amount of water saved are explained.

In the Transportation section, information is given about the services provided by our university in order to reduce the greenhouse gas emissions caused by transportation, the zero emission vehicle policies and practices of the university, and the usefulness and reliability of the pedestrian roads on the university campus.

In the Education and Research section, information on courses that can be associated with sustainability, academic studies, social responsibility projects, student societies and the work of these communities are included.

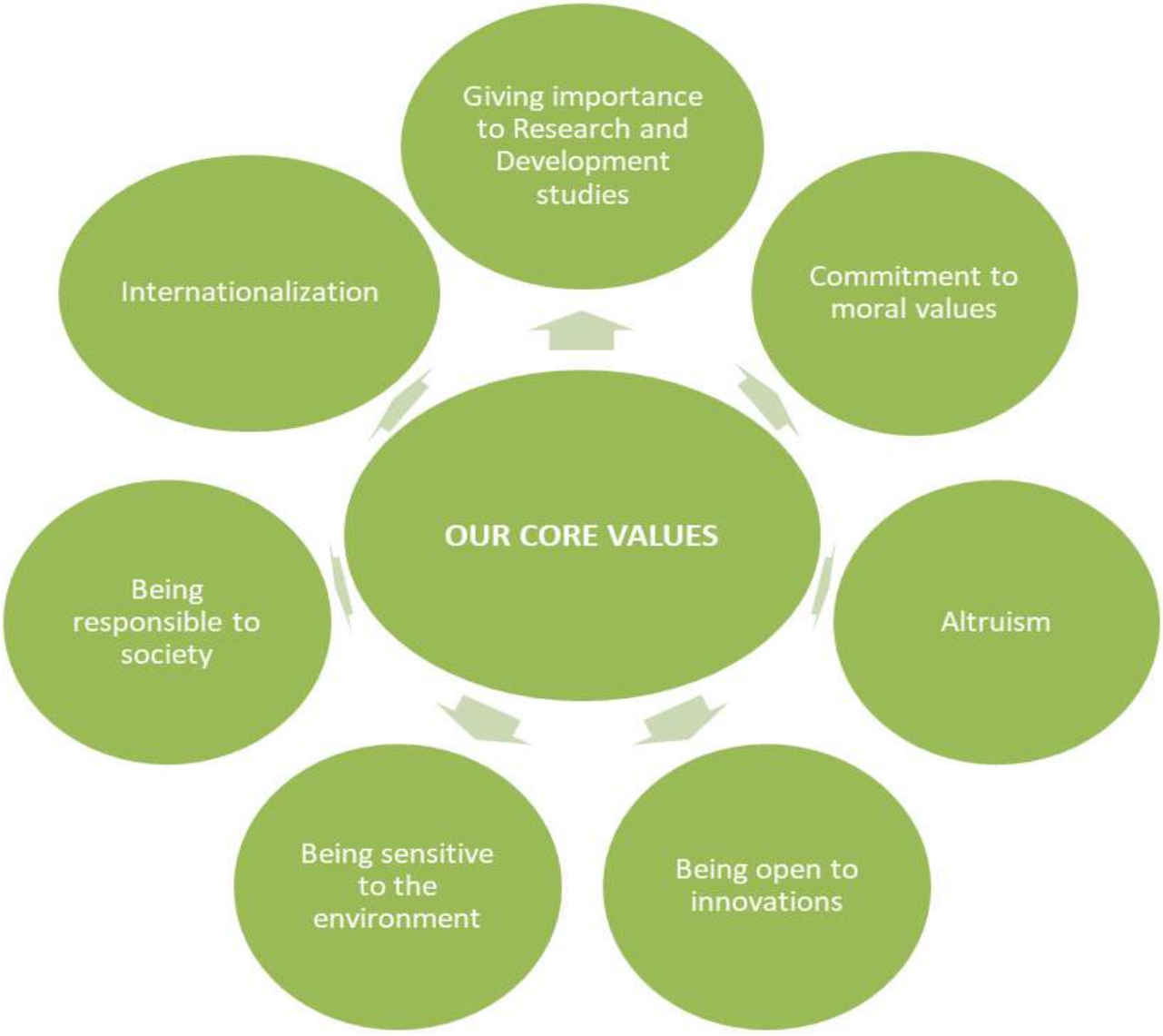
In the preparation and presentation of the report, DPU Quality Coordination Department spent a lot of time and devoted and harmonious teamwork was carried out. I would like to thank firstly Associate Professor Onur KOŞAR, who is DPU Quality Coordinator Assistant, DPU Quality Coordinator's staff and other academic and administrative staff who provided data.

Associate Professor Hilmi YURDAKUL
Kütahya Dumlupınar University
Quality Coordinator

INSTITUTIONAL VALUES

To train individuals with professional competencies with the responsibility of scientific research and community service.

To educate individuals who have professional knowledge and skills preferred in their fields.



OUR QUALITY POLICIES	
Applied Education Policy	•Creating practice-based curriculum in all units •Continuous improvement of education with the participation of stakeholders •Continuous development of laboratory, information and technological facilities
Entrepreneurship Policy	•Dissemination of employment-oriented entrepreneurship courses in the curriculum •Supporting entrepreneurial skills
Foreign Language Policy	•Increasing the development of foreign language skills •Dissemination of business foreign language in units
Technology and Information Policy	•Development of employment-oriented technology and technological competencies
Lifelong Learning Policy	•Supporting practices fostering continuous learning habits •Presentation of educational opportunities for community needs
Education and Environment Friendly Campus Policy	•Protection and development of physical infrastructure that increases education quality •Maintaining the current understanding of green campus •Initiation of initiatives to meet GreenMetric criteria
Social University Policy	•Making sociopark a model for universities •Increasing activities to improve community awareness •Developing applications to increase City-University interaction

STRATEGİC GOALS AND TARGETS

Objective 1: Increasing the weight of practice in education.

- **Targets**
  - Updating course content and outputs for practice.
  - Updating laboratories and ateliers.

Objective 2: Creating course curricula by taking into account the views of external stakeholders.

- ***Targets***
  - Establishment of the regulation regulating the activities of the Advisory Board of Education Programs.
  - Inclusion of employment courses in the curriculum (business foreign language, entrepreneurship, etc.).
  - Updating curricula based on technology and Informatics

KUTAHYA DUMLUPINAR UNIVERSITY IN NUMBERS

- 11 Faculty
- 1 School of Foreign Language
- 14 Vocational School

- 1 Institute
- 22 PhD Programs
- 56 Thesis Master's Programs
- 20 Non-Thesis Master's Programs

- 7 Coordinatorships
- 2 Language Centers
- 27 application and Research Centers

- 47.624 Students
- 5.263 Foreign Students

- 1.631 Academic and Administrative Staff

- 103 Student Community

- 5.107 Number of Scientific Publications in International Indices

- 43 Seminars
- 29 Panels
- 114 Awards
- 14 Social Events
- 1 International Competition
- 21 Exhibitions

- 94.367 Number of Certificates Given by Continuing Education Center and Language Center for Vocational Education

- 381.656 Number of Printed and Electronic Resources in the Library

- 131 Number of Activities Regarding Social Integration and Inclusion for Disadvantaged Groups

- 51.864 square meters of Social Facilities per Student

[1] Setting and Infrastructure

[1.1] Number of Campus Sites

	Kütahya Dumlupınar University Turkey
	Kütahya Dumlupınar University Turkey
	Altıntaş Vocational School

	Çavdarhisar Vocational School
	Domaniç Hayme Ana Vocational School
	Dumlupınar Vocational School

	Emet Vocational School
	Gediz Vocational School
	Hisarcık Vocational School

	Pazarlar Vocational School
	Simav Vocational School
	Şaphane Vocational School

Tavşanlı Vocational School

Kütahya Academy of Economics and Administrative Sciences, which forms the core of Kütahya Dumlupınar University, was established on October 12, 1974, under the name of Kütahya School of Management Sciences, affiliated to Eskişehir Academy of Economic and Commercial Sciences.

The college, which started its education in a two-storey building near the Kütahya Zafer Square on December 4, 1974 and is now affiliated with the Presidency of the Turkish Manuscripts Institution, was upgraded to a faculty by the Academy on February 15, 1979 and renamed the Kütahya Faculty of Management Sciences. With the Decree Law No. 41 on 20 July 1982, the institution was organized as Kütahya School of Administrative Sciences, affiliated to Anadolu University Faculty of Economics and Administrative Sciences. In 1987, it was named Kütahya Faculty of Economics and Administrative Sciences by law.

Dumlupınar University was separated from Anadolu University by law on 11 July 1992. In addition to Kütahya Faculty of Economics and Administrative Sciences and Kütahya Vocational School, the newly established Faculty of Arts and Sciences, Faculty of Engineering, Simav Technical Education Faculty, Bilecik Faculty of Economics and Administrative Sciences, Institute of Social Sciences and Institute of Science and Technology were affiliated to Dumlupınar University.

Faculty of Fine Arts ; One year after the establishment of the university, which continued its education in the building in which it was founded while affiliated with Anadolu University in the 1993-94 academic year, a vocational school was opened in the districts of Tavşanlı and Gediz, with the decision taken by the Higher Education Council (YÖK). In 1994, vocational schools affiliated to Dumlupınar University were established in 10 districts of Kütahya and 4 districts of Bilecik. The construction of Evliya Çelebi Campus, which is the largest and central campus of the university, started in 1995. Three years later, the Faculty of Arts and Sciences and the Faculty of Engineering, and then the Faculty of Economics and Administrative Sciences moved to this campus. The first rectorate building in the campus has been arranged as the building where the Dean's Office of the Faculty of Economics and Administrative Sciences is located today.

Faculty of Engineering; With the establishment of Bilecik University in 2007, Bilecik Faculty of Economics and Administrative Sciences and vocational schools in Bilecik's Gölpazarı, Osmaneli, Pazaryeri and Söğüt districts were separated from Dumlupınar University and joined to Bilecik Şeyh Edebali University with its current name.

After the Faculty of Medicine, Simav Technology Faculty established instead of Simav Technical Sciences Faculty which was closed in 2009; in 2011 The Faculty of Dentistry; in 2012 The Faculties of Theology and Architecture, the Institute of Educational Sciences and the Tavşanlı Tourism Management and Hotel Management and Foreign

Languages Schools were established connecting to Dumlupınar University Rectorate.

With the law numbered 7141, which changed the name of the university to Kütahya Dumlupınar University in 2018, the faculties of Medicine, Dentistry and Health Sciences, Health Sciences Institute, Gediz Health Services Vocational School and Simav Health Services Vocational School were transferred to the newly established Kütahya Health Sciences University.

In 2019, Tavşanlı Tourism and Hotel Management School was transformed into Tavşanlı Faculty of Applied Sciences, School of Applied Sciences was transformed into Kütahya Faculty of Applied Sciences, and in 2020, Physical Education and Sports School was transformed into Faculty of Sports Sciences.

Kütahya Dumlupınar University Campuses:

1. Evliya Çelebi Campus
2. Altıntaş Vocational School
3. Çavdarhisar Vocational School
4. Domaniç Hayme Ana Vocational School
5. Dumlupınar Vocational School
6. Emet Meslek Vocational School
7. Gediz Vocational School
8. Hisarcık Vocational School
9. Pazarlar Vocational School
10. Simav Vocational School
11. Şaphane Vocational School
12. Tavşanlı Vocational School

Altıntaş Vocational School; The fact that the Vocational School is close to the surrounding provinces provides an important advantage for the students. The vocational school continues its educational activities with the departments of Postal Services, Population and Citizenship, Food Technology, Food Quality Control and Analysis, Laboratory Technology.

Çavdarhisar Vocational School was founded in 1994. The vocational school continues its educational activities with the departments of Tourist Guidance.

Domaniç Hayme Ana Vocational School; The vocational School started its education life in the 1994-1995 academic year in line with the principle of raising qualified manpower in parallel with the developing country's economy and technology. The vocational school continues its educational activities with the departments of Banking and Insurance, Logistics, Social Security and Information Management.

Dumlupınar Vocational School is a higher education institution that provides two-year associate degree education on the basis of formal education in order to meet the need for qualified intermediate staff in various fields such as energy, education and health services in line with the principles and objectives of our country's development plans, and to establish a link between manpower and educational elements. The vocational school continues its educational activities with the departments of Alternative Energy Resources Technology, Child Development and Health Institutions Management programs.

Emet Vocational School ; Our school, which started its educational activities in the 1994-1995 academic year, today, it continues its education and training services under 9 different programs, namely Child Development, Foreign Trade, Business Management, Chemistry, Public Finance, Securities and Capital Markets, Accounting and Tax Applications, Health Institutions Management, Tourism and Hotel Management.Moreover, foreign trade, Chemistry, Finance and Health Institutions and Management programs also have evening education. Our college, which has an open area of 38000 m2 and a closed area of 3800 m2, is 100 km away from the center of Kütahya, and transportation can be provided from the Kütahya Central Bus Terminal.

Gediz Vocational School is 3 km away from the district center and with its campus built on an area of 418,000 m2; It

provides its students with a comfortable and peaceful educational environment with its architectural structures that are far from the crowd of the city center and intertwined with nature. In addition, Gediz Vocational School; with its modern sports facility, social facility and library, where sports activities such as football, basketball and tennis are held, it allows its students to have a good time in the campus. KYK Girls' Dormitory with a capacity of 500 students; with its extensive social facilities and the new and modern building, is 150 meters from the classrooms. Our vocational school continues its educational activities with the departments of Justice, Banking and Insurance, Logistics, Computer Programming, Office Management and Executive Assistant, Graphic Design, Occupational Health and Safety, Mechatronics, Health Institutions Management, Medical Laboratory Techniques, Medical Promotion and Marketing .

Hisarcık Vocational School; Our school, which is structured with the understanding of a national and contemporary Vocational School, has taken the responsibility of fulfilling its duties in making our students have a qualified profession and in making our country one of the most advanced and respected countries in the world in all areas of international competition. Our vocational school continues its educational activities with the departments of Banking and Insurance, Public Relations and Promotion, Human Resources Management, Occupational Health and Safety, Logistics, Criminal Execution and Security Services, Land Registry and Cadastre.

Pazarlar Vocational School was opened under the Kütahya Dumlupınar University with the 14.02.1994 and 95-5332 numbered election of the Higher Education Executive Board. In 1994-1995 Education and training started with Fruit-Vegetable Processing and Food Technology programs in education. In the 2020/2021 academic year, Pazarlar Vocational School continues its education with Occupational Health and Safety, Food Technology, Machinery and Construction, Health Institutions Management, Health Information Systems Technician programs.

Simav Vocational School aims to train intermediate manpower that will successfully serve the science, production, trade, industry and technology of our country, with an increasing momentum since its establishment. Our vocational school continues its educational activities with the departments of Electricity, Banking and Insurance, Logistics, Human Resources Management, Local Administrations, Health Tourism Management, Computer Programming, Interior Design, Laboratory Technology, Biomedical Device Technologies and Mechatronics.

Şaphane Vocational school has a 210m2 conference hall in the school building for social and cultural meetings and shows, and also a 25m2 meeting room in the new service building. Apart from this, students meet their needs by always making use of the movie theater belonging to Şaphane Municipality. The School continues its educational activities with the departments of Public Relations and Publicity, Law Office Management and Executive Assistance, Banking and Insurance, Local Administrations and Social Services.

The aim of Kütahya Dumlupınar University Tavşanlı Vocational School is to train professionals who are qualified and equipped to meet the requirements of the 21st century, in new and important fields of work where it is difficult to find professional staff trained with contemporary approaches in parallel with new technological developments. Our vocational school continues its educational activities with Computer Programming, Internet and Network Technologies, Office Management and Executive Assistant, Foreign Trade, Biomedical Device Technology, Machinery, Map Cadastre, Automotive Technology, Accounting and Tax Applications and Logistics departments.

[1.2] Campus Setting

Example of rural campus environment (Kütahya Dumlupınar University, Turkey)

Department of Health, Culture and Sports
(Kütahya Dumlupınar University, Turkey)

Ponds
(Kütahya Dumlupınar University, Turkey)

Parking Areas
(Kütahya Dumlupınar University, Turkey)

Parking Areas
(Kütahya Dumlupınar University, Turkey)

The campus area is located in a rural area with a high rate of forest cover. Evliya Çelebi Campus, which is the central campus of Kütahya Dumlupınar University, is established on an area of over 7,500 decares on the 10th kilometer of the Kütahya-Tavşanlı Highway. University rectorship; Graduate Education Institute; Faculty of Education, Faculty of Arts and Sciences, Faculty of Fine Arts, Faculty of Economics and Administrative Sciences, Faculty of Islamic Sciences, Kütahya Applied Sciences, Faculty of Architecture and Faculty of Engineering; School of Foreign Languages; Social facilities such as Martyr Petty Officer Ömer Halisdemir library, covered Turkish bazaar and guesthouses are located in Evliya Çelebi Campus. The academic structure of Kütahya Dumlupınar University consists of 1 institute, 11 faculties, 1 school, 14 vocational schools, 3 departments affiliated to the rectorate and 18 research centers. Kütahya is neighbor to metropolitan cities such as Balıkesir, Bursa, Eskişehir and Manisa in terms of its location. Due to its proximity to Eskişehir and Bursa, some university students can spend their weekends in these cities. Student clubs have an important place in the social life and culture at Kütahya Dumlupınar University. Student clubs endeavor to raise awareness among university students by organizing trips, interviews or social responsibility projects from time to time.

[1.3] The ratio of open space to total area.

Area Viewed from Satellite(Kütahya Dumlupınar University, Turkey)

Description:
The total campus area and the total campus circumference of Kütahya Dumlupınar University are given.
Total area: 7866913.92 m^2.
Total distance/circumference: 12 km

[1.4] Total Campus Buildings Area

	
Kütahya Dumlupınar University Rectorate 14690 m^2	Faculty of Fine Arts 44500 m^2
	
Engineering Faculty 26839.02 m^2	Faculty of Economics and Administrative Sciences 35359.03 m^2
	
Faculty Of Science And Literature 34697.12 m^2	Central Cafeteria 7467.89 m^2

Library and Documentation Department
17836.22 m^2

Indoor Sports Hall
5451 m^2

Dormitory Building
12606.26 m^2

Painting Workshop
290 m^2

Olympic Swimming Pool
10297 m^2

Woodworking Workshop + Hangar
786 m^2

Machinery Supply Building

Guesthouse Building

1145.02 m^2	3392 m^2
	
Disabled Unit 700 m^2	School of Foreign Languages 11194.92 m^2
	
DINING HALL +WC+ Cafeteria 2845 m^2	Congress Cultural Center 20900 m^2
	
Faculty of Islamic Sciences 16830 m^2	Sports Science Faculty 11620 m^2
	
Primary Education Building 9104 m^2	Advanced Technologies Center 5948 m^2

	
Lodgings 3453.68 m^2	Construction Works Technical Department 1047 m^2

Description:

BUILDING NAME	TOTAL AREA $(m¿¿2)¿$
Kütahya Dumlupınar University Rectorate	14690
Faculty of Fine Arts	44500
Engineering Faculty	26839.02
Faculty of Economics and Administrative Sciences	35359.03
Faculty Of Science And Literature	34697.12
Central Cafeteria	7467.89
Library and Documentation Department	17836.22
Indoor Sports Hall	5451
Dormitory Building	12606.26
Painting Workshop	290
Olympic Swimming Pool	10297
Woodworking Workshop + Hangar	1925
Machinery Supply Building	1145.02
Guesthouse Building	3392
Disabled Unit	700
School of Foreign Languages	11194.92
Dining Hall +WC+ Cafeteria	2845
Congress Cultural Center	20900
Faculty of Islamic Sciences	16830
Sports Science Faculty	11620
Primary Education Building	9104
Advanced Technologies Center	5948
Lodgings	3453.68
Construction Works Technical Department	1047
TOTAL	300138.16 m^2

[1.5] The ratio of open space to total area.

Area Viewed from Satellite(Kütahya Dumlupınar University, Turkey)

Description:
Ratio of open space towards total area: 98.7%
Total Open Area =7761349.78 m^2

[1.6] Total Area on Campus Covered in Forest Vegetation (meter^2)

Example of Total Forest Vegetation Area (Kütahya Dumlupınar University, Turkey)

Description:

Total area: **1924675** m^2
Total distance/circumference: 28.1 km
1924675 / 7866913.92 = 24.47 %

[1.7] Total area on campus covered in planted vegetation (please provide total area in square meters)

Area on campus covered in planted vegetation (Kütahya Dumlupınar University, Turkey)

Description:

Total area on campus covered in planted vegetation (Lawns, gardens, green roofs, indoor planting, vertical gardening) 1691386.5 m^2.
Total area on campus covered in planted vegetation / Total campus area = 1691386.5/7866913.92 = 21.5 %

[1.8] Total area on campus for water absorption besided forest and planted vegetation (please provide total area in square meters)

Total area on campus for water absorption besided forest and planted vegetation
(Kütahya Dumlupınar University, Turkey)

Description:

Total area on campus for water absorption besided forest and planted vegetation = (1924675m^2 forest + 1009551m^2 planted vegetation + 4634484.69m^2 water absorption) = 7568710.69 m^2
7568710.69m^2 / 7866913.92m^2 = 96.21 %

[1.9] University budget for sustainability effort (in US Dollars)

	2021	2022	2023	Average
Budget Total	$ 23167367	$ 23684371.26	$ 36066831.68	$ 27639523.31
Sustainability Budget	$ 4346341.64	$ 7272114.30	$ 6503896.8	$ 6040784.247
			Percentage	21.86 %

[1.10] Campus facliities for disable, special needs and or maternity care

Description:
The university has made the necessary arrangements and taken measures to facilitate the lives of disabled individuals (including students, academic and administrative staff) and to enable them to continue their lives actively. In this content;

1. The university has the necessary arrangements and improvement works to facilitate the lives of disabled individuals. Parking areas for disabled vehicles at the university, tactile tactile walking surface for visually impaired individuals in indoor and outdoor spaces of the campus, audible elevator call button and announcement system, Braille Alphabet-enabled floor plan, audible exit guidance system for disabled sections, ramps suitable for physically disabled pedestrians, as well as disabled There are disabled toilets for individuals (with a pager, grab bar and a special adjustable sink-top mirror).

2. There is a Disabled Student Unit that carries out its activities within the university. The purpose of the unit; The aim is to identify the difficulties that disabled students who are registered at our university or who have registered for the new academic year and who will come to our university in the coming years may encounter throughout their education lives. One of the studies carried out for this purpose is the implementation of the Disabled Guidance and Information System (Navigation) project. In addition, disabled individuals are informed about educational or social activities through the unit's social media accounts.

3. As a result of the arrangements made to facilitate the lives of disabled individuals, 12 buildings of our University were deemed worthy of 13 separate awards by the Kütahya Governorship and the Council of Higher Education within the scope of the Higher Education Council Barrier-Free University Flag awards in 2023. Kütahya Dumlupınar University, which made a name for itself with first places in the Barrier-Free University Awards in Turkey, received many awards this year as well. In 2023, 6 of its buildings received the Blue Flag award, symbolizing suitability for barrier-free sociocultural activities; Faculty of Arts and Sciences, Faculty of Economics and Administrative Sciences, Tavşanlı Faculty of Applied Sciences, Emet Vocational School, Pazarlar Vocational School and Simav Vocational School.

4. The Presidency of the Council of Higher Education has made the necessary improvements in the presentations, course preparations and lectures of our students with special needs studying at our University by raising awareness about our disabled students while continuing their education in distance education. In line with the demands, decisions were taken to deliver homework instead of exams for visually impaired students in the relevant term exams.

5. A Hobby Workshop has been opened where disabled individuals can spend their free time. A hobby workshop is opened for our disabled students to spend their free time and develop their hand skills, and various handicraft training is provided here.

6.There is a Baby Care Room. These are rooms used to breastfeed babies, change their diapers and even put them to sleep. Baby Care and Breastfeeding Room makes the lives of mothers who have just had a baby easier. Mothers do not have to look for a place to breastfeed their babies, change their diapers and meet their needs. Thanks to the bench and sink in the Baby Care and Breastfeeding Room, mothers can meet the needs of their babies in healthy conditions.

[1.11] Security and safety facilities

Description:

Kütahya Dumlupınar University (DPÜ) Disaster Management Systems: Security and Emergency Preparedness

In order to ensure the security of the campuses of our university, the Security Unit, which works to ensure the duty and working conditions of the Private Security Officers employed within the scope of the Private Security Service procurement, and to perform the coordination task by making the necessary inspections, carries out its activities within the framework of the "Directive on the Execution of Security Services of Kütahya Dumlupinar University". As stated in the work flow chart of the private security organization responsible for the execution of security services, in case of an event that may create a security problem in the campus, the event is intervened as soon as possible.

Kütahya Dumlupınar University has,

1. License Plate Recognition System
2. Closed Circuit Security Cameras
3. Fire alarm
4. Turnstile Access Control System
5. X-RAY Device Scan
6. Fire extinguishing system

[1.12] Planning, implementation, monitoring and/or evaluation of all programs related to Setting and Infrastructure through the utilization of Information and Communication Technology (ICT)

Stage	Activities/Programs	ICT Utilization	Evidence	Timeline	Responsible Team/Department
Planning	• Some course recordings that will be conducted via distance education in the 2023-2024 academic year will be recorded in a studio environment. • Some faculty members participate as guests in live broadcast programs in different media outlets.	Smart boards, camera systems, sound recorders and director room mounting equipment	Studio Photos	March 2023 – May 2023	Distance Education Application and Research Center Directorate (UZEM)
Implementation	Installation of smart classroom technology	Interactive whiteboards, digital projectors and video conferencing systems	Smart board, projectors	Jun 2023 – July 2023	UZEM
Monitoring	Regular audits of network infrastructure and classroom technology usage	Network monitoring tools (Nagios, PRTG Network Monitor) and usage analysis software (Google Analytics for Education)	Audit reports, network performance measurements, and usage statistics of classroom technologies.	July 2023 - Ongoing	UZEM
Evaluation	Assessment of ICT impact on teaching and learning outcomes	Surveys and feedback forms distributed via digital platforms (Google Forms, Survey Monkey) and data analysis tools (SPSS, Excel).	Survey results, feedback summaries, academic performance data	Dec 2024	UZEM

Installation of smart classroom technology

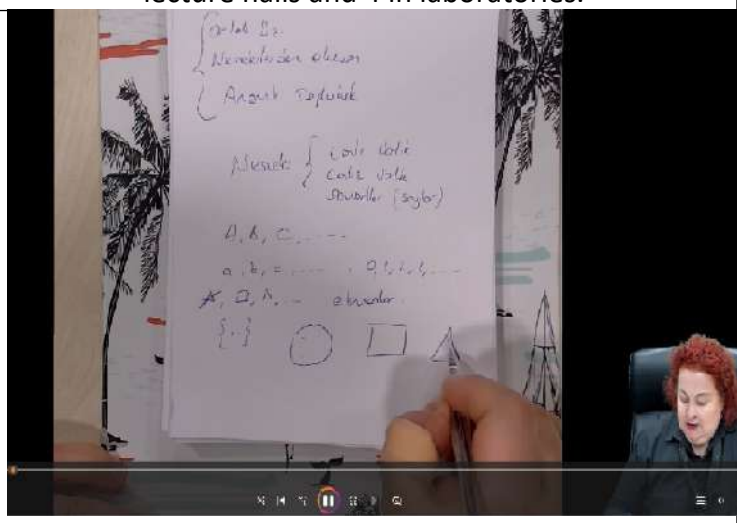
Lab.1. 51 integrated PCs, Vestel Smart Board, 1 Samsung Dongle in the laboratory

Lab.2. 21 integrated PCs, 1 HNC Smart Board in the laboratory

AT.1. HNC smart board. There are 4 classrooms, 2 laboratories and 2 lecture halls in the faculty.

There are a total of 27 projectors in 21 classrooms, 2 in lecture halls and 4 in laboratories.

Wireless Image Transfer devices are connected to the projectors (Android) in 21 classrooms, 2 in lecture halls and 2 in laboratories.



Lesson Recording Studio

[2.1] Energy Efficient Appliances Usage

Description:

Kütahya Dumlupınar University is committed to sustainability and energy efficiency across all areas of campus operations. We have implemented several key initiatives to reduce energy consumption and promote environmentally friendly practices:

Energy-Efficient Appliances: As part of our university's commitment to sustainability and reducing energy consumption, a range of high-efficiency appliances and systems have been implemented across our campus. These energy-efficient technologies are integrated into student dormitories, staff residences, academic buildings, and outdoor areas, creating a comprehensive approach to reducing the university's carbon footprint and ensuring sustainable resource management.

High-Efficiency Washing Machines and Dryers in Dormitories and Residences

Our student dormitories and staff residences are equipped with high-efficiency washing machines and dryers that consume significantly less water and electricity compared to standard models. These appliances are ENERGY STAR certified, featuring advanced sensors that adjust water levels and drying times based on load size and fabric type, reducing energy waste. This also helps extend the lifespan of the equipment and lower maintenance costs.

Energy-Efficient Televisions in Common Areas

Common areas in dormitories, lounges, and staff residences use energy-efficient LED televisions, known for their lower power consumption and enhanced brightness control. These TVs feature power-saving modes that automatically adjust screen brightness based on ambient light, further reducing electricity use. They are chosen for their long operational life and low environmental impact, aligning with our university's sustainability initiatives.

Eco-Friendly Printers

Our university uses eco-friendly printers, particularly in libraries and administrative offices, to minimize both energy consumption and environmental impact. These printers operate on energy-saving modes during standby periods and utilize low-temperature toner technology to reduce heat usage during printing. Additionally, double-sided printing is encouraged to reduce paper waste, and many of our printers are set to default eco-modes to conserve resources.

Energy-Saving Sports Equipment in Fitness Facilities

The campus fitness centers feature energy-saving sports equipment, such as treadmills and elliptical machines, that are designed to optimize energy use. Many of these devices incorporate regenerative braking technology, which captures the energy produced by the machine during exercise and feeds it back into the building's energy system. This reduces the overall energy demand of the fitness centers, aligning with our green campus policies.

Low-Energy Work Computers

Energy-efficient computers are used in student labs, faculty offices, and classrooms. These devices feature power-efficient processors, solid-state drives, and automatic sleep modes that reduce energy consumption when the devices are idle. Additionally, centralized management software ensures that computers automatically shut down during non-operational hours, contributing to the campus's overall energy savings.

Smart LED Lighting Systems for Indoor and Outdoor Use

The campus lighting system is designed with smart LED technology, incorporating motion sensors and timers to optimize energy usage. Indoor lighting in classrooms, hallways, and offices only activates when spaces are occupied, while outdoor lighting is programmed to dim or turn off during periods of low activity. LED lights are chosen for their longevity and low heat emission, further reducing energy costs.

Automated Irrigation Systems

Landscape maintenance across campus utilizes automated irrigation systems that adjust watering schedules based on local weather data and soil moisture levels. This technology conserves both water and energy, as the irrigation system only activates when needed, and shuts off automatically during rain or high humidity periods. This reduces the operational load on water pumps and contributes to efficient resource management.

High-Efficiency Boilers for Heating Systems

The campus heating infrastructure includes high-efficiency boilers designed to maximize heat output with minimal fuel consumption. These boilers use advanced heat exchangers that recover waste heat, significantly lowering fuel

costs and greenhouse gas emissions. Regular maintenance ensures these units operate at peak efficiency, supporting a sustainable heating solution for dormitories, offices, and classrooms.

Geothermal Heating Systems

Geothermal heating systems are installed in several campus buildings to utilize the earth's stable underground temperatures for heating and cooling needs. This renewable energy source reduces dependency on conventional heating fuels, resulting in substantial energy savings and decreased greenhouse gas emissions. These systems are a key component of our long-term sustainable energy strategy.

Solar Energy Applications

Solar panels installed on open spaces provide a renewable energy source for powering campus facilities. These panels generate electricity directly from sunlight, reducing reliance on the grid and lowering overall carbon emissions. The solar energy generated is used to power select buildings, contributing directly to our renewable energy goals and reducing operating costs.

Building Insulation Applications

All campus buildings incorporate high-quality insulation in walls, windows, and doors, which significantly reduces heating and cooling energy needs by preventing air leakage. This insulation system improves indoor comfort and reduces the workload on HVAC systems, thus contributing to energy savings and enhancing overall building efficiency.

Climate Control Systems for Temperature and Humidity Management

Advanced climate control systems regulate temperature and humidity levels in campus buildings to maintain comfort while conserving energy. These systems adjust heating, ventilation, and air conditioning (HVAC) output based on real-time data, preventing unnecessary energy use. Temperature set-points are optimized seasonally to minimize energy consumption without sacrificing occupant comfort.

Radiators with Heat Shields

Radiators in buildings are equipped with heat shields to reflect heat back into rooms, minimizing energy losses through walls. These shields improve heating efficiency by directing more warmth into occupied spaces, which reduces overall energy consumption. This simple yet effective technology enhances thermal comfort and supports our commitment to sustainable energy practices.

Biofuel Production Unit

Our biofuel production unit utilizes organic waste from campus dining and landscaping to produce biofuels, which are then used to supplement the campus energy supply. This unit is both an educational and operational tool, allowing students and faculty to engage in sustainable energy practices. By producing biofuels on-site, the university reduces its reliance on fossil fuels and contributes to a circular economy model.

High-Efficiency HVAC System

Our HVAC system is optimized for energy efficiency, featuring variable speed drives and advanced filtration to maintain air quality while conserving energy. This system operates based on demand, reducing unnecessary energy use during low occupancy periods. The HVAC system also recycles air within buildings, providing sustainable heating and cooling without relying excessively on external energy sources.

Appliance/System	**Total Units**	**High-Efficiency Units**	**Percentage**
Smart LED Lighting (Indoor & Outdoor)	645	574	88.9
Television	82	70	85.3
Refrigerator	436	384	88
Washing Machines & Dryers	52	40	76.9
Printers	268	221	82.4

Work Computers	426	395	92.7
Air Conditioning	46	37	78.7
Automated Irrigation Systems	30	30	100
High-Efficiency Boilers	20	20	100
Geothermal Heating Systems	3	3	100
Solar Energy Panels	122	122	100
Building Insulation	15	15	100
Radiators with Heat Shields	428	348	76.6
Biofuel Production Unit	1	1	100
High-Efficiency HVAC System	5	5	100
Total	**2579**	**2265**	**87.8**

[2.2] Smart Building Implementation

Smart building implementation $\frac{total\ smart\ building\ area}{total\ building\ area} \times 100\% = \frac{99993}{299091.16} \times 100\%$ **= % 29.91**

[2.2] Renewable Energy Sources in Campus

Total Renewable Energy Contributions

When we combine the contributions from these renewable energy sources, we find that:

Electricity from Solar PV: 217,000 kWh

Electricity Equivalent from Biomass Pellets: 48,000 kWh

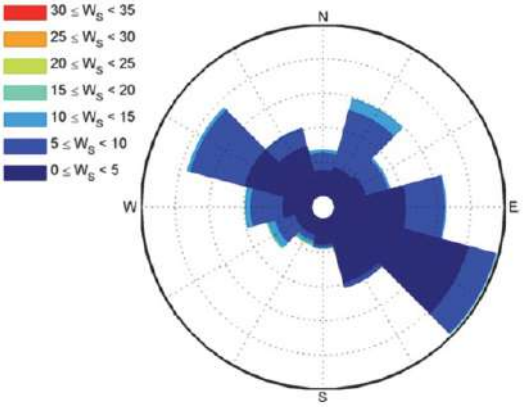
Electricity Savings from Geothermal Heating: 667,000 kWh

Total Renewable Energy Contribution: 217.000 + 48.000 + 667.000 = 932.000 kWh

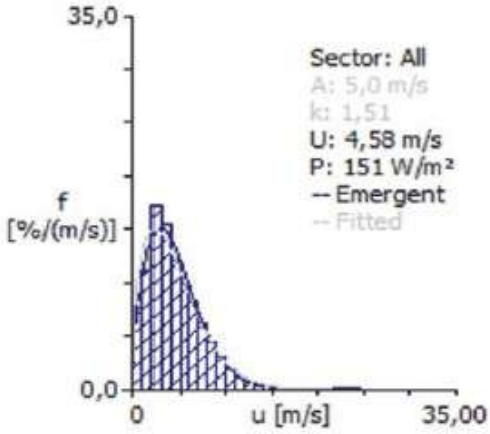
[2.3] Renewable Energy Sources in Campus

Wind Measurement Station

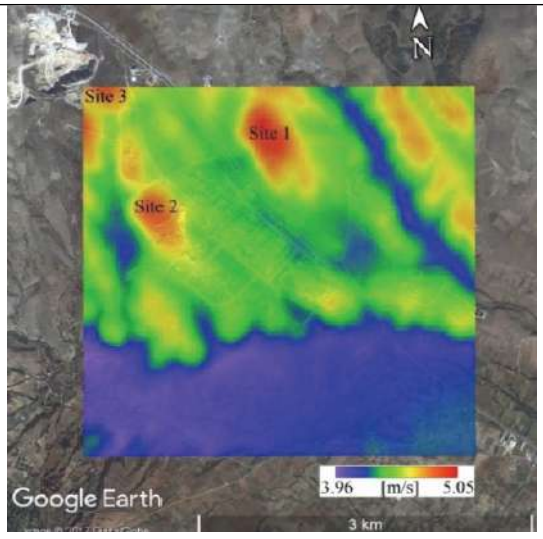
Wind Measurement Station (10 m and 30 m)



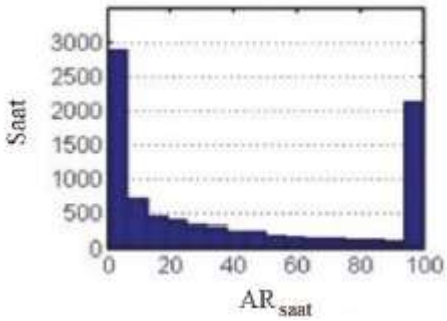
Wind Speed and Direction (30 m AGL)



Wind Frequency (30 m AGL) at campus

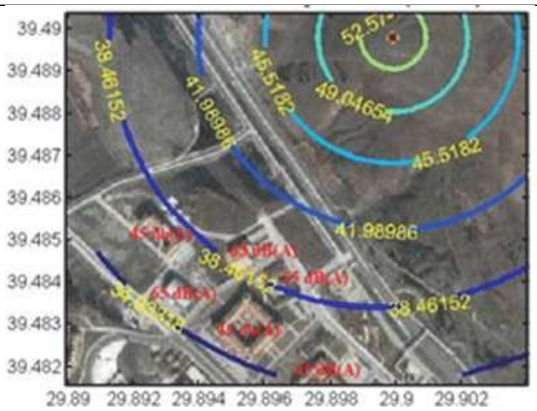


Wind Speed Feasibility at campus

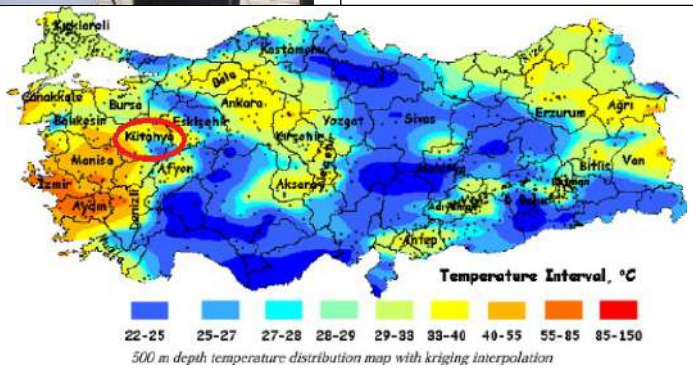


2 MW Wind Turbine Hourly Instant Electricity Coverage Analysis Example

Possible Wind Turbine
Locations at campus

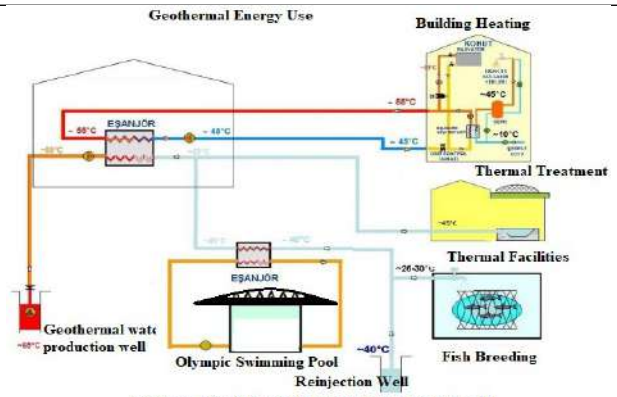


Wind Turbine noise propagation analysis
And maximum allowable noise
level values each buildings



500 m depth temperature distribution map with kriging interpolation

Reference : Basel, E. D. K., Serpen, U., & Satman, A. (2010). Turkey's geothermal energy potential: updated results. In Proc. 35th Workshop on Geothermal Reservoir Eng., Stanford University, Stanford, CA, SGP-TR-188.



Geothermal energy utilization scheme

Examples of geothermal water output at different temperatures in Kütahya

Geothermal energy management center, heat exchanger and pump systems

Description:

Our university has made significant strides in promoting sustainability and reducing its carbon footprint through the integration of renewable energy sources across the campus. The following key components highlight our commitment to renewable energy:

Photovoltaic Solar Panels: The campus is equipped with a 185 kW photovoltaic (PV) solar panel system, which has been operational since April 2003. This system harnesses solar energy to generate clean electricity, significantly contributing to the university's energy needs. The use of solar power not only reduces dependency on fossil fuels but also minimizes greenhouse gas emissions, thereby promoting environmental sustainability.

Wind Energy Potential Assessment: To explore the viability of wind energy, a dedicated meteorological station has been established on campus to collect long-term wind data. Utilizing WAsP (Wind Atlas Analysis and Application Program) software, we have identified areas within the campus that have high wind potential for future wind turbine installations. Feasibility analyses for various types of turbines have been conducted, ensuring that we can select the most efficient options for harnessing wind energy. Furthermore, we have carried out noise analyses to assess the potential impact on surrounding buildings, ensuring that the implementation of wind turbines aligns with our commitment to minimizing environmental disturbances.

Biomass Production Unit: Within our campus, we operate a biomass unit with an annual capacity of producing 10 tons of biofuel pellets. This facility not only supports our renewable energy initiatives but also contributes to waste management by utilizing organic materials to create sustainable fuel. The production of biofuel pellets offers an eco-friendly alternative to traditional fossil fuels, reducing emissions and promoting a circular economy.

Geothermal Heating System: The heating requirements for our three educational buildings and Olympic-sized swimming pool are met through a geothermal energy system. This sustainable heating method utilizes the natural heat from the Earth, providing an efficient and environmentally friendly solution to our heating needs. By leveraging geothermal energy, we significantly lower our carbon footprint and energy consumption.

Conclusion
These initiatives reflect our university's unwavering commitment to renewable energy and sustainability. By investing in solar and wind energy, biomass production, and geothermal heating, we not only enhance our campus's energy efficiency but also serve as a model for other institutions aiming to adopt similar sustainable practices. Our ongoing efforts to integrate renewable energy sources into our infrastructure demonstrate a proactive approach to environmental stewardship and sustainability, positioning our university as a leader in the transition to a greener future.

In 2023, our university has made significant progress in harnessing renewable energy sources, resulting in substantial contributions to our overall energy requirements. The following highlights the key components of our renewable energy production and their respective contributions:

Photovoltaic Solar Energy Production: Our 185 kW photovoltaic (PV) solar power plant produced 217,000 kWh of electricity this year. This renewable energy source plays a crucial role in reducing our reliance on non-renewable energy and contributes to lowering greenhouse gas emissions. By utilizing solar energy, we not only meet a portion of our electricity needs but also promote sustainable practices on campus.

Biomass Pellets Production: Our biomass production unit, with an annual capacity of 10 tons of biofuel pellets, generates approximately 48,000 kWh of electricity equivalent. This process involves converting organic waste into sustainable fuel, which provides an eco-friendly alternative to fossil fuels. The production of biomass pellets not only aids in energy generation but also supports our waste management efforts by recycling organic materials.

Geothermal Heating Systems: The heating for our three educational buildings and Olympic-sized swimming pool is provided by a geothermal energy system, which has resulted in an estimated 667,000 kWh of electricity savings. This efficient heating solution utilizes the Earth's natural heat, significantly reducing our energy consumption and carbon footprint. By relying on geothermal energy, we ensure that our heating needs are met sustainably and efficiently.

Total Renewable Energy Contributions
When we combine the contributions from these renewable energy sources, we find that:

Electricity from Solar PV: 217,000 kWh
Electricity Equivalent from Biomass Pellets: 48,000 kWh
Electricity Savings from Geothermal Heating: 667,000 kWh
Total Renewable Energy Contribution: 217.000 + 48.000 + 667.000 = 932.000 kWh

Conclusion
In total, our renewable energy initiatives have contributed 932,000 kWh to our campus energy supply in 2023. This significant achievement underscores our commitment to sustainability and demonstrates how integrating renewable energy sources not only fulfills our energy needs but also supports our environmental goals. By continuing to invest in and utilize renewable energy, we position our university as a leader in sustainable practices and contribute positively to the broader community.

The total renewable energy contribution of **932,000 kWh** to our campus energy supply in 2023 highlights the significant strides our university has made in utilizing sustainable energy sources. This figure represents the direct electricity generated from our photovoltaic solar panels, the equivalent energy from our biomass pellet production, and the substantial electricity savings achieved through our geothermal heating systems.

While this total showcases the effectiveness of our renewable energy initiatives, it is essential to recognize that further enhancements in our overall energy efficiency can be achieved through additional energy-saving applications and practices. Implementing energy-efficient appliances, optimizing building energy management systems, and adopting smart technologies can collectively elevate our campus's energy performance beyond this current figure.

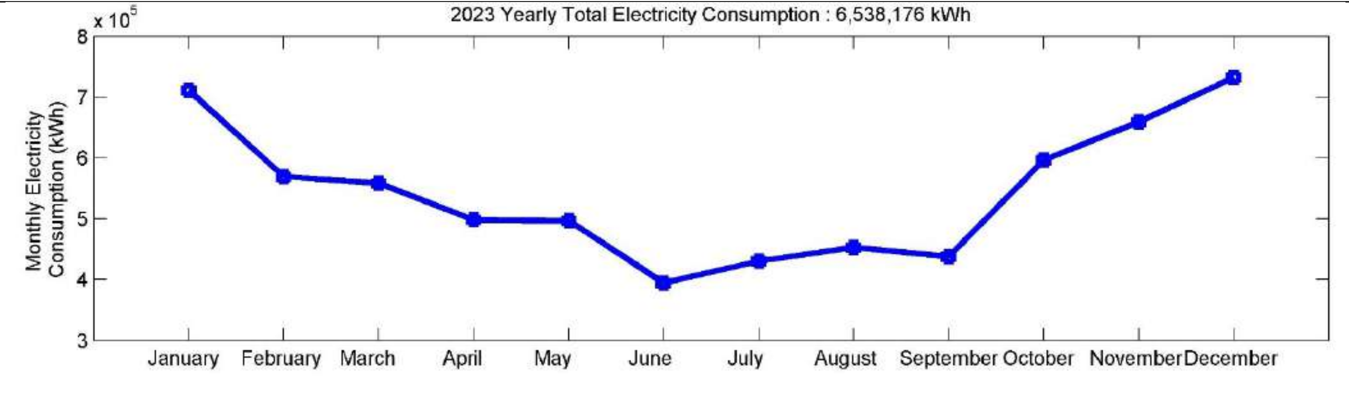
However, it is crucial to emphasize that the **932,000 kWh** derived from renewable energy sources is a standalone achievement, reflecting our commitment to sustainable practices and environmental stewardship. By focusing on renewable energy, we not only meet a significant portion of our energy needs but also set a benchmark for other institutions aiming to transition towards cleaner energy solutions. Our ongoing efforts in this area demonstrate that sustainable energy is not merely an option but a fundamental part of our operational strategy, fostering a greener future for our campus and the community at large.

As part of our ongoing commitment to expanding renewable energy sources on campus, we have conducted a comprehensive feasibility study for wind energy. This analysis has identified optimal locations for wind turbine installation, taking into account wind patterns and environmental impacts.

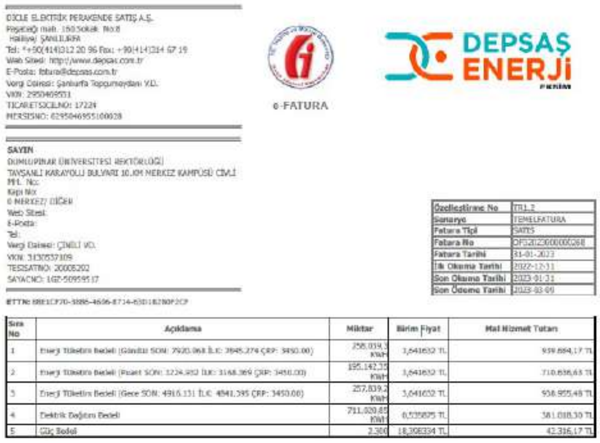
Currently, we are in the process of obtaining the necessary approvals from relevant authorities for the installation of a 2 MW wind turbine. These permits are essential for ensuring that our project complies with all regulatory requirements and adheres to best practices in environmental stewardship.

We anticipate that these approvals will further enhance our renewable energy portfolio, allowing us to harness wind power effectively and contribute even more to our sustainability goals. The implementation of wind energy will complement our existing solar and geothermal systems, creating a diversified approach to clean energy generation on campus.

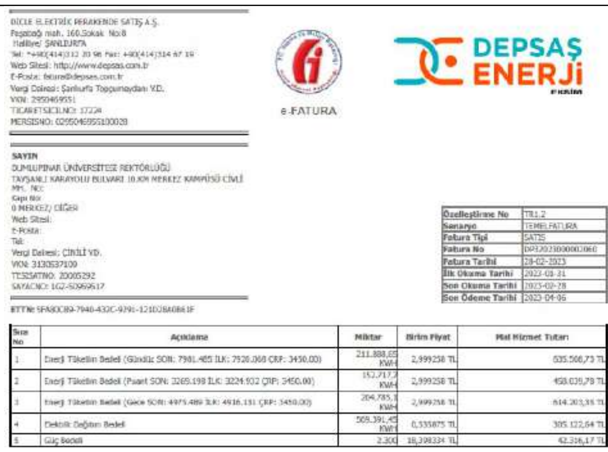
[2.4] Electricity Usage per Year (in Kilowatt hour)



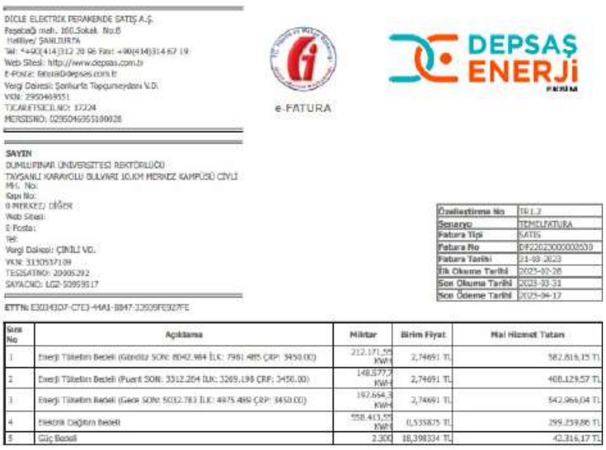
One-year monthly total electricity consumption of Evliya Çelebi Campus (Kwh)
(Kütahya Dumlupınar University, Turkey)



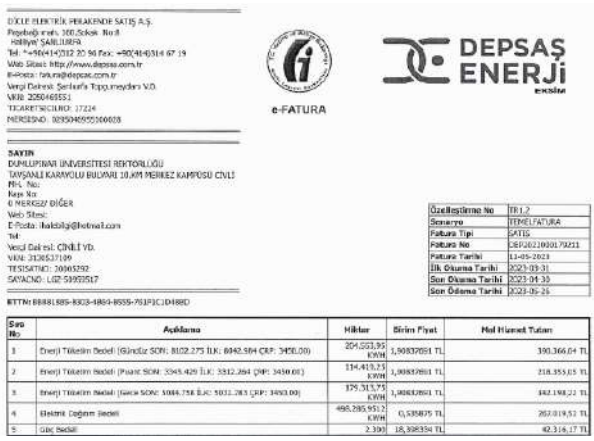
Electricity Consumption Bill Example
(Kütahya Dumlupınar University, Turkey.)



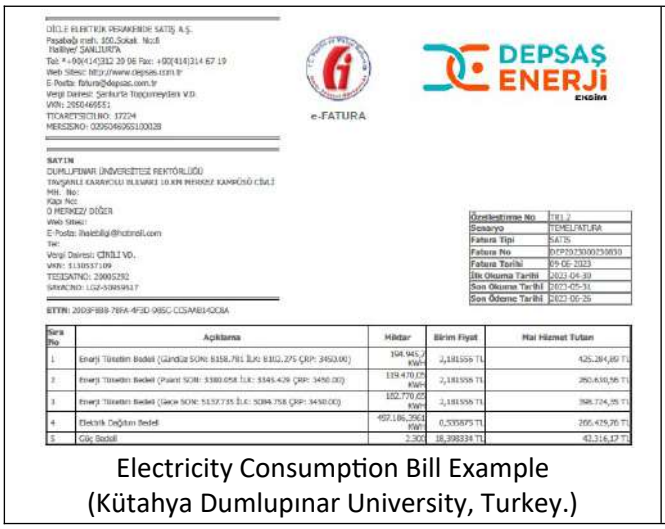
Electricity Consumption Bill Example
(Kütahya Dumlupınar University, Turkey.)



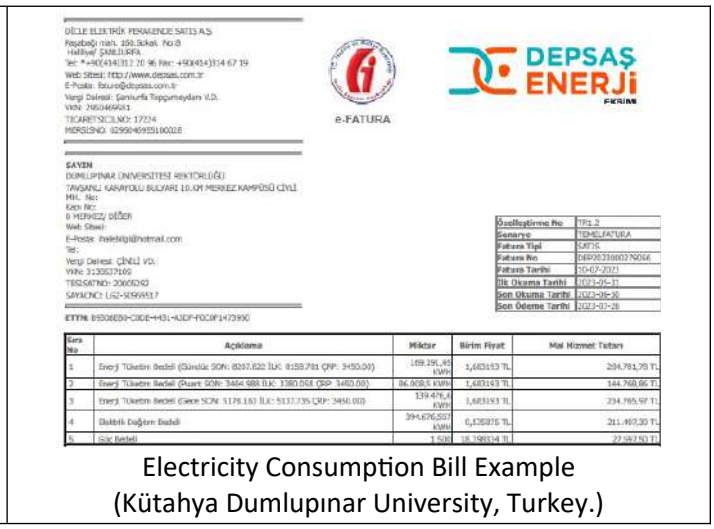
Electricity Consumption Bill Example
(Kütahya Dumlupınar University, Turkey.)



Electricity Consumption Bill Example
(Kütahya Dumlupınar University, Turkey.)



Electricity Consumption Bill Example
(Kütahya Dumlupınar University, Turkey.)



Electricity Consumption Bill Example
(Kütahya Dumlupınar University, Turkey.)

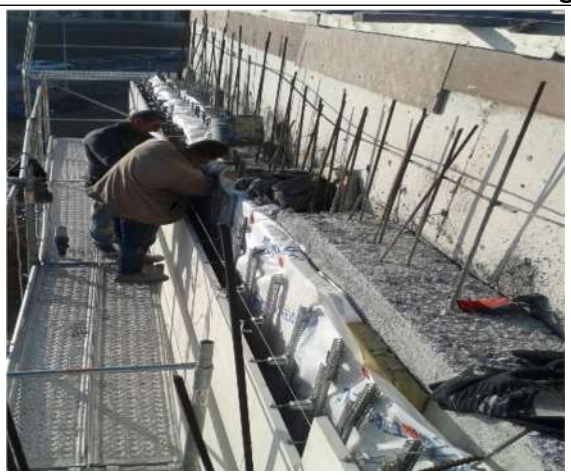
Description:
The total electricity usage of Evliya Çelebi Campus in 2021 is 5959746 Kwh. The amount of electricity usage per person is 190.48 Kwh. Kütahya Dumlupınar University main campus area; Used for electrical lighting, heating and laboratory instruments.

$E_t = 6{,}538{,}176\,kWh$ Total Campus Population = 51,173 $E_n = \frac{6{,}538{,}176\,kWh}{51173\,person} = 127.76\,\frac{kWh}{person}$

[2.5] Elements of Green Building Implementation as Reflected in All Construction and Renovation Policies

This report examines how our university integrates and implements green building practices in all new construction and renovation projects. In alignment with sustainability principles, it explores how the campus buildings are designed and executed within the framework of existing policies, focusing on energy efficiency, water conservation, waste management, and the use of environmentally friendly materials. These policies and practices not only support the university's green building strategies and goals but also demonstrate compliance with UI GreenMetric criteria. This document aims to highlight the steps taken towards creating a sustainable campus and evaluate the effectiveness of these initiatives.

Energy Efficiency

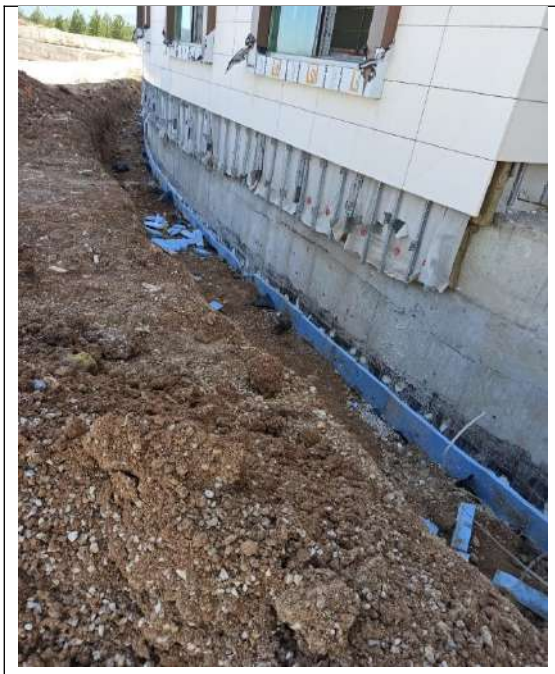
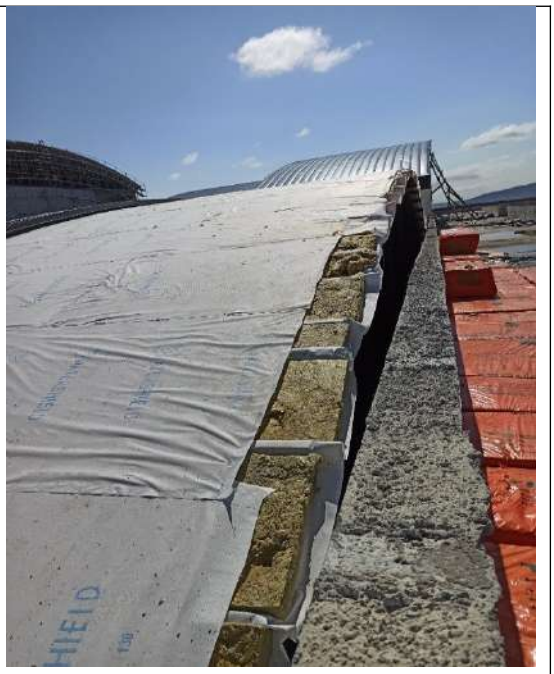


Insulation applications

Insulation applications

 Insulation applications	 Insulation applications

 Insulation applications	 Insulation applications
 Insulation applications	 Insulation applications

 Insulation applications	 Insulation applications

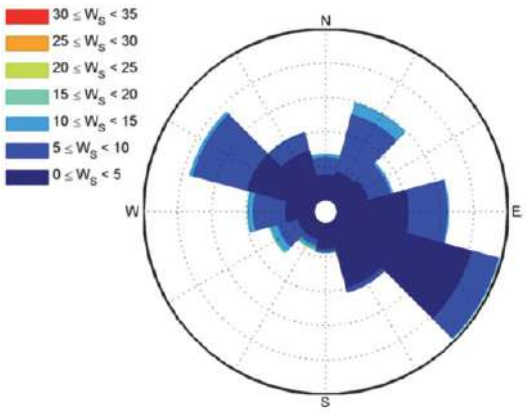
Solar Energy – Wind Energy – Geothermal Energy - Biofuel Applications	
 Solar Panel Examples	 Solar Panel Examples
 Solar Panel Examples	 Solar Panel Examples

PV System Layout (180 kW)

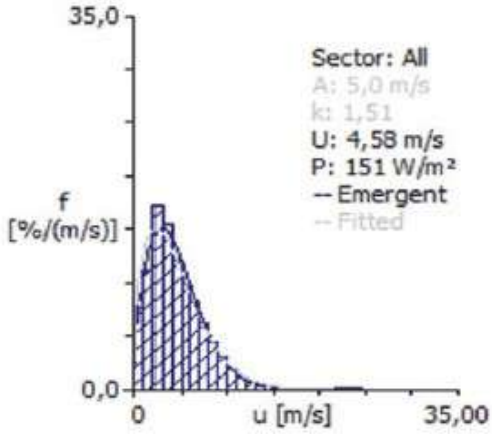
Wind Measurement Station

Wind Measurement Station (10 m and 30 m)

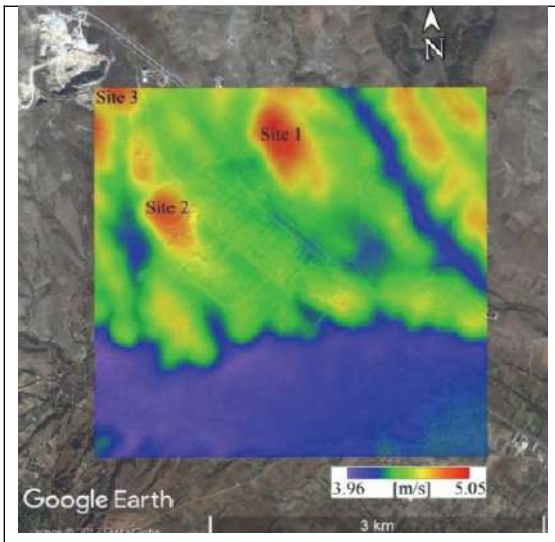
Solar Energy – Wind Energy – Geothermal Energy - Biofuel Applications



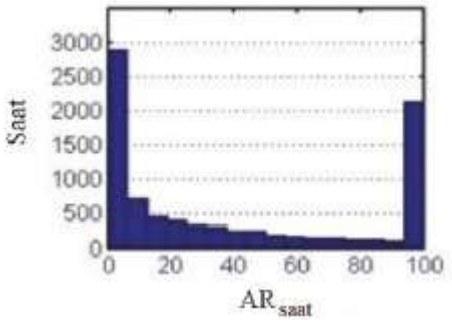
Wind Speed and Direction (30 m AGL)



Wind Frequency (30 m AGL) at campus

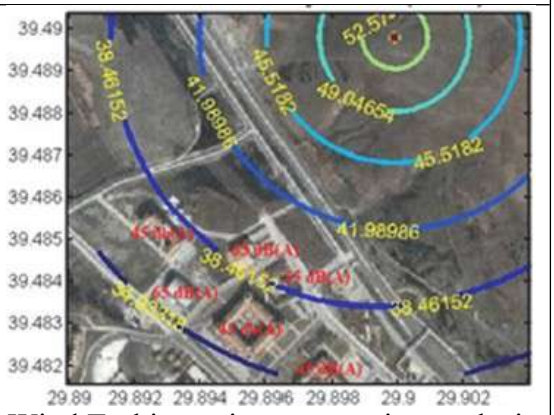


Wind Speed Feasibility at campus



2 MW Wind Turbine Hourly Instant Electricity Coverage Analysis Example

Possible Wind Turbine Locations at campus



Wind Turbine noise propagation analysis And maximum allowable noise level values each buildings

Solar Energy – Wind Energy – Geothermal Energy - Biofuel Applications	
	
Biofuel Machines Unit	Wastes on Campus can be converted into Pellet Fuel

Geothermal Heating System

Smart Lighting Examples and Smart Lighting Control		
		

Smart Lighting Examples and Smart Lighting Control

Smart Lighting Control

Smart Lighting Control

High Efficiency Smart HVAC Examples

Whole System Air Handling Unit Examples

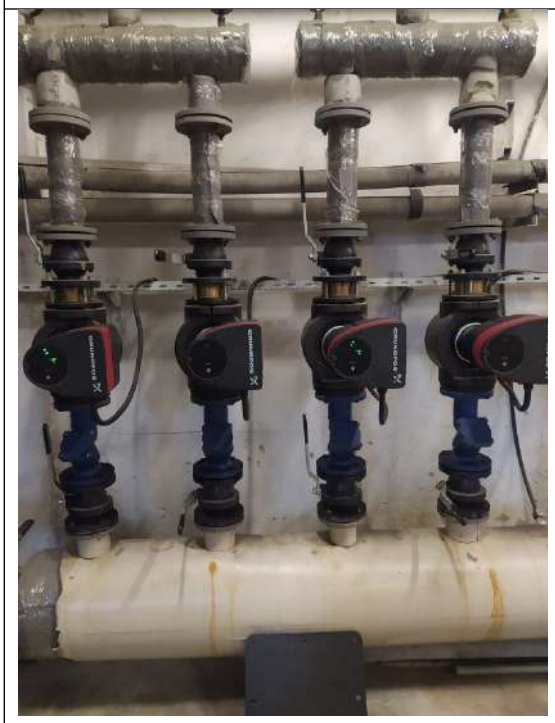
Whole System Air Handling Unit Examples

High Efficiency Smart HVAC Examples	
 High Efficiency Heat Exchanger Unit Example	 Air Handling Unit Sensor Example
 Air Handling Unit Control Panel Example	 Air Handling Unit Control Panel Example

High Efficiency Smart HVAC Examples

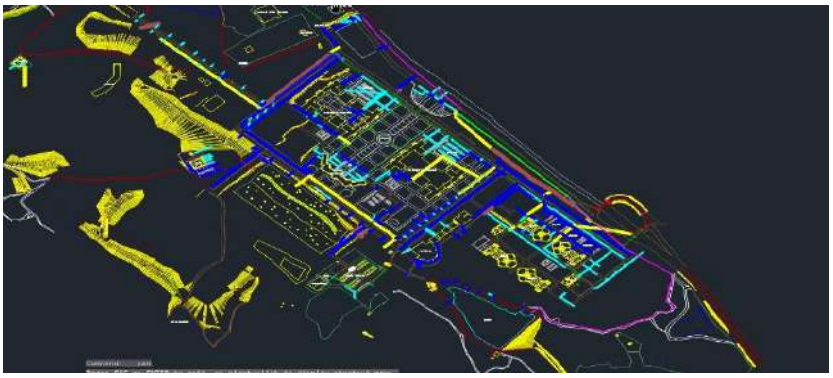
Heating Installation Automation

High Efficiency Heating System Equipment



High Efficiency Heating System Equipment

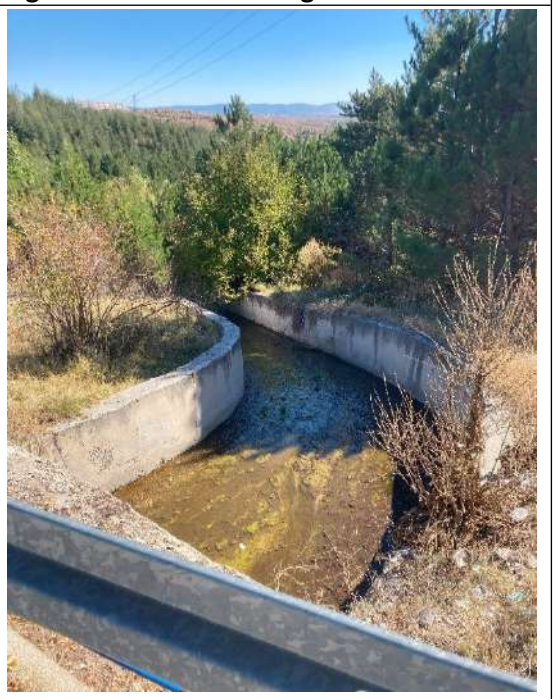
High Efficiency Heating System Equipment

Rainwater Collection Systems – Campus Water Management - Use of Underground Well Water		
 Red Icon: Main Control Center Blue Icons: Water Wells and Water Tanks  Transfer of rainwater to canal system and lakes		
 Control Panel	 PLC system	 Storage main valve lines
 Pump control	 Underground storage center	 Underground transmission lines (rainwater outfall, center)

Description of Water Wells and Water Tanks of the Rainwater Collection System

- **The system is monitored from the SCADA computer in the main center. The number of scada tags is 256.**
- **Tank capacities vary between 2000 and 3000 m^3 . The tanks are equipped with a PLC system with ethernet communication. Communication between PLCs is provided over a wireless network with Access Point devices suitable for outdoor and industrial conditions.**
- **From the panels in the wells, fault, running information, current drawn by the pump, well entrance door open and closed information are received. Pumps operate according to the level information from the well tanks. Tank water level controls are carried out in coordination.**
- **Tank levels in the warehouses are controlled by ultrasonic sensors. Ultrasonic sensors have analog output and show the warehouse height in meters on the SCADA screen. In addition to the level indicator, there is one overflow level sensor in the warehouses. The system gives an alarm when the limit height is exceeded.**
- **Flow meters are installed at tank inlets and outlets to the lines. The amount of water coming from the wells and the amount of water leaving the tank can be seen on the SCADA screen through these devices.**
- **There are systems that alarm when the tank lids are opened.**
- **Chlorination status is monitored on the SCADA screen by receiving analog signals from the chlorine devices to be placed in the tanks.**
- **The opening and closing status of the valves at points with motorized valves is managed by the PLC at the relevant point. The operation of the pumps is regulated according to the valve opening status.**

Information About the Lakes On Campus

Rainwater Collection Systems – Campus Water Management - Use of Underground Well Water	
	
Water channels carrying rainwater to lakes	**Canal conveying lake water to irrigation areas located at lower altitudes**

Lake 1

- **Completed on 29.09.2020.**
- **It covers an area of 42,341 m^2. It has a water volume of 210,000 m^3.**
- **Recreation areas have been created around it, which are also available to local people.**
- **The water flowing from the spillway discharge contributes to the irrigation of fields near the campus.**
- **The rainwater and drainage water outlets of the campus are connected to this lake and it is also fed by the surrounding groundwater and surface water.**
- **With the pumping system installed, it contributes to the irrigation of the grass areas on campus.**

Lake 2

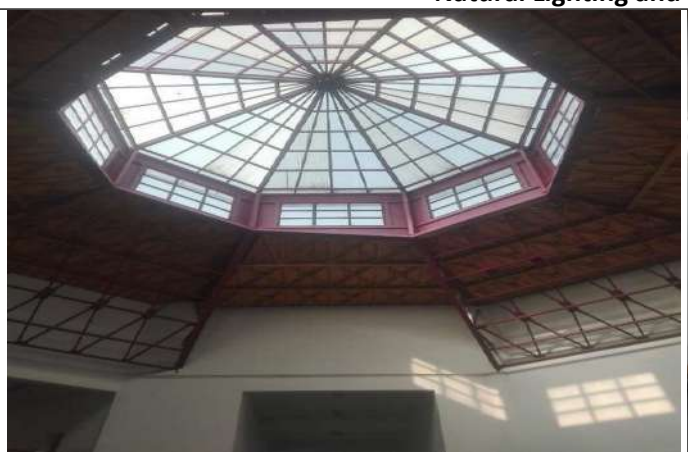
- **Completed in 2007.**
- **It was created with the machinery and equipment belonging to our university without any cost by evaluating the excavations on campus. It covers an area of 7000 m^2 and has a water volume of 24,500 m^3.**
- **Recreation areas have been created around it, which are also available to local people.**
- **It is fed by underground and stored rainwater.**
- **The discharge legs of thermal water and other waters coming to the campus are also connected here.**

Lake 3

- **Completed in 2007.**
- **It was created with the machinery and equipment belonging to our university without any cost by evaluating the excavations on campus. It covers an area of 2280 m^2 and has a water volume of 4,500 m^3.**
- **Recreation areas have been created around it, which are also available to local people.**
- **It is fed by underground and stored rainwater.**
- **The discharge legs of thermal water and other waters coming to the campus are also connected here.**

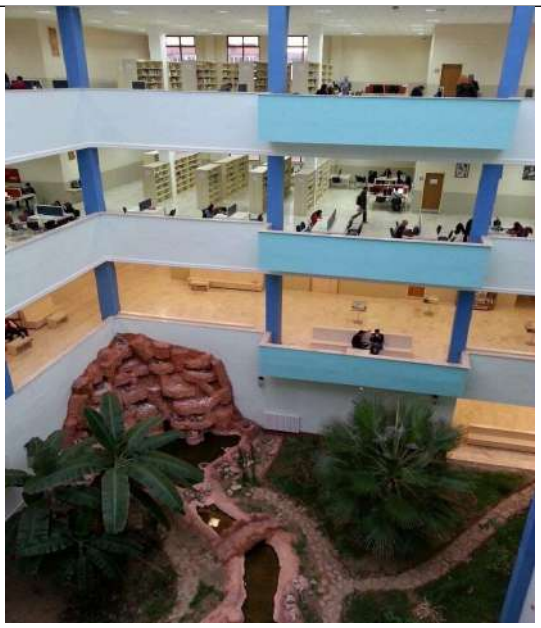
Low Flow Water Fitting Examples

Natural Lighting and Ventilation



Faculty of Economics and Administrative Sciences

Library and Documentation Department Building



Library and Documentation Department Building

Natural Lighting and Ventilation Example

Natural Lighting and Ventilation Example

Natural Lighting and Ventilation

Natural Lighting and Ventilation Example

Natural Lighting and Ventilation Example

Natural Lighting and Ventilation Example

Natural Lighting and Ventilation Example

Sustainable Landscaping

Typical High Water Efficiency Timer And Drip Irrigation System Used Throughout The Campus

Automatic Watering System

Our Vertical Garden Vision

New Congress Center Preliminary Draft Work

School of Foreign Languages indoor vertical garden concept study

Description:

Our university has adopted comprehensive policies that prioritize environmental sensitivity in all construction and renovation projects in line with its sustainability goals. These policies focus on key aspects such as energy efficiency, water management, and the effective use of natural resources, aiming to create sustainable living spaces across the campus through green building technologies.

Insulation Applications
Advanced insulation systems are used in all new construction projects and renovations of existing buildings to increase energy savings. These applications minimize the energy needs of buildings by significantly reducing heat loss during winter and cooling needs during summer.

Solar Energy PV Panels and Wind Measurement Station
Photovoltaic panels have been installed on campus buildings to harness solar energy, contributing significantly to meeting the campus's electricity needs while promoting the use of renewable energy. In addition, a wind measurement station is located on campus, and a feasibility study is being conducted to assess the potential for wind energy.

Heating with Geothermal Energy
Geothermal energy is used for heating in several buildings on campus, reducing reliance on fossil fuels and minimizing environmental impact with this innovative system.

Biofuel Applications
Various biofuel applications are implemented on campus, utilizing biomass energy to both support waste management and reduce carbon emissions.

Smart Lighting Examples and Smart Lighting Control
Smart lighting systems are used throughout the campus to enhance energy efficiency in lighting. These systems automatically adjust lighting levels according to user needs, optimizing energy consumption. Additionally, sensor-based lighting control mechanisms prevent unnecessary energy waste.

High Efficiency Smart HVAC Examples

Our buildings are equipped with high-efficiency smart HVAC (Heating, Ventilation, and Air Conditioning) systems, which are designed with technologies that maximize energy efficiency. These systems monitor energy consumption continuously and dynamically respond to indoor conditions, preventing energy waste.

Rainwater Collection Systems and Campus Water Management
The efficient use of water resources is a key component of our campus policies. Rainwater collection systems allow for the reuse of water in landscaping and cleaning, contributing to water conservation efforts. In addition, campus-wide water management systems are optimized to save water and protect underground water sources.

Use of Underground Well Water
Underground water wells are utilized to sustainably manage natural resources and meet the water needs of the campus.

Description of Water Wells and Water Tanks of the Rainwater Collection System
Water wells and tanks integrated into the rainwater collection system are a vital part of our sustainable water management policies. This infrastructure prevents water waste and contributes to the campus's water cycle.

Information About the Three Lakes on Campus
The three natural lakes located on campus play a significant role in maintaining ecosystem balance and raising environmental awareness. These lakes are effectively used for natural irrigation and within the framework of environmental sustainability.

Low Flow Water Fitting Examples
Low-flow water fittings are used in all buildings to reduce water consumption and support environmentally friendly water use. This not only saves energy but also helps conserve water resources.

Natural Lighting and Ventilation
Natural lighting and ventilation systems are implemented in buildings to increase energy savings and indoor air quality. Natural light reduces the need for artificial lighting, while natural ventilation systems minimize energy consumption.

Sustainable Landscaping
The campus landscape design is developed based on sustainable environmental principles. By incorporating water-efficient vegetation, local flora, and soil conservation techniques, the sustainability of natural resources is ensured, and ecological balance is maintained.

[2.6] Greenhouse Gas Emission Reduction Program

Description:
Our university is committed to significantly reducing its greenhouse gas (GHG) emissions through a comprehensive range of initiatives aimed at promoting energy efficiency, the use of renewable energy, sustainable transportation, and waste management. Below are the key components of our GHG emission reduction program, with relevant examples provided as evidence:

1. **LED Lighting Examples (Scope 2)**

Energy-efficient LED lighting systems have been installed across campus facilities, reducing energy consumption and cutting down on emissions related to traditional lighting methods. This transition is part of a larger effort to phase out energy-intensive lighting sources.

2. **Energy Efficient Appliances (Scope 2)**

The university has adopted energy-efficient appliances, ensuring that all equipment meets or exceeds energy efficiency standards. This includes the use of low-consumption air conditioning systems, refrigerators, and other electronic devices to reduce energy demand.

3. **Monitoring and Optimizing Energy Use (Scope 2)**

A centralized energy monitoring system is in place to track, assess, and optimize energy consumption across the campus. This system allows for real-time data analysis, leading to more efficient energy use and a decrease in overall carbon emissions.

4. **Thermal Insulation and Insulation Works (Scope 1)**

Buildings on campus have undergone retrofitting to enhance thermal insulation using eco-friendly materials approved by the Ministry of Environment, Urbanization, and Climate Change. These efforts reduce the need for heating and cooling, resulting in lower energy use and GHG emissions.

5. **Use of Renewable Energy Sources (Scope 2)**

The university is actively increasing its reliance on renewable energy sources. This includes solar and wind energy installations to supplement the campus energy grid and reduce dependence on fossil fuels.

6. **Mobile Electric Vehicle Charging Station (Scope 3)**

A mobile electric vehicle (EV) charging station has been introduced, promoting the use of electric vehicles among staff and students and reducing reliance on gasoline-powered vehicles.

7. **Solar Panel Examples (Scope 2)**

Solar panels have been installed on various buildings, utilizing renewable solar energy for electricity production. These panels provide a significant portion of the campus's energy needs, further reducing GHG emissions.

8. **Wind Measurement Station (10m and 30m) (Scope 2)**

The campus has established wind measurement stations at 10-meter and 30-meter heights to assess wind energy potential. This data informs future wind energy projects, further integrating renewable energy into the campus infrastructure.

9. **Biofuel Machines Unit (Scope 3)**

The biofuel machines on campus convert organic waste into biofuel, which is then used to power specific university operations, providing a sustainable energy alternative and contributing to a circular waste economy.

10. **Geothermal Heating System (Scope 1)**

The university employs a geothermal heating system to provide energy-efficient heating to various facilities. This reduces the need for traditional heating methods that contribute to higher carbon emissions.

11. **Green Transportation Incentives (Scope 3)**

To encourage sustainable commuting, green transportation incentives are offered to students and staff who choose low-carbon alternatives like electric vehicles, bicycles, or public transportation.

12. **Campus Route 100% Electric Bus Service in Partnership with Local Municipality (Scope 3)**

In partnership with the local municipality, the campus operates a 100% electric bus service, providing a zero-emission alternative for campus transportation.

13. **Personnel Shuttle Vehicles (Scope 3)**

Shuttle services for university personnel are designed to reduce the number of private vehicles on campus, minimizing GHG emissions from individual commuting.

14. **Bicycle Paths (Scope 3)**

Dedicated bicycle paths have been established to promote cycling as a sustainable mode of transportation, reducing vehicle emissions and supporting an active, eco-friendly lifestyle.

15. **Installation of Electric Vehicle Charging Stations (Scope 3)**

The installation of multiple electric vehicle charging stations across campus encourages the use of EVs, supporting the reduction of emissions from gasoline-powered cars.

16. **Our DUSCART Award Winning Electric Vehicle (Scope 3)**

The university proudly showcases its award-winning DUSCART electric vehicle, a project developed by students and faculty to demonstrate the potential for innovation in electric transportation.

17. **Road Sharing Application Example (Scope 3)**

A campus-specific road-sharing application allows students and staff to carpool or share rides, significantly reducing the number of vehicles on the road and lowering emissions.

18. **Example of a Recycling Program for University Waste (Scope 3)**

The university has implemented a comprehensive recycling program, ensuring the separation and proper disposal of recyclable materials, which helps reduce landfill waste and GHG emissions.

19. **Waste Segregation and Storage Example (Scope 3)**

Waste segregation bins are placed throughout the campus to encourage the proper disposal of waste, enhancing recycling rates and ensuring organic waste is composted, thus minimizing methane emissions from landfills.

20. **Recycling Workshops Exhibition (Scope 3)**

Regular workshops and exhibitions on recycling and waste management are organized to educate students and staff on best practices, fostering a campus-wide culture of sustainability.

21. **Composting Organic Waste into Fertilizer (Scope 3)**

Organic waste generated on campus is composted and converted into fertilizer, reducing waste sent to landfills and providing a valuable resource for campus landscaping projects.

22. **Tree Planting Projects (Scope 1)**

In line with our commitment to carbon sequestration, the university runs annual tree-planting projects, helping to absorb atmospheric CO2 while beautifying the campus.

[2.7] Please Provide The Total Carbon Footprint (CO2 emission in the last 12 months, in metric tons)

Description:
The total carbon footprint of Kütahya Dumlupınar University in a year is 5733.52 metric tons.
As other data are for the main campus, electricity consumption is taken only for the main campus.
The daily on-campus distance traveled for each expedition is 5 km. taken as.
For each vehicle, the daily average distance traveled was doubled (1.5 km) from the main campus entrance to the rectorate.

[2.8] Number of the Innovative Program(s) in Energy and Climate Change

Description:
Our university has implemented a comprehensive array of innovative programs and systems in energy management and climate change mitigation, each contributing to a more sustainable campus. The diversity and impact of these initiatives clearly demonstrate our commitment to sustainability and innovation, warranting full marks in this category. Here is an overview of the key programs:

1. **Centralized Energy Management Software:**

A state-of-the-art centralized energy management software continuously monitors and optimizes energy consumption across campus buildings. The platform provides real-time data and analytics, supporting efficiency improvements and enabling us to minimize energy waste effectively.

2. **Geothermal Heating System:**

Several campus buildings are heated using geothermal energy, significantly reducing our reliance on conventional fossil fuels. This renewable energy source provides consistent heating throughout the year, reducing carbon emissions and enhancing overall energy efficiency. Photographs of the system in operation have been included to illustrate this commitment.

3. **Green Transportation Initiatives:**

We have taken proactive steps towards sustainable transportation, with initiatives that include a focus on our award-winning **DUSCART electric vehicle**. Designed and built by our students, DUSCART exemplifies our dedication to green innovation and reducing campus-based emissions. In addition, bicycle-friendly routes and walkable campus pathways promote low-carbon commuting options.

4. **Online Education Module for Reducing Carbon Footprint:**

By implementing a robust remote learning module, we are able to offer flexible and accessible education options. This reduces the need for on-campus presence, thus lowering commuting emissions and supporting carbon footprint reduction.

5. **Waste and Resource Management Programs:**

Our campus features compost machines for organic waste management, turning campus-generated organic waste into nutrient-rich compost. Additionally, we hosted a unique exhibition displaying art created from recycled materials, highlighting the importance of waste reduction and sustainable practices within our community.

6. **Water Conservation and Rainwater Harvesting Systems:**

Three artificial ponds on campus, created using harvested rainwater and groundwater resources, provide essential water reserves for irrigation and habitat support. This system reduces dependency on external water sources, promotes biodiversity, and aligns with our water conservation goals.

7. **Renewable Energy Projects:**

Our **185 kW photovoltaic solar power plant** generates clean energy for campus use. Furthermore, a wind energy feasibility study has been conducted, and we are in the process of securing necessary approvals for a 2 MW wind turbine. Together, these renewable energy projects diversify our energy sources and promote sustainability.

Given these diverse and impactful initiatives, the number of our energy and climate change programs is not only more than three but represents a well-rounded approach to sustainable development. Our comprehensive strategy in energy management, renewable resource utilization, and climate resilience clearly positions our university as a leader in sustainability innovation. We confidently anticipate full marks for our extensive and innovative contributions to energy and climate change.

Program/Initiative	Description	Impact
Centralized Energy Management	Real-time monitoring and energy optimization	Energy efficiency
Geothermal Heating	Renewable heating for campus buildings	Reduced emissions
DUSCART Electric Vehicle & Green Transport	Award-winning student-built EV; promotes green commuting	Lowered campus carbon footprint
Remote Learning Module	Reduces on-campus commuting by facilitating remote education	Carbon footprint reduction
Compost Machines & Recycled Art Exhibit	Organic waste processing and waste reduction awareness	Waste minimization
Rainwater Harvesting & Artificial Ponds	Water conservation through harvested rainwater and groundwater	Water resource efficiency
Solar PV Plant & Wind Turbine Feasibility	Clean energy generation with solar PV; wind energy in progress	Renewable energy adoption

[2.9] Impactful University Program(s) On Climate Change

NO	PROGRAMS	SCOPE (international/ regional/ national/local/ etc.)	TOTAL PARTICIPANT	URL	EXPLANATION
1	Hanging Clothing Project	Local	135	https://haber.dpu.edu.tr/tr/haber_oku/621948ac5f2cd/dpunun-askida-giysi-kampanyasina-buyuk-destek#:~:text=Giysi%20gereksinimi%20olan%20%C3%B6%C4%9Frencilerimiz%20randevu,s%C3%BCrede%20Giysibank'%C4%B1n%20raflar%C4%B1nda%20olacak.	As a result of the donations made to the Clothes on Hangers campaign, which was organized under the leadership of DPU Kütahya Faculty of Applied Sciences faculty member Assoc. Prof. Dr. Nilüfer Dalkılıç and our Risk Community, of which she is the advisor, and which can be used by our students who need clothes, more than 300 clothes were delivered to our Department of Health, Culture and Sports.
2	Assistance Project for Earthquake Victims	National	4 lecturers 14 students	https://haber.dpu.edu.tr/tr/haber_oku/63fa6aaf2e191/dpu-depremzedeler-icin-yardim-kermesinde	A bazaar was organized in Kütahya for earthquake victims.

3	Giysibank Kindness Project	Local	7 Stuff 62 students	https://haber.dpu.edu.tr/tr/haber_oku/6492e75037532/dpu-giysibanktan-bayram-oncesi-iyilik-hareketi	GiysiBank, which continues to work within the body of our Department of Health, Culture and Sports, distributed clothes to our citizens in need in neighborhoods and villages in Kütahya through mukhtars before Eid al-Adha.
4	World Water Month Project	National	5 lecturers 71 students	https://haber.dpu.edu.tr/tr/haber_oku/6601312969bfc/dpude-dunya-su-gunu-etkinligi	Kütahya Dumlupınar University Faculty of Education hosted a conference on the efficient use of water resources on World Water Day.
5	KDPU PLANTING EVENT	Local	10 lecturers 50 students	https://emetmyo.dpu.edu.tr/tr/index/sayfa/14204/milli-agaclandirma-gunu-kapsaminda-emet-myo-ogrencilerimiz-agac-dikim-etkinligi-gerceklestirdi	Within the scope of "November 11th National Afforestation Day"; a tree planting event was held in Gürpınar Village on the Emet - Çavdarhisar Road. 50 students from our Vocational School took part in the event.
6	Planting Saplings of the Disabled Student Unit	Local	6 academic staff 12 students	Engelli_öğrenci_Birimi_fidan-dikim-etkinligi	In order to heal the wounds of the forest fires that took place, 2 thousand 53 saplings were planted in the Kızılbayır sapling planting field in the Evliya Çelebi Campus of Kütahya Dumlupınar University with the participation of the Kütahya protocol.
7	Talk on "Biodiversity Conservation"	National	12 academic staff 42 students	https://kutahya.csb.gov.tr/turkiye-cevre-haftasi-etkinlikleri-kapsaminda-dpu-rektoru-sn.-kazim-uysal-tarafindan-biyolojik-cesitliligi-koruma-konulu-soylesi-gerceklestirilmistir.-haber-283116	In the event organized by the Provincial Directorate of Environment, Urbanization and Climate Change of Kütahya and the Provincial Directorate of National Education within the scope of the Turkish Environment Week on June 5-9, our Provincial Director Mr. İbrahim ÇATLADAN made a speech about "Turkish Environment Week" to the high school students of our province at the beginning of the program. İbrahim ÇATLADAN made a speech about "Turkey Environment Week" to the high school students of our province. Afterwards, Mr. Kazım UYSAL, Rector of Kütahya

					Dumlupınar University, delivered a speech on ''Turkish Environment Week''. Kazım UYSAL, Rector of Kütahya Dumlupınar University, delivered a speech on '' A talk on “Biodiversity Conservation” was held
8	'Living Museums' Add Value to DPU	Local	4 academic staff 34 students	https://haber.dpu.edu.tr/tr/haber_oku/65547fb43ec9d/yasayan-muzeler-dpuye-deger-katiyor	The indoor and outdoor exhibition area of the Private Dumlupınar University Museum, which is centrally located on our Evliya Çelebi Campus, provides an ideal educational environment for the formation and drawing courses of our Faculty of Fine Arts and the architectural drawing courses of the Archaeology Department of our Faculty of Arts and Sciences.
9	1st National Aizanoi Ceramic and Tile Design Competition	National	200+ participants	https://dpu.edu.tr/index/etkinlik/2002/i-ulusal-aizanoi-seramik-ve-cini-tasarim-yarismasi-odul-toreni	The award ceremony of the National Aizanoi Ceramic and Tile Design Competition, the first of which will be held within the scope of the project called Young Entrepreneurs on the Path to Creative Cultural Industries, supported by the Ministry of Culture and Tourism under the auspices of the Governorship of Kütahya and carried out by DPU Kütahya Vocational School of Fine Arts
10	Relief Art Exhibition	National	100+ participants	https://haber.dpu.edu.tr/tr/haber_oku/64709c3aeebd0/dpude-rolyef-sanat-sergisi	The Relief Art Exhibition, where the works of our earthquake victims who were guests of Kütahya Dumlupınar University were exhibited, was opened in Bedesten.
11	Waste Materials Turn into Works of Art	Local	50+ participants	https://haber.dpu.edu.tr/tr/haber_oku/658d19cc88e01/dpude-atik-malzemeler-sanat-eserine-donusuyor	At Kütahya Dumlupınar University's Barrier-Free Student Unit, students produce jewelry and souvenirs with waste materials.
12	International Interactive Art Workshop	Internati onal	24 artists from different countries	https://haber.dpu.edu.tr/tr/haber_oku/658590978464b/dpudeki-	The six-day event, organized by the GSF Painting Department and attended by 24 artists from

				uluslararasi-etkilesimli-sanat-calistayi-sergiyle-sona-erdi	different countries, included observation and field trips to historical sites, including the ancient city of Aizanoi, as well as art studies and workshops in groups.
13	Art exhibition	National	50+ participants	https://haber.dpu.edu.tr/tr/haber_oku/65852959c1dbe/dpuden-dumlupinarin-feyzi-sergisi	The exhibition titled Feyzi of Dumlupınar, featuring the works of Kübra Ünsaç, was held at the Private Ahmet Yakupoğlu Museum operating within Kütahya Dumlupınar University.
14	You Take a Step Against Violence Against Women Exhibition	Local	30+ participants	https://haber.dpu.edu.tr/tr/haber_oku/656989799c6cf/dpude-kadina-siddete-karsi-bir-adimda-sen-at-sergisi	Kütahya Dumlupınar University Faculty of Fine Arts opened the International Cartoon Competition Award Winning Works Exhibition titled “Take One Step Against Violence Against Women” at the Rectorate Foyer Area.
15	Student Group Exhibition	Local	30+ participants	https://haber.dpu.edu.tr/tr/haber_oku/65560d8b454c4/dpu-gsfden-karma-sergi	Lecturer from the Visual Communication Design Department academicians. Assist. Within the scope of the Graphic Design Practices course conducted by Hüseyin Ermumcu, the Student Group Exhibition consisting of the works applied during the 2022-2023 Academic Year Spring Semester was held online.
16	Organ Donation Themed Exhibition	National	30+ participants	https://haber.dpu.edu.tr/tr/haber_oku/654a82fc3513a/dpu-ve-ksbuden-organ-bagisi-temali-sergi	In cooperation with DPU and KSBU, a poster exhibition on organ donation was opened in KSBU Faculty of Medicine Dean's Office building within the scope of World Organ Donation Week on November 3-9.
17	A TEKNOFEST Championship from DUSCART to DPU	National	1000+ participants	https://haber.dpu.edu.tr/tr/haber_oku/644e0c53e7ff9/duscarttan-dpuye-bir-teknofest-sampiyonlugu-daha	DUSCART team of Kütahya Dumlupınar University came first in Turkey in the Acceleration Competition organized for the first time this year within the scope of the International Efficiency Challange Electric Vehicle Races organized within TEKNOFEST.

[3] Waste

[3.1] Total volume organic waste produced

Types of organic waste	Total Produced (tons)
- food waste	715.4
- waste bins	423.4
- Landscape/Leaf Fall	54.75
- Lawn Mowing Residues	27.38
- Fruit and Garden Waste	13.69

Description:

The total amount of organic waste generated on our campus comes from various sources and the management of these wastes plays an important role in ensuring environmental sustainability. Below are the main components of organic waste on our campus and their annual production estimates:

Cafeteria Waste: The daily use of student and staff cafeterias by an average of 4500 students and 1500 staff is an important source of organic waste production. Materials such as food leftovers, vegetable peelings and cooked food residues constitute the total annual organic waste.

Personal Waste: The 3000 students staying on campus and other students, academics and other staff during teaching hours each produce personal organic waste daily.

Garden and Landscape Waste: It is provided from the waste generated by pruning and leaf shedding processes during the maintenance of green areas on our campus.

Other Organic Wastes: Organic wastes originating from different activities were also collected annually.

When these data are brought together, the annual organic waste amount on our campus is calculated as 1234.62 tons in total. Recycling and composting processes of organic waste contribute to environmental sustainability by reducing the negative effects of waste on nature. These practices aim to increase recycling awareness of students and staff as well as minimizing the environmental effects of campus life.

[3.2] Total volume inorganic waste produced

Types of organic waste	Total Produced (tons)
Paper Waste	10.0
Soft Plastic	5.0
Hard Plastic	3.0
Metal Waste	2.0
Glass Waste	1.5
Other (cardboard, etc.)	2.0

Description:

The total annual inorganic waste volume generated on our campus is estimated to be approximately 23.5 tons. These waste types include paper, soft and hard plastic, metal, glass and other packaging waste. Paper waste generally originates from student projects, correspondence and photocopying. Plastic waste consists of single-use products used especially in canteens and dining halls. Metal and glass waste originates from various beverage containers. The effective recycling of all these inorganic wastes contributes to our goal of creating an environmentally friendly campus.

[3.3] Total volume toxic waste produced

Type of toxic waste	Total Produced (tons)
-Chemical Wastes	1.0
-Electronic Waste	1.5
-Medical Waste	0.031
-Other (Paint etc.)	0.3

Description:
The total annual volume of toxic waste generated on our campus is estimated to be approximately 2,831 tons. This waste includes chemicals used in laboratories, electronic waste generated during education and research processes, and medical waste originating from healthcare services. While the management of chemical waste is of great importance in terms of environmental health, recycling programs are also put in place for electronic waste, and medical waste is collected and disposed of within the framework of relevant legislation. The effective management of this waste is an important part of our efforts to create a sustainable campus.

[3.4] Total volume toxic waste treated

Type of waste	amount (ton)				
	Total	reduced	reused	down-cycled	up-cycled
toxic	2,831	0.56	0.4	1.32	0.551
-Chemical Wastes	1.0	0.2	0.1	0.5	0.2
-Electronic Waste	1.5	0.3	0.2	0.7	0.3
-Medical Waste	0.031	0.01	0	0.02	0.001
-Other (Paint etc.)	0.3	0.05	0.1	0.1	0.05

Description:
The total of 1.0 tons of recorded chemical waste was reduced by 0.2 tons in order not to harm the environment and 0.1 tons was separated for reuse in laboratories. The remaining 0.5 tons of waste was passed through safe recycling processes and 0.2 tons is evaluated in creative projects at our university. The annual amount of electronic waste is 1.5 tons and has been reduced by 20% and the recycling rate has been increased by reusing the parts. 0.7 tons of electronic waste was processed with environmentally friendly recycling practices; in addition, 0.3 tons of it was upcycled in education and art projects.

Other toxic waste categories such as paint and adhesives were determined to be approximately 0.3 tons per year. By reducing 0.05 tons of these wastes, the environmental burden was lightened, and 0.1 tons were reused in project applications, thus ensuring resource efficiency. The remaining 0.1 tons were recycled, while 0.05 tons were used as upcycled in on-campus projects.

[4] Water

[4.1] Water Conservation Program Implementation

Description:
Lake 1

- Completed on 29.09.2020.
- It covers an area of 42,341 m^2. It has a water volume of 210,000 m^3.
- Recreation areas have been created around it, which are also available to local people.
- The water flowing from the spillway discharge contributes to the irrigation of fields near the campus.
- The rainwater and drainage water outlets of the campus are connected to this lake and it is also fed by the surrounding groundwater and surface water.
- With the pumping system installed, it contributes to the irrigation of the grass areas on campus.

Lake 2

- Completed in 2007.
- It was created with the machinery and equipment belonging to our university without any cost by evaluating the excavations on campus. It covers an area of 7000 m^2 and has a water volume of 24,500 m^3.
- Recreation areas have been created around it, which are also available to local people.
- It is fed by underground and stored rainwater.
- The discharge legs of thermal water and other waters coming to the campus are also connected here.

Lake 3

- Completed in 2007.
- It was created with the machinery and equipment belonging to our university without any cost by evaluating the excavations on campus. It covers an area of 2280 m^2 and has a water volume of 4,500 m^3.
- Recreation areas have been created around it, which are also available to local people.
- It is fed by underground and stored rainwater.
- The discharge legs of thermal water and other waters coming to the campus are also connected here.

Description of Water Wells and Water Tanks of the Rainwater Collection System

- The system is monitored from the SCADA computer in the main center. The number of scada tags is 256.
- Tank capacities vary between 2000 and 3000 m^3 . The tanks are equipped with a PLC system with ethernet communication. Communication between PLCs is provided over a wireless network with Access Point devices suitable for outdoor and industrial conditions.
- From the panels in the wells, fault, running information, current drawn by the pump, well entrance door open and closed information are received. Pumps operate according to the level information from the well tanks. Tank water level controls are carried out in coordination.
- Tank levels in the warehouses are controlled by ultrasonic sensors. Ultrasonic sensors have analog output and show the warehouse height in meters on the SCADA screen. In addition to the level indicator, there is one overflow level sensor in the warehouses. The system gives an alarm when the limit height is exceeded.
- Flow meters are installed at tank inlets and outlets to the lines. The amount of water coming from the wells and the amount of water leaving the tank can be seen on the SCADA screen through these devices.
- There are systems that alarm when the tank lids are opened.
- Chlorination status is monitored on the SCADA screen by receiving analog signals from the chlorine devices to be placed in the tanks.
- The opening and closing status of the valves at points with motorized valves is managed by the PLC at the relevant point. The operation of the pumps is regulated according to the valve opening status.

On our campus, not a single drop of rainwater is wasted. Every drop of rain that falls, if it is not absorbed by cultivated fields or forests, is carefully directed to our lakes and preserved there. Through exemplary use of rainwater and groundwater, the once-barren landscape surrounding the campus has transformed into a thriving ecosystem, featuring three fully developed lakes and four additional lakes in progress. Around these lakes, soil fertility has significantly improved, expanding green areas and creating a rich habitat for diverse wildlife.

We purify this water, conduct thorough quality controls, and channel it toward irrigating our green spaces, supporting the growth of lush, vibrant landscapes across the campus. This process embodies our dedication to sustainability and environmental stewardship, transforming each drop into a resource that nurtures the land, preserves natural beauty, and enhances the ecological balance of our university. Each lake serves as a powerful symbol of regeneration, turning once-arid land into a flourishing, life-supporting environment, and establishing our campus as a model of environmental resilience and sustainable practice.

[4.2] Water Efficient Appliances Usage (e.g. hand washing taps, toilet flush, etc.)

Description:

Our campus, serving a population of approximately 51,173 students and staff, has prioritized water efficiency through the deployment of advanced water-saving technologies across all facilities. These installations include: Sensor-Activated Faucets: Installed in handwashing areas, sensor-activated taps dispense water only when hands are detected, significantly reducing water waste. With 1,200 handwashing stations across the campus, 900 of these are equipped with sensor-activated faucets, reducing water waste by only activating when hands are detected. This represents 75% of all faucets, providing substantial water conservation across high-use areas.

Low-Flow Faucet Aerators: These are fitted to reduce the flow rate of faucets while maintaining effective water pressure, conserving water without compromising usability. Out of a total of 1,200 faucets, 100% have been equipped with low-flow aerators to ensure reduced water flow without sacrificing pressure, maintaining user satisfaction and maximizing water efficiency. Dual-Flush Toilets: Our restroom facilities are equipped with dual-flush systems, allowing users to select a lower water volume for liquid waste, saving substantial amounts of water with every flush. The campus contains approximately 2,000 toilet units, of which 1,500 utilize dual-flush mechanisms, allowing users to choose a low-flow flush option when appropriate. This represents 75% of the total toilet facilities, achieving notable water savings.

[4.3] Consumption of Treated Water

Well water pump, water tank centralized sample, tank borehole communication and automatic chlorination

Description:

The lakes of Kütahya Dumlupınar University were created with the recycling of rainwater and the proper management of underground spring waters. In order to ensure the continuity of our lakes and the life it carries, the use of lake waters for irrigation purposes is controlled so that the water does not fall below a certain level. Our second option for irrigation of green areas is the use of groundwater without usable geothermal energy.

These waters account for 18% of the total campus water consumption. Mains water use within the campus boundaries is met from Kütahya mains water.

Our university prioritizes the quality and safety of water on campus through comprehensive water softening and purification processes. To ensure that mains water meets high standards for campus use, we employ an advanced water softening system that effectively reduces hardness, protecting infrastructure and enhancing water quality for daily use. Thus, it is monitored in a controllable and provable way that approximately 82% of our campus' water needs are met with treated water.

[4.4] Water Pollution Control in Campus Area

The Hosts of our Lakes	
	
	
	

Description:

The campus contains three ponds, each supported by a system of lower and upper weirs that facilitate water discharge and aeration, thereby enhancing water quality.
To further maintain and improve the aquatic ecosystem, ongoing monitoring of oxygen (O_2) and nitrate (NO_3) levels is conducted, along with periodic evaluations of fish populations. Measures are in place to remove invasive species and cultivate preferred species, in collaboration with the General Directorate of Fisheries.
Our campus has established a comprehensive water pollution control program, ensuring a high standard of water quality and environmental stewardship across all water bodies. We have implemented rainwater collection channels and primary reservoirs, equipped with automatic chlorination and monitoring systems, which provide continuous, real -time control over water quality.
Our university lakes represent exemplary freshwater ecosystems, rigorously maintained to support biodiversity and reflect our commitment to environmental stewardship. The lake habitats support various species, including fish, amphibians such as frogs, reptiles like turtles and occasional water snakes, and a diverse array of birds. Regular sightings of lizards and migratory birds around the lakes further demonstrate the pristine conditions we uphold.In addition to ecological preservation, we prioritize community engagement by organizing inclusive fishing events for individuals with disabilities and their families, promoting both environmental appreciation and recreational access.

5. Transportation

[5.1] The total number of vehicles (cars and motorcycles) divided by total campus' population

No	Vehicle	Total Number
1	Car managed by the university	45
2	Cars entering the university	1703
3	Motorcycles entering the university	27
	Total	1775

The total number of vehicles (cars and motorcycles) divided by total campus' population
5.4 = 1775 / 51173 (population)
= 0.034 0.034 < 0.045

[5.2] Shuttle Services

Description:
University staff are very well served by the university-run shuttle bus from the campus to the city center and from the city center to the campus.Shuttle service is provided by the our university, regular, and free.Electric bus service also started in 2023

ELECTRIC BUS Example of Shuttle Vehicles (Kütahya Dumlupınar University, TURKEY)

Example of Shuttle Vehicles (Kütahya Dumlupınar University, TURKEY)

[5.3] Zero Emission Vehicles (ZEV) Policy on Campus

Description:
Kütahya Dumlupınar University owns bicycles and electric bicycles, and offers its bicycles and electric bicycles to the use of its staff and students in order to encourage the use of zero-emission vehicles and does not charge any fee as a usage fee. It also supports students' solar-powered car construction work as part of its zero-emission vehicle policy.In 2023, two electric buses started service.

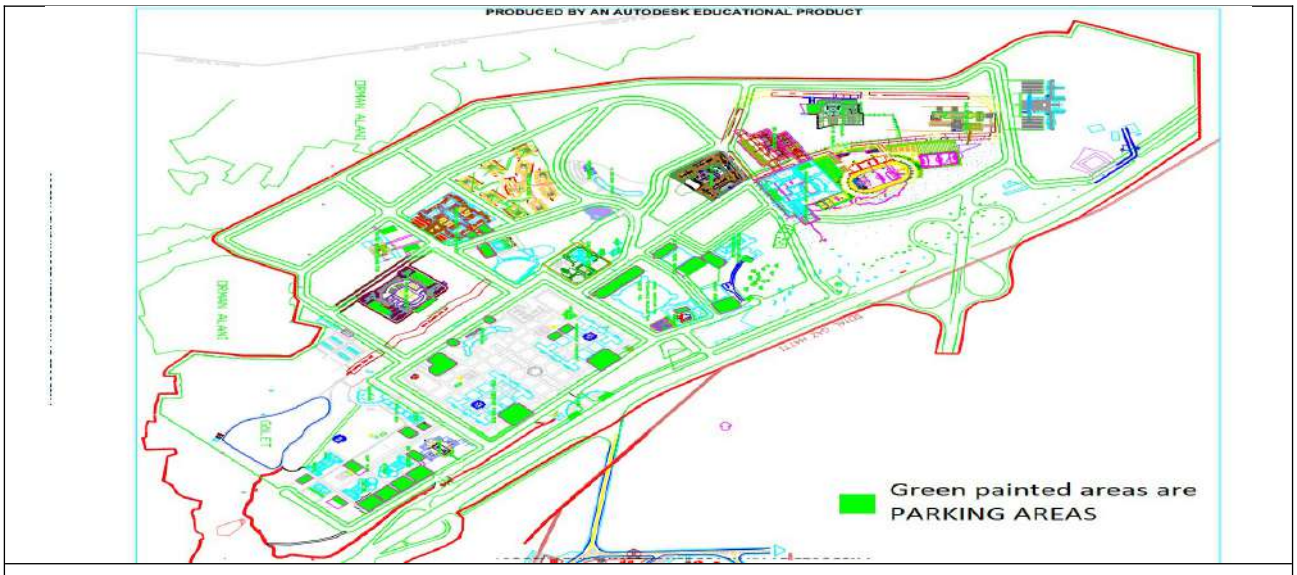
ELECTRIC BUS Example of Shuttle Vehicles
(Kütahya Dumlupınar University, TURKEY)

Electric Vehicle Charging Station
(Kütahya Dumlupınar University, TURKEY)

Example of Campus Bikes
(Dumlupınar University, TURKEY)

Case Zero Emission Electric Bicycle
(Dumlupınar University, TURKEY)

[5.4] Ratio of Parking Area to Total Campus Area



Example of Ratio of Parking Area to Total Campus Area (Kütahya Dumlupınar University, Turkey)

Example of Ratio of Parking Area to Total Campus Area (Kütahya Dumlupınar University, Turkey)

Total main campus area: 7866913.92 m2,Total parking area = 53665.46 m2
Ratio of parking area to total campus area
Formula: ((5.12/1.5) x 100%) =((53665.46 /7866913.92) x 100%) = 0.6 0.6 % < 1 %

[5.5] Number of Transportation Initiatives to Decrease Private Vehicles on Campus

Campus Bus (Kütahya Dumlupınar University, Turkey)

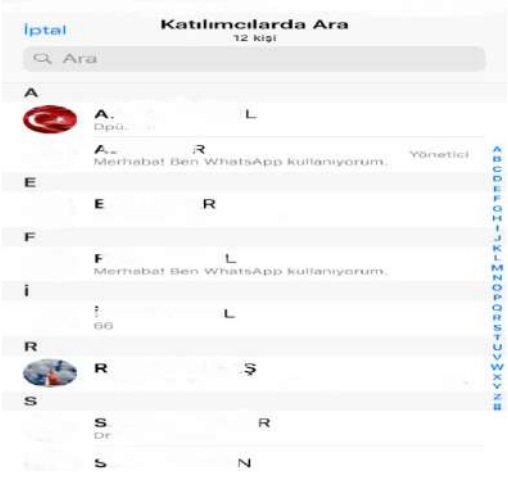
ELECTRIC BUS Example of Shuttle Vehicles (Kütahya Dumlupınar University, TURKEY)

Case Zero Emission Electric Bicycle
(Dumlupınar University, Turkey)

Free Bicycle for rent
(Kütahya Dumlupınar University, Turkey)

UTV (Kütahya Dumlupınar University, Turkey)

ATV (Kütahya Dumlupınar University, Turkey)



DPU Road Sharing Application Example (Kütahya Dumlupınar University, TÜRKİYE)

Description:
Kütahya Dumlupınar University provides free bus service, bicycle service, zero emission vehicle use, electric bus, UTV and ATV usage services and encourages road sharing application in order to limit or reduce the use of private vehicles on campus. There are 6 transportation applications provided by our University in order to limit or reduce the use of private vehicles.

1. Shuttle/bus inside campus
2. Free to rent bicycle on campus
3. Case Zero Emission Electric Bicycle
4. UTV and ATV on campus
5. Road sharing application
6. Case Zero Emission Electric Bus

[5.6] Pedestrian Path Policy on Campus

Pedestrian road example
(Kütahya Dumlupınar University)

Pedestrian road example
(Kütahya Dumlupınar University)

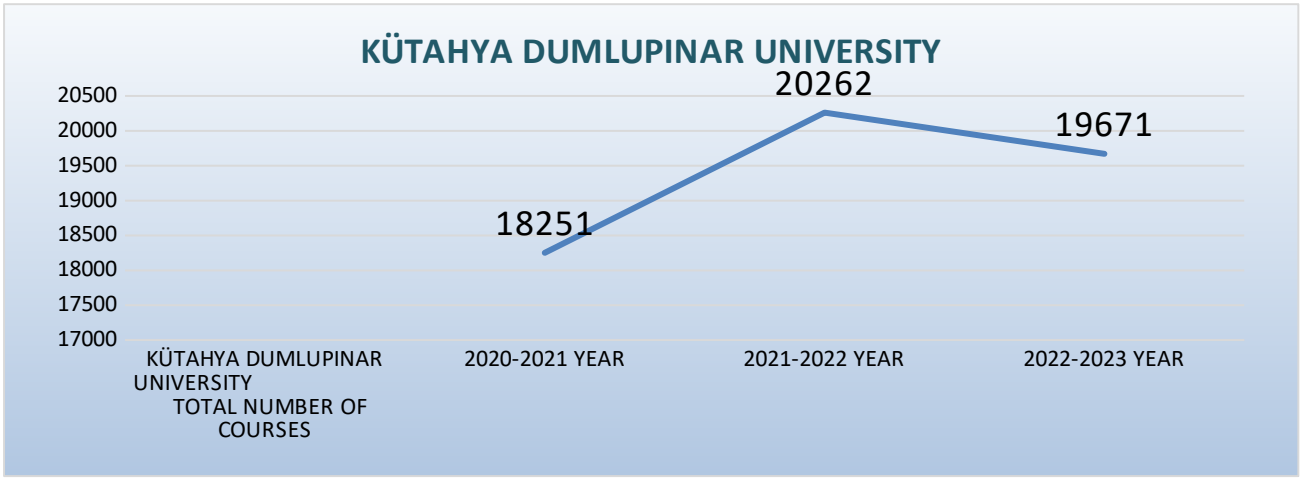
Ramps and guidance blocks suitable for physically disabled pedestrians (Kütahya Dumlupınar University)

Street lamp for pedestrian in night (Kütahya Dumlupınar University)

Description:
There are pedestrian paths equipped with disability-friendly features on our university campus. Parks and pedestrian paths on campus are arranged in a way that can be used by the disabled. On our campus, which is illuminated for pedestrians at night, there is a dividing strip between the vehicle road and the pedestrian road, and there are ramps and tangible walking surfaces designed for the use of physically disabled pedestrians.
1. Park and pedestrian road are also in order in the campus plan.
2. There is a separating lane between the vehicle road and the pedestrian road.
3. There are lights for pedestrians at night.
4. There are ramps and guiding blocks designed for physically disabled pedestrians.

[6] Education and Research

[6.1] Number of Courses/Subjects Related to Sustainability Offered



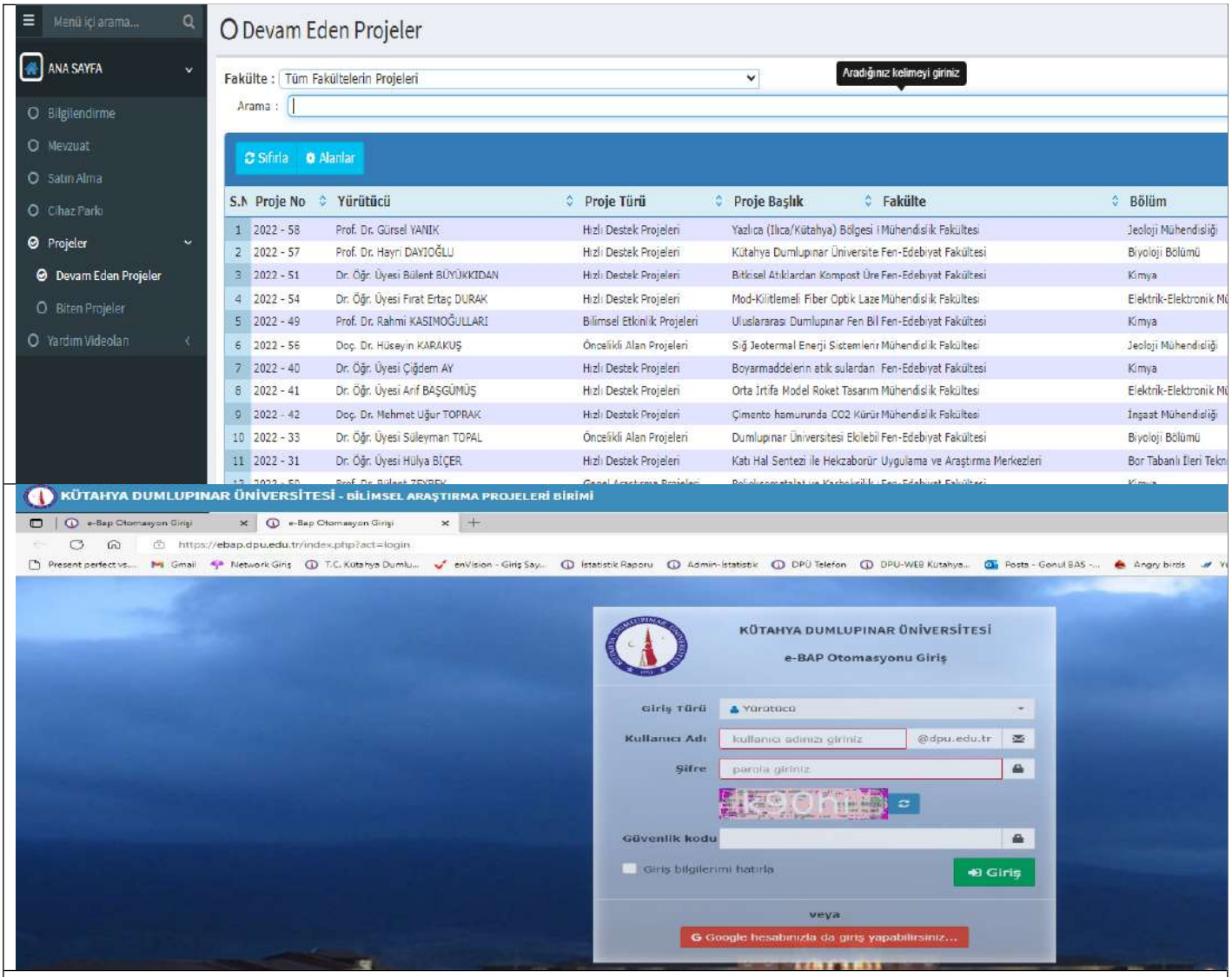
Total Courses Offered in 2021-2023 (Kütahya Dumlupınar University, Turkey)

Description:
In our university, 18251 lessons were given in the 2020-2021 period, 20262 lessons were given in the 2021-2022, and 19671 lessons were given in the 2022-2023 period.

2021	18251
2022	20262
2023	19671

Total number of courses offered in 2023 = 19671 lessons.

[6.2] Total Research Funds Dedicated to Sustainability Research (in US Dollars)



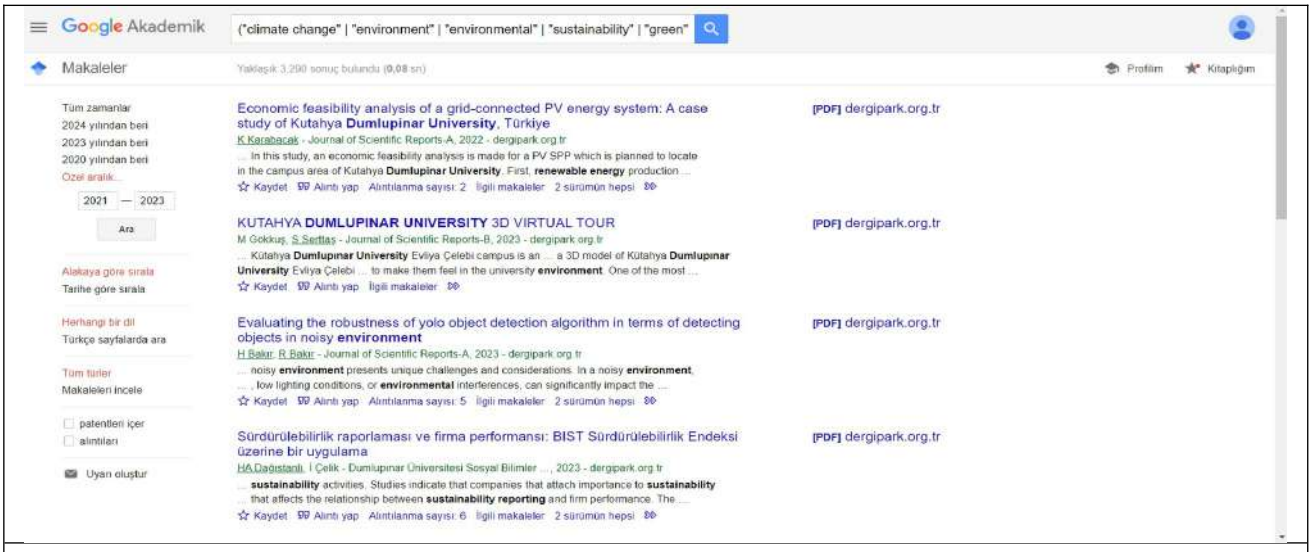
An overview of WUR research can be found on our website; **https://ebap.dpu.edu.tr/index.php**, e-Bap Otomasyon Girişi (dpu.edu.tr)

Example of Sustainability Research Fund (Kütahya Dumlupınar University Turkey)

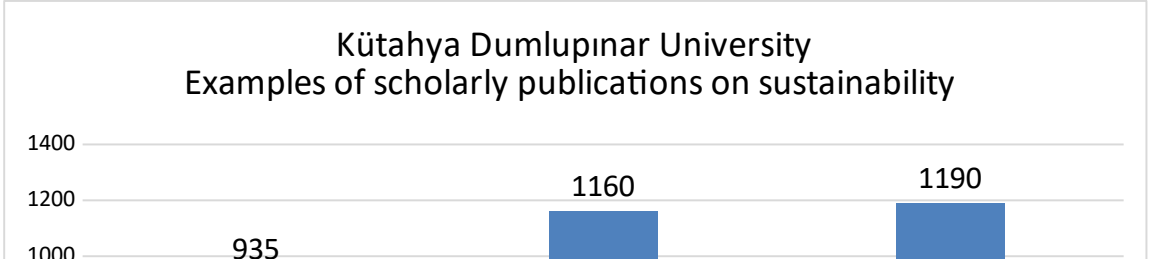
Description:
Information on the researches conducted in Kütahya Dumlupınar University in 2021-2022 and 2023 on sustainability issues is given in the table below.
According to this information, the average budget allocated to research on sustainability by Kütahya Dumlupınar University is USD 258143.81.

Total research fund dedicated to sustainability research in 2021 = 147132.76 US Dollars
Total research fund dedicated to sustainability research in 2022 = 455910.20 US Dollars
Total research fund dedicated to sustainability research in 2023 = 171388.47 US Dollars
The averaged annum last 3 years of research fund dedicated to sustainability research = 258143.81 US Dollars

[6.3] Number of scholarly publications on sustainability



Examples of **scholarly publications on sustainability** (Kütahya Dumlupınar University, Turkey)



Examples of **scholarly publications on sustainability** (Kütahya Dumlupınar University, Turkey)

Description:

Key words used in scanning academic publications on environment and sustainability made by Kütahya Dumlupınar University academics in the last 3 years: renewable energy, green, environment, sustainability, climate change.
Example of events **scholarly publications on sustainability** in the academic year 2021-2023.
A total average per annum over the last 3 years of **3285 publications.**
Number of academic publications in 2021: 935
Number of academic publications in 2022: 1160
Number of academic publications in 2023: 1190
There are 1095 scientific publications (3-year average) scanned by Google Scholar and SCI-EXPANDED, SSCI, A&HCI, CPCI-S, CPCI-SSH, BKCI-S, BKCI-SSH, ESCI indexes.

[6.4] Number of sustainability-related startups

No	Information
1	**Startup name: DPÜ KUBFA Hobby Workshop** **Startup area in UI Greenmetric questionnaire (SI, EC, WS, WR, TR, ED):**(WR) **URL:** https://haber.dpu.edu.tr/tr/haber_oku/658ec3bf119ac/dpu-kubfa-ogrencileri-engelsiz-hobi-atolyesinde **Description:** Approximately 50 of our students received tile making and tile painting training and practiced at the event organized at DPÜ Disabled Hobby Workshop in cooperation with our Disabled Student Unit and Kütahya Faculty of Applied Sciences. 

2	**Startup name:** Science Day for Children at Emet Vocational School **Startup area in UI Greenmetric questionnaire (SI, EC, WS, WR, TR, ED):**(WR) **URL:** https://haber.dpu.edu.tr/tr/haber_oku/658c48f399257/emet-myodan-cocuklar-icin-bilim-gunu **Description:** A Science Day event was held at DPÜ Emet Vocational School. An event was organized for the kindergarten class of Gazi Emet Primary School by our Child Development and Chemistry Technology programs at the Vocational School Drama Hall and Chemistry Laboratory. 
3	**Startup name:** 1st National Aizanoi Ceramic and Tile Design Competition Launch Meeting at DPÜ **Startup area in UI Greenmetric questionnaire (SI, EC, WS, WR, TR, ED):((WR)** **URL:** **https://haber.dpu.edu.tr/tr/haber_oku/658bfc366bef2/dpude-1-ulusal-aizanoi-seramik-ve-cini-tasarim-yarismasi-lansman-toplantisi** **Description:** Our Rector and Vice Rectors Prof. attended the program held at the Rectorate. Dr. Özer Aydin, Prof. Dr. Mustafa Arif Özgür and Prof. Dr. Ayhan Kahraman, our Dean of the Faculty of Fine Arts, Prof. Dr. Levent Mercin, Kütahya Fine Arts Vocational School Director Assoc. Dr. Pınar Yazkaç, Gürok Group Deputy Chairman of the Board of Directors and Kütahya Chamber of Commerce and Industry President Esin Güral Argat, NG Group Chairman of the Board Nafi Güral, Kütahya Porselen Chairman of the Board of Directors Sema Güral Sürmeli, Keramika Chairman of the Board of Directors Emin Yüce, Gülümser Hatun Thermal Hotel Project Representative İsmail Yavaş and the guests attended.

	
4	**Startup name:** Barrier-Free Hobby Workshop Opened at DPU **Startup area in UI Greenmetric questionnaire (SI, EC, WS, WR, TR, ED):** (ED) **URL:** https://haber.dpu.edu.tr/tr/haber_oku/656ef37c7009d/dpude-engelsiz-hobi-atolyesi-acildi **Description:** A ceremony was held for the opening of the Barrier-Free Hobby Workshop at Kütahya Dumlupınar University Barrier-Free Student Unit, with the participation of protocol members. 

5	**Startup name**: Gluten-Free Food Support from DPU to Students with Celiac Disease **Startup area in UI Greenmetric questionnaire (SI, EC, WS, WR, TR, ED)**: (WR) **URL**: https://haber.dpu.edu.tr/tr/haber_oku/655f2dc27e54c/dpuden-colyak-hastasi-ogrencilere-glutensiz-gida-destegi **Description:** Gluten-free product support was provided to our students with celiac disease studying at Kütahya Dumlupınar University within the scope of the nutrition service of our Department of Health, Culture and Sports. 
6	**Startup name:** Humanity is Not Dead Project **Startup area in UI Greenmetric questionnaire (SI, EC, WS, WR, TR, ED):**(WR) **URL:** https://haber.dpu.edu.tr/tr/haber_oku/654cb46a312fe/dpunun-insanlik-olmedi-projesi-tiyatroyla-sona-erdi **Description:** The closing of the Humanity is Not Dead project, organized in cooperation with Kütahya Dumlupınar University, Tavşanlı Municipality and Tavşanlı Mufti's Office, was held with the theater play titled Banquet Sofrası, staged by Theater Külliyen at the Tavşanlı Municipality Culture Palace, to which protocol members and citizens showed great interest. 
	Startup name: 16th Cartoon and Animation Festival

7	**Startup area in UI Greenmetric questionnaire (SI, EC, WS, WR, TR, ED): (WR)** **URL:** https://haber.dpu.edu.tr/tr/haber_oku/653bd66ff1229/dpude-16-cizgi-film-ve-animasyon-festivali **Description:** At the event held at the Faculty of Fine Arts, our students participated in the festival by wearing the same costumes as the patterns and cartoon characters they drew. Our students, who hung their drawings on the walls of the faculty building to introduce them to sector representatives, spent three full days with the activities they organized at the festival, which hosted many participants. On the last day of the festival, our students shared the story and design process of the clothes they designed with other participants. 
8	**Startup name:** Purple Breeze Lavender Garden Opening **Startup area in UI Greenmetric questionnaire (SI, EC, WS, WR, TR, ED):** (ED) **URL:** **https://haber.dpu.edu.tr/tr/haber_oku/64ae56edf0e4c/dpu-tavsanli-myoda-mor-esinti-lavanta-bahcesi-acildi** **Description:**

	A series of events were organized at Kütahya Dumlupınar University Tavşanlı Vocational School, including the opening of the lavender garden called Purple Esinti, the naming of the saplings after martyrs, the giving of gifts to the top students and the promotion of the biofuel machines unit. 
9	**Startup name:** Kütahya's First Trugo Charging Station Opened **Startup area in UI Greenmetric questionnaire (SI, EC, WS, WR, TR, ED): (**WR) **URL**: https://haber.dpu.edu.tr/tr/haber_oku/649426d84a4b5/dpuye-kutahyanin-ilk-trugo-sarj-istasyonu-kuruldu **Description:** Trugo, Togg's charging station company, installed the first fast charging station among universities in Kütahya and Turkey at Kütahya Dumlupınar University Evliya Çelebi Campus. 
10	**Startup name:** Pre-Eid Kindness Movement from Giysibank **Startup area in UI Greenmetric questionnaire (SI, EC, WS, WR, TR, ED)**:(WR) **URL:** https://haber.dpu.edu.tr/tr/haber_oku/6492e75037532/dpu-giysibanktan-bayram-oncesi-iyilik-hareketi

	Description: DPÜ GiysiBank, which is one of the services of DPÜ Department of Health, Culture and Sports and aims to support clothes and goods to students in need, continues its services. 
11	**Startup name:** Mother Heart Lavender Garden Opening Ceremony **Startup area in UI Greenmetric questionnaire (SI, EC, WS, WR, TR, ED):(**WR) **URL:** https://haber.dpu.edu.tr/tr/haber_oku/645e31b3621b9/dpude-anne-kalbi-lavanta-bahcesi-acilis-toreni **Description:** The Opening Ceremony of the Mother's Heart Lavender Garden, organized on the occasion of Mother's Day, was held at Kütahya Dumlupınar University Evliya Çelebi Campus. 
12	**Startup name:** Charity Bazaar for Earthquake Victims **Startup area in UI Greenmetric questionnaire (SI, EC, WS, WR, TR, ED):(**WR) **URL:** https://haber.dpu.edu.tr/tr/haber_oku/63fa6aaf2e191/dpu-depremzedeler-icin-yardim-kermesinde

	Description: The charity bazaar, which will remain open for two days at Sera Shopping Center under the auspices of Kütahya Governorship, was opened with the participation of the provincial protocol. 
13	**Startup name:** Winter Clothing and Blanket Aid to the Earthquake Zone **Startup area in UI Greenmetric questionnaire (SI, EC, WS, WR, TR, ED):(WR)** **URL:** https://haber.dpu.edu.tr/tr/haber_oku/63e20c602d810/dpuden-deprem-bolgesine-kislik-giyim-ve-battaniye-yardimi **Description:** Kütahya Dumlupınar University delivered the winter clothing items and blankets in the warehouses of Giysibank, under the management of our Health, Culture and Sports Department, to the Kütahya Governorship to be delivered to the earthquake zone. 

14	**Startup name:** Sapling Planting Event at the 100th Anniversary Honey Forest **Startup area in UI Greenmetric questionnaire (SI, EC, WS, WR, TR, ED):(ED)** **URL:** https://haber.dpu.edu.tr/tr/haber_oku/645267259184b/dpu-100-yil-bal-ormaninda-fidan-dikim-etkinligi **Description:** A sapling planting event was held at Kütahya Dumlupınar University Evliya Çelebi Campus for the 100th Anniversary Honey Forest, which is dedicated to our citizens who lost their lives in the February 6 earthquakes and takes its name from the 100th anniversary of our republic. 
15	**Startup name:** Hamza ÜSTÜNKAYA Tile Design and Application Workshop Opening **Startup area in UI Greenmetric questionnaire (SI, EC, WS, WR, TR, ED): (EC)** **URL:** https://haber.dpu.edu.tr/tr/haber_oku/64a56e3d37fb5/dpude-hamza-ustunkaya-cini-tasarim-ve-uygulama-atolyesi-acildi **Description:** Hamza Üstünkaya Tile Design and Application Workshop was established at our University for tile master Hamza Üstünkaya, one of the world-famous artists raised in Kütahya and winner of UNESCO's Living Human Treasure award, to carry out his works and to convey the art of tile to young people. 

16	**Startup name:** Writing and Ventriloquism Event **Startup area in UI Greenmetric questionnaire (SI, EC, WS, WR, TR, ED):(ED)** **URL:** https://haber.dpu.edu.tr/tr/haber_oku/6579643ce835d/dpude-yazarlik-ve-vantrologluk-etkinligi **Description:** An event titled Writing and Ventriloquism was held at Kütahya Dumlupınar University, where Teacher and Children's Book Writer Yağmur Kartal participated as a speaker. 
17	**Startup name:** Day for the Elimination of Violence Against Women Conference **Startup area in UI Greenmetric questionnaire (SI, EC, WS, WR, TR, ED):(EC)** **URL:** https://haber.dpu.edu.tr/tr/haber_oku/658425200a30b/dpu-emet-myoda-kadina-yonelik-siddetle-mucadele-gunu-konferansi **Description:** The event held at Emet Vocational School Conference Hall was attended by Emet Vocational School deputy director Lecturer. See. Mehmet Kılıç, academic and administrative staff and many students attended. Moderated by Social Service Program Department. Chairman Lecturer See. At the conference held by Latife Sürsavur, important information was given about violence against women. 

[6.5] Total number of graduates with green jobs

Academic Year	Faculty/Department	Total Graduates	Graduates with Green Jobs	Description of Green Jobs	Data Source
2022-2023	**Simav Faculty of Technology / Mechanical Engineering**	**6**	**2**	**Renewable energy sources, energy efficiency, sustainable energy production**	**Dpu Alumni Portal**
2022-2023	**Simav Faculty of Technology/ Electrical-Electronics Engineering**	**198**	**25**	**Renewable energy technologies, electric vehicles, energy distribution and efficiency.**	**Dpu Alumni Portal**
2022-2023	**Altıntaş Vocational School / Food Technology Program**	**28**	**5**	**Use of renewable energy resources, reducing waste, minimizing environmental impacts**	**Dpu Alumni Portal**
2022-2023	**Altıntaş Vocational School / Food Quality Control and Analysis Program**	**16**	**4**	**Taking environmental impacts into account in quality control processes, establishing standards for the application of sustainable methods in food production, improving waste management and recycling processes,**	**Dpu Alumni Portal**
2022-2023	**Altıntaş Vocational School / Laboratory Technology Program**	**53**	**14**	**Proper management of waste and implementation of recycling processes, use of environmentally friendly materials and methods**	**Dpu Alumni Portal**
2022-2023	**Domaniç Hayme Main Vocational School / Banking and Insurance Program**	**0**	**0**	**To encourage sustainable investments and provide financing, to develop financial products that are sensitive to environmental impacts.**	**Dpu Alumni Portal**
2022-2023	**Domaniç Hayme Main Vocational School / Social Security Program**	**1**	**0**	**Designing sustainable social aid and services, Raising awareness in society and promoting environmental social responsibility**	**Dpu Alumni Portal**
2022-2023	Domaniç Hayme Main Vocational School / Logistics Program	19	6	Integrating waste management and recycling processes. Developing transportation methods that increase energy efficiency. Taking environmental factors into account in sustainable material selection and supply processes.	**Dpu Alumni Portal**
2022-2023	Dumlupınar Vocational School Alternative Energy Resources Program	10	2	Development and implementation of renewable energy projects. To provide solutions that will increase energy efficiency. Optimizing energy systems to minimize environmental impacts.	**Dpu Alumni Portal**
2022-2023	Dumlupınar Vocational School Health Program Management Program	0	0	Integration of sustainable practices in healthcare institutions. Use of environmentally friendly materials and energy resources. Developing projects to	**Dpu Alumni Portal**

				protect public health.	
2022-2023	Emet Vocational School Chemical Technology Program	19	2	Developing strategies to minimize the environmental impacts of chemical processes. Development of innovative and sustainable chemical products. Improving waste management and recycling processes.	**Dpu Alumni Portal**
2022-2023	Emet Vocational School Health Institutions Management Program	70	5	Integration of sustainable practices in healthcare institutions. Use of environmentally friendly materials and energy resources. Developing projects to protect public health.	**Dpu Alumni Portal**
2022-2023	Emet Vocational School Social Services Program	8	1	Organizing training and awareness programs to raise environmental awareness in society. Designing and implementing sustainable social service projects. To develop solutions by addressing social problems related to environmental problems.	**Dpu Alumni Portal**
2022-2023	Emet Vocational School Emergency and Disaster Management Program	0	0	Developing strategies to reduce environmental impacts in disaster management. Planning and implementing sustainable reconstruction processes. To raise awareness in society about climate change and disasters.	**Dpu Alumni Portal**
2022-2023	Gediz Vocational School Office Management and Executive Assistant Program	35	2	Integration of sustainable practices within the office. Developing projects on paper saving, recycling and energy efficiency. To create environmental awareness among employees.	**Dpu Alumni Portal**
2022-2023	Gediz Vocational School Mechatronics Program	16	3	Developing automation applications in renewable energy systems. Designing smart systems and robotic technologies that minimize environmental impacts. To ensure the integration of energy-saving mechatronic systems.	**Dpu Alumni Portal**
2022-2023	Gediz Vocational School Banking and Insurance Program	63	6	Reducing environmental impacts by investing in sustainable projects. Developing green insurance products and analyzing environmental risks. Providing customers with environmentally friendly financial solutions.	**Dpu Alumni Portal**
2022-2023	Gediz Vocational School Occupational Health and Safety Program	69	7	To ensure the implementation of environmental health and safety standards in workplaces. To ensure the integration of environmental risks into occupational health and safety policies. Organizing training and awareness programs for sustainable practices.	**Dpu Alumni Portal**
2022-2023	Gediz Meslek Yüksekokulu Moda Tasarımı Programı	42	4	Moda tasarımında sürdürülebilir malzeme ve üretim yöntemlerini teşvik etmek. Geri dönüşüm ve ikinci el moda	**Dpu Alumni Portal**

				uygulamalarını desteklemek. Tüketicileri çevre dostu moda konusunda bilgilendirmek ve farkındalık yaratmak.	
2022-2023	Gediz Vocational School Medical Laboratory Techniques Programs	8	1	To develop sustainable practices to reduce environmental impacts in laboratories. Improving waste management and recycling processes. Training employees on environmentally friendly laboratory practices.	**Dpu Alumni Portal**
2022-2023	Gediz Vocational School Logistics Program	37	5	Developing sustainable practices to reduce environmental impacts in logistics processes. Improving recycling and waste management processes. Training employees on environmentally friendly logistics practices.	**Dpu Alumni Portal**
2022-2023	Gediz Vocational School Health Institutions Management Program	33	3	Integration of sustainable practices in healthcare institutions. Use of environmentally friendly materials and energy resources. Developing projects to protect public health.	**Dpu Alumni Portal**
2022-2023	Hisarcık Vocational School Banking and Insurance Program	27	2	Reducing environmental impacts by investing in sustainable projects. Developing green insurance products and analyzing environmental risks. Providing customers with environmentally friendly financial solutions.	**Dpu Alumni Portal**
2022-2023	Hisarcık Vocational School Occupational Health and Safety Program	73	9	To ensure the implementation of environmental health and safety standards in workplaces. To ensure the integration of environmental risks into occupational health and safety policies. Organizing training and awareness programs for sustainable practices.	**Dpu Alumni Portal**
2022-2023	Hisarcık Vocational School Logistics Program	64	8	Developing sustainable practices to reduce environmental impacts in logistics processes. Improving recycling and waste management processes. Training employees on environmentally friendly logistics practices.	**Dpu Alumni Portal**
2022-2023	Kütahya Fine Arts Vocational School Tile Art and Design Program	3	1	To promote the use of natural and recycled materials in tile production. Developing sustainable production processes to reduce the amount of waste. To create projects that will increase environmental awareness through tile art.	**Dpu Alumni Portal**
2022-2023	Kütahya Fine Arts Vocational School Traditional Handicrafts Design Program	17	4	To promote the use of environmentally friendly materials in the production of traditional handicrafts. To develop sustainable design methods and techniques. To carry out projects that support local cultures and traditional crafts.	**Dpu Alumni Portal**

2022-2023	Kütahya Fine Arts Vocational School Architectural Decorative Arts Program	82	9	Integration of sustainable materials and practices in interior designs. Developing energy efficient decoration and design solutions. To offer customers environmentally friendly design alternatives and raise awareness.	**Dpu Alumni Portal**
2022-2023	Kütahya Fine Arts Vocational School Artwork Conservation Program	1	0	To ensure the use of environmentally friendly materials and methods during the restoration of works. Considering energy efficiency and waste management in conservation processes. To raise awareness in society and organize training programs for the protection of cultural heritage.	**Dpu Alumni Portal**
2022-2023	Kütahya Fine Arts Vocational School Interior Design Program	118	17	To ensure the integration of sustainable materials and applications in interior designs. Developing energy efficient lighting and heating solutions. To offer customers environmentally friendly design alternatives and raise awareness about sustainability.	**Dpu Alumni Portal**
2022-2023	Kütahya Fine Arts Vocational School Architectural Restoration Program	122	19	To encourage the use of natural and recycled materials in the restoration of historical buildings. Considering energy efficiency and sustainability principles in conservation processes. To raise awareness in society about the protection of cultural heritage and to organize training programs.	**Dpu Alumni Portal**
2022-2023	Kütahya Vocational School of Social Sciences Logistics Program	86	8	Developing sustainable practices to reduce environmental impacts in logistics processes. Improving recycling and waste management processes. Training employees on environmentally friendly logistics practices.	**Dpu Alumni Portal**
2022-2023	Kütahya Vocational School of Social Sciences Tourism and Travel Services Program	44	3	To promote sustainable tourism practices and develop strategies to reduce environmental impact. To organize tourism activities by protecting local cultures and ecosystems. To organize training programs and awareness campaigns that will raise environmental awareness in the tourism sector.	**Dpu Alumni Portal**
2022-2023	Kütahya Vocational School of Social Sciences Office Management and Executive Assistant Program	118	13	Integration of sustainable practices within the office. Developing projects on paper saving, recycling and energy efficiency. To create environmental awareness among employees.	**Dpu Alumni Portal**
2022-2023	Kütahya Vocational School of Social Sciences Banking and Insurance Program	132	16	Reducing environmental impacts by investing in sustainable projects. Developing green insurance products and analyzing environmental risks. Providing	**Dpu Alumni Portal**

				customers with environmentally friendly financial solutions.	
2022-2023	Kütahya Social Sciences Vocational School Tourism Hotel Management Program	23	2	Integrating sustainable practices and reducing environmental impacts in hotel businesses. Increasing energy efficiency by using renewable energy sources. Organizing training and information programs that will increase environmental awareness among guests.	**Dpu Alumni Portal**
2022-2023	Kütahya Technical Sciences Vocational School Electrical Program	46	24	Developing strategies to increase the energy efficiency of electrical systems and reduce their environmental impact. Designing and implementing renewable energy projects. Integrating sustainable practices in electrical systems and promoting energy savings.	**Dpu Alumni Portal**
2022-2023	Kütahya Technical Sciences Vocational School Electrical Technology Program	33	14	Developing solutions that will save energy in electrical systems. Designing and implementing renewable energy projects. Integrating sustainable practices to reduce the environmental impact of electrical systems.	**Dpu Alumni Portal**
2022-2023	Kütahya Vocational School of Technical Sciences Mechatronics Program	42	6	Developing automation applications in renewable energy systems. Designing smart systems and robotic technologies that minimize environmental impacts. To ensure the integration of energy-saving mechatronic systems.	**Dpu Alumni Portal**
2022-2023	Kütahya Technical Sciences Vocational School Construction Technology Program	54	12	To ensure the use of sustainable materials and methods in construction projects. Developing designs that will increase the energy efficiency of buildings. Creating strategies to reduce environmental impacts during construction processes.	**Dpu Alumni Portal**
2022-2023	Kütahya Vocational School of Technical Sciences Chemistry Program	0	0	Developing solutions that will increase waste management and energy efficiency in chemical processes. Conducting sustainable material research and developing environmentally friendly products. Creating innovative chemical methods that will reduce environmental impacts.	**Dpu Alumni Portal**
2022-2023	Kütahya Vocational School of Technical Sciences Mechanical Program	59	24	To ensure the use of sustainable materials and methods in machine design. Developing energy-saving systems and processes. Creating waste management and environmental impact reduction strategies in industrial applications.	**Dpu Alumni Portal**
2022-2023	Pazarlar Vocational School Occupational	58	7	To ensure the implementation of environmental health and safety	**Dpu Alumni Portal**

	Health and Safety Program			standards in workplaces. To ensure the integration of environmental risks into occupational health and safety policies. Organizing training and awareness programs for sustainable practices.	
2022-2023	Pazarlar Vocational School Food Technology Program	19	5	Use of renewable energy resources, reducing waste, minimizing environmental impacts	**Dpu Alumni Portal**
2022-2023	Pazarlar Vocational School Health Institutions Management Program	10	1	Integration of sustainable practices in healthcare institutions. Use of environmentally friendly materials and energy resources. Developing projects to protect public health.	**Dpu Alumni Portal**
2022-2023	Simav Vocational School Cooking Program	0	0	To encourage the use of local and organic products in the preparation of meals. Developing creative solutions to reduce food waste. Organizing training programs to reduce environmental impacts in food production and consumption.	**Dpu Alumni Portal**
2022-2023	Simav Vocational School Electrical Program	81	18	Developing strategies to increase the energy efficiency of electrical systems and reduce their environmental impact. Designing and implementing renewable energy projects. Integrating sustainable practices in electrical systems and promoting energy savings.	**Dpu Alumni Portal**
2022-2023	Simav Vocational School Banking and Insurance Program	67	5	Reducing environmental impacts by investing in sustainable projects. Developing green insurance products and analyzing environmental risks. Providing customers with environmentally friendly financial solutions.	**Dpu Alumni Portal**
2022-2023	Simav Vocational School Logistics Program	32	3	Developing sustainable practices to reduce environmental impacts in logistics processes. Improving recycling and waste management processes. Training employees on environmentally friendly logistics practices.	**Dpu Alumni Portal**
2022-2023	Simav Vocational School Interior Design Program	90	9	To ensure the use of sustainable materials and methods in interior designs. Developing solutions that will increase energy efficiency in spaces. To implement ergonomic and environmentally friendly design applications that will increase user comfort.	**Dpu Alumni Portal**
2022-2023	Simav Vocational School Laboratory Technology Program	40	4	To develop sustainable practices to reduce environmental impacts in laboratories. Improving waste management and recycling processes. Training employees on environmentally	**Dpu Alumni Portal**

				friendly laboratory practices.	
2022-2023	Simav Vocational School Biomedical Technology Program	107	16	To ensure the use of sustainable materials in the design and production of medical devices. Developing innovative solutions that will increase the energy efficiency of medical devices. To analyze the environmental impacts of biomedical products and offer improvement suggestions.	**Dpu Alumni Portal**
2022-2023	Simav Vocational School Mechatronics Program	65	8	Developing automation applications in renewable energy systems. Designing smart systems and robotic technologies that minimize environmental impacts. To ensure the integration of energy-saving mechatronic systems.	**Dpu Alumni Portal**
2022-2023	Şaphane Vocational School Social Services Program	30	1	Organizing training and awareness programs to raise environmental awareness in society. Designing and implementing sustainable social service projects. To develop solutions by addressing social problems related to environmental problems.	**Dpu Alumni Portal**
2022-2023	Şaphane Vocational School Banking and Insurance Program	67	4	Reducing environmental impacts by investing in sustainable projects. Developing green insurance products and analyzing environmental risks. Providing customers with environmentally friendly financial solutions.	**Dpu Alumni Portal**
2022-2023	Şaphane Vocational School Emergency and Disaster Management Program	10	2	Developing strategies to reduce environmental impacts in disaster management. Planning and implementing sustainable reconstruction processes. To raise awareness in society about climate change and disasters.	**Dpu Alumni Portal**
2022-2023	Tavşanlı Vocational School Office Management and Executive Assistant Program	18	0	Integration of sustainable practices within the office. Developing projects on paper saving, recycling and energy efficiency. To create environmental awareness among employees.	**Dpu Alumni Portal**
2022-2023	Tavşanlı Vocational School Logistics Program	45	7	Developing sustainable practices to reduce environmental impacts in logistics processes. Improving recycling and waste management processes. Training employees on environmentally friendly logistics practices.	**Dpu Alumni Portal**
2022-2023	Tavşanlı Vocational School Gas and Plumbing Technology Program	0	0	Optimizing gas installations to save energy. To provide integration between renewable energy sources and gas systems. Developing standards for gas safety and reducing environmental impacts.	**Dpu Alumni Portal**
2022-2023	Tavşanlı Vocational	4	0	To ensure the use of sustainable	**Dpu Alumni**

	School Biomedical Technology Program			materials in the design and production of medical devices. Developing innovative solutions that will increase the energy efficiency of medical devices. To analyze the environmental impacts of biomedical products and offer improvement suggestions.	**Portal**
2022-2023	Tavşanlı Vocational School Machinery Program	17	2	To ensure the use of sustainable materials and methods in machine design. Developing energy-saving systems and processes. Creating waste management and environmental impact reduction strategies in industrial applications.	**Dpu Alumni Portal**
2022-2023	Tavşanlı Vocational School Automotive Technology Program	22	3	To ensure the use of sustainable materials and methods in the design and production of vehicles. To promote and develop the integration of electric and hybrid vehicles. Developing new technologies and solutions to reduce the energy consumption of vehicles.	**Dpu Alumni Portal**
2022-2023	Tavşanlı Vocational School Occupational Health and Safety Program	0	0	To ensure the implementation of environmental health and safety standards in workplaces. To ensure the integration of environmental risks into occupational health and safety policies. Organizing training and awareness programs for sustainable practices.	**Dpu Alumni Portal**
Total	798				

CONCLUSION

Kütahya Dumlupınar University, which has adopted the mission of being an education-oriented university that trains individuals with professional qualifications in various fields with the responsibility of scientific research and service to society, is a university that is aware of its responsibilities towards the environment and society. Being sensitive to the environment and being responsible to the society are the basic values of our university. In line with these core values, educational activities, scientific meetings, events and projects have been realized for both internal and external stakeholders.

Kütahya Dumlupınar University, with the initiatives and participation of our rector, vice-rectors, academic and administrative staff, students, human rights, animal rights and protection of animals, providing equal opportunities in education, providing unhindered education for disabled students, protecting and developing the environment, reducing greenhouse gas emissions, water and energy saving, use of renewable energy sources, providing lifelong learning, providing education for the society, reducing poverty, protecting water and life on land. In order to contribute more to sustainability, it will be beneficial to increase green areas, to increase the work to be done on sustainability and the budget to be allocated to these studies, to increase the production and use of renewable energy, and to increase the number of courses on sustainability.