

YEDİTEPE UNIVERSITY SUSTAINABILITY REPORT





Yeditepe University Sustainability Report

Yeditepe University, within the framework of the "Sustainable Environmental Policy", has adopted continuous improvement as a pioneering educational institution aiming international recognition and respectability in the fields of education, scientific research and social service, while focusing on environmental awareness and sustainability issues. Yeditepe University has identified its activities and goals in line with the Sustainable Environmental Policy.

In line with these objectives, we plan to become a leading educational institution at the national and international level with studies on "Environment and Sustainability" issues. We aim to increase social awareness by introducing these studies and practices within the scope of service to society. The demonstration of sustainability efforts in various areas has been identified as a priority in order to create a sustainable campus life. Environmental issues were taken into consideration in all academic and administrative decisions as well as activities at Yeditepe University.

In 2017, a "Sustainability" network was initiated by Yeditepe University in order to exchange information and collaborate with other universities. Firstly, by becoming a member of the UI GreenMetric World University Rankings (IWGM) system, the university became part of the "2017 GreenMetric International Assessment". Secondly, we became a member of the "International Sustainable Campus Network" (ISCN) system and related studies were initiated.

UI GreenMetric is recognized as the world's first rating agency for sustainability. The UI GreenMetric University Sustainability Rating evaluates and compares the sustainability efforts at university campuses worldwide. The evaluation platform was established by the University of Indonesia in 2010 and evaluates participating universities every year.

GreenMetric is a platform that promotes internationalization, raises awareness of sustainability and tries to attract global awareness for environmental issues. It is open to the participation of all higher education institutions in the world. Every year, many universities from different countries are evaluated by GreenMetric in areas such as infrastructure, energy and climate change, wastes, water resources, transportation and education, are scored for each assessment category and as a result higher education institutions are ranked according to their total scores from these evaluations. The evaluation is carried out by a team of experts from the University of Indonesia.

The results of UI GreenMetric World University Rankings, which Yeditepe University applied for the second time in 2018, were announced in December. 719 universities from 81 countries all over the world participated in the evaluation. Among the participating 30

universities from Turkey, Yeditepe University ranked first among foundation universities, fourth in overall Turkey, and 249th across the world.

UI GreenMetric World University Rankings (IWGM), has organized the 4th international GreenMetric Workshop in cooperation with Diponegoro University between the dates 8-10 April 2018, at Semerang in Indonesia. The theme of the 4th international GreenMetric Workshop Organisation has been determined as "Universities impacts and sustainable development goals". At the platform established for the workshop, the universities have shared their best practices on 'Sustainability'. Yeditepe University has participated in the workshop organization.



4th International GreenMetric Workshop Organisation

On 4-5 October 2019, the 2nd National Workshop on UI GreenMetric World University Rankings for Turkish Universities has been held in Zonguldak Bülent Ecevit University. The workshop aims to form a national platform to share the experiences and best practices about the sustainability of the universities and the GreenMetric expert members. Yeditepe University has participated in the workshop organization with its valuable contribution.

In 2019 November, Yeditepe University has applied the UI GreenMetric World University Rankings for the third time. The number of participant universities increases every year and the results will be announced in December 2019.

Yeditepe University evaluates its activities on "Sustainability" in 6 main categories:

Campus Setting and Infrastructure

Sustainability criteria are applied in structural elements and green areas at the Yeditepe University Campus. All campus buildings have green building features such as natural ventilation, full-day natural lighting, and an energy management system.

Green areas within the campus take up a large space. Sustainability criteria are used in the design, maintenance and application of green areas. Besides, Yeditepe University also conducts studies to create an Arboretum. The development and protection of plant material are continued every year in the Arboretum and the campus landscaping area..



Energy and Climate Change

Yeditepe University has identified measures related to the Energy and Climate Change category. In the first phase, a solar energy system started to be used as a renewable energy production on campus. For this purpose, solar panels were installed on campus building terraces. The ratio of renewable energy production to total annual energy use is 10%. Also, the solar system for heating hot water is present on the roof of the social facilities building.



In addition, Yeditepe University aims to improve energy savings by various sustainable energy management applications. The energy consumption is monitored and energy efficient appliances and sensor systems are used throughout the campus area. While there are LED illuminations and energy saving lamps throughout the campus, energy efficient devices are used in laboratories.





At the same time, all buildings have automated systems such as automatic doors, automatic fire alarm systems and automatic lighting.



Elements of the green building implementations that are present in all the campus buildings are; Natural Ventilation, Full Day Natural Lighting and Building Energy Management System.



 Electricity Counter
 Solar Power Monitor

 Green Buildings implementation (Yeditepe University, Turkey)

Waste Management

At Yeditepe University, a comprehensive recycling and waste reduction program is implemented for "Waste Management" and measures are taken to protect natural resources and use them efficiently.

All recyclable wastes throughout the university are collected separately in order to be

recycled. To carry out this process properly, indoor waste separation units in all corridors of classes, offices and halls have been placed so as to collect and separate in their source. Besides, the used papers generated at the offices are recycled with a mechanical technique by an authorized recycling company and GHG emission resulting from the incineration has been avoided indirectly.



Recycling Program For University Waste (Yeditepe University, Turkey)

Environmental protection campaigns are being conducted to raise environmental awareness among the students and academic and administrative staff. Examples of the campaigns can be given as waste battery collection, fluorescent light collection, plastic cover collection and safely disposal of expired drugs. The university is supported by the municipality with the joint projects carried out for recycling.





In addition to these, various applications started to be used within the scope of the 'Program for Reducing Paper and Plastic Usage'. To this end, new computer systems have been implemented for corporate correspondence (EDYS) and course management (Moodle). In addition, programs such as double-sided printing are implemented within the framework of the policy of reducing the number of prints.



Program to Reduce the Use of Paper and Plastic in Campus (Yeditepe University, Turkey)

All wastes from Yeditepe University Campus are being treated separately. Nonrecyclable inorganic wastes are collected in cooperation with the Ministry of Environment and Urbanization. In order to avoid environmental pollution, odor and leakage from these wastes, an Underground Waste Container System is used. In addition to this, by using Recycling Units, Packaging Units and Indoor Waste Separation Units for recycling are available in common areas of the campus. The wastes are thrown to the Indoor Waste Separation Units that are placed in the corridors of the classes, offices and halls. These wastes are then daily controlled for separation according to their types and are given to the recycle company which is authorized for recycling by the Municipality. Additionally, the outdoor waste bins have been categorized and labeled so as to separate the waste material in their source. New indoor waste bins have also been provided for the separation of indoor wastes in their source as well.



At our university, organic wastes are collected during the pruning of plants, mowing of the lawns and after processes in the compost plant. The organic waste supplied from the plant materials in the campus landscape is utilized by a recycle machine. The compost produced is fully used in the campus for landscape maintenance. This year, the amount of organic waste recycled have been increased significantly.



The disposal of toxic waste is carried out by keeping an inventory. All toxic wastes from our university are sent to disposal companies with environmental license permit and national waste transportation forms. All records are kept and the entered into the system of the Ministry of Environment and Urbanization at the end of the year.



There is a biological treatment plant in the campus for the treatment of waste water. In the plant, approximately 30% of the total amount of water used annually is treated and recycled as water.



Water Resources

A new water conservation program has been implemented in 2019. Rainwater from the building roofs is being collected in rain water tanks for watering indoor and outdoor planting. Also, a ground water tank construction is still in preparation in the Arboretum area. The capacity of the Ground Water Tank is 6000 m³.



Following the water treatment process, the recycled water is taken from the storage tank by an electrical system which uses booster pumps. Then the recycled water is sent to a piping system which distrubutes the recycled water to the garden irrigation system and the campus toilet system.



The Use of Water Efficient Appliances in the campus buildings; flow rate decreasing appliances for water taps are used in all the campus WCs. In addition, all the WCs are provided with low flush toilet equipment.



At Yeditepe University 'Sustainable Transportation Practices' are applied. In order to reduce the use of vehicles in the campus, vehicle entries are restricted. The Shuttle Services are available for journeys within the campus and the ride is free. There are 11 Shuttle Bus Stations in the Campus Shuttle Route. 6 Shuttle Buses operate during the day from 8.00 am to 11.00 pm.



Zero emission vehicles are available within the campus area. An electrical car provides shuttle services from campus building area to the parking lot at the arboretum area carrying 4 passengers for each trip at regular intervals daily. For the same route, another alternative transportation is planned. Bicycle racks are located to specific locations and free bicycles are provided for use. A zero emission electric car is present in the campus area which is designed by Yeditepe University Automotive Club and exhibited in different scientific occasions.





In addition, various pedestrian path alternatives were created in the campus circulation system to encourage walking.



Education

At our university, courses, research, academic publications and academic activities related to 'Environment and Sustainability' are encouraged. In this regard, the Graduate School of Natural Applied Sciences established the "Sustainable Built Environment" and "Urban Design and Landscape Architecture", "Sustainable Energy" graduate programs. On the other hand, School of Applied Sciences established "Agricultural Trade and Management" undergraduate program. Furthermore, we plan to integrate these programs and related courses throughout the university. A new course named "Sustainable Development" is offered for all the students of the university which focuses on the sustainable development goals of the United Nations.

We aim to encourage, direct and support activities related to "Environment and Sustainability" by both academic and administrative staff as well as by student organizations. In relation to this, "Sustainability Study Group" which is composed of specialized academic and administrative staff, has been started their studies to coordinate the sustainability efforts of the whole university. Also, several student organizations have been established in order to increase the participation of students in sustainability activities.

Various activities have been organized throughout the university to raise awareness about "Sustainability and the Environment":

"The Future of Sustainable Development" conference has been held with the participation of sustainability leaders from different institutions. Jeffrey D. Sachs who is the director of the Center for Sustainable Development at Columbia University has been invited as the keynote speaker for the event. He has introduced and signed the last version of his book 'The Age of Sustainable Development' which has been translated to Turkish lately by the Yeditepe University Press.



Examples of Events Related to Environment and Sustainability (Yeditepe University, Turkey)

During the conference, also a structure in the form of a tree has been designed and located at several locations for collecting plastic bottles throughout the campus area and a campaign has been started among the students and the staff to raise awareness for the global plastic waste problem.



Examples of Events Related to Environment and Sustainability (Yeditepe University, Turkey)

"Sustainable Urban Furniture with waste materials", workshop & exhibition (24-25-26 April 2019, İstanbul) has been conducted as a collaborative effort by Yeditepe University Faculty of Architecture, Department of Industrial Design, Interior Design, Urban Design and Landscape Architecture, Directorate of Environment as well as Landscape colloboration with İstek High School students.



Sustainability Ambassador Student Group organized 'Sustainability Summit' event for the second time this year. At the event, speakers from different industries dealing with sustainability have given important aspects of their studies. During the event a symbolic cup has been designed from recycled materials and been used for collecting waste to raise environmental awareness among students and staff.



Examples of Events Related to Environment and Sustainability (Yeditepe University, Turkey)

RGBE Certificate Program in Practical Horticulture is being organised at regular intervals with the cooperation of Royal Botanic Garden Edinburgh and Nezahat Gökyiğit Botanic Garden. The aim of the certificate program is to increase the number of the specialized staff in sustainability practices.

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"Light On" International Design Workshop & Exhibition was conducted with the collaboration of Bern University of Applied Sciences and 700 DCC-Design Communication Consultancy, Yeditepe Üniversitesi Faculty of Architecture, on 2-6 September 2019, Tutor. The design workshop focuses on the concept of light at any scale, as an oppurtunity to design a sustainable industrial product or to enlighten an indoor/outdoor space.



Public Administration Department organized a field visit to Kadıköy Municipality City Council on 05 November 2019 Students met with councillors and participated in hearings and voting processes of the City Council. An other field visit to Eskişehir City Council, Tepebaşı Municipality and Tepebaşı District Governership and Odunpazarı Municipality organised between 29-30 November 2019. Students met with mayors, vice mayors and councillors and discussed on local governmental issues in Eskişehir.

Food Engineering Department organized a series of seminars on Sustainable Food Systems. Public Administration Department organized a seminar on Air Pollution, Cities and Energy Politics. Public Administration Department organized a seminar on the experiences of department graduates in NGOs (Non-governmental issues) on 15 October 2019. MARC (Management Application and Research Center) and Yeditepe Public Administration Department organized a seminar on the "Role of Municipalities in Environmental Management, Climate Change and Marmara Sea".



In the Arboretum area of the Yeditepe University, annually a "Student Tree Planting Activity" is put into practice during the academic year to encourage the students to take part in nature conservation by the Yeditepe University Directorate of Environment and Landscape.



Examples of Events Related to Environment and Sustainability (Yeditepe University, Turkey)

Designer Habitat Designers' Habitat Workshop", Yeditepe University, Department of Industrial Design & İzfaş A.Ş. collaborative work Fuar İzmir, Designing the sustainable "Design Thinking Area". (27-30 March 2019)



"Using Natural Stone as an element of Design" (27-30 March 2019)



Ataşehir Municipal Science & Art Center -Department of Industrial Design, Interior Design, Urban Design and Landscape Architecture, Directorate of Enviroment And Landscape colloboration. This organization was conducted in order to emphasize the importance of Recycling –" Product design with waste materials" workshop with children aged 8 to 12 years old. Exhibition (November 2018)



Examples of Events Related to Environment and Sustainability (Yeditepe University, Turkey)

Organic Agriculture Propagation Techniques have been practiced by the students of Yeditepe University as an application of a course in a greenhouse located within the campus area every semester.



"Sustainability and Environmental Awareness Workshop Event"; the study of making use of waste materials and greening the environment. The project have been practiced in corporation with Yeditepe University and ISTEK High School to raise awareness and sustainability among high school students.



Examples of Events Related to Environment and Sustainability (Yeditepe University, Turkey)

A workshop organized by Yeditepe University and Atasehir Municipality; concerning the children of the residents living within the municipality area. The workshop had been dealing with the product design using waste materials and vertical garden design and application.



A workshop had been organized by the Industrial Design, Interior Architecture Design and Graphic Design departments from Yeditepe University in cooperation with Ataşehir Municipality. A city park within the boundaries of Ataşehir Municipality has been designed reconsidering sustainable design criterias. Industrial Design, Interior Architecture Design and Graphic Design students redesigned the city park by using sustainable Street furniture elements and the student works has been demonstrated at Istanbul Design Week exhibition.



Examples of Events Related to Environment and Sustainability (Yeditepe University, Turkey)

Yeditepe University participated in the 7th International Student Triennial with the "Sustainable Value in Packaging" workshop.



The department of Gastronomy and Culinary Arts promoted a World Food Day through a seminar on Global Food Security and Sustainability. The purpose of the seminar was to spread awareness among university students as to how food security and rural development can change the future of migration.



Yeditepe University Environment and Ecology Student Organization has organized a "Forest Cleaning Activity" at Aydos Forest in Istanbul. The various kinds of wastes have been collected by the students from the forest with a joyful activity.



Yeditepe University Environment and Ecology Student Club has executed a seminar hosting TEMA (The Turkish Foundation for Combating Soil Erosion, for Reforestration and Protection of Natural Habitats) with the subject of "TEMA in 25 Years".



Yeditepe University Environment and Ecology Student Club has organized a "Bicycle

Festival" to attract attention to the environmental and human health impacts of the Coal-Fired

Thermal Power Plants at Princess Islands at Istanbul.



Yeditepe University Environment and Ecology Student Club has organized a Botanical Garden Technical Trip to Nezahat Gokyigit Botanical Garden in Istanbul to get to know the different plant species.



The Yeditepe University Gastronomy and Culinary Arts Department supports scientific and nonprofit activities to promote healthy eating environments.

Annually a tree planting activity is carried out for the memory of the students who lost their lives in a space reserved at the campus.

An exhibition is held at Yeditepe University about the maintenance of Urban Trees in Istanbul to remark the significance and consequences of improper prunning in the cities.

Yeditepe University has conducted an Organic Tea Project in Yesiltepe Village in cooperation with Caykur General Directorate to support the production of organic agricultural tea production in order to achieve sustainability goals in the East Black Sea Region.

A project about the recycling of the batteries and plastic covers is carried out in cooperation with the student organization and the municipalty.

