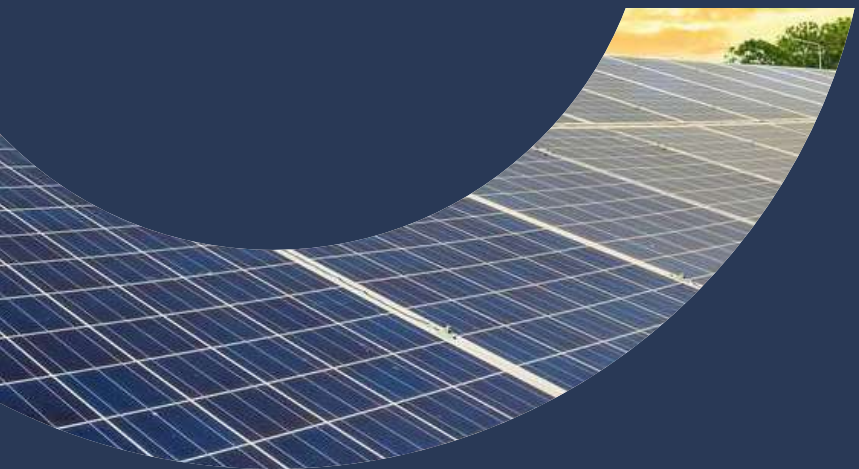
SUSTAINABILITY REPORT 2021

SUSTAINABLE CAMPUS OFFICE



CIU SUSTAINABILITY TIMELINE

2009
Centre of Excellence

Centre of Excellence was established in 2009 to begin the sustainable development of the campus.

2011
Sustainable Energy Research Centre

Sustainable Energy Research Center was created in 2011 to deal with campus sustainability issues.

2015
Photovoltaic Power Plant Project

Photovoltaic Plant Project commenced in 2015 to produce a peak power of 1.3 MW in order to provide sustainable energy to the whole campus.

2016
Energy Efficient Building

The Science and Technology Building is a unique project and it is the only building equipped with applied energy conservation measures in the region.

2017
Students for a Sustainable Campus & Sustainable Workshop

Students for a Sustainable Campus (SSC) is an inclusive and multidisciplinary student project that works on longlasting sustainable practices, on and off the campus, through education, engagement and direct action.

2018
Sustainable Campus Office

Sustainable Campus Office (SCO) is the coordinator of campus sustainability goals and was founded order to provide a pathway and for developing and supporting programs.

2019
Biogas Project

Pre-engineering study of 1MW Biogas Plant has been completed and local permissions were obtained. Installation is planned to begin in 2021.

2020
Improvements

Sustainability Policy was updated and Energy & Divestment Policy was approved by the Executive Board. Also, free drinking water project was realized.

ENERGY AND CLIMATE

UI GreenMetric World Sustainable University Ranking:

149th, Turkey:1st Cyprus:1st

Indicators

- Energy Efficient Applications
- Smart Building Program Implementation
- Number of renewable energy sources in campus
- The total electricity usage divided by total campus population
- The ratio of renewable energy production towards total energy usage per year
- Elements of green building implementation
- Greenhouse gas emissions reduction program
- The ratio of total carbon footprint divided by campus population

Smart Building Implementation

The goal is to provide clean and affordable energy to the whole campus.

%50

50 % of all buildings in the campus are implemented with automation systems to improve energy efficiency such as HVAC Systems, Central Vacuum Systems, Central Heating Systems etc.

%75

75 % of all buildings are equipped with energy monitoring and management systems, allowing us to record energy consumptions of each building and energy supply management.

%63

63 % of the buildings are equipped with water management systems like monitoring systems (Flow meters). Additionally, rainwater collection systems are used for flushing and irrigation.

%100

All buildings are equipped to control the indoor environment such as air quality, thermal comfort and passive cooling methods.

%100

All buildings in the campus are equipped with smart lighting systems such as sensors, solar shadıng and highly efficient LED lighting.

Energy and Climate Score: 1400 out of 2100

PHOTOVOLTAIC PLANT

The project was commissioned in 2015 by the Sustainable Energy Research Center. It is a unique solar energy project due to the application of 5 different mounting types, namely on a level roof, an inclined roof, terrain, façade, and carports. It remains the largest solar energy project in any university on the island. The PV project will mitigate 470 tons of CO_2/year.

BIOGAS PLANT

This project will be the first largest private plant of Northern Cyprus, mitigating about 70 t/y of whey and fresh waste. It is planned to produce 411 m^3/h biogas, which will lead to a 1,260 kW electrical capacity. Additionally, nearly 1000 kW heat capacity will be realized. The Biogas plant will lead to 2,500 tons of CO_2 reductions annually.

298.64 kWp

1,169 kWh Electricity

700 kWh heat

400 Nm3/h gas

746.48 kWp

235.29 kWp

%100 DOUBLE GLAZING

All the buildings on the campus are equipped with double glazing windows, and according to the new energy policy on campus, any renovation or maintenance should also utilize this type of window.

%80 HIGH-EFFICIENT EQUIPMENT

Cyprus International University has a strict policy in relation to using high-efficient electrical equipment, such as Energy Star label or with A+ and A++ energy consumption standards.

%68 VRF SYSTEM

Science and Technology, Çevik Uraz, CIU Sports Arena Complex, Student Services Center, Soli Apartment, Rectorate building, International Center and Student Union, together covering a total area of 60,000 m^2, are equipped with a high-efficiency VRF system.

% 52 THERMAL INSULATION

The roofs of more than 52% of the total buildings on-campus (Academic Zone), have thermal insulation installed. With the new project in place, it is projected that this number will be 100% by the end of 2025.

% 60 NATURAL LIGHTING

Energy Efficient Appliances Usage: More than half of the whole buildings in the campus are designed with natural day-lighting to decrease consumption of electricity for illumination.

%55 SHADING

More than half of the building are equipped with solar shading systems due to the location and orientation of the buildings.

TRANSPORTATION

UI GreenMetric World Sustainable University Ranking:69th, Turkey:

4th, Cyprus:1st

Indicators

- The ratio of total vehicles divided by total campus population
- Shuttle services
- Zero emission vehicles policy on campus
- The ratio of zerio emission vehicles divided by total campus population
- Transportation program, designed to limit/decrease the parking area on campus for the last 3 years
- Number of transportation initiatives to decrease private vehicles on campus
- Pedestrian policy on campus

Shuttle and Stops

6 Shuttles operate daily. 2 Buses include disabled friendly locations.

In average, nearly 11,000 students use the campus buses daily but a gradual decrease took place due to the COVID-19 pandemic.

CIU campus buses provides free trips every 2 hours during the day and intermittent free trips during the night.

Every 10 minutes, minibuses carry out operations for students from city center to campus

The Transportation Unit of Cyprus International University offers free shuttle services to students and staff. The university owns 25 vehicles of varying sizes to fulfil its commitments to its students and staff alike, providing free transportation between the CIU campus and Nicosia daily between the hours of 07:00 and 19:00. The Famagusta shuttle services operate in the morning and evenings, weekdays only. The Transportation Unit also provides shuttle services on Saturdays to Kyrenia, departing at 14:00 from CIU and returning at 22:30 from Kyrenia.

19,000 m² of open space or horizontal type parking space in the university campus which equates to **3 %** of the total campus area.

Currently **100 %** of buildings and facilities have disabled access through the use of ramp pathways.

Two main stations on campus provide **38** bicycles within the campus area. In total, **70** electrical bicycles are utilized by the staff, campus management, maintenance office and security staff.

640 m of pathways across the campus are made of tactile paving, ensuring ease of access to the various locations for the visually impaired.

Water Score: 825 out of 1000

WATER

UI GreenMetric World Sustainable University Ranking:104th, Turkey: 3rd
Cyprus:1st

Indicators

- Water conservation program
- Water recycling program
- The use of water efficient appliances
- Piped water consumed

CIU is equipped with drip irrigation system. More than 100,000 m² of the area are forest land and high trees, and 150,000 m² of flowers and grass area, and they are all covered by the latest technology underground irrigation piping, equipped with the drip irrigation system.

The capacity of the CIU lake is 800 m³ and this water is only collected by rain.

Fresh Water

70,000 liters of municipal water daily is treated to provide free drinking water thrpugh **21** fountains located around the campus.

Additionally, CIU has two underground usage water reserves with a capacity of more than 650,000 liters (650m³) on the east side and for the west side, 580,000 liters (580m³) of water is availbable.

One of the most important factors in maintaining the water management system is the monitoring issue. The CIU Sustainable Campus Office has completed a large project in applying water flow meters for all the campus buildings individually in 2019.

The Monitoring and recording are carried out by the Campus Management, in order to create an in-depth archive in relation to water consumption on the campus, reducing water losses.

Cyprus International University Water Treatment System

Setting and Infrastructure Score: 975 out of 1500

30,000 m²
550 Olive Trees

23,000 m²
700 Pine Trees

1,200 m²
100 Date Palm Trees

30,000 m² of different varieties of trees

More than 102,000 m² of CIU is covered by forest, tall green plants and trees, with this forest area amounting to 17 % of CIU.

SETTING AND INFRASTRUCTURE

UI GreenMetric World Sustainable University Ranking: 203rd, Turkey: 17th Cyprus:1st

Indicators

- The ratio of open space area towards total area
- Area on campus covered in forest
- Area on campus covered in planted vegetation
- Area of campus for water absorbance
- The ratio of open spaces area divided by campus population
- University budget for sustainability effort

150,800 m² area on the campus is covered with plant vegetations (including lawns, gardens, green roofs and internal planting), reaching almost 24 % of the total campus area.

130,500 m² (21 %) of CIU's campus, is non-retentive surfaces (e.g. earth, grass, concrete block, etc.), for water absorption.

The new Campus Lighting Project is currently at the design stage. The aim of the project is to increase the lighting quality while simultaneously decreasing the energy consumption and emissions, by utilizing up-to-date technology and smart control systems.

EDUCATION

UI GreenMetric World Sustainable University Ranking:228th , Turkey:7th Cyprus:1st

Indicators

- The ratio of sustainability courses towards total courses/modules
- The ratio of sustainability research funding towards total research funding
- Sustainability publications
- Sustainability events
- Sustainability student organizations
- Sustainability website
- Sustainability report

We have **29** Publications related to Sustainability cited on Google Scholar during the 2020-2021 academic Year.

There are **35** undergraduate students participating on the Sustainable Campus Project, as well as 40 members of staff and Graduate Students.

There are **50** Master and PhD thesis' dedicated to the same subject during the 2020 – 2021 Academic Year.

A total of **48** events in 2020- 2021 were held (e.g. conferences, workshops, awareness raising, practical training, etc.)

430 courses have been taught during the 2020-2021 Academic year relating to sustainability.

35 members of staff and Graduate Students are working in sustainability organizations.

We have **111** Publications related to Sustainability written by academicians.

Education Score: 1350 out of 1800

Startup Name:
Sustainable Garden

Some local vegetables and intercontinental agricultural plants and seeds were planted in order to produce organic agricultural products on the naturally amended soil within the campus, some of our yields will be spinach, radishes, parsley, celery, broad beans by the Students for Sustainable Campus Project team. In this agricultural farm, organic waste from plants and animals is utilized to amend the soil to carry out a sustainable farming system.

Startup Name: Café Nature

Café Nature is a zone of the university managed by a combined group of 10 graduate and undergraduate students with the aim of adressing environmental issues education and the focus on reduction of waste and plastic pollution.

Startup Name:
Sustainability Workshop

5 undergraduate students from various departments work in the sustainable workshop to educate other students with their innovation for recycling purpose of different materials (cigarette buds, paper, glass etc.)

WASTE

UI GreenMetric World Sustainable University Ranking:315th, Turkey:17th Cyprus:2nd

Indicators

- Recycling Program for University Waste
- Program to reduce the use of paper and plastic in campus
- Organic Waste Treatment
- Inorganic Waste Treatment
- Toxic Waste Treatment
- Sewerage Disposal

Due to the COVID-19 pandemic, all 2020-2021 academic year activities were carried out online which resulted in almost 85% reduction in organic waste and 50% reduction in paper waste in this period.

Cyprus International University uses Dual Stream Recycling Plan to collect, separate and send recycling material wastes to local recycling companies. The recyclables are sorted as Category 1: paper/ cardboard, Category 2: electric waste and Category 3: metals/glass/plastic/battery/toxic/organic

Category 1: 99% of paper waste had been collected by campus management Student for Sustainable Campus (SSC) and delivered to the sustainability workshop. Because of online education the collected amount (750 kg) is 65% less compared to prior two years; However, all paper wastes were recycled/reused by the campus. In addition to paper waste, more than 60% (300 kg) of cardboard were reused by sustainability workshop due to maintenance/renovation/construction/ development activities during 2020-2021.

Waste Score: 1125 out of 1800

Clothes Donation: Fabric recycling is carried out through the cooperation of a private company. All second hand clothes are collected in designated boxes around the campus and are sent for recycling process to create a budget for cancer patients. (99% of all fabric)

Paper Wastes: is collected by designated trash bins that are located all across the campus site. The average monthly amount of newspaper and wasted paper collected is 60kg. Sustainable innovation center creates a constant program to recycle these papers and make paper recycled pencils. Approximately 5g of recycled paper is required to produce a pencil which utilises 99% of the waste .

Yard Trimming: Campus Management team collects the organic wastes (grasses or leaves) from the total area of CIU campus which is nearly 50 kg/day and sends or reuses in the university greenhouse as mulch and peat.

We Are Nature café is not only used as a reflection of the waste management on the campus, but also to educate the students and the public on the adverse effects of harmful materials upon the environment, such as single-use plastic.

University activities are creative, sustainable and based on design ideas in order to utilize the University's recyclable materials.

The green design center was founded in 2018 in the public sphere 'We Are Nature Café' is situated in the middle campus area, where students can gather and enjoy a sustainable green environment. This center has had a substantial impact upon the students on the campus, with a variety of activities. This area is designated as a plastic free zone (PFZ) and plans to educate students to reduce the usage of plastic in their day-to-day life.

SUSTAINABILITY IMPROVEMENT TRENDS

UI GreenMetric World Sustainable University Ranking:111th, Turkey:5th Cyprus:1st

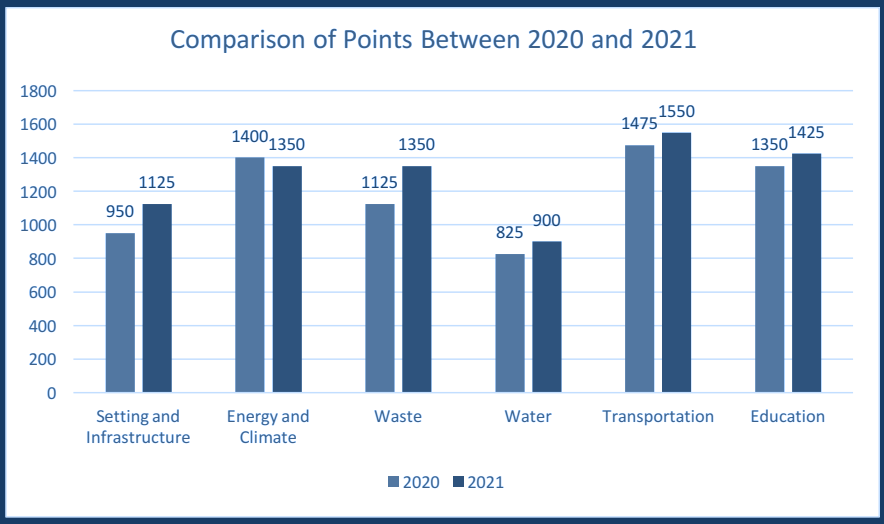
UI GreenMetric Ranking and Points

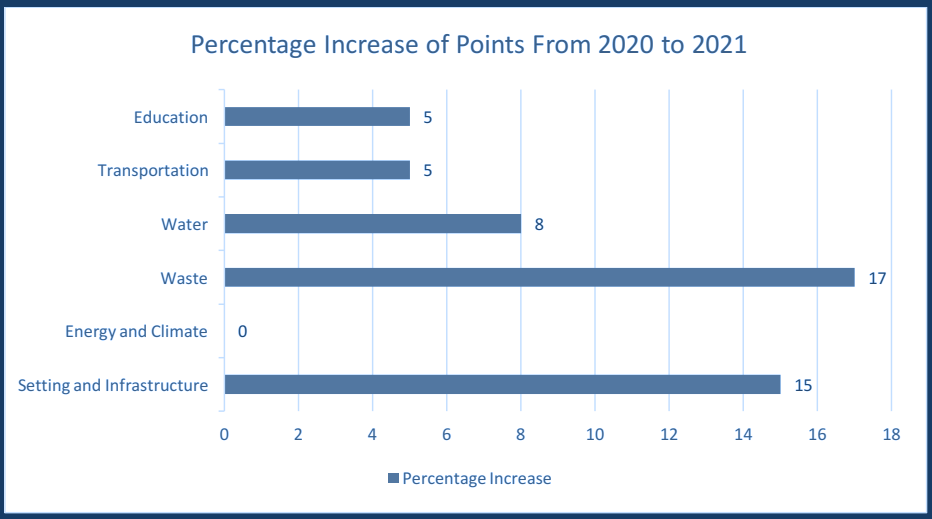
UI GreenMetric Ranking and Points

Sections	Points	Maximum Points	Cyprus Ranking	Turkey Ranking	World Ranking
Energy and Climate	1350	2100	1.	6.	185.
Setting and Infrastructure	1125	1500	1.	18.	151.
Waste	1425	1800	1.	13.	212.
Water	900	1000	1.	2.	59.
Transportation	1400	1800	1.	6.	185.
Education	1325	1800	1.	15.	238.

University Improvement Trend Line

Overall Score: 7150 out of 10000





UNIVERSITAS INDONESIA
Veritas, Probitas, Iustitia

UI GreenMetric
World University Rankings

Certificate

This certificate is awarded to

Cyprus International University

as The 111th World's Most Sustainable University
in 2021 UI GreenMetric World University Rankings

Jakarta, 14 December 2021

Prof. Ari Kuncoro, S.E., M.A., Ph.D
Rector of Universitas Indonesia

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