



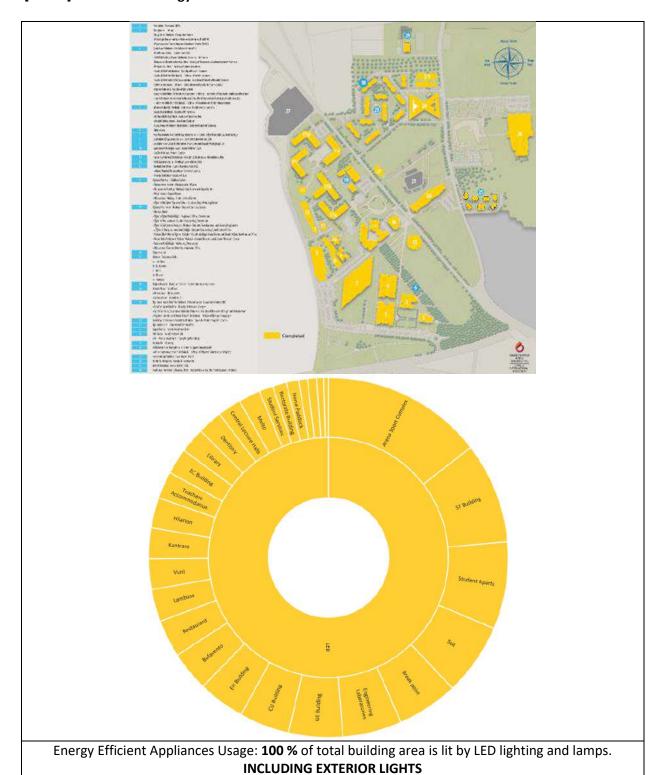
Evidence for THE Impact Rankings Questionnaire

University : Cyprus International University

Country : North Cyprus - Turkiye

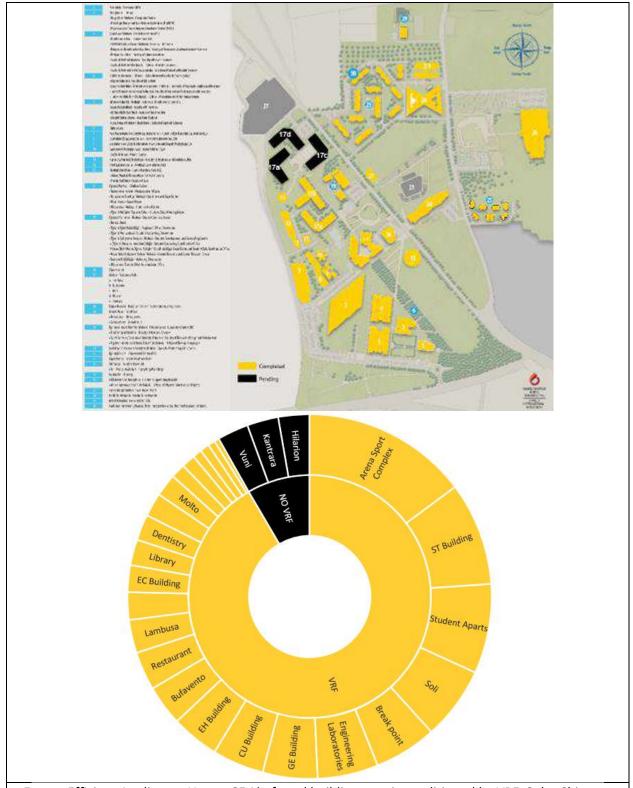
Web Address : www.ciu.edu.tr

[13.2.2] Low-carbon Energy Use





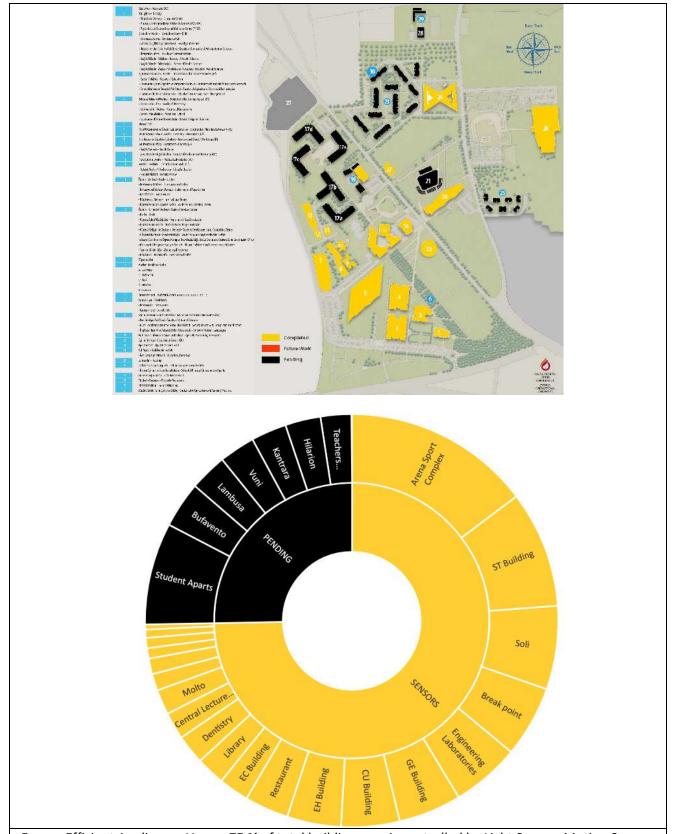




Energy Efficient Appliances Usage: **85** % of total building area is conditioned by VRF, Solar Chimney based Air Ventilation, Highly Efficient Air Handling Units and Ventilation systems.



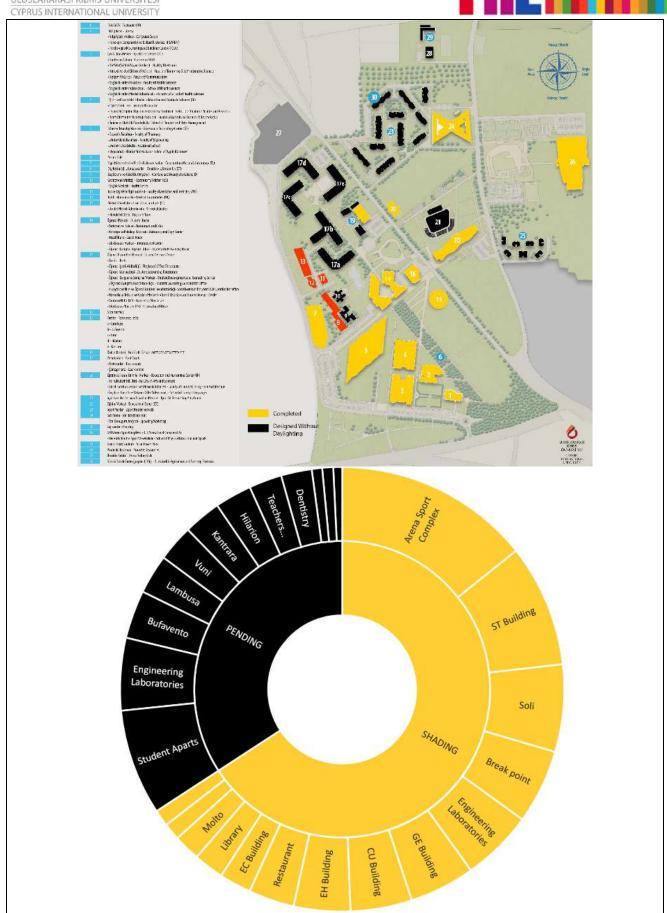




Energy Efficient Appliances Usage: **75** % of total building area is controlled by Light Sensor, Motion Sensor, Temperature Sensor, Windows Sensor, Gas Emission Sensor and Fire Alarm.



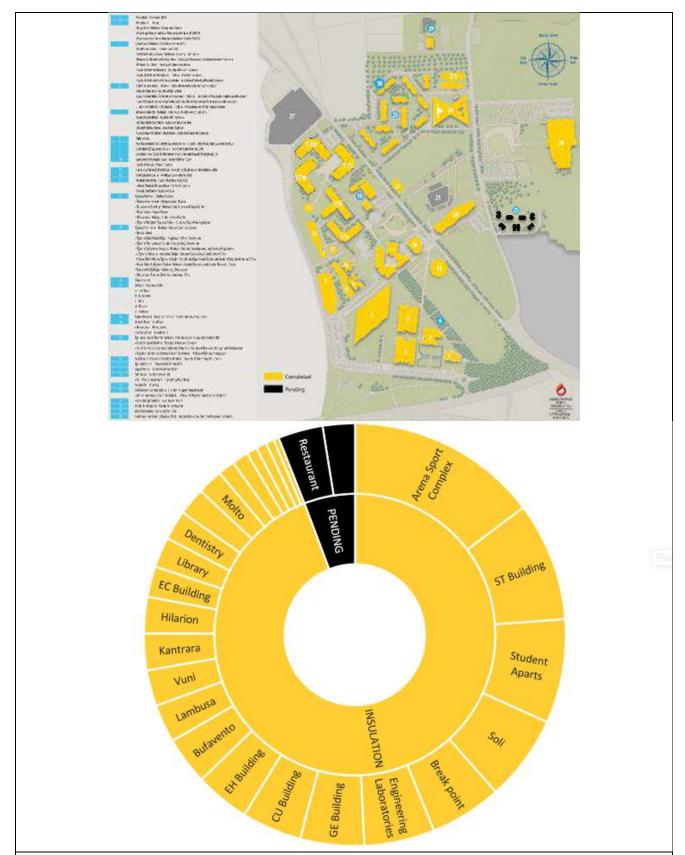




Energy Efficient Appliances Usage: Shading Systems with direct impact of the university location and climate (70%)



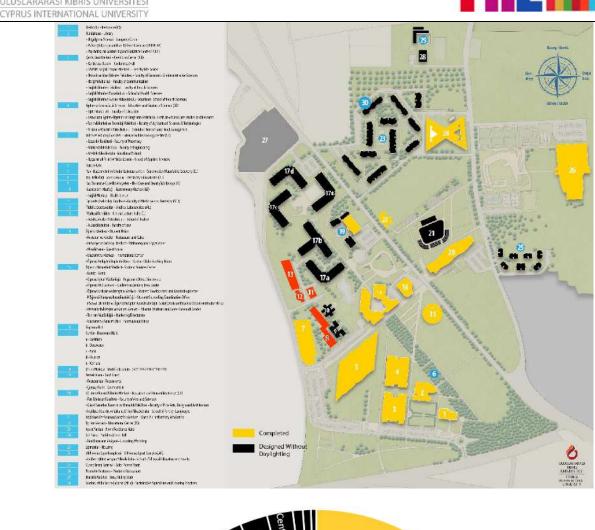


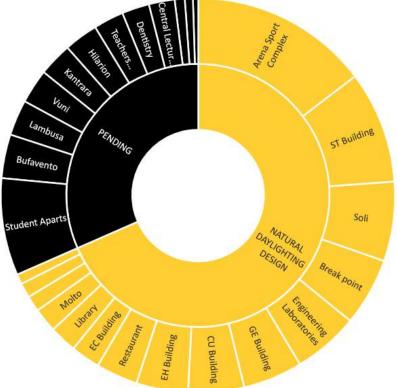


Energy Efficient Appliances Usage: All the new buildings are using thermal roof Insulation and also more than 60% of old building insulated with this material. (95%)









Energy Efficient Appliances Usage: More than half of the whole buildings in the campus are designed with natural day-lighting to increase to consumption of electricity for illumination. (68 %)





Pictures00 Air Conditioning System LED Lighting Shading System Daylighing







- Double Glazing windows; ~ 100 %
- Energy Star Label Equipment; 85 %

Average value of Energy Efficiency implementations is 84.75 % for whole campus.

In the 2024-2025 academic year, we have made great efforts to implement insulation to all the roofs of the university buildings except the Teachers Accommodation. This is purely due to the fact that the timeline has not fit to finish the teacher's accommodation yet. It is planned to finish by the end of 2025. As Cyprus has a very hot climate, the roof is where we have the most amount of solar gain from. Though not fully as some buildings insulation efforts finished after others, this allowed us to save a lot of energy in the dormitories section. The results of the insulation efforts are seen in the total energy consumption of the university.

















Application and finish product example of the roof insulations



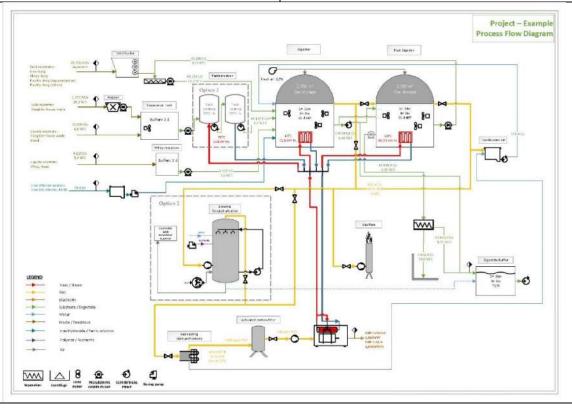






Photovoltaic

Solar Thermal Panels





















CIU CHP Plant for Biogas Project.





Description:

Cyprus International University is introducing a cutting-edge 800 kW Combined Heat and Power (CHP) system that has the potential to generate more than 7 million kWh of electricity per year if operated continuously, significantly reducing or complitely eliminating the reliance on the national grid and lowering carbon emissions. Future integration with biogas production from campus organic waste as well as other sister companies like Taskent Tavukculuk, Levent Farms etc., will allow CIU to produce clean, circular, and locally sourced energy, transforming waste into power and positioning the university as a true energy-generating Living Lab. While several leading institutions globally such as University of California, Davis, University of British Columbia, and Ghent University, operate on-campus biogas facilities, CIU will become the first in its region to implement a CHP system directly connected to sustainability education, student research, and operational energy resilience. This innovation marks a major step toward CIU's vision of becoming a near-zero energy campus, empowering students to study, test, and optimize campus infrastructure while actively participating in climate action.

This year, as the biogas plant is not fully built, the CHP was ran as a test and fed into the grid. Over a 22 hour period, the CHP produced a total of **15289 kWh** of energy. At this magnitude, when the biogas plant fully finishes the construction, CIU will be completly net zero carbon campus through its own means. The energy produced is constant.

The Biogas Project was planned to finish by 2025, however due to governmental approvals, this date was pushed to 2026. However, all the approvals from Renewable Energy Department and KIBTEK were gathered, and the building permits completed, therefore the CHP can run any time we please.

The Solar PV Project at Cyprus International University was initiated in 2015 by the Sustainable Energy Research Center (SERC) and stands out as a pioneering renewable energy initiative in the higher education sector. The system integrates five different photovoltaic mounting technologies, including installations on flat roofs, inclined roofs, ground-mounted arrays, façade-integrated panels (BIPV on the ST Building), and solar carports, making it one of the most diverse university solar applications in the region. With a total installed capacity of 1.3 MWp, it is also recognized as one of the largest university-based solar power systems. During the 2024–2025 academic year alone, the system generated approximately 1,876,143 kWh of clean electricity, significantly reducing the campus's carbon footprint and contributing to CIU's transition toward a sustainable and energy-resilient future.

Arena Carport	100 kW
Roof	100 kW

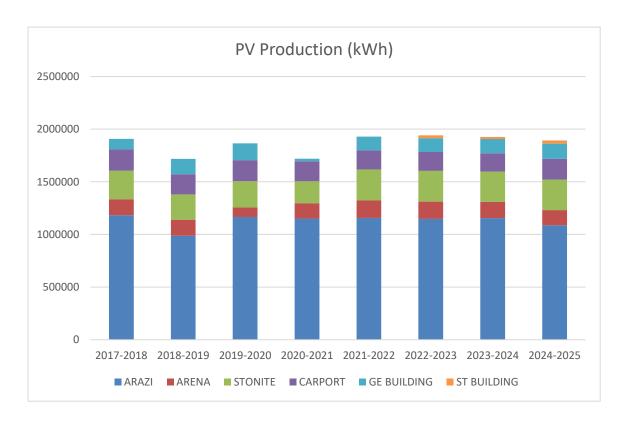




ST Carport		135 kW
Land		
		750 kW
Stonite		
		200 kW
Facade		
	CHILDREN TO THE WATER TO	21 kW

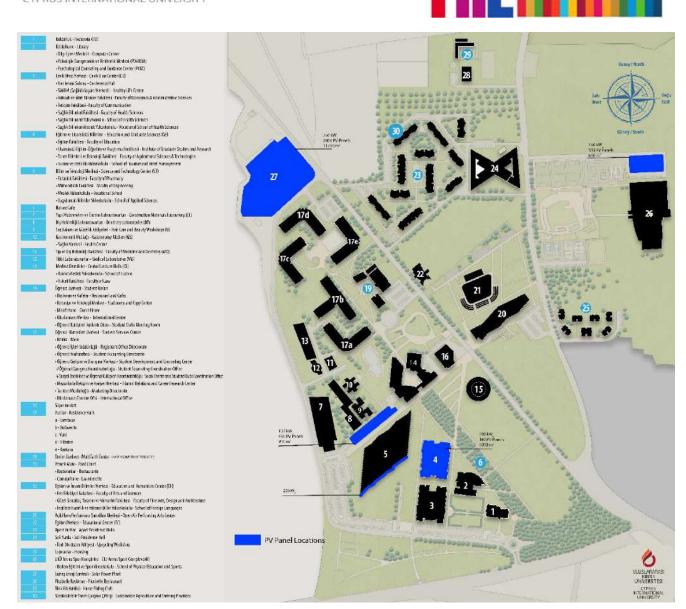
















Solar Thermal Panels:

Whole Residential Zones of the CIU campus are using more than 300 solar thermal panels for hot water system and this energy is almost equal to 2268 MWh in a year.

