



University : Uzbekistan State World Language University
Country : Uzbekistan
Web Address : <https://www.uzswlu.uz/en>

[2] Energy and Climate Change (EC)

2.9 – Elements of Green Building Implementation as Reflected in All Buildings

The Uzbekistan State World Languages University (UzSWLU) integrates multiple green building principles into the design, renovation, and daily operation of its academic, administrative, and residential facilities.

These elements aim to reduce energy consumption, optimize natural resources, improve indoor comfort, and support the university's long-term sustainability strategy in line with SDGs 7, 9, 11, and 13.

Key Elements of Green Building Design and Operation

Category	Description of Implementation	Coverage
Energy Efficiency	All university buildings are equipped with A+++ rated electrical appliances, LED lighting, motion sensors, and automatic shut-off systems to minimize electricity use.	100%
Natural Lighting and Ventilation	Classrooms and offices are designed with large windows, cross-ventilation, and daylight optimization, reducing the need for artificial lighting during the day.	95%
Solar Energy Integration	Rooftop solar panels (1,584 kW) installed on main and branch campuses provide clean electricity for classrooms and administrative areas.	70%
Smart Building Management	The Fusion Energy digital platform integrates HVAC, lighting, and security systems for real-time monitoring and automatic control.	80%
Thermal Insulation	Building envelopes have been retrofitted with eco-friendly insulation materials to reduce heat loss in winter and cooling needs in summer.	60%
Water and Waste Management	Water-saving taps, dual-flush toilets, and rainwater harvesting tanks are installed; waste sorting bins for paper, plastic, and food waste are available in every building.	90%
Sustainable Landscaping	Courtyards include shade trees, permeable pavements, and green buffer zones that regulate microclimate and improve air quality.	100%
Healthy Indoor Environment	CO ₂ and humidity sensors maintain air quality; non-toxic paints and low-emission materials are used in renovations.	85%

Institutional Practices

- Since 2022, UzSWLU's Construction and Maintenance Department has followed national green building standards (O'zDSt 31310:2017) and internal sustainability guidelines during all renovation and construction works.
- The E-IJRO platform monitors building energy and water consumption in real time, supporting data-driven decision-making.



- Fusion Energy Smart System optimizes indoor comfort and lighting through automated scheduling.
- Student-led projects under the “Green Campus Innovation Challenge” contribute to the maintenance and design of sustainable facilities.



Renewable energy (UzSWLU)