University : **UzSWLU**
Country : **Uzbekistan**
Web Address : **https://www.uzswlu.uz/en#**

1.19 – Percentage of Operation and Maintenance Activities of Buildings in One-Year Period

In accordance with the **Presidential Decree No. PF-57 (February 16, 2023)**, *"On Measures to Accelerate the Introduction of Renewable Energy Sources and Energy-Saving Technologies,"* the Uzbekistan State University of World Languages (UzSWLU) continues to strengthen its infrastructure through comprehensive operation, maintenance, and modernization programs focused on sustainability, accessibility, and safety.

The university's **Department of Infrastructure and Technical Services** oversees preventive maintenance, renewable energy integration, energy audits, and smart building monitoring across all campuses. These initiatives ensure that the entire university infrastructure operates efficiently, safely, and inclusively.

Year	Percentage	Key Achievements
2022	64 %	Routine maintenance, lighting replacement
2023	73 %	Partial insulation, pilot solar PV installation
2024	83 %	LED retrofitting, heating upgrades, automation
2025	**87 %**	New buildings, renewable systems, inclusive access upgrades

Trend (2022–2025): +23 percentage points improvement

In **2025**, UzSWLU launched several key infrastructure projects aimed at increasing energy efficiency, sustainability, and inclusivity:

- A **new academic building in Angren, Tashkent region**, equipped with energy-saving lighting, digital monitoring, and accessibility features.
- **Modernized sports grounds** with new surfaces and facilities, as well as new sports equipment for students.
- Construction of a **new 3,000-student dormitory**, designed with solar lighting, water-efficient fixtures, and universal accessibility.

Every building across the university now includes **designated walking paths and voice-guided navigation systems for visually impaired students**, ensuring barrier-free mobility and inclusive learning environments. Accessibility ramps and tactile paving have been integrated into entrances, corridors, and elevators.

Maintenance and modernization achievements also include:

- **Solar Photovoltaic Expansion:** 1.6 MW rooftop capacity, producing 1.5 million kWh and saving **1.25 billion UZS (≈ 98,860 USD)** annually.

- **Heating Systems:** New high-efficiency boilers at Uchtepa and Chilanzar, saving **1.18 billion UZS (≈ 93,000 USD)** per year.
- **Solar Water Heating (G-9A Campus):** 2.4 tons capacity, saving **52.8 million UZS (≈ 4,170 USD)** annually.
- **LED and Solar Lighting:** 780 LED units and 12 solar lamps installed to improve energy performance and safety.
- **Smart Climate Automation:** Two 300 kW chillers and 289 fan coil units managed via digital control, cutting energy waste by 15%.

Energy and infrastructure performance are continuously tracked through the university's **Digital Infrastructure Management System (BMS)**, allowing predictive maintenance, data transparency, and early fault detection.

Altogether, **87% of UzSWLU's 55 buildings** underwent operation or modernization in 2025, resulting in over **1.4 billion UZS (≈ 110,000 USD)** in annual energy and fuel savings and a 15% reduction in CO_2 emissions.

These results reflect UzSWLU's unwavering commitment to sustainability, accessibility, and innovation, directly supporting the **UN Sustainable Development Goals (SDGs 7, 9, 10, 11, and 13)** *— Affordable and Clean Energy, Industry and Infrastructure, Reduced Inequalities, Sustainable Cities, and Climate Action.*

In 2025, UzSWLU maintained or upgraded **87% of its 55 buildings**, introducing energy-efficient, smart, and inclusive infrastructure.
All academic buildings now feature **voice-guided systems and tactile paths** for visually impaired students.
Continuous modernization (+23 pp since 2022) supports **SDGs 7, 9, 10, 11, and 13** — clean energy, inclusivity, and climate action.

Solar Panels (Uzswlu)	Heating system of the university (UzSWLU)
	
Example of operation and maintenance activities of building in a year period	

Initiative	2023 Outcome	2024 Outcome	2025 Outcome
Solar Power Capacity	1,320 kW	1,584 kW	1,860 kW *(+17% vs 2024)*
Solar Energy Generated	1,250,000 kWh	1,500,000 kWh	1,750,000 kWh
Solar Energy Savings	1,044,000,000 UZS	1,252,800,000 UZS	1,458,000,000 UZS
Heating System Savings	714,400,000 UZS	857,280,000 UZS	972,000,000 UZS *(+13%)*
Solar Water Heater Savings	44,000,000 UZS	52,800,000 UZS	61,600,000 UZS
Solar Lighting Units Installed	10 units	12 units	15 units
LED Lamps Installed	650 units	780 units	930 units
Student Dormitory Construction	–	Project planned	3,000-student facility under construction (completion 2026)
Smart Climate Automation	–	Implemented in main building	Expanded to all academic buildings
Accessibility Features (for visually impaired)	–	–	Tactile paths and voice-guidance systems across all buildings

Additional evidence link (i.e., for videos, more images, or other files that are not included in this file):