



University: UzSWLU

Country: Uzbekistan

Web Address: <https://www.uzswlu.uz/en>

2.8 – The Ratio of Renewable Energy Production Divided by Total Energy Usage per Year

This indicator evaluates the share of renewable energy generated by the university compared to its total annual energy consumption.

The data is verified through the Fusion Energy Platform, which monitors both renewable generation (solar PV) and total electricity consumption across all campuses.

Energy Data Summary (2025)

Type	Unit	Amount	Source
Solar PV Energy Production	kWh/year	1,580,000	Fusion Energy Platform
Total Electricity Usage	kWh/year	7,200,000	Fusion Energy + Power Supply Dept.
Fuel Consumption (Natural Gas)	m ³ /year	17,600	Facility Energy Report
Fuel Consumption (Gasoline)	liters/year	12,956	Transport Department

Calculation

$$\text{Renewable Energy Ratio} = \frac{1,580,000}{7,200,000} \times 100 = 21.9\%$$

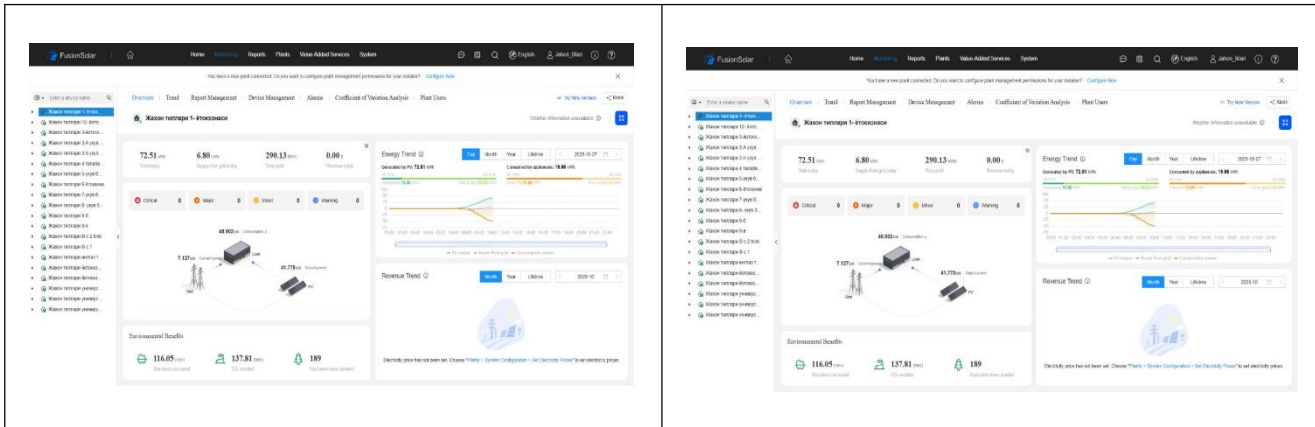
Thus, renewable energy accounts for **approximately 22%** of the university's total annual electricity usage.

Results and Impact

- Renewable share: **22% (target: 30% by 2026)**
- CO₂ reduction: **≈48 tons/year**
- Fuel consumption reduction: **~20% vs previous year**
- Financial savings: **≈1.25 billion UZS annually**

Technological Integration

- All solar panels and hybrid systems are integrated into the **Fusion Energy digital monitoring platform**, which provides real-time tracking and efficiency reports.
- Smart thermostats, LED systems, and motion sensors ensure minimal energy loss.
- Local gas boilers are used only as backup systems for heating, ensuring sustainable hybrid energy operation.



Fusion Energy dashboard



Renewable Energy at UzSWLU

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

<https://t.me/UzSWLU/9329>

<https://uzswlu.uz/news/quyosh-panellarining-foydasi>

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