UZBEKISTAN STATE WORLD LANGUAGES UNIVERSITY

Institutional Greenhouse Gas Emissions Inventory

SDG 7 Affordable and Clean Energy | Reporting year 2025

Uzbekistan State World Languages University compiles an institutional greenhouse gas emissions inventory across its six campuses, following the GHG Protocol Corporate Accounting and Reporting Standard. The inventory covers direct emissions from fuel combustion (Scope 1), indirect emissions from purchased grid electricity (Scope 2), and staff and student commuting (Scope 3), and is consolidated by the International Rankings Department from utility records, fuel records and transport data.

Electricity figures are drawn from the University's own metering records with Tashkent city electricity networks (Uchtepa TETK) and its 2,423-panel, 1,340 kW solar installation. Confirmed actuals for 1 January – 1 October 2025 show 1,363,600 kWh generated by the solar system, of which 715,200 kWh was used on-site and 648,400 kWh was exported to the city grid, against 1,001,000 kWh purchased from the city network over the same nine months. These year-to-date figures are extrapolated on a pro-rata basis (×12/9) to estimate full-year 2025 totals pending year-end closing data.

Reporting boundary and activity data

Parameter	Value
Reporting entity	Uzbekistan State World Languages University
Operational boundary	Six University campuses
Campus population	24,058 (22,208 students and 1,850 staff), used as the Scope 3 commuting denominator
Reporting period	Calendar year 2025; energy figures are extrapolated from confirmed actuals for 1 January – 1 October 2025 (9 months), pending year-end closing data
Accounting standard	GHG Protocol Corporate Accounting and Reporting Standard (Scopes 1, 2 and 3)

Energy accounts (2025, annualized from confirmed actuals)

Item	Annualized value
Solar electricity generated (annualized)	1,818,133 kWh
— of which used on-site by the University	953,600 kWh
— of which exported to the city grid	864,533 kWh
Grid electricity purchased from Tashkent city network (Uchtepa TETK, annualized)	1,334,667 kWh
Total University electricity consumption (on-site solar use + grid purchase)	2,288,267 kWh
Gasoline consumed (vehicle fleet)	14,900 L
Natural gas consumed (heating and utilities)	20,680 m³
Refrigerants released or replenished (provisional, pending confirmation of refrigerant type and mass)	64.8 units

Scope 1 — Direct emissions

Source	Activity data	Emission factor	Emissions
Gasoline	14,900 L	2.31 kg CO2e/L	**34.42 tCO2e**
Natural gas	20,680 m³	1.96 kg CO2e/m³	**40.53 tCO2e**
Refrigerants (provisional)	64.8 units	1,000 kg CO2e/unit (provisional)	**64.80 tCO2e**
Scope 1 subtotal (provisional)			**139.75 tCO2e**

Scope 2 — Purchased electricity

Source	Activity data	Emission factor	Emissions
Grid electricity purchased	1,334,667 kWh	0.506 kg CO2e/kWh	**675.34 tCO2e**
On-site solar electricity (self-generated and exported)	1,818,133 kWh	0 (no grid draw)	**0.00 tCO2e**
Scope 2 total			**675.34 tCO2e**

Scope 3 — Staff and student commuting

Mode	Normalized share	Emission factor	Emissions
Bus	36.94%	0.12 kg CO2e/passenger-km	**3,518.97 tCO2e**
Taxi	11.26%	0.25 kg CO2e/passenger-km	**2,235.12 tCO2e**
Metro	33.78%	0.05 kg CO2e/passenger-km	**1,341.07 tCO2e**
Bicycle	5.41%	0 (no direct emissions)	**0.00 tCO2e**
Walking	12.61%	0 (no direct emissions)	**0.00 tCO2e**
Scope 3 total (commuting, working estimate)			**7,095.16 tCO2e**

Inventory summary

Scope	Emissions
Scope 1 — Direct emissions (provisional)	**139.75 tCO2e**
Scope 2 — Purchased electricity	**675.34 tCO2e**
Scope 3 — Staff and student commuting (working estimate)	**7,095.16 tCO2e**
Total institutional inventory	**7,910.25 tCO2e**

Methodology notes and data sources

- Electricity activity data: University metering records with Tashkent city electricity networks (Uchtepa TETK) and the University's solar photovoltaic system, as of 1 October 2025, extrapolated to a full year on a pro-rata basis.
- Grid electricity emission factor (0.506 kg CO2e/kWh): UNFCCC Standardized Baseline for the Uzbekistan national grid (combined margin, CDM methodology).
- Gasoline and natural gas emission factors: United States Environmental Protection Agency, GHG Emission Factors Hub (2025).
- Campus population (24,058 = 22,208 students and 1,850 staff) and commuting distance and frequency assumptions (7.5 km one-way, 220 days a year, two journeys a day) are institutional working estimates pending a dedicated commuting survey; transport mode shares were collected as overlapping percentages and normalized to 100% before being applied to total passenger-kilometres.
- The Scope 1 refrigerant estimate is provisional: the final inventory must identify the refrigerant type, the mass released or replenished and its global warming potential before this figure can be treated as an auditable emission value.

Conclusion

UzSWLU's 2025 institutional greenhouse gas inventory, consolidated across six campuses under the GHG Protocol Corporate Accounting and Reporting Standard, totals approximately 7,910 tCO2e: 139.75 tCO2e from direct fuel combustion (provisional), 675.34 tCO2e from purchased grid electricity, and 7,095.16 tCO2e from staff and student commuting. The inventory will be finalized once full-year 2025 energy data, a confirmed refrigerant record and a dedicated commuting survey are available, and will inform the University's continuing energy-efficiency and renewable-energy program .