Hryhorii Skovoroda University in Pereiaslav

GHG Protocol Corporate Standard Report 2025
Scope 1 and Scope 2 Inventory

Reporting basis: institutional activity data supplied by HSUP

Date: 19 January 2026

Gross Scope 1 and 2 emissions	**316.55 tCO2e**
Scope 1 emissions	**68.87 tCO2e**
Scope 2 emissions	**247.68 tCO2e**
Largest source	**Purchased electricity**

1. Executive Summary

This report presents a Scope 1 and Scope 2 greenhouse gas inventory for Hryhorii Skovoroda University in Pereiaslav (HSUP) prepared in line with the logic of the GHG Protocol Corporate Accounting and Reporting Standard. The document is structured in the manner typically used by Western European universities: a clear definition of organisational and operational boundaries, a short methodology statement, a concise results table, explicit exclusions, and a management-oriented recommendations section.

For the reporting period covered by the activity data supplied by the university, HSUP's gross Scope 1 and Scope 2 emissions are estimated at 316.55 tCO2e. Scope 1 emissions amount to 68.87 tCO2e and arise from stationary and mobile fuel combustion, while Scope 2 emissions amount to 247.68 tCO2e and arise from purchased electricity consumed by the institution.

Purchased electricity is the dominant emission source in the present inventory, followed by natural gas use, petrol consumption, and diesel consumption. This pattern is typical for higher education institutions whose direct industrial process emissions are absent and whose operational profile is driven primarily by buildings, utility services, and institutional transport.

2. Organisational Profile and Reporting Boundary

Hryhorii Skovoroda University in Pereiaslav is treated in this report as a single reporting organisation. The inventory has been prepared on an operational-control basis, meaning that emissions are attributed to activities and energy use under the university's direct operational management. This is consistent with common university carbon reporting practice across Europe.

The present report covers Scope 1 and Scope 2 categories only. Scope 1 includes direct emissions from natural gas combustion and the combustion of liquid fuels in vehicles or equipment under university control. Scope 2 includes indirect emissions from purchased electricity. Water supply and waste removal data were supplied by the university and have been retained in this report for transparency; however, these items are not included in the Scope 1 and Scope 2 total because they would ordinarily be disclosed as Scope 3 categories.

3. Methodological Approach

The inventory has been prepared as a management report rather than an externally assured statement. Activity data were provided directly by the university. Emissions were quantified using standard activity-data multiplied by emission-factor methodology. In order to keep the report readable and aligned with institutional practice, detailed calculations are not shown in the body of the report.

For Scope 1 fuels, standard combustion-based emission factors were applied to natural gas, petrol, and diesel. For Scope 2 electricity, a location-based emission factor representing the carbon intensity of grid electricity supplied in Ukraine was applied. Because electricity factors may vary depending on the national source selected by the reporting institution, the Scope 2 figure should be read as a transparent working estimate suitable for management use and external sustainability submissions, but it may be updated if HSUP later adopts a different official national factor for the same reporting period.

The report does not include fugitive refrigerant emissions, purchased heat or steam, on-site renewable electricity generation, renewable electricity certificates, or any market-based Scope 2 adjustment, because no such data were supplied. Consequently, the Scope 2 result should be understood as location-based only.

4. Inventory Results

Source category	Activity data	Scope	Emissions (tCO2e)

Natural gas combustion	16,798 m3	Scope 1	32.59
Petrol combustion	8,798.3 litres	Scope 1	20.32
Diesel combustion	5,955.9 litres	Scope 1	15.96
Purchased electricity	515,995 kWh	Scope 2	247.68
Total Scope 1	**-**	**Scope 1**	**68.87**
Total Scope 2	**-**	**Scope 2**	**247.68**
Gross total	**-**	**Scope 1 + 2**	**316.55**

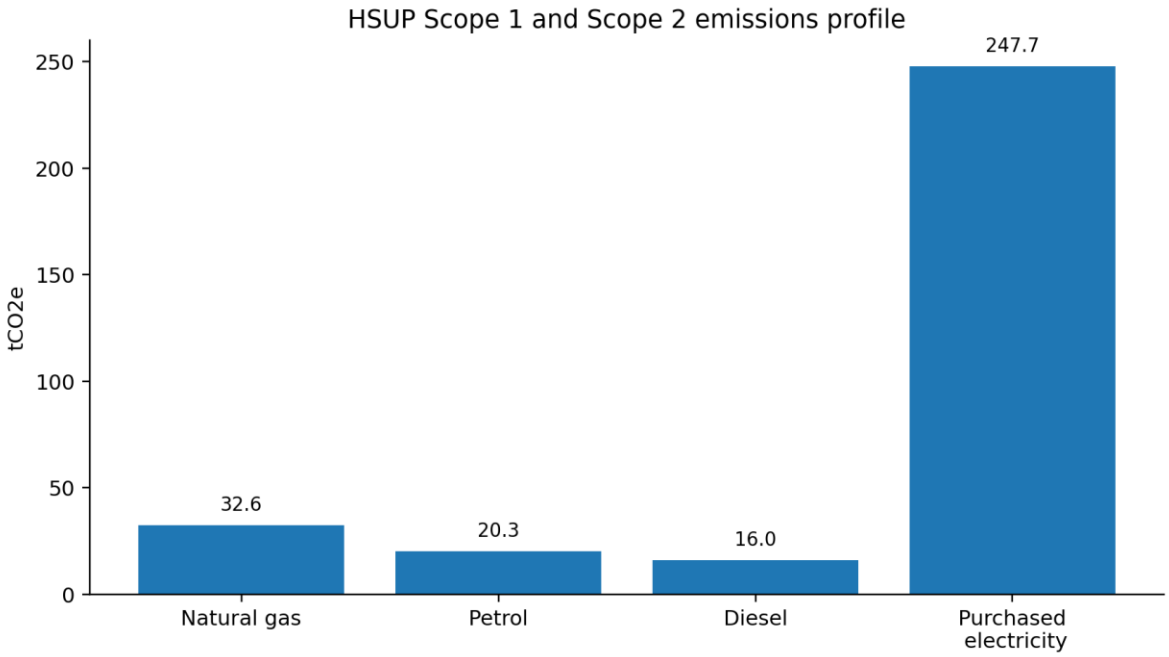

Figure 1. HSUP Scope 1 and Scope 2 emissions profile by source category.

5. Supplementary Operational Data Outside Scope 1 and Scope 2

The university also supplied data on water supply and waste removal. These data are useful for future expansion of the inventory but have not been included in the Scope 1 and Scope 2 total presented above.

Item	Activity data supplied	Indicative GHG Protocol treatment
Water supply	13,054 m3	Normally reported in Scope 3
Waste removed	5,592.95 m3	Normally reported in Scope 3

6. Interpretation of Results

The emissions profile indicates that electricity use is the principal lever for near-term carbon reduction. This means that building energy management, lighting upgrades, controls optimisation, operational scheduling, and any shift toward renewable electricity procurement or on-site renewable generation are likely to deliver the largest effect on the university's Scope 1 and Scope 2 footprint.

Natural gas remains the second most material source of emissions. This suggests that any medium-term decarbonisation strategy should also address building heat demand, thermal efficiency, control regimes, sub-metering, insulation, heating-system balancing, and gradual heat-source substitution where technically and financially feasible.

Liquid fuel use is materially smaller than electricity but still significant enough to warrant management attention. Fleet optimisation, route planning, preventive maintenance, replacement of older vehicles, electrification of appropriate vehicles, and stronger controls on fuel monitoring would all be reasonable measures within a university operational environment.

7. Recommendations for HSUP

- Establish an annual institutional GHG inventory cycle with a fixed reporting boundary, a defined reporting year, and named data owners for each activity stream.
- Separate campus energy data by building or function wherever possible in order to identify the highest-consumption assets and prioritise interventions.
- Record any refrigerant losses, purchased heat, backup generation, and renewable electricity generation so that future inventories become more complete.
- Develop a Scope 3 roadmap covering water, waste, commuting, business travel, procurement, and capital projects once core Scope 1 and Scope 2 reporting is stable.
- Adopt a written emissions-factor protocol for each reporting year so that recalculations are consistent and transparent if factors are updated.
- Use the present report as a baseline management document and update it annually in the same format to enable trend analysis.

8. Limitations and Assurance Status

This document is an internal management-style report prepared from user-supplied activity data and standard emission-factor assumptions. It has not been independently verified. No claim of third-party assurance is made. The report should therefore be used as a transparent operational baseline suitable for sustainability planning, evidence submission, and future methodological refinement.

9. Selected Methodological References

- GHG Protocol. Corporate Accounting and Reporting Standard.
- Department for Energy Security and Net Zero (United Kingdom). Greenhouse gas reporting conversion factors 2025.
- University of Cambridge. Annual carbon emissions report 2022/23.
- University of Winchester. Carbon Management Plan Annual Monitoring Report 2023/24.
- Wadham College, University of Oxford. Carbon Emissions Report 2024/25.

Prepared for: Hryhorii Skovoroda University in Pereiaslav (HSUP)

Prepared as: Scope 1 and Scope 2 inventory report in English