Greenhouse Gas Emissions Report

Institution: Kyrgyz National Agrarian University named after K.I. Skryabin
Reporting Period: 1 January – 31 December 2025

1. Purpose

This report aims to quantify greenhouse gas (GHG) emissions generated by university operations during the reporting period, in accordance with the **GHG Protocol Corporate Standard**.

2. Methodology

Emissions were calculated using the following formula:

Emissions (tCO_2e) = Activity Data × Emission Factor

- Methodology: GHG Protocol Corporate Standard
- Emission factors: IPCC (Tier 1 default)
- Reference: UK Government GHG Conversion Factors (2025)

3. Activity Data (2025)

Indicator	Value
Staff	689
Electricity consumption	2,426,750 kWh
Diesel	2.7 tons
Gasoline	14.5 tons

Operational Boundary:

- Fuel consumption (vehicles and equipment)
- Electricity consumption

4. Emissions Inventory

Scope 1 – Direct Emissions

- Diesel: 2.7 × 3.17 = **8.56 tCO_2**
- Gasoline: 14.5 × 3.09 = **44.81 tCO_2**

Total Scope 1: 53.37 tCO_2e

Scope 2 – Indirect Energy Emissions

- Electricity: 2,426,750 kWh
- Emission factor: 0.7 kg CO_2/kWh

Calculation:

2,426,750 × 0.7 = 1,698,725 kg CO_2

1,698,725 / 1000 = 1,698.7 tCO_2

Total Scope 2: 1,698.7 tCO_2e

5. Emissions Intensity

- Per staff member: **2.54 tCO_2e/person**

6. Summary of Emissions

Category	Emissions (tCO_2e)	Share (%)
Scope 1 (Direct)	53.37	3.05%
Scope 2 (Energy)	1,698.73	96.95%
Total	**1,752.10**	**100%**

7. Key Findings

- Total emissions: **1,752 tCO_2e**
- Electricity consumption accounts for **97%** of emissions
- Scope 2 is the dominant emission source

8. Outlook and Improvement Measures

- Priority area: **energy efficiency in buildings**
- Ongoing work: integration of **Scope 3 emissions (2025–2026)**
- Future focus: reduction of indirect energy-related emissions