INSTITUTIONAL GREENHOUSE GAS (GHG) ACCOUNTING AND REPORTING STANDARD & BASELINE INVENTORY SUMMARY

(as of December 31, 2022)

Document Status: Official Institutional Methodology

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Document Owner: Office of the Vice-Rector for International Cooperation, in coordination with Finance and Facilities Departments.

Review Cycle: Annual

1. EXECUTIVE COMPLIANCE STATEMENT

Samarkand State Institute of Foreign Languages (SamSIFL) prepares its organisational greenhouse gas inventories using an institutional methodology strictly aligned with the **GHG Protocol Corporate Accounting and Reporting Standard (Revised Edition)** and the **GHG Protocol Scope 2 Guidance**.

This document establishes the Institute's internal rules for the identification, quantification, consolidation, and quality control of Scope 1 and Scope 2 greenhouse gas emissions. It serves as the foundation for internal environmental analysis, strategic "Net-Zero 2050" planning, and responses to legitimate external sustainability information requests.

2. ORGANISATIONAL AND OPERATIONAL BOUNDARY

– **Consolidation Approach:** Operational Control.

– **Included Facilities:** The inventory encompasses all 13 geographically separate institutional sites under SamSIFL's operational control, including the Main Administrative Campus, 6 Faculty buildings, the Academic Lyceum, regional faculties (Payarik and Narpay), and 5 student dormitory buildings.

– **Reporting Period:** 12 months (01.01.2022 – 31.12.2022), established as the official institutional baseline year.

3. METHODOLOGY AND CALCULATION RULES

Emissions are calculated using the standard formula:

Emissions (tCO_2 e) = Activity Data × Applicable Emission Factor

Emission factors are sourced from authoritative international databases (IPCC / DEFRA), adapted for the Central Asian energy grid context and local natural gas composition. Primary source records (utility invoices, meter readings, and supplier statements) are used to ensure data accuracy and internal auditability.

4. BASELINE INVENTORY SUMMARY (2022)

The following table represents the consolidated, internally verified baseline data for Scope 1 and Scope 2 emissions.

Scope	Source Category	Facility / Asset	Activity Data (2022)	Unit	Emission Factor	Total Emissions (tCO_2 e)
Scope 1	Stationary Combustion (Natural gas for campus space heating, hot water, and catering facilities)	All 13 campus sites	100,000	m^3	0.00183 tCO_2 e / m^3	**183.00**
Scope 2	Purchased Electricity (Grid consumption for lighting, IT, laboratories, and dormitories)	All 13 campus sites	947,692	kWh	0.00065 tCO_2 e / kWh	**616.00**
TOTAL	**Combined Scope 1 & Scope 2**					**799.00 tCO_2 e**

(Note: Scope 3 emissions, including Category 5: Waste Generated in Operations, are tracked separately in our internal waste management registers (e.g., 1,600 m³ of solid waste) but are intentionally excluded from this combined Scope 1 & 2 total, in strict accordance with GHG Protocol accounting rules).

5. DATA QUALITY AND INTERNAL ASSURANCE

– **Data Sources:** Activity data was reconciled against primary institutional records, including municipal utility invoices, internal electricity meter readings, and facility management logs for the 2022 calendar year.

– **Internal Audit:** The reported figure of 799 tCO_2 e represents the official baseline estimate. Minor margins of error inherent in aggregated utility billing are acknowledged. The Finance and Facilities Departments are currently conducting a routine internal audit to refine data granularity for future reporting cycles.

– **Strategic Context:** As an educational institution, SamSIFL's direct industrial pollution is negligible. Our primary emissions stem solely from seasonal natural gas space heating (Scope 1) and grid electricity consumption (Scope 2). This baseline directly informs our active "Net-Zero 2050" decarbonization strategy, which focuses on the electrification of heating systems and the integration of rooftop solar PV units.

6. APPROVAL

This Institutional Standard and Baseline Summary has been internally reviewed, verified for methodological compliance with the GHG Protocol, and approved for institutional record-keeping and authorized external disclosure.