AZERBAIJAN STATE OIL AND INDUSTTRY UNIVERSITY

CLIMATE ACTION PLAN

Azerbaijan State Oil and Industry University

Those charged with governance

Sustainability Committee

Climate Action Plan Policy

October 2025

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CONTENT

1. POLICY STATEMENT AND PURPOSE

This document serves as both ASOIU's Climate Action Plan and Climate Policy (hereinafter the "Policy-Plan"), establishing the university's governance framework, measurable targets, and resource commitments to mitigate its climate impact and strengthen institutional resilience.

It applies to all faculties, departments, research institutes, administrative units, and university-affiliated activities under ASOIU's operational control.

The Policy-Plan aligns with the Paris Agreement, Azerbaijan's Nationally Determined Contributions (NDCs), national and international sustainability frameworks, addressing campus operations, education, and research.

BACKGROUND AND CONTEXT

Climate change presents one of the most significant global challenges of this century. Azerbaijan, as a signatory to the Paris Agreement, has committed to reduce national greenhouse gas emissions by 35% by 2030 compared with 1990 levels[1]. ASOIU aligns its own institutional targets using 2023 as the baseline year. ASOIU, as a leading technical-engineering university, recognizes its responsibility to contribute to this national transition through research, education, and sustainable campus management.

This Policy-Plan integrates the university's strategic vision with practical measures to achieve measurable emissions reductions and promote long-term climate resilience.

2. KEY TERMS AND DEFINITIONS

This section defines essential terminology used throughout this Policy-Plan to ensure clarity and alignment with global standards:

- **Scope 1:** Direct emissions from sources owned or controlled by ASOIU (e.g., boilers, generators, university vehicles, laboratory equipment);
- **Scope 2:** Indirect emissions from purchased electricity, heating, or cooling consumed by the university;
- **Scope 3:** All other indirect emissions across ASOIU's value chain, including business travel, commuting, purchased goods and services, construction materials, and waste;

[1] International Energy Agency – Nationally Determined Contribution to the Paris Agreement: Azerbaijan

- **Baseline Year:** 2023 — the first year with comprehensive verified data for Scopes 1–3, serving as the reference point for all future comparisons;
- **Greenhouse Gas (GHG):** A gas that traps heat in the atmosphere, including carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O);
- **Net-zero:** A condition where residual GHG emissions are balanced by certified removals or offsets through verified sequestration projects;
- **Carbon offset:** A certified reduction or removal of greenhouse gases used to compensate for emissions elsewhere, applied only after all feasible reductions are achieved;
- **Operational control:** The boundary condition where ASOIU has full authority to introduce and implement operating policies, even if the asset is not owned by the institution;
- **Adaptation:** Adjusting natural or human systems to minimize harm from actual or expected climate impacts;
- **Resilience:** The capacity of ASOIU's systems, infrastructure, and communities to anticipate, absorb, and recover from climate-related shocks.

3. SCOPE AND APPLICABILITY

This Policy-Plan applies to all operational, academic, research, and administrative units of ASOIU, including subsidiaries and centers under its operational control. It covers all activities that generate greenhouse-gas emissions or influence climate-related decisions.

The Policy-Plan also extends to projects, partnerships, and contracts where ASOIU exercises significant influence or participates in joint facilities. Students, staff, and third-party contractors are expected to comply with its principles and contribute to emission-reduction and adaptation initiatives.

The boundaries for implementation follow the operational-control approach defined by the GHG Protocol. This means ASOIU accounts for all emissions and activities it can manage directly, regardless of asset ownership, and aligns its reporting with national and international sustainability frameworks.

4. INSTITUTIONAL COMMITMENTS

ASOIU's Climate Action Plan Policy affirms the university's long-term commitment to responsible environmental governance and sustainable development.

Through this Policy-Plan, ASOIU integrates climate responsibility into every aspect of its academic, operational, and administrative activities, recognizing that universities play a crucial role in shaping a resilient, low-carbon future for Azerbaijan and beyond.

ASOIU's institutional commitments are founded on the following principles:

- **Leadership and accountability** – The university will demonstrate visible leadership in addressing climate change, ensuring that senior management and all academic and administrative units are accountable for sustainability performance.
- **Integration into core functions** – Climate action will be embedded across teaching, research, procurement, campus operations, and community engagement to promote systemic change rather than isolated initiatives.
- **Evidence-based decision-making** – All major projects and investments will consider climate risks, energy efficiency, and life-cycle impacts, guided by reliable data and recognised standards.
- **Transparency and continuous improvement** – ASOIU will maintain open, accurate, and accessible reporting on its environmental performance, fostering trust among stakeholders.
- **Ethical and educational responsibility** – The university regards climate action not merely as a regulatory requirement but as a moral and educational duty to current and future generations.
- **Alignment with national and global goals** – ASOIU supports Azerbaijan's national climate commitments under the Paris Agreement and contributes to the achievement of SDGs 7, 9, 11, 12, and 13.
- **Adaptation and resilience** – The university will strengthen its capacity to withstand and adapt to the physical and operational risks posed by climate change through sustainable infrastructure and informed planning.

These commitments provide the foundation for the governance, implementation, and monitoring mechanisms that follow in this Policy-Plan.

5. GOVERNANCE AND RESPONSIBILITIES

Effective governance is essential to achieving ASOIU's climate objectives. The university's governance framework ensures strategic oversight by leadership and active participation of multidisciplinary groups engaged in research, operations, and social responsibility. Each governance body plays a distinct role to coordinate implementation, manage data, and ensure the plan's success. The specific roles and responsibilities of

these governing bodies are outlined below:

RECTOR

Provides strategic leadership, approves this Policy-Plan, sets annual targets, allocates budgets, and oversees institutional performance on climate and sustainability objectives.

SUSTAINABILITY COMMITTEE

A central coordinating body chaired by the Rector. It acts as the main platform for planning, implementation, and monitoring of climate and sustainability actions across the university. The Committee consolidates annual progress reports, reviews performance against institutional targets, and prepares recommendations for the Rector.

ADVISORY BOARD

An external consultative group composed of representatives from industry, academia, and public-sector partners. It provides expert advice on climate-related projects, fosters collaboration, and supports alignment between ASOIU's climate goals and national sustainability priorities.

WORKING GROUPS

To operationalize actions, the Sustainability Committee oversees four permanent Working Groups, each led by a designated member:

- Working Group for Sustainable Research – Promotes interdisciplinary research in renewable energy, low-carbon technologies, and climate adaptation.
- Working Group for Industrial Collaboration – Strengthens partnerships with industry to develop applied sustainability projects and technology transfer.
- Working Group for Environmental Governance – Focuses on internal policy integration, compliance with environmental regulations, and monitoring of campus operations.
- Working Group for Social Responsibility – Engages staff and students in outreach, awareness, and community-based sustainability initiatives.

HEADS OF INSTITUTIONS

Include deans, directors, and heads of administrative divisions. They ensure implementation of sustainability actions within their respective units, allocate necessary resources, and submit annual progress and data reports to the Sustainability Committee.

ACCOUNTABILITY PRINCIPLES

Accountability ensures that sustainability is not symbolic but actionable. All units are responsible for integrating climate objectives into their operations and decision-making. Heads of institutions are required to report annually on progress and resource use. The Sustainability Committee consolidates these reports for review by the Rectorate, ensuring both top-down oversight and bottom-up engagement.

6. IMPLEMENTATION AND ACTION PLAN

This section outlines how ASOIU will operationalize its commitments through measurable targets, coordinated initiatives, and a phased decarbonization pathway. The plan emphasizes a practical balance between emission reduction, climate resilience, education, and research integration.

BASELINE

Understanding current emissions is fundamental to defining realistic and transparent targets. ASOIU conducted its first comprehensive GHG inventory for 2023 to establish a verifiable baseline and identify priority areas for intervention. The following data summarize emissions by scope and source:

Figure 1. ASOIU 2023 Greenhouse Gas Emissions[2] by Scope

Scope	Source	Emissions (kg CO_2e)
1	Stationary (boilers, labs)	192,970.32
1	Mobile (fleet)	15,019.68
2	Purchased electricity	1,001,010
3	Employee Commuting	144,560
3	Waste	58,749
Total (2023)		**≈ 1,412,309.00**

TARGETS

ASOIU has established clear, time-bound targets to guide emission-reduction efforts and measure progress against the 2023 baseline:

- By **2028** → −25% total emissions vs. 2023 baseline (short-term);

- By **2030** → −40% total emissions vs. 2023 baseline (medium-term);
- By **2040** → Net-zero across Scopes 1–3 (long-term).

PRIORITY ACTION AREAS

ASOIU's mitigation strategy focuses on five interconnected areas that collectively drive emission reductions and cultural transformation across the university. Each area is supported by measurable KPIs and funding identified in Appendix B.

- **Energy & Buildings:** Conduct energy audits, replace lighting with LED, upgrade HVAC systems, and integrate renewable power generation through rooftop PV systems and green PPAs;
- **Mobility:** Transition the university fleet to low-emission vehicles, introduce incentives for public transport and carpooling, and promote virtual meetings to reduce air and road travel;
- **Waste & Circularity:** Implement full waste segregation, recycling, and e-waste collection systems. Expand composting and food waste prevention programs in campus cafeterias;
- **Sustainable Procurement:** Apply lifecycle and carbon-intensity criteria in major purchases and engage suppliers in emission-reduction disclosure programs (see Sustainable Procurement Policy for details);
- **Education, Research and Community Engagement:** Integrate climate literacy into curricula, support interdisciplinary research on renewable energy and materials science, and engage students and staff in sustainability challenges and outreach events. Partnerships with local communities, government agencies, and industry support ASOIU's broader social mission.

CAMPUS ADAPTATION AND RESILIENCE MEASURES

While emission reduction addresses mitigation, ASOIU also prioritizes resilience against climate risks. Adaptation ensures operational continuity and protects students and assets from environmental shocks. The following measures display ASOIU's approach to building adaptive capacity and ensuring long-term resilience across campus operations:

- Conduct periodic assessments of climate-related risks such as heat stress, flooding, and energy-supply disruptions;
- Apply climate-resilient standards in new building designs and renovations (cool roofs, shading, efficient insulation);

- Strengthen green infrastructure and drainage to manage stormwater;
- Develop emergency preparedness and business-continuity plans that account for climate extremes.

7. MONITORING, REPORTING AND COMMUNICATION

Effective monitoring guarantees accountability and credibility. ASOIU will use transparent, standardized, and verifiable systems to track its progress. Monitoring and reporting not only demonstrate compliance with institutional commitments but also support continuous improvement and benchmarking against national and international sustainability frameworks:

- **GHG Inventory:** Compiled annually by the Sustainability Committee, with data contributions from the relevant Working Groups and Heads of Institutions, following GHG Protocol standards and verified internally by the Committee;
- **Internal Review:** Conducted each May by the Sustainability Committee; findings submitted to Rectorate for approval and publication;
- **External Disclosure:** Results published annually on ASOIU's website and shared with the Ministry of Science and Education of Azerbaijan Republic and international networks;
- **Performance Indicators:** Core KPIs include energy use intensity, renewable energy share, waste diversion rate, fleet emissions, and Scope 3 coverage;
- **Stakeholder Communication:** Outcomes are summarized in an annual Sustainability Report distributed to staff, students, and partners, with key highlights used for external campaigns.

DATA AND METHODOLOGY

Emissions are calculated in accordance with the GHG Protocol (Corporate Standard) using Azerbaijan's national grid emission factors for electricity and DEFRA[3] emission factors for commuting and waste. The organizational boundary follows the operational-control approach. Data are reviewed by at least two independent staff members to ensure quality assurance. All records are archived for a minimum of seven years, and detailed data sources and calculation factors are maintained collectively by the Sustainability Committee for audit review.

[3] DEFRA (UK Department for Environment, Food & Rural Affairs) GHG Conversion Factors are used where national factors are unavailable

8. REVIEW AND CONTINUOUS IMPROVEMENT

ASOIU recognizes that climate action is an evolving process requiring flexibility and learning. This Policy-Plan will be reviewed every two years, or earlier if significant regulatory, technological, or operational changes occur.

The Sustainability Committee, together with the relevant Working Groups and Heads of Institutions (as defined in Section 4), oversees the review process. The Committee consolidates annual progress reports, evaluates performance against KPIs and targets, and proposes revisions or new measures where needed. The Rectorate reviews these recommendations, approves major updates, and ensures that sufficient resources are allocated for continued implementation.

Continuous improvement will be pursued through benchmarking against national and international sustainability frameworks, integration of new scientific insights, and ongoing capacity-building for staff and students engaged in delivery of climate initiatives.

APPENDIX A — KPIs

KPI	2023 Baseline	2028 Target	2030 Target	Responsible Unit
Total GHG (tCO_2e)	1.41 kt	−25%	−40%	Sustainability Committee
Renewable Electricity (%)	0%	15%	25%	Facilities Dept.
Waste Diversion (%)	35%	55%	70%	Waste Working Group
Low-Emission Fleet (%)	0%	50%	100%	Transport Working Group

APPENDIX B — CLIMATE ACTION INVESTMENT PLAN

Initiative	Scope	Estimated Cost (AZN)	Primary KPI Impact
Implement Energy-Efficient Systems and Building Retrofits	1 + 2	1,190,000	Reduction in energy consumption and GHG emissions
Develop Renewable-Energy Infrastructure (Solar PV and PPA Projects)	2	1,700,000	Increase in renewable electricity share
Establish a Sustainable Procurement and Supply-Chain Program	3	416,000	Expansion of low-carbon and resource-efficient purchasing
Expand Virtual Collaboration and Remote-Work Platforms	3	136,000	Reduction in business-travel-related emissions
Build Waste-Management and Resource-Recovery Infrastructure	3	978,000	Improvement in waste diversion and recycling rates
Deliver Educational Outreach and Engagement Programs	All Scopes	315,000	Strengthened climate awareness and participation across ASOIU
Total Estimated Budget	—	**4,735,000**	—

Note: Figures are expressed in 2025 AZN values and are indicative; they are reviewed annually as part of ASOIU's budgeting cycle