Zero Emission Policy of Azerbaijan Technical University

Document type	Policy
Scope (applies to)	All staff and students
Issued	2025
Revised	-
Expiry date	2050
Approver	University Council
Document owner	Sustainability Unit
Document status	Published
Information classification	Public
Purpose	The purpose of this policy is to define AzTU's strategic pathway to achieving zero greenhouse gas emissions across all campuses, through the adoption of sustainable transportation, energy efficiency, renewable energy integration, and waste reduction initiatives, supported by data-driven monitoring and community engagement.

Baku-2025

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Purpose

The purpose of this policy is to define Azerbaijan Technical University's strategic pathway to achieving zero greenhouse gas emissions across all campuses. Specifically, it aims to:

- Implement sustainable transportation systems.
- Improve energy efficiency and integrate renewable energy solutions.
- Reduce waste and adopt green procurement practices.
- Ensure data-driven monitoring of emissions and progress.
- Actively engage students, faculty, staff, and external partners in climate action.

Scope

This policy applies to:

- All AzTU campuses, including main, branch, and faculty-specific buildings.
- All operations related to transportation, energy use, waste management, and procurement.
- All students, faculty, staff, contractors, and visitors.

Principles

1. Campus Sustainability First – Prioritize solutions that directly improve AzTU's environmental performance.
2. Technology-Driven Efficiency – Integrate ICT, digital monitoring, and smart systems to reduce emissions.
3. Safety and Accessibility – Ensure sustainable transport and facilities are safe and inclusive for all users.
4. Transparency – Publicly report emissions data, progress, and annual sustainability performance.
5. Collaborative Action – Involve students, researchers, local authorities, and partners in designing and implementing solutions.

Policy

AzTU commits to:

- Expanding bike lanes and pedestrian pathways, prioritizing routes between the main teaching building, library, sports hall, and dormitories.
- Scaling the electric scooter-sharing program across all campuses, maintaining the affordable rate of 0.17 AZN (0.01 USD) per minute.
- Converting 50% of the university's vehicle fleet to electric or hybrid by 2030, starting with shuttle buses and administrative vehicles.
- Creating vehicle-free zones in high-traffic areas such as the main teaching building courtyard and library plaza.
- Installing covered bicycle parking stations with CCTV security at all building clusters.
- Retrofitting campus buildings with LED lighting, smart HVAC systems, and rooftop solar panels.

- Integrating ICT-based monitoring systems for real-time tracking of energy consumption.
- Implementing a Green Procurement Policy that prioritizes low-emission products and services.
- Organizing annual Zero Emission Week events to raise awareness and promote behavioral change.

Goals

Short-Term (1–3 years)
- Install 3 new EV charging stations on the main campus.
- Publish the first baseline GHG emissions inventory and annual sustainability reports.
- Launch pilot solar-powered pedestrian lighting projects.
- Introduce a campus-wide cycling map with designated safe routes.

Medium-Term (4–7 years)
- Replace all diesel-powered campus buses with electric models.
- Achieve 30% reduction in GHG emissions compared to 2025 levels.
- Install solar panels on the main teaching building, sports hall, and library.
- Expand covered bike parking to accommodate 500 bicycles.

Long-Term (8–15 years)
- Achieve carbon neutrality in all direct operations.
- Transition to a 100% zero-emission vehicle fleet.
- Source 100% of campus electricity from renewable energy.

National & Global Alignment (to 2050)
- Contribute to Azerbaijan's national target of 35% GHG reduction by 2030.
- Achieve net-zero carbon emissions by 2050, in alignment with global climate goals.

Carbon Reduction Roadmap

Scope 1: Direct Emissions
- Transition campus fleet from diesel/gasoline to electric and hybrid.
- Upgrade heating systems to cleaner fuels (natural gas/biogas).
- Improve building efficiency through insulation, smart controls, and efficient appliances.

Scope 2: Indirect Emissions from Purchased Energy
- Install rooftop solar panels and explore wind energy solutions.
- Purchase green electricity where available.
- Conduct energy audits and adopt smart energy management systems.
- Invest in energy storage systems to optimize renewable energy use.

Scope 3: Other Indirect Emissions
- Promote sustainable commuting (cycling, walking, public transit, scooter-sharing).
- Implement comprehensive waste management, including recycling, composting, and phasing out single-use plastics.
- Adopt green procurement practices with suppliers that meet carbon reduction standards.

- Encourage sustainability-focused research and curriculum integration.
- Engage the campus community through workshops, awareness campaigns, and student-led sustainability committees.

Roles and Responsibilities

Rector's Office: Approve policy, allocate funding, and ensure compliance.

Sustainability & Environmental Management Unit: Oversee implementation, monitor progress, publish annual emission reports.

Facilities & Transport Department: Maintain pedestrian/cycling infrastructure, EV charging, and vehicle fleet transition.

ICT Department: Develop and manage digital monitoring platforms for energy and transport.

Academic Departments: Integrate sustainability and climate topics into teaching and research.

 Students & Staff: Participate in sustainable commuting, energy saving, and waste reduction initiatives.

Future Goals

- Establish a Zero Emission Innovation Hub at AzTU for clean technology research.
- Partner with Baku Municipality to improve public transport connectivity to AzTU sites.
- Introduce green roofs and vertical gardens for natural cooling and carbon absorption.
- Develop digital wayfinding and smart mobility apps for sustainable campus navigation.

Review

This policy will be reviewed every two years to ensure relevance, effectiveness, and compliance with evolving sustainability standards, national climate strategies, and technological advancements.

The previous version of the policy will remain in effect until formally revised and approved by the University Council.