

13.4.1 - Does your university as a body have a target date by which it will become carbon neutral according to the Greenhouse Gas Protocols?

ASOIU Net-Zero 2040 Implementation Plan

1. Vision and Goal

ASOIU commits to achieving net-zero greenhouse gas (GHG) emissions by 2040, ten years earlier than its previous 2050 target. This goal integrates scientific, educational, and operational pillars to transform the university into a carbon-neutral, climate-resilient campus that serves as a national model for higher-education sustainability.

https://asoiu.edu.az/upload/sustainability/Sustainability_Plan_ASOIU.pdf

<https://asoiu.edu.az/upload/sustainability/pdf/policy/Climate%20Action%20Plan.pdf>

2. Scope 1

Short Term (2024-2028)

- Retrofit boilers, HVAC, and laboratory burners to high-efficiency, low-carbon systems.
- Install solar thermal and geothermal heat-pump units in pilot buildings.
- Begin bio-LPG or biogas blending for campus heating.
- Replace 25 % of vehicle fleet with EVs or hybrid models; deploy charging points.
- Launch eco-driving training for all fleet operators.

Mid Term (2029-2034)

- Transition 100 % of boilers to renewable fuels or electric heating.
- Achieve fully electric fleet for on-campus transport and service vehicles.
- Integrate vehicle-to-grid (V2G) and smart-charging systems to balance renewable output.
- Begin carbon capture pilot on central heating flues.

Long Term (2035-2040)

- Attain carbon-neutral heating and mobility through renewables, efficiency, and carbon-offset investments.
- Develop energy-storage micro-grid linking buildings and EV infrastructure.

3. Scope 2 – Indirect Energy Emissions (Electricity)

Short Term (2024-2028)

- Complete LED retrofits and smart-meter rollout across all facilities.

- Conduct campus-wide energy audit and establish performance targets.
- Sign initial Power Purchase Agreement (PPA) for 30 % renewable electricity.

Mid Term (2029-2034)

- Build on-site solar PV systems on rooftops and parking canopies (≥ 2 MW).
- Upgrade to smart-grid controls and battery storage.
- Increase renewable share to ≥ 75 % through PPAs and self-generation.

Long Term (2035-2040)

- Attain 100 % renewable electricity supply (solar + wind + hydro mix).
- Install energy-storage capacity for 48-hour autonomous operation.
- Maintain ISO 50001 Energy Management certification.

4. Scope 3 – Value-Chain & Indirect Emissions

4.1 Commuting and Travel

Short Term (2024-2028)

- Launch ride-share and bike-share programs, install secure cycle parking.
- Conduct annual mobility surveys to benchmark progress.
- Implement hybrid work and virtual-meeting policies to cut travel.

Mid Term (2029-2034)

- Provide public-transport subsidies and EV-charging incentives for staff.
- Cooperate with Baku transport authorities for bus routes serving campus.

Long Term (2035-2040)

- Reach ≥ 80 % of commutes via low-carbon modes (transit, EV, active).
- Offset remaining travel through verified carbon-credit schemes.

4.2 Waste & Procurement

Short Term – Campus-wide waste-audit; ban single-use plastics; partner with recyclers.

Mid Term – Full waste-segregation, composting, and circular-procurement systems.

Long Term – Introduce waste-to-energy technology to offset ≥ 90 % of landfill GHGs.

4.3 Purchased Goods, Food & Research Operations

- Adopt sustainable procurement code (life-cycle criteria).
- Reduce embodied carbon in construction materials.
- Encourage plant-based dining options and local sourcing to cut food-chain emissions.
- Implement digitalization of administrative workflows to minimize printing and travel.

5. Governance and Monitoring

Element	Mechanism
Leadership	Sustainability Committee chaired by Vice-Rector for Strategic Development
Tracking	Annual GHG inventory verified under GHG Protocol Corporate Standard
Reporting	Yearly Sustainability & Climate Report following GRI standards
Engagement	Eco-Ambassador Program + staff training + student projects
Verification	Third-party audit every 3 years on Scope 1-2-3 data accuracy

Conclusion

By accelerating its roadmap to Net-Zero 2040, ASOIU establishes itself as a regional climate-leadership hub. Through targeted Scope 1–2–3 actions, transparent reporting, and strategic investment, the university will achieve complete decarbonization within 15 years, nurturing a generation of climate-aware engineers and innovators.