



WASTE MANAGEMENT, PLASTIC REDUCTION AND SUSTAINABLE SUPPLY CHAIN POLICY

THE POLICY HAS BEEN APPROVED BY THE DECISION OF
THE SCIENTIFIC COUNCIL OF NAKHCHIVAN STATE
UNIVERSITY AT THE MEETING HELD ON APRIL 16, 2025
(PROTOCOL NO: 7)



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1. Purpose

The purpose of this Policy is to establish an integrated institutional framework for preventing and reducing waste generation at Nakhchivan State University (NSU), promoting source separation, reuse and recycling, and ensuring the safe treatment and disposal of residual and hazardous waste.

The Policy also seeks to progressively minimise the use of single-use plastics, improve resource efficiency, embed circular-economy principles into university operations, and integrate environmental requirements into procurement and supply-chain management.

NSU recognises that its environmental responsibility extends beyond activities under its direct operational control. Accordingly, relevant provisions of this Policy apply, where appropriate, to third parties that supply goods or services to the University, including contractors, outsourced service providers and organisations operating on University premises.

2. Scope

This Policy applies across all eight NSU campuses and to teaching, research, administrative, residential, social, catering, clinical, laboratory and service facilities managed by the University.

- students and academic, administrative, technical and support staff;
- faculties, departments, laboratories, research centres and institutes;
- canteens, cafés and other catering operations;
- student residences and social facilities;
- event organisers and University-hosted events;
- cleaning, maintenance and facilities-management services;
- construction and renovation contractors;
- suppliers of goods and services;
- outsourced service providers; and
- other third parties operating on University premises.

3. Policy Principles and Waste Hierarchy

NSU applies the following hierarchy when making decisions on waste and resource use:

PREVENTION → REDUCTION → REUSE → REPAIR/REFURBISHMENT → RECYCLING → OTHER RECOVERY → SAFE DISPOSAL

The University's primary approach is therefore to prevent waste from arising wherever practicable rather than relying solely on end-of-pipe disposal. Procurement decisions should, where technically and economically feasible, consider product durability, packaging, reparability, reusability, recyclability and end-of-life impacts in addition to purchase price.



4. Waste Classification

Paper and cardboard: office paper, cardboard boxes, printed materials and other paper-based products.

Plastic: PET bottles, plastic containers, packaging and other plastic materials.

Glass: glass containers and other non-hazardous glass waste.

Metal: metal packaging and other recyclable metal materials.

Organic and food waste: biodegradable waste generated by catering, events and related activities.

Waste electrical and electronic equipment (WEEE/e-waste): computers, monitors, printers, telephones, cables, electronic devices and components.

Batteries and accumulators: items requiring separate collection and controlled transfer.

Laboratory, medical and hazardous waste: chemicals, biological materials, clinical waste and other materials requiring specialised management.

Construction and renovation waste: materials generated through construction, refurbishment and repair activities.

Residual mixed waste: non-recyclable waste not falling within the categories above.

5. Source Separation and Collection

NSU shall progressively implement source-separation systems across its campuses. Clearly identified collection points shall be provided in appropriate teaching, administrative, residential, catering and high-traffic areas. A consistent labelling and signage system should be used across campuses to reduce contamination and improve correct segregation.

The weight or, where weighing is not yet feasible, the volume of collected waste should be recorded by waste stream and campus. The University shall progressively move towards weight-based measurement as its preferred reporting method.

6. Reduction of Single-Use Plastics

NSU considers the reduction of unnecessary single-use plastics an institutional environmental priority. The University shall progressively:

- reduce procurement of single-use plastic cups, plates, cutlery, straws and comparable disposable products;
- prioritise reusable alternatives at University-organised meetings, conferences and events;
- reduce reliance on single-use plastic water bottles and, where feasible, expand drinking-water refill points;
- encourage students and staff to use reusable bottles, cups and food containers;
- require or encourage catering operators to replace unnecessary disposable plastics with reusable or lower-impact alternatives;



- avoid products with excessive plastic packaging where suitable alternatives are available; and
- encourage suppliers to use minimal, reusable, returnable or recyclable packaging.

Where a practical alternative to a single-use plastic item exists, procurement units should give preference to the more sustainable option, taking account of technical suitability, hygiene, safety, availability and whole-life cost.

7. Food Waste Management

Catering facilities shall take reasonable measures to prevent and reduce food waste. Actions may include separate measurement of food waste, improved demand and portion planning, identification of major sources of avoidable waste, safe reduction of surplus food, and assessment of composting or other organic-waste recovery options where technically and legally feasible.

8. Electronic, Medical, Laboratory and Hazardous Waste

Electronic, battery, medical, laboratory, chemical and other hazardous wastes shall not be mixed with ordinary municipal waste. Such materials shall be collected and stored in designated conditions and transferred to appropriately authorised service providers in accordance with applicable legal, environmental, health and safety requirements.

Records should include, where applicable, the waste category, quantity, date of transfer, receiving organisation and documentary evidence of collection, treatment, recycling or disposal.

9. Sustainable Procurement and Supply Chain

NSU shall progressively integrate environmental considerations into relevant procurement decisions and tender documentation. Where appropriate, preference should be given to:

- products containing recycled material;
- reusable products and systems;
- durable, repairable and energy/resource-efficient equipment;
- products with minimal or recyclable packaging;
- alternatives that reduce unnecessary single-use plastics;
- products and equipment with credible end-of-life recovery options; and
- suppliers that provide take-back, reuse or recycling arrangements.

For significant purchases, NSU should consider not only initial acquisition cost but also relevant whole-life factors such as durability, operating efficiency, maintenance, packaging, end-of-life management and disposal costs.



10. Application to Contractors, Outsourced Services and Suppliers

The principles of this Policy extend, where relevant and proportionate, to NSU's supply chain and outsourced activities. Contracts, tender specifications and service-level agreements may require suppliers and contractors to:

- comply with NSU waste-separation and collection procedures while operating on University premises;
- avoid mixing hazardous or specialised waste with general waste;
- minimise unnecessary single-use plastics and excessive packaging;
- use reusable, returnable or recyclable packaging where feasible;
- manage and dispose of waste lawfully and safely;
- provide waste, packaging or disposal data when reasonably requested by NSU;
- retain evidence of lawful transfer, treatment, recycling or disposal where relevant; and
- cooperate with NSU environmental monitoring, inspection and audit requirements.

Relevant procurement and service contracts should include an Environmental and Waste Management Clause. Material or repeated non-compliance may be considered in contract-performance reviews, corrective-action processes and future procurement decisions.

11. Measurement and Key Performance Indicators

NSU shall operate a measurable monitoring framework so that implementation of this Policy can be demonstrated through evidence rather than policy statements alone.

KPI	Unit	Measurement / Formula
Total waste generated	kg/year or tonnes/year	Sum of recorded waste streams
Waste intensity per capita	kg/person/year	Total annual waste ÷ total students and staff
Waste sent for recycling	kg/year	Recorded by material stream
Recycling rate	%	Waste recycled ÷ total waste generated × 100
Diversion rate	%	(Reuse + recycling + other recovery) ÷ total waste generated × 100
Plastic waste generated	kg/year	Measured separately where practicable
Single-use plastic procurement	units and/or AZN/year	Procurement records
Paper consumption	kg, reams or sheets/year	Procurement/printing records



Food waste	kg/year	Catering measurement
E-waste	kg/year	Transfer and collection records
Hazardous waste	kg/year	Records by category
Sustainable procurement coverage	%	Relevant procurements applying environmental criteria ÷ relevant procurements × 100
Supplier compliance	%	Key/relevant suppliers assessed as compliant ÷ suppliers assessed × 100
Source-separation coverage	%	Priority buildings/areas with operational separation systems ÷ priority buildings/areas × 100

12. Waste Intensity per Capita

Given an institutional community of approximately 14,000 students and staff, NSU shall use per-capita waste intensity as one of its principal normalised indicators:

Waste Intensity = Annual Total Waste (kg) ÷ Total Number of Students and Staff

For example, if 350,000 kg of waste were recorded in a year, the indicative waste intensity would be 25 kg/person/year. This indicator allows year-on-year comparison while reducing distortion caused by changes in student or staff numbers.

13. Eight-Campus Monitoring Mechanism

Each campus shall be treated as a distinct monitoring unit while contributing to the consolidated University dataset. Monthly or quarterly records should follow the structure:

Campus → Waste Stream → Quantity → Collection Method → Treatment/Recovery Route → Receiving Organisation → Supporting Evidence

An annual Waste Performance Scorecard shall be prepared for each campus. The consolidated system shall enable NSU to identify differences between campuses, detect high-waste activities, target interventions and verify progress.

14. Annual Waste Audit

NSU shall conduct an institutional waste audit at least annually. The audit should assess total waste generation, waste composition, major sources of waste, plastic consumption and waste, recycling and diversion performance, food waste, electronic and hazardous waste, packaging arising from procurement, source-separation effectiveness, and the compliance of relevant outsourced service providers.

Findings shall inform corrective and preventive actions, infrastructure priorities and targets for the following reporting period.



15. Targets and Baseline

NSU shall establish a verified baseline year before adopting binding quantitative reduction targets. Once the baseline is established, time-bound targets shall be approved and reviewed periodically.

By 2030, the University should aim to achieve the following institutional outcomes:

- a measurable reduction in residual mixed waste per capita;
- source-separation systems across 100% of priority campus buildings and operational areas;
- substantial reduction of unnecessary single-use plastics directly procured by the University;
- progressive reduction in single-use plastic bottled-water consumption;
- reduced paper consumption through digitalisation and responsible printing;
- 100% controlled and documented management of recorded electronic and hazardous waste streams;
- inclusion of relevant environmental requirements in 100% of applicable major supplier and outsourced-service contracts; and
- annual publication or disclosure of key waste-management performance data through NSU sustainability/SDG reporting.

Specific percentage-reduction targets shall be set following completion of the Waste Baseline Assessment so that targets remain evidence-based, measurable and achievable.

16. Alignment with the United Nations Sustainable Development Goals

SDG 12 - Responsible Consumption and Production: Primary alignment. The Policy supports waste prevention, responsible consumption, recycling, sustainable procurement and institutional reporting.

Target 12.3: Reduction and measurement of food waste.

Target 12.4: Environmentally sound management of chemicals and hazardous waste.

Target 12.5: Waste prevention, reduction, recycling and reuse.

Target 12.6: Integration and disclosure of sustainability practices and performance information.

Target 12.7: Promotion of sustainable procurement practices.

Target 12.8: Awareness and education for sustainable consumption and lifestyles.

SDG 3 - Good Health and Well-being: Safe management of medical, chemical and hazardous waste.

SDG 6 - Clean Water and Sanitation: Prevention of inappropriate disposal that may affect water systems.

SDG 11 - Sustainable Cities and Communities: Development of sustainable campus waste-management systems.

SDG 13 - Climate Action: Reduction of resource use, waste generation and associated greenhouse-gas impacts.

SDG 14 - Life Below Water: Reduction of plastic leakage and pollution.



SDG 15 - Life on Land: Reduction of waste-related impacts on land and terrestrial ecosystems.

SDG 17 - Partnerships for the Goals: Cooperation with recycling organisations, public authorities, suppliers and other partners.

17. Student and Staff Engagement

NSU recognises that effective waste management depends on the participation of the University community. Awareness and engagement measures may include Zero Waste Campus initiatives, plastic-reduction campaigns, SDG Club activities, recycling drives, e-waste collection days, induction materials, staff training and inter-campus sustainability initiatives.

18. Governance and Responsibilities

University leadership shall provide institutional oversight of this Policy. The Sustainable Development Center shall coordinate monitoring, consolidation of indicators and SDG-related reporting in cooperation with relevant units.

Facilities and administrative units shall organise operational collection, separation and transfer arrangements. Procurement and finance functions shall support the integration of environmental criteria into relevant procurement and contracting processes. Campus and structural-unit managers shall support implementation within their areas of responsibility. Students and staff are expected to follow separation procedures and use resources responsibly.

19. Reporting, Evidence and Transparency

NSU shall seek to disclose, at least annually, a core set of waste and resource indicators, including total waste generated, waste per capita, waste recycled, recycling rate, diversion rate, plastic consumption/reduction, food waste, e-waste collected, hazardous waste safely managed, sustainable procurement coverage and supplier compliance.

Relevant results shall be incorporated into the University's annual Sustainability/SDG Progress Report and, where appropriate, published on the official University website. Supporting evidence should be retained, including weight tickets, transfer notes, invoices, procurement records, photographs, contractor reports, audit records and corrective-action documentation.

20. Continuous Improvement: PDCA Mechanism

PLAN: establish the baseline, identify significant waste streams and set annual objectives and targets.

DO: implement source separation, plastic-reduction measures, sustainable procurement criteria and supplier requirements.

CHECK: collect monthly/quarterly data, verify evidence, conduct the annual Waste Audit and review KPI performance.



ACT: implement corrective actions and update targets, procurement criteria, infrastructure and operational procedures based on results.

Through this Plan-Do-Check-Act cycle, waste management is treated as a continuous institutional management process rather than a one-off environmental campaign.

21. Approval, Entry into Force and Review

This Policy shall enter into force upon approval by the Scientific Council of Nakhchivan State University. It shall be reviewed at least once every three years, or earlier where significant changes occur in applicable legislation, University operations, environmental risks, institutional strategy or sustainability requirements.

Implementation performance shall be reviewed through annual sustainability reporting and the University's wider strategic planning and quality-assurance processes.

Nakhchivan State University regards waste not merely as an end product to be disposed of, but as a preventable loss of resources, and is committed to progressively embedding circular-economy principles across education, research, procurement and campus operations.

Annex 1. Minimum Campus Waste Monitoring Record

Reporting Period	Campus	Waste Stream	Quantity (kg)	Destination / Treatment	Service Provider	Evidence Reference

Annex 2. Model Environmental and Waste Management Clause for Suppliers

The Supplier/Contractor shall comply with applicable environmental and waste-management requirements and with relevant Nakhchivan State University procedures while providing goods or services to the University. The Supplier/Contractor shall take reasonable measures to prevent waste, minimise unnecessary single-use plastics and packaging, separate waste streams where required, and ensure that hazardous or specialised waste is handled and transferred lawfully. Upon reasonable request, the Supplier/Contractor shall provide relevant information or documentary evidence concerning waste quantities, packaging, recycling, recovery or disposal. Repeated or material non-compliance may be addressed through corrective-action and contract-performance procedures.