Baku State University

Sustainability and Biodiversity Policy

INTRODUCTION

Baku State University (BSU), as one of the leading higher education and research institutions in the Republic of Azerbaijan, recognizes its responsibility to contribute to sustainable development and environmental protection at local, national, and global levels. As a center for education, research, and innovation, the University acknowledges that its academic activities, campus operations, and development initiatives have a direct and indirect impact on natural resources, ecosystems, and biodiversity.

In response to growing environmental challenges, including climate change, biodiversity loss, resource depletion, and environmental degradation, BSU is committed to integrating sustainability principles into all aspects of its institutional governance and operations. The Sustainability and Biodiversity Policy establishes a comprehensive framework that guides the University's approach to environmental stewardship, conservation of biodiversity, and responsible resource management. This policy reflects BSU's commitment to minimizing its environmental footprint while promoting long-term ecological resilience, social responsibility, and economic sustainability.

The policy supports the systematic integration of sustainability and biodiversity considerations into education, research, campus planning, infrastructure development, and administrative processes. It emphasizes the protection of terrestrial ecosystems, sustainable land use, responsible food sourcing, waste reduction, plastic management, and the prevention of invasive species, while fostering awareness, participation, and accountability among students, staff, and partners.

Through this policy, BSU aims to serve as a model for sustainable campus management, contribute to national and international sustainability objectives, and cultivate a culture of environmental responsibility within the university community. By aligning institutional practices with sustainable development principles, BSU reinforces its role in advancing knowledge, protecting biodiversity, and supporting a sustainable future for present and future generations.

DEFINITION

The Sustainability and Biodiversity Policy of BSU defines the principles, responsibilities, and institutional commitments guiding the integration of sustainability and biodiversity conservation across all university activities. The policy establishes a structured framework for promoting environmental stewardship, conserving ecosystems and species, and ensuring the responsible and efficient use of natural resources within academic, administrative, operational, and development processes.

This policy provides guidance for decision-making, planning, and implementation by embedding sustainability considerations into education, research, campus management, infrastructure development, procurement, and community engagement. It aims to minimize negative environmental impacts, enhance ecological resilience, and support the long-term environmental, social, and economic well-being of the University and its stakeholders.

Through clearly defined objectives, implementation mechanisms, and monitoring procedures, the Sustainability and Biodiversity Policy ensures continuous improvement in environmental performance, compliance with relevant national and international standards, and alignment with sustainable development principles. It serves as a foundational reference for all sustainability-related initiatives at BSU and supports the University's commitment to biodiversity conservation and responsible development.

SCOPE

The Sustainability and Biodiversity Policy of BSU applies to all academic, administrative, operational, and development activities carried out under the authority or management of the University. This policy is binding for all faculties, departments, research centers, institutes, administrative units, and affiliated facilities, as well as for all students, academic and administrative staff, contractors, service providers, and partners engaged in activities on behalf of the University.

The scope of the policy includes

- Educational and research activities, including curriculum development, scientific research, and laboratory operations
- Campus planning, land use, infrastructure development, construction, renovation, and landscaping projects
- Management and conservation of terrestrial ecosystems, green spaces, and biodiversity within campus boundaries
- Environmental monitoring, impact assessment, reporting, and continuous improvement mechanisms
- Sustainable food sourcing, procurement practices, and supply chain management
- Energy use, water management, emissions reduction, and promotion of renewable and resource-efficient technologies
- Waste management, recycling, plastic reduction, and hazardous material handling
- Prevention and management of alien and invasive species
- Awareness-raising, training, and capacity-building activities related to sustainability and biodiversity

This policy covers all University-owned, leased, or managed properties and applies to activities conducted both on campus and off campus where such activities are under BSU's control or influence. All actions within the scope of this policy shall be implemented in compliance with applicable national legislation, regulatory requirements, and relevant international environmental standards, ensuring consistency with the principles of sustainable development and environmental responsibility.

Support services

To ensure the effective implementation of the Sustainability and Biodiversity Policy, BSU establishes a comprehensive system of institutional support services designed to provide technical, administrative, academic, and operational assistance across all faculties and departments. These support services function as an integrated framework that strengthens governance, ensures regulatory compliance, enhances data-driven decision-making, and facilitates continuous improvement in environmental performance.

Technical support services are provided to strengthen environmental and biodiversity management. These include GIS-based biodiversity mapping, species inventory management, habitat condition assessments, and invasive species monitoring. Dedicated expertise supports the screening of species listed in international and national conservation registries, environmental risk assessments, and the integration of biodiversity criteria into campus development projects.

Operational support services ensure the effective implementation of waste management, plastic reduction, energy efficiency, and carbon reduction measures. The University provides structured assistance in the installation and maintenance of waste segregation systems, management of recycling contracts, monitoring of hazardous waste handling, and administration of waste tracking software. Carbon management services include annual greenhouse gas inventory calculations, energy use monitoring, renewable energy feasibility assessments, and compliance verification with sustainable construction standards. These services ensure that operational sustainability targets are measurable and aligned with institutional commitments.

Academic and research support services facilitate the integration of sustainability into curricula, research priorities, and innovation activities. Faculties receive

guidance on incorporating sustainability learning outcomes into course design, developing interdisciplinary modules, and aligning programs with environmental objectives. Research support includes coordination of interdisciplinary research clusters, partnership facilitation with government and industry, and tracking of sustainability-related publications and grants. These services strengthen BSU's academic leadership in biodiversity conservation and sustainable development.

Capacity-building and training services are provided to academic staff, administrative personnel, students, contractors, and suppliers to enhance institutional awareness and competence in sustainability practices. Training programs cover biodiversity conservation principles, waste segregation procedures, plastic reduction strategies, sustainable procurement requirements, invasive species identification, and carbon management fundamentals.

Audit and compliance services further reinforce accountability by conducting internal environmental audits, verifying KPI achievement rates, assessing regulatory compliance, and evaluating corrective action implementation. Findings are consolidated into structured review reports that inform strategic decision-making and future planning cycles. Through this integrated system of institutional support services, BSU ensures that its Sustainability and Biodiversity Policy is fully operationalized across governance, academics, research, and campus operations. These services transform policy commitments into measurable outcomes, strengthen environmental stewardship, and position the University as a leading model for sustainable higher education development at national and international levels.

INFRASTRUCTURE SUPPORT

To ensure the effective and long-term implementation of the Sustainability and Biodiversity Policy, BSU establishes a comprehensive infrastructure support system grounded in principles of sustainability and environmental responsibility. This infrastructure support ensures that the University's physical spaces, technical systems, digital platforms, and environmental management mechanisms are planned, modernized, and managed in alignment with sustainability objectives.

Campus planning and construction activities are carried out with full consideration of biodiversity and environmental criteria. Green building standards are applied in all new construction and renovation projects, prioritizing soil protection,

preservation of existing green areas, and the use of native plant species. Biodiversity screening is conducted during the design phase of infrastructure projects to minimize habitat disturbance and integrate mitigation solutions where necessary. Green areas across campus are expanded to enhance ecological resilience, native and climate-adapted species are planted, and degraded areas are restored to strengthen ecosystem stability.

Waste management infrastructure is developed to cover all campus buildings. Source-separation bins, recycling collection points, and designated storage areas for hazardous waste are installed. A digital waste tracking system is implemented to monitor waste streams and recycling performance. Infrastructure and logistical arrangements are introduced to reduce plastic use and encourage sustainable alternatives. These systems support circular economy principles, enhance resource efficiency, and reduce environmental impact.

Water resource management is also strengthened through infrastructure support measures. Water-saving technologies, leak detection systems, and efficient irrigation methods for green areas are implemented. Where feasible, nature-based solutions such as rainwater harvesting systems are introduced. This approach contributes to water conservation and long-term environmental sustainability.

Transportation and mobility infrastructure are aligned with sustainability goals. Pedestrian-friendly pathways and bicycle access are promoted across campus, and measures are introduced to reduce dependency on private vehicles. Low-emission transportation options are assessed and gradually integrated where feasible. These initiatives contribute to reducing the University's carbon footprint and creating a healthier campus environment.

Through this structured infrastructure support system, BSU strengthens the physical and technological foundations of its Sustainability and Biodiversity Policy. The planned modernization and ecological alignment of infrastructure ensure long-term institutional resilience, support biodiversity conservation, and transform the campus into a model environment consistent with sustainable development principles at national and international levels.

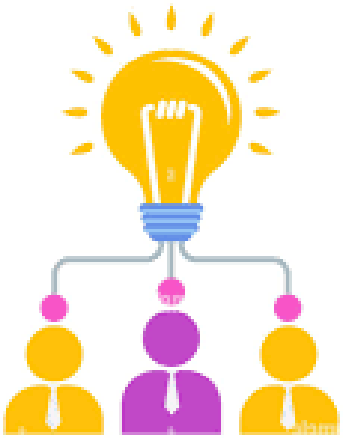
AWARENESS

To ensure the successful implementation and long-term impact of the Sustainability and Biodiversity Policy, BSU establishes a structured and continuous awareness program designed to foster a culture of environmental responsibility across the entire university community. The awareness framework aims to inform, engage, and empower students, academic staff, administrative personnel, contractors, and external partners to actively contribute to sustainability and biodiversity conservation objectives.

The University organizes annual awareness campaigns and thematic events to maintain continuous engagement. “Green Campus Days,” biodiversity conservation weeks, tree-planting initiatives, recycling drives, and sustainability fairs provide practical opportunities for participation. These events highlight key themes such as climate change, invasive species management, plastic reduction, responsible consumption, and ecosystem restoration. Through interactive activities, exhibitions, and expert talks, the University strengthens knowledge exchange and encourages community-wide involvement.

Visual communication tools contribute significantly to awareness-building. Clearly labeled waste segregation bins, informational signage on energy conservation, biodiversity information boards in green areas, and eco-labeling across facilities serve as constant reminders of environmental responsibilities. Campaign materials, digital infographics, and short educational videos are used to communicate complex sustainability concepts in accessible formats.

Awareness program, Baku State University cultivates a strong culture of sustainability and biodiversity stewardship. By combining communication, education, participation, and continuous evaluation, the University ensures that the Sustainability and Biodiversity Policy is not only an institutional commitment but also a shared value embraced by the entire university community.



Sustainable Food Sourcing on Campus

BSU ensures that the food served on campus is sustainably produced and ethically sourced. The objective is to reduce the carbon footprint associated with food production and transportation, promote healthy and environmentally responsible eating habits among the university community, and ensure the efficient use of natural resources. This policy guarantees the systematic application of BSU's sustainable development principles in food provision, management, and educational activities.

Implementation Strategies

Vendor Partnerships

Establish long-term collaborations with local and sustainable farms and food suppliers that hold biological and ethical certifications.

Require suppliers to implement strategies that minimize the environmental impact of production and transportation processes.

Supply Chain Transparency

Require all suppliers to provide sustainability certifications, environmental impact reports, and documentation of ethical production practices.

Monitor quality and environmental compliance at every stage of the supply chain.

Menu Planning

Prioritize seasonal, local, and plant-based products in menus

Highlight healthy eating and environmental responsibility in menus to raise awareness among students and staff

Education and Awareness

Organize seminars, training sessions, and campaigns on sustainable food practices and environmental responsibility for students and staff

Prepare informational materials on carbon footprint, water, and energy conservation related to food production and consumption

Monitoring and Evaluation

Regularly assess key indicators related to food sourcing, menu planning, and waste management to ensure compliance with sustainability objectives

Conservation and Sustainable Use of Terrestrial Ecosystems

BSU actively commits to the protection, management, and restoration of natural habitats associated with its campuses, including forests, mountainous areas, drylands, and other ecologically significant zones, while promoting sustainable land use practices to preserve ecosystem integrity. The University ensures that all campus operations, development activities, and landscaping initiatives are conducted in a manner that minimizes environmental impact, prevents habitat degradation, and supports biodiversity conservation. Through these efforts, BSU seeks to maintain native flora and fauna, restore degraded ecosystems, and integrate ecological sustainability into strategic planning, campus management, and community engagement, thereby fostering a culture of environmental stewardship among staff, students, and partners.

Implementation Strategies

Ecosystem Assessment

BSU regularly conducts environmental and ecosystem monitoring across its campus areas, evaluates the condition of natural habitats, and identifies priority sites for biodiversity conservation. These assessments play a key role in guiding the University's sustainability strategy and planning.

Conservation Initiatives

The University implements reforestation programs, habitat restoration projects, and sustainable landscaping initiatives. These efforts strengthen the protection of native flora and fauna, restore ecosystem services, and maintain ecological balance across campus areas.

Sustainable Land Management

BSU develops guiding principles and protocols for land use that prioritize ecosystem preservation and the sustainable management of soil resources. All projects and operations are carried out in accordance with environmental criteria to ensure minimal ecological impact.

Partnerships and Collaboration

The University collaborates closely with environmental organizations, local communities, and other partners to implement joint conservation and restoration projects, promote knowledge exchange, and strengthen ecosystem sustainability at both local and regional levels.

Education and Research

BSU promotes awareness of ecosystem conservation, sustainable land use, and biodiversity significance through academic programs, seminars, and projects. The University also supports scientific research to develop innovative solutions in the field of ecosystem protection.

Protection of IUCN Red Listed and National Conservation List Species

BSU actively identifies, monitors, and implements protective measures for species at risk within all campus areas and other sites affected by University operations, ensuring that vulnerable and endangered flora and fauna are preserved. The University integrates biodiversity considerations into institutional planning, development projects, and operational decision-making, aligning all activities with ecological best practices and sustainability principles. Through continuous monitoring, habitat management, and targeted conservation initiatives, BSU promotes the resilience of ecosystems, mitigates potential environmental impacts, and fosters awareness and engagement among staff, students, and partners regarding the importance of protecting species diversity as an integral part of the University's commitment to sustainable development.

Habitat Protection

Critical habitats supporting Red Listed and nationally protected species are designated as conservation or restricted-use zones. Development and operational activities in these areas are avoided or strictly controlled to prevent habitat degradation, fragmentation, or loss.

Collaborative Conservation

BSU partners with conservation organizations and relevant government agencies to support joint initiatives for biodiversity protection. These collaborations facilitate the conservation, restoration, and sustainable management of ecosystems. Cooperation with government bodies strengthens compliance with national environmental legislation and conservation strategies. Such partnerships also promote knowledge exchange, research collaboration, and practical learning opportunities.

Education and Outreach

Baku State University raises awareness about species conservation through targeted education and outreach activities for students, staff, and the wider community. The University organizes training programs, seminars, workshops, and awareness campaigns to promote understanding of biodiversity values and conservation responsibilities. These initiatives encourage active participation, responsible behavior, and community engagement in protecting species and ecosystems.

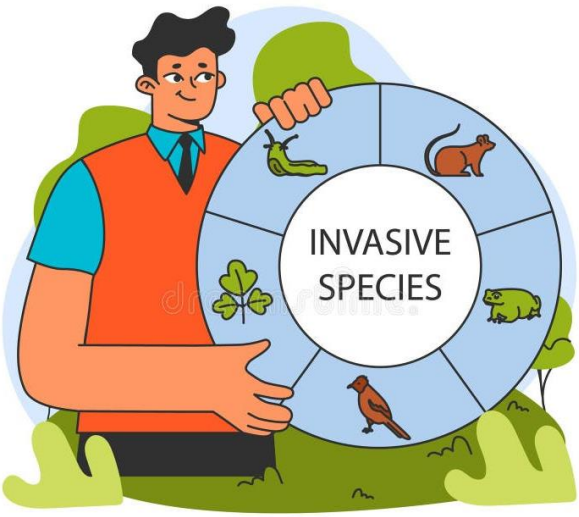
Integration of Local Biodiversity into Planning and Development

BSU ensures that biodiversity considerations are systematically embedded into all institutional planning, land-use decisions, and development projects in order to minimize adverse impacts on local ecosystems. The University requires that environmental and biodiversity assessments be conducted at the early stages of project design, enabling the identification of potential risks to habitats, species, and ecosystem services. Mitigation and avoidance measures are integrated into project planning and implementation, ensuring that development activities are aligned with sustainability principles, regulatory requirements, and best environmental practices, while supporting the long-term conservation and resilience of local ecosystems.

Biodiversity Assessments	The University conducts baseline biodiversity assessments prior to the initiation of any planning or development activities to identify local species, habitats, and ecological sensitivities that may be affected by proposed projects.
Design Guidelines	Planning and development projects incorporate biodiversity-sensitive design principles, including habitat avoidance, minimization of land disturbance, and the integration of green infrastructure to support local ecosystems.
Impact Mitigation	Biodiversity considerations are explicitly integrated into environmental impact assessments, ensuring that potential effects on local ecosystems are identified, evaluated, and addressed through appropriate mitigation and management measures.
Stakeholder Engagement	Engage local communities and experts in planning processes.

Management of Alien and Invasive Species

	BSU is committed to preventing the introduction, establishment, and spread of alien and invasive species across all campus areas and operations, recognizing their potential to disrupt local ecosystems and threaten native biodiversity. The University integrates preventive measures into planning, landscaping, procurement, and operational activities, including the use of native species, biosecurity controls, and regular monitoring of campus environments. Where alien species are identified, BSU implements appropriate management and control actions to reduce their ecological impacts, restore affected habitats, and support the resilience of native ecosystems, while promoting awareness and responsibility among staff, students, contractors, and partners as part of its broader sustainability and biodiversity commitments.



Implementation Strategies

Risk Assessment

BSU conducts systematic risk assessments to identify alien species that pose threats to local ecosystems. These assessments evaluate ecological impacts, pathways of introduction, and potential risks to native species and habitats. Based on the findings, alien species are prioritized to ensure timely and effective management actions.

Prevention Measures

The University implements preventive biosecurity protocols to reduce the risk of introducing and spreading alien species across campus areas. These measures include controls on procurement, landscaping, construction activities, and material movement. Awareness campaigns are conducted to inform students, staff, and contractors about prevention responsibilities and best practices.

Control Programs

BSU develops and applies science-based management programs to control and reduce existing alien species populations. Control measures may include mechanical, biological, or ecological approaches, depending on the species and level of risk. These programs aim to minimize environmental damage while supporting ecosystem recovery.

Monitoring and Reporting

Regular monitoring is carried out to detect the presence and spread of alien species within University-managed areas. Monitoring results are documented and analyzed to assess trends and the effectiveness of control measures. Reporting supports informed decision-making and continuous improvement of alien species management strategies.

Collaboration and Research

The University collaborates with environmental organizations, research institutions, and experts to strengthen alien species management efforts. Joint research initiatives support the development of sustainable, innovative, and evidence-based solutions. These collaborations also promote knowledge exchange and capacity building in biodiversity protection.

Waste Management and Plastic Reduction

BSU implements comprehensive waste management policies designed to minimize environmental impacts across all campus operations, with particular emphasis on the safe handling and disposal of hazardous materials and the systematic reduction of plastic waste. The University establishes clear procedures for waste segregation, collection, storage, recycling, and environmentally sound disposal in accordance with applicable regulations and best practices. By promoting waste reduction initiatives, encouraging the use of reusable and recyclable materials, and raising awareness among students, staff, contractors, and partners, BSU aims to reduce overall waste generation, prevent pollution, and support a circular and sustainable approach to resource management that aligns with its broader sustainability and environmental responsibility commitments.

Implementation Strategies

Plastic Reduction

BSU promotes the use of reusable and environmentally friendly alternatives to reduce dependence on single-use plastics across campus. The University implements policies that limit plastic consumption and encourage sustainable behavior among students and staff. In addition, BSU collaborates with suppliers that adopt sustainable and recyclable packaging solutions.

Hazardous Waste Management

The University strictly follows national regulations and safety standards for the handling, storage, and disposal of laboratory, medical, and electronic waste. Specialized procedures and licensed service providers are used to ensure that hazardous waste is managed in an environmentally sound and secure manner. Regular inspections and staff training support compliance and risk reduction.

Recycling and Awareness

BSU encourages comprehensive recycling programs through the provision of appropriate infrastructure and clearly labeled waste segregation systems. Awareness campaigns and educational activities engage the university community in responsible waste management practices. These initiatives aim to increase recycling rates and foster a culture of environmental responsibility.

Monitoring, Evaluation, and Education

BSU systematically monitors the implementation of all sustainability and biodiversity initiatives to ensure effective execution and alignment with institutional objectives. The University regularly assesses outcomes through performance indicators, environmental audits, and impact evaluations to measure progress and identify areas for improvement. In parallel, BSU actively promotes environmental education by integrating sustainability and biodiversity topics into academic programs, training activities, and awareness initiatives, thereby fostering environmental responsibility, informed decision-making, and a culture of sustainability among students, staff, and the wider university community.

Monitoring

Regular audits and environmental assessments are conducted to track progress and evaluate the effectiveness of sustainability and biodiversity initiatives. These monitoring activities help identify strengths, gaps, and potential risks across operations and projects. The findings support evidence-based decision-making and accountability.

Reporting

Detailed records of activities, outcomes, and performance indicators are systematically maintained. Transparent reporting ensures that relevant stakeholders are informed about progress, challenges, and achievements. This approach strengthens trust, compliance, and institutional responsibility.

Education and Awareness

Workshops, seminars, and awareness campaigns are organized to promote environmental responsibility among students, staff, and the wider community. These activities aim to enhance knowledge, encourage sustainable behavior, and foster active participation. Education plays a key role in embedding sustainability principles into daily practices.

Continuous Improvement

Policies and operational practices are regularly reviewed and updated based on monitoring results and scientific research. Lessons learned from implementation and feedback mechanisms are used to improve effectiveness. International best practices are considered to ensure alignment with evolving sustainability standards.

Inclusion of Local Biodiversity in Planning and Development

BSU, as a leading educational and research institution, recognizes the importance of preserving and enhancing local biodiversity within the context of campus planning, development, and infrastructure projects. The University acknowledges that construction, renovation, and land-use activities may have direct and indirect impacts on local ecosystems, habitats, and species, and therefore commits to integrating biodiversity considerations into institutional decision-making processes.

In campus planning and landscaping activities, priority is given to the preservation of existing green spaces, the use of native and ecologically appropriate plant species, and the enhancement of habitat connectivity. Sustainable infrastructure practices, such as minimizing soil disruption, protecting existing vegetation, and integrating nature-based solutions, are encouraged where feasible.

Through these measures, the University aims to progressively strengthen the systematic inclusion of local biodiversity considerations in planning and development activities, ensuring alignment with sustainability principles, regulatory requirements, and long-term environmental stewardship objectives.

Environmental Assessments for New Projects	Major construction or renovation projects are evaluated in line with national environmental regulations. These assessments include reviewing potential impacts on local flora and fauna, with measures proposed to minimize disruption.
Green Spaces and Campus Landscaping	The university integrates green spaces, gardens, and tree planting initiatives within campus planning, supporting local plant species and providing habitats for urban wildlife.

Collaborations with Environmental Departments	BSU's Faculty of Biology and Environmental Sciences is often consulted for input on development projects, ensuring that biodiversity considerations are included in planning and design stages.
Sustainable Infrastructure Practices	Where feasible, construction projects incorporate environmentally friendly practices, such as preserving existing vegetation, reducing soil disruption, and implementing water management systems that support local ecosystems.

Mechanism, Tools, and Execution, Monitoring and Review

The implementation of the Sustainability and Biodiversity Policy at BSU is carried out through a structured institutional mechanism fully integrated into the University's governance, academic, research, and operational systems. The policy is coordinated centrally through the Sustainability Committee, operating under the strategic oversight of the Rectorate, while designated faculty focal points ensure implementation at the departmental level. Sustainability principles are embedded into planning, procurement, infrastructure development, curriculum design, research priorities, and campus operations. The implementation mechanism is supported by clearly defined KPIs, formal internal regulations, and a digital performance monitoring system that ensures accountability, cross-departmental coordination, and long-term institutional continuity.

A comprehensive set of technical, administrative, regulatory, and digital tools supports the operationalization of the policy. These include the Sustainability Committee Charter, internal sustainability regulations, and a faculty focal point system that structures governance. Environmental management is strengthened through GIS-based biodiversity mapping, species inventory databases, IUCN Red List and national conservation screening procedures, invasive species registries, habitat protection protocols, and Environmental Impact Assessment (EIA) checklists integrated into planning processes. Operational tools include green building and

sustainable construction standards, carbon inventory and energy monitoring systems, renewable energy feasibility studies, waste tracking software, plastic reduction regulations, and sustainable procurement criteria supported by supplier codes of conduct. Academic and research implementation is guided by curriculum review frameworks incorporating sustainability learning outcomes, interdisciplinary research clusters, grant monitoring systems, and innovation platforms such as green laboratories and applied research partnerships. Awareness and engagement are promoted through structured training programs, outreach initiatives, and standardized sustainability reporting templates.

Execution responsibilities are distributed across multiple institutional levels to ensure effective delivery and shared accountability. The Rectorate provides strategic leadership and approves sustainability targets, while the Sustainability Committee coordinates implementation, tracks KPIs, and prepares institutional reports. The Planning and Development Office ensures biodiversity considerations are embedded in infrastructure projects, while the Facilities and Technical Services Departments manage waste systems, energy efficiency, carbon reduction measures, and invasive species control. The Procurement Office and campus catering services implement sustainable sourcing practices, and the Public Relations Office together with student organizations lead awareness and community engagement activities. The Internal Audit Unit verifies compliance and evaluates performance against approved standards.

Monitoring and Review are conducted through a structured and evidence-based system designed to ensure continuous improvement. The University performs annual KPI reviews, environmental audits, carbon footprint calculations, energy use intensity assessments, recycling rate evaluations, hazardous waste compliance checks, and biodiversity monitoring including species population trends and habitat condition assessments. Baseline environmental and biodiversity inventories established in 2025 serve as reference points for multi-year trend analysis. Infrastructure projects undergo biodiversity screening prior to approval, and corrective action plans are developed where performance gaps are identified. Operational indicators such as waste reduction, recycling rates, and energy consumption are reviewed quarterly and annually, while broader biodiversity and ecosystem assessments are conducted every two years.

The results of monitoring activities are consolidated into an Annual Sustainability Report that presents KPI achievement rates, biodiversity conservation outcomes, carbon and waste performance data, academic integration progress, research outputs,

and corrective measures undertaken. This reporting framework ensures transparency, institutional learning, and adaptive management.

Policy Area	Mechanism	Tools	Execution Responsibility	Monitoring & Review
Governance and Institutional Framework	Establish integrated sustainability governance embedded in university management system	Sustainability Committee Charter; Internal Sustainability Regulations; Faculty Focal Point System; Digital KPI Dashboard	Rectorate; Sustainability Committee; Faculty Deans	Annual KPI review; Internal compliance audits; Governance performance assessment
Baseline Environmental and Biodiversity Assessment	Conduct comprehensive environmental and biodiversity inventory to establish benchmarks	GIS Biodiversity Mapping; Species Inventory Database; Environmental Baseline Survey Tools; Risk Assessment Matrix	Sustainability Committee; Biology and Ecology Departments; External Experts (if required)	Baseline report approval; Species richness tracking; Habitat condition assessment (biennial review)
Protection of Threatened Species	Identify and implement conservation measures for nationally and	IUCN Red List Screening; National Conservation Registry; Habitat	Research Centers; Campus Management Unit	Annual species status monitoring; Population trend analysis; Habitat

	internationally listed species	Protection Protocols; Species Monitoring Sheets		disturbance reporting
Alien & Invasive Species Management	Prevent introduction and control spread of invasive species	Invasive Species Registry; Biosecurity Guidelines; Native Landscaping Plan; Removal and Restoration Protocols	Facilities Department; Research Teams; Landscaping Contractors	Annual ecological inspection; Coverage reduction measurement (%); Restoration success rate
Integration of Biodiversity into Planning	Embed biodiversity criteria into infrastructure and land-use decisions	Environmental Impact Assessment (EIA) Checklist; Green Design Standards; Sustainable Construction Policy; Native Planting Guidelines	Planning and Development Office; Procurement Department	Pre-construction biodiversity screening; 100% compliance audit for new projects
Sustainable Food Sourcing	Introduce responsible procurement and low-carbon food supply systems	Sustainable Procurement Criteria; Supplier Sustainability Code; Local	Procurement Office; Campus Catering Services	Annual procurement audit; % of local/responsible suppliers; Plastic

		Supplier Database; Food Carbon Footprint Calculator		packaging reduction rate
Waste Management and Plastic Reduction	Implement campus-wide circular waste management system	Waste Segregation Infrastructure; Recycling Contracts; Plastic Reduction Regulation; Waste Tracking Software	Facilities Department; Sustainability Office	Recycling rate (%); Waste reduction vs. 2025 baseline; Hazardous waste compliance checks
Carbon Footprint and Energy Management	Improve energy efficiency and reduce greenhouse gas emissions	Carbon Inventory Tool; Smart Energy Monitoring System; Renewable Energy Feasibility Studies; Green Building Standards	Technical Services Department; Finance and Planning Units	Annual CO_2 emissions calculation; Energy use intensity tracking; Renewable energy share (%)
Academic Integration	Embed sustainability learning outcomes across curricula	Curriculum Review Framework; Sustainability Module Templates;	Academic Affairs Office; Faculties	% of programs with sustainability outcomes; Student enrollment

		Academic QA Tools; Digital Learning Platform		statistics; Course evaluation surveys
Research and Innovation	Strengthen sustainability-focused interdisciplinary research capacity	Research Cluster Platform; Grant Tracking System; Green Innovation Lab; Partnership MOUs	Research & Innovation Office	Number of funded projects; Peer-reviewed publications; Growth in external research funding (%)
Awareness and Community Engagement	Promote sustainability culture within and beyond campus	Green Campus Days; Training Workshops; Outreach Programs; Communication Campaigns; Digital Engagement Tools	Public Relations Office; Student Organizations; Sustainability Committee	Participation rate; Number of events; Satisfaction surveys; Community engagement metrics
Monitoring, Evaluation and Continuous Improvement	Establish adaptive management and performance review system	Sustainability KPI Framework; Environmental Audit Checklist; Annual Sustainability Report	Sustainability Committee; Internal Audit Unit	KPI achievement rate; Audit findings closure rate; Benchmark comparison with 2025 baseline;

		Template; Corrective Action Tracker		Annual performance review

ACHIEVEMENTS

The achievements outlined in this section demonstrate BSU's concrete progress in advancing sustainability and biodiversity through academic, research, institutional, and community-based initiatives. These accomplishments reflect the University's active engagement in national and international environmental priorities, as well as its commitment to scientific collaboration, policy development, and practical environmental solutions.

1. Professors from the Faculty of Biology of BSU participated in a roundtable in Lankaran dedicated to the 21st anniversary of Hirkan National Park, organized by the Biodiversity Protection Service under the Ministry of Ecology and Natural Resources. The event brought together representatives from universities, research institutes, regional tourism authorities, and World Wide Fund for Nature to discuss biodiversity conservation and scientific cooperation. Participants emphasized the ecological significance of the Hirkan forests and highlighted the importance of protecting its rare ecosystems and promoting its recognition within the UNESCO World Heritage framework.
   For more information click link please: BSU staff participates in the event dedicated to the 21st anniversary of the creation of Hirkan National Park
2. Employees of the Biodiversity Conservation Service of the Ministry of Ecology and Natural Resources held a training session at the Faculty of Ecology and Soil Science of BSU on January 11 in observance of World Reserves and National Parks Day. The speakers provided detailed information about specially protected natural areas and recent developments, including the planned establishment of a Geopark based on the Absheron Mud Volcanoes State Nature Reserve and a Biosphere Reserve based on the Zagatala State Nature Reserve. They also discussed the creation of new protected areas such as Bozdag National Park and Ilisu National Park.
   For more information click link please: A training session at BSU dedicated to World Reserves and National Parks Day

3. On November 19, 2025, a scientific seminar was held at the Faculty of Ecology and Soil Science of BSU, where Şahnaz Amanova presented her research on climate-adaptive city management using the case of Shirvan. Through GIS technologies and analysis of Landsat and Sentinel satellite data from 1975 to 2025, she identified urban heat islands and assessed the impact of natural and human factors on the city's climate. The study produced a climate risk zoning map highlighting areas vulnerable to floods, heat waves, and drought, and proposed management models to reduce these risks.
   For more information click link please: Scientific seminar held: Climate-adaptive cities: management models for reducing heat risks
4. The Student Scientific Society of BSU launched a seminar series within the framework of the "Year of Solidarity for the Green World," bringing together multiple faculties to promote the national priority of a clean environment and green growth by 2030. Students presented topics on sustainable urban planning, green infrastructure, innovative technologies, renewable energy, green fuels, and the environmental and historical dimensions of human development. The seminar emphasized reforestation, efficient resource use, renewable energy systems, and environmentally responsible practices as key components of sustainable development in Azerbaijan.
   For more information click link please: The student scientific society of BSU launches seminar in commemoration of the year of solidarity for a Green World
5. The Biological Faculty of BSU held a scientific seminar titled "Increasing the Number of Plant Species Resilient to Environmental Stress in Azerbaijan," presented by Associate Professor Zulfiya Mammadova. She emphasized the significance of 2024 as the "Year of Solidarity for the Sake of a Green World," the country's green growth priorities until 2030, and the hosting of COP29, highlighting the responsibilities of biologists in this context. The seminar discussed resilient plant species suitable for national greening efforts and recommended planting evergreen trees and restoring floristic diversity in areas environmentally damaged during the occupation.
   For more information click link please: BSU hosts scientific seminar titled Increasing the number of plant species resilient to environmental stress in Azerbaijan
6. During the final meeting of the Scientific Council of BSU for the 2023/2024 academic year, a decision was made to establish the ECOLEAD Clinic to investigate and prevent environmental violations more effectively. On June 24,

2024, an agreement on the ECOLEAD project was signed in Khankendi between the Prosecutor General's Office, the Ministry of Ecology and Natural Resources, and BSU to strengthen cooperation in environmental protection.
For more information click link please: Establishment of the ECOLEAD Clinic at BSU

7. A memorandum of understanding was signed between BSU and the Biological Diversity Protection Service of the Ministry of Ecology and Natural Resources to strengthen cooperation in biodiversity protection, education, and research. During the ceremony, Rector Elchin Babayev highlighted the significance of Azerbaijan hosting COP29 and emphasized that the "Year of Solidarity for the Green World" increases the responsibilities of state and higher education institutions in advancing sustainable development. The memorandum предусматрuеs joint scientific research, student internships, involvement of experts in the educational process, and the organization of academic events and environmental projects to support evidence-based policymaking and national environmental priorities.
For more information click link please: A memorandum of understanding was signed with the Biological Diversity Protection Service
8. BSU is committed to fostering a socially responsible and green campus environment by integrating the principles of environmental responsibility, ethical conduct, and sustainable development into all of its academic and administrative activities. The University promotes sustainable consumption and efficient resource use through initiatives such as the EcoEnergy renewable energy station, the Eco Space research area, a food waste monitoring system, and various waste reduction campaigns. The Ethical Sourcing, Waste Management, and Sustainable Use Policy consolidates these efforts within a unified institutional framework, ensuring transparent procurement, waste minimization, and continuous improvement.
For more information click link please: Ethical Sourcing, Waste Management, and Sustainable Use Policy

PLANED ACTIVITIES

The 2025–2030 Impact and KPI Framework of the Sustainability and Biodiversity Policy establishes a structured, measurable pathway for institutional

transformation at BSU. Building on the 2025 environmental baseline, the framework translates policy commitments into quantifiable targets across governance, biodiversity protection, waste management, carbon reduction, academic integration, research development, and community engagement. It is designed to move the University progressively from foundational structural reforms (2025–2026), through performance acceleration (2027–2028), toward full institutionalization and measurable long-term impact by 2030.

Environmentally, the framework aims to transform the campus into a biodiversity-supportive and ecologically resilient model. Beginning with a comprehensive biodiversity inventory and GIS-based ecosystem mapping in 2025, BSU establishes measurable benchmarks for species richness, habitat condition, invasive species coverage, and native plant composition. By 2030, the University targets at least a 20% increase in species richness compared to the 2025 baseline, restoration of degraded ecological zones, a minimum of 50% native species coverage in green areas, and an 80% reduction in invasive species presence. All new infrastructure projects are required to undergo biodiversity screening and comply fully with green design standards, ensuring that campus development aligns with ecosystem protection and long-term environmental sustainability.

In parallel, the waste management and circular economy framework introduces campus-wide source separation systems, digital waste tracking, and plastic reduction regulations. By the end of the period, BSU aims to achieve a recycling rate of at least 70%, reduce total waste generation by 40% compared to the 2025 baseline, and cut single-use plastics in campus operations by 50% in the short term. Hazardous waste handling is brought into full regulatory compliance, supported by internal audits and monitoring systems. These measures collectively shift the University toward advanced circular resource management practices.

Carbon footprint and energy management form another central pillar of the impact framework. Following the establishment of a 2025 greenhouse gas inventory, the University commits to a minimum 40% reduction in CO_2 emissions by 2030. Energy use intensity is targeted to decrease significantly through efficiency upgrades, smart monitoring systems, and renewable energy feasibility integration. All new buildings are required to meet green construction standards, reinforcing the long-term transition to a low-carbon campus model consistent with national and international climate objectives.

Academically, the KPI framework embeds sustainability as a core institutional competency. Initial curriculum revisions in 2025–2026 introduce sustainability

modules across multiple programs, with at least 5,000 students annually enrolled in sustainability-related coursework. By 2029–2030, sustainability becomes a mandatory university-wide learning outcome, ensuring that 100% of undergraduate students complete sustainability-related academic components. A formal minor or specialization in Sustainable Development is launched, while measurable sustainability learning outcomes are incorporated into at least 30% of academic programs during the medium-term phase.

Research and innovation indicators further position the University as a national leader in biodiversity and sustainability scholarship. Interdisciplinary research clusters are established early in the framework period, followed by growth in externally funded environmental projects and applied research partnerships with government and industry. By 2030, BSU targets at least 50 peer-reviewed publications annually in sustainability-related fields and active participation in multiple international sustainability networks. These research KPIs strengthen scientific output, attract funding, and enhance institutional visibility in environmental research domains.

Institutional governance underpins the entire framework. The Sustainability Committee, faculty focal point system, digital KPI dashboard, and internal regulatory instruments ensure structured implementation and accountability. Annual sustainability reporting begins in 2027, consolidating data on biodiversity, waste, energy, research, academic integration, and community engagement. Sustainability KPIs are progressively embedded into the University's strategic planning processes, culminating in full integration within the 2030+ Strategic Plan. Continuous internal audits and corrective action mechanisms support adaptive management and long-term institutional resilience.

Social and community impact indicators reinforce the cultural dimension of sustainability. Through annual "Green Campus Days," training programs, outreach initiatives, and student-led innovation platforms, BSU promotes widespread engagement in environmental responsibility. Participation rates, satisfaction surveys, and outreach metrics are tracked to ensure meaningful involvement. By 2030, the University aims to achieve national recognition as a Green University and secure membership in at least one recognized green university alliance, reflecting both institutional credibility and public trust.

Overall, the 2025–2030 Impact and KPI Framework converts the Sustainability and Biodiversity Policy into a performance-driven institutional transformation

agenda. It establishes clear baselines, measurable targets, defined execution responsibilities, and systematic monitoring cycles.

SHORT TERM GOALS (2025-2026)

Category	Key Activities	Duration	Expected Outcomes	KPI (Key Performance Indicator)
Structural Reform	Conduct environmental baseline assessment and biodiversity inventory	2025	Clear understanding of environmental status	Baseline report approved by Rectorate; 100% campus zones assessed; GIS biodiversity map completed
	Identify invasive and at-risk species	2025	Priority species list established	Official invasive species registry created; Annual monitoring protocol adopted
	Install waste segregation infrastructure	2025-2026	Functional recycling system across campus	Waste sorting bins installed in 100% buildings; ≥30% waste separated at source by end 2026
	Approve internal regulation reducing single-use plastics	2025	Reduced plastic dependency	50% reduction in single-use plastics in cafeterias and events (vs 2024 baseline)
	Establish Sustainability Committee and faculty focal points	2025	Clear governance structure	Committee operational; Sustainability focal person assigned in 100% faculties

	Develop sustainable procurement criteria (food and supplies)	2026	Responsible purchasing framework	≥40% food sourced from local/responsible suppliers; Sustainability clause included in 100% new procurement contracts
Academic	Integrate sustainability modules into general courses	2025-2026	Students exposed to sustainability concepts	≥10 programs revised; ≥5000 students annually enrolled in sustainability-related courses
	Staff and student sustainability training sessions	Annual	Increased awareness	≥3000 participants annually; ≥70% satisfaction rate in feedback surveys
Research	Establish interdisciplinary sustainability research cluster	2025	Coordinated research structure	≥4 interdisciplinary research groups formed
	Launch invasive species monitoring research	2026	Data-driven ecological management	1 annual monitoring report; At least 2 student theses linked to project
Social Activities	Organize "Green Campus Days" and awareness campaigns	Annual	Increased campus engagement	≥20 events per year; ≥10000 participants annually

MEDIUM TERM GOALS (2027–2028)

Category	Key Activities	Duration	Expected Outcomes	KPI

Structural Reform	Integrate biodiversity criteria into campus infrastructure projects	2027	Sustainable construction standard	100% new projects comply with green design criteria
	Expand planting of native species and restore degraded areas	2027-2028	Improved campus ecosystem	30% increase in native plant coverage (vs 2025 baseline); ≥5 degraded areas restored
	Increase recycling efficiency and reduce total waste	2027-2028	Improved waste performance	≥50% recycling rate; 25% reduction in total waste (vs 2025)
	Conduct annual environmental audits and publish sustainability report	Annual from 2027	Transparency and accountability	Annual sustainability report published; ≥80% KPI targets tracked annually
Academic	Integrate sustainability learning outcomes across curricula	2027-2028	Systematic academic integration	≥30% academic programs include measurable sustainability outcomes
	Launch minor/specialization in Sustainable Development	2027	Formal academic pathway	≥200 students enrolled annually

Research	Increase external funding in sustainability research	2027-2028	Strengthened research capacity	20% increase in environmental research grants (vs 2025)
	Develop applied research projects with government/industry	2027-2028	Practical environmental solutions	≥10 applied sustainability projects; ≥5 institutional partnerships
Social Activities	Community biodiversity outreach programs	2027-2028	Regional environmental impact	≥15 outreach programs annually; Engagement in ≥5 local communities
	Establish Green Innovation Lab	2028	Student-driven sustainability innovation	≥10 student-led sustainability projects annually; ≥2 prototype solutions developed

LONG TERM GOALS (2029–2030)

Category	Key Activities	Duration	Expected Outcomes	KPI
Structural Reform	Embed sustainability KPIs into university strategic plan	2029	Full institutionalization	Sustainability integrated into Strategic Plan 2030+
	Transform campus into biodiversity-supportive model	2029-2030	Ecologically resilient campus	≥50% green areas composed of native species;

				20% increase in species richness (vs 2025)
	Reduce carbon footprint	2029-2030	Lower climate impact	≥40% reduction in CO_2 emissions (vs 2025 baseline)
	Achieve high recycling and waste reduction rate	2029-2030	Advanced circular economy practices	≥70% recycling rate; ≥40% reduction in total waste generation
	Control invasive species population	2029-2030	Ecosystem stabilization	≥80% reduction in invasive species coverage (vs 2025 baseline)
Academic	Make sustainability a mandatory university-wide competency	2029-2030	Fully integrated education model	100% undergraduate students complete sustainability-related coursework
Research	Position BSU as national leader in biodiversity and sustainability research	2029-2030	Academic leadership	≥50 peer-reviewed publications annually in sustainability fields; Participation in ≥3 international sustainability networks
Social Activities	Achieve national and regional recognition as Green University	2029-2030	Institutional reputation	National award or recognition obtained; Membership in at least 1 recognized green university alliance

The policy goes beyond isolated environmental actions by embedding sustainability into institutional governance, strategic planning, academic programming, research activities, infrastructure development, and daily operational practices.

Within this framework, land use and campus planning are guided by ecological sensitivity and long-term environmental responsibility. All new construction and renovation projects apply green design standards, prioritize the preservation of existing green spaces, prevent soil degradation, and promote the use of native and climate-adapted plant species. Activities related to forests and natural areas associated with the campus are conducted in a manner that protects ecosystem integrity, reduces land degradation, and supports habitat restoration and ecological resilience.

Species protection represents a core pillar of the policy. The University conducts systematic monitoring of flora and fauna within campus boundaries and areas influenced by its operations. Scientifically grounded assessment mechanisms are used to identify at-risk and protected species, while development projects undergo biodiversity screening to evaluate potential impacts. Preventive and mitigation measures are implemented to minimize ecological disturbance. In addition, structured management strategies are applied to prevent the introduction and spread of alien and invasive species, ensuring the protection of native ecosystems.

Waste management and plastic reduction measures further strengthen the University's environmental performance. The policy promotes efficient resource use and the implementation of circular economy principles through source separation systems, recycling mechanisms, safe hazardous waste handling, and the gradual reduction of single-use plastics.

The policy also ensures the integration of sustainability into education and research. Sustainability and biodiversity topics are incorporated into academic curricula, equipping students with environmental knowledge, ethical awareness, and responsible decision-making skills. Research initiatives are encouraged to address environmental challenges, promote innovation in sustainable solutions, and contribute to evidence-based policymaking.

Overall, the policy consolidates governance systems, operational procedures, infrastructure planning, academic frameworks, and community engagement within a unified sustainability framework.