



Baku State University

2025 REPORT ON

**12 RESPONSIBLE
CONSUMPTION
AND PRODUCTION**





INTRODUCTION

The report highlights Baku State University's (BSU) comprehensive efforts to promote responsible consumption and production (SDG 12) and integrate sustainability into its operations.



It outlines key policies and practices, including a Sustainable Procurement Policy. BSU actively encourages recycling, reduction of single-use plastics, and minimizing paper consumption.

The university collaborates with local partners, engages in education and training, and collects data to

support informed waste management decisions. Through these initiatives, BSU demonstrates its commitment to sustainable practices, ethical food sourcing, and environmental protection within its campus community.



BSU recognizes the importance of sustainable development. This Sustainable Procurement Policy outlines our commitment to integrating Environmental, Social, and Governance factors into our investment decisions and aligning our investments with the United Nations SDGs.

According to the sustainability investment policy of BSU the goal is to generate long-term financial returns while contributing to a more sustainable and equitable future. Management to waste disposal can help planners study objectively and make



rational decisions as to the best alternative strategic options of managing, recovering, and utilizing the vast quantity of solid waste is a very important investment.



In BSU, waste disposal is effectively managed and typically includes the following categories: municipal waste, hazardous waste, radioactive waste, biological waste and sharps. Each waste category must be handled and managed according to established procedures and work practices. Liquids, chemical waste, including stock containers with unused product, do not being placed in the municipal waste. All sharps are in an appropriate, puncture-resistant container to prevent injuries.

The main policy addressing the issues of Responsible Consumption and Production is reflected in the BSU Sustainable Procurement Policy (SPP).

Since BSU considers the SDGs as criteria for selecting procurement, the SPP is based on the idea of creating a procurement system that considers and minimizes negative impacts on society and the environment. It is within this policy that, for example, the use of plastic bottles is prohibited in canteens operating in different buildings. Separate trash cans for plastic and paper waste are installed in the university buildings and courtyards.



Disposal of all university waste is subject to the Sustainable Procurement Policy (SPP) and is handled through outsourcing. The legal basis for this policy is not only the legislation of the Republic of Azerbaijan, but also international standards, including those related to this topic. All concluded waste disposal agreements comply with sustainable development goals and standards.



The University's Sustainable Procurement Policy (SPP) prohibits the use of all plastic bottles in university dining facilities. Lessons in the courses “Ecology”, “Organic Chemistry”, “Sustainable Development”, etc. provide detailed information about the role of plastic in earth pollution; Students are encouraged to minimize their consumption of plastic containers not only on campus but also off campus.

The British Embassy organized a campaign “Plastic-Free July” to reduce the use of single use plastic bags together

with the IDEA Public Union. The British Embassy in Baku and the IDEA Public Union encourage everyone to give up single use plastic items, including plastic bags, and to use environmentally friendly and sustainable alternatives, for the benefit of present and future generations. Students of the Faculty of Ecology and Soil Science of BSU also took part in the Challenge.



In many waste management systems, there are options of landfill disposal and recycling. BSU mostly tries to minimize the amount of waste sent to landfills and maximize recycling. The university promotes recycling and reduce waste generation. We are using different forms of recycling bins throughout the campus with labels on them. Also, our goal is to encourage the use of reusable containers.

Goals of sustainability investment policy can be achieved through various strategies, such as promoting sustainable consumption patterns, encouraging product



design for longevity and recyclability, and implementing effective waste prevention measures.



An International Scientific Conference on the topic Application of Modern Equipment and Methods in Improving Food and Water Security is being held at BSU

Within the framework of the international scientific conference hosted by Baku State University, the role of public-private partnerships in food and water security, alongside the implementation of innovative technologies, was deliberated. During the sessions, participants examined advanced analytical methodologies, including Atomic Absorption Spectroscopy (AAS) and Inductively Coupled Plasma Mass





Spectrometry (ICP-MS), while gaining insights into novel approaches in ecology and waste management. The event facilitated the strengthening of knowledge and expertise exchange between the research and teaching laboratories of Baku State University and industrial partners.

For more information please [click](#).

BSU staff participates in the event dedicated to the 21st anniversary of the creation of Hirkan National Park

Professors and specialists from the Faculty of Biology at Baku State University participated in a roundtable held in Lankaran to commemorate the 21st anniversary of the establishment of Hirkan National Park. The discussions focused on the conservation of the



national park's endemic flora and fauna, the advancement of ecotourism, and the expansion of scientific research frameworks. Furthermore, the strategic importance of the Hirkan Forests' inclusion in the UNESCO World Heritage List was emphasized as a key milestone for biodiversity preservation.

For more information please [click](#).

BSU has been awarded 5 stars in the "QS Stars" audit evaluation

Baku State University (BSU) has been awarded a "5 Stars" (Excellent) rating in the international audit conducted by QS Quacquarelli Symonds. The university received high evaluations across key performance indicators, including teaching, academic development, infrastructure, graduate employability, environmental impact,



inclusiveness, and governance. This achievement validates BSU's operational alignment with international standards and its commitment to the principles of sustainable development and innovative management, significantly enhancing the institution's global academic reputation.

For more information please [click](#).



A professor from Akdeniz University delivered a lecture at BSU on the preservation of quality in fruits and vegetables

A seminar entitled "New Approaches to Preserving the Quality of Fresh Fruits and Vegetables" was convened at Baku State University. Professor Mustafa Erkan delivered a comprehensive presentation on



the long-term preservation of product freshness, optimization of storage conditions, bioengineering solutions, and ecologically sustainable methods for combating phytopathology.



The session facilitated high-level scientific deliberations, focusing on the integration of advanced technologies, quality assurance



protocols, and the promotion of environmental sustainability within the agricultural supply chain.

For more information please [click](#).

Development history and contemporary issues of Agricultural Sciences in Azerbaijan discussed at BSU

The seminar held at the Faculty of Ecology and Soil Science of BSU was dedicated to the "Historical Development and Contemporary Issues of Agricultural Sciences in Azerbaijan." Akif Valiyev presented the history of agricultural sciences in the country, modern research directions, and the efficient use of soil and agricultural resources. Furthermore, the



scientific and practical aspects of projects within the "Great Return" program in the



Karabakh and East Zangezur economic regions were highlighted. During the seminar, student inquiries were addressed, and development prospects for future agricultural and ecological projects were discussed.

For more information please [click](#).



BSU students visit "Clean city" ASC

Within the framework of "Sustainable Development Goals Week," students from Baku State University (BSU) visited "Tamiz Shahr" JSC to gain insights into waste management, recycling processes, and environmental awareness. The participants observed the operations of the Baku Solid Waste Incineration Plant at the Balakhany Industrial Park and obtained technical information regarding plastic molding, oil production, and waste recycling technologies. The visit demonstrated the practical application of environmental protection and sustainable production principles. **For more information please [click](#).**



The project IRRIGO - Sustainable Agricultural Ecosystem which will be established on the BBSU campus, will be featured in the finals of the TEKNOFEST 2025 SHC

The project "Irrigo – Sustainable Agricultural Ecosystem," presented by the "BSU TETYM" team of Baku State University, was highly commended at the TEKNOFEST TRNC festival and advanced to the final stage. The project facilitates the treatment, recycling, and preparation of wastewater for irrigation purposes, offering innovative solutions based on IoT (Internet of Things) and "Smart Village" concepts. The prototype, website, and mobile application are being developed by BSU students. **For more information please [click](#).**





The first workshop of the project titled "Application of Artificial Intelligence in Precision Agriculture" organized by the Agricultural Innovation Center at BSU has been held

The inaugural seminar within the project "Application of Artificial Intelligence in Precision Agriculture" was held at Baku State University. The project aims to ensure the intelligent management of soil, water, and natural resources through the integration of Artificial Intelligence (AI), while promoting innovative technologies and empowering youth potential. The event was attended by representatives from universities, agro-parks, and the private sector. Key discussion topics included current technological innovations, "Smart Village" and IoT systems, the practical application of scientific research, and the economic integration of AI within the agricultural sector.



For more information please [click](#).

A training titled Student Contribution to SDG was organized at BSU

A training session titled "Students' Contribution to Sustainable Development Goals" was conducted at Baku State University. The program aimed to enhance awareness of the SDGs among students, encourage their active participation, and support the integration of these goals within the university framework. During the event, initiatives such as the establishment of student clubs, the organization of educational events, and the implementation of social projects were discussed.



For more information please [click](#).



A scientific seminar on the topic of Synthetic Biology was held at BSU



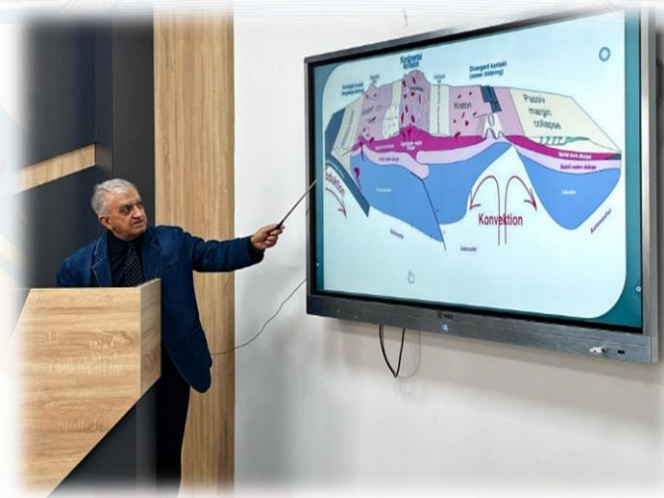
A scientific seminar on the subject of "Synthetic Biology" was convened at the Faculty of Biology of Baku State University. During the presentation, student Nargiz Garayeva provided insights into the fundamental principles, applications, and future perspectives of synthetic biology. It was emphasized that this field enables the

fulfillment of consumer demand while simultaneously safeguarding human health through innovative biological engineering. The seminar concluded with a session of interactive academic discussions.

For more information please [click](#).

An International Earth Day has been celebrated at BSU

A scientific seminar dedicated to "International Earth Day" was organized by the Faculties of Geology and Geography at Baku State University. The event aimed to emphasize the importance of ecological stability, promote the efficient utilization of natural resources, and deliberate on contemporary challenges within the fields of geology and geography. The seminar featured academic presentations on earthquake forecasting, geomatics, environmental monitoring, and sustainable regional development.



The seminar featured academic presentations on earthquake forecasting, geomatics, environmental monitoring, and sustainable regional development.

For more information please [click](#).



Information session on the international startup acceleration program Green and Digital Silk Road at BSU



An information session regarding the "Green and Digital Silk Road" international startup accelerator program was held at Baku State University. The session provided participants with comprehensive details on the program's objectives, including the support of startups in green and digital technology sectors, the enhancement of regional cooperation, and

strategies for investment attraction. The event also featured a briefing on registration procedures, opportunities for collaboration with international mentors, and a specialized Q&A session.

For more information please [click](#).

BSU students learn ways to protect the environment

An event titled "Protect the Environment! Care for It!" was organized at Baku State University. The discussions focused on human-nature relations through historical and geological perspectives, the efficient utilization of underground and surface resources, the preservation of ecological balance, and the significance of civic engagement. The event centered on the environmental education of youth and concluded with the screening of an instructional video.



For more information please [click](#).



An event titled “Green Economy” held at BSU



A dedicated event on the theme of the "Green Economy" was convened at Baku State University. The discussions encompassed the strategic role of the green economy in land and resource management, ecologically sustainable agricultural paradigms, opportunities for international cooperation, and environmental

awareness initiatives for youth. The proceedings concluded with the presentation of formal proposals for the institutional implementation of green economy principles at the university level.

For more information please [click](#).



Opening of the Materials science research laboratory held at BSU

The Materials Science Research Laboratory has been established within the Center of Excellence at Baku State

University. Equipped with state-of-the-art





instrumentation, the laboratory enables advanced scientific research in the fields of chemistry, materials science, geology, nanotechnology, construction materials, and the analysis of industrial waste. During the inauguration, the importance of the facility was emphasized regarding the involvement of youth in scientific activities, the strengthening of university-industry collaboration, and the commercialization of research outcomes.



For more information please [click](#).

“PASHA Holding” conducts a training session for BSU students

A training session titled "Government Relations and Corporate Social Responsibility" was held at Baku State University. During the session, the core essence of Corporate Social Responsibility (CSR) was explained, covering its economic, environmental, ethical, and philanthropic models, as well as the role of CSR in contributing to sustainable development. The session also facilitated discussions on collaboration with government agencies, international best practices, and initiatives aimed at enhancing societal welfare.



For more information please [click](#).

EcoDay-2025 competition at BSU dedicated to World Environment Day

The "Bioteam" club of the Faculty of Biology at Baku State University organized the "EcoDay-2025" contest and exhibition dedicated to World Environment Day. The event featured projects constructed from recycled materials, emphasizing the importance of increasing ecological responsibility among students and promoting SDG 12: Responsible Consumption and Production. In addition to fostering youth creativity, "EcoDay-2025" contributed to the formation of ecological thinking and sustainable behavioral patterns.



For more information please [click](#)



Scientific seminar at BSU: Carbon credit market and potential opportunities

The Nano-Research Scientific Laboratory of Baku State University (BSU) hosted a scientific seminar entitled "Carbon Credit Market and



Potential Opportunities." The seminar addressed critical themes such as climate change, the reduction of carbon emissions, the fundamental mechanics of carbon credit systems, and global best practices. Particular emphasis was placed on the emerging opportunities for Azerbaijan following the COP29 summit. The event highlighted the strategic importance of strengthening collaboration between scientific research institutes, government bodies, and the private sector.

For more information please [click](#).



Scientific seminar at BSU: "Fifth industrial revolution: Current Situation and Future Prospects"

The Nano-Research Scientific Laboratory of Baku State University

(BSU) hosted a scientific seminar titled "The Fifth Industrial Revolution: Current State and Future Perspectives." The seminar addressed the human-centric approaches of Industry 5.0, applications of ethical artificial intelligence, green technologies, and the





principles of social justice. Additionally, Azerbaijan's strategic position within this global transition was discussed. The event contributed to the identification of future research priorities in the fields of technology and industry.

For more information please [click](#).

BSU student wins the “Azad Mirzajanzade Development Program” of RiİB

Saida Rahimli, a fourth-year student at the Faculty of Ecology and Soil Science of Baku State University (BSU), has become a winner of the "Azad Mirzajanzade Development Program" organized by the Regional Development Public Union (RiİB). Her project, titled “CMC-Vessel,” was selected as one of the 10 winning projects from over 100 applications nationwide and secured financial support. The project focuses on cleaning oil-based pollution and plastic waste in the Caspian Sea; the prototype, based on chemical methods and artificial intelligence applications, will be developed at BSU's Student Scientific-Technical Creativity Center. Since its implementation in 2023, the program has supported a series of successful initiatives in social, environmental, educational, and innovation fields.

For more information please [click](#).



Opening ceremony of the UN Local Conference of Youth on Climate Change – “LCOY Azerbaijan 2025” held at BSU

The opening ceremony of the UN Local Conference of Youth on Climate Change - "LCOY Azerbaijan 2025" - was held at Baku State University (BSU). Organized by the "EkoSfera" Social-Ecological Center in partnership with BSU



and SEA BREEZE Resort, and with media support from CBC, the first day of the



conference brought together over 150 young climate leaders, government agencies, international organizations, and leading experts.

For more information please [click](#).

National Youth Climate Statement of Azerbaijan adopted at the UN Local Conference of Youth on Climate Change

The second day of the UN Local Conference of Youth on Climate Change - "LCOY Azerbaijan 2025" - has taken place. Organized by the "EkoSfera" Social-Ecological Center in partnership with



BSU and SEA BREEZE Resort, and supported by CBC media, the event highlighted the active participation of youth in the global climate agenda.

For more information please [click](#).



Research by Azerbaijani scientists on nanoparticles presented at an international conference in Pakistan

The 1st International Conference on Nanoscience and Nanotechnology (ICNN-1) was held at the International Center for Chemical and Biological Sciences of the



University of Karachi, Islamic Republic of Pakistan. At the conference, a joint research study titled "Study of the Effect of Metal Nanoparticles on the Reproductive Processes of Fish" was presented. The research was conducted by Chingiz Mammadov, Associate Professor of the Department of Zoology and

Physiology at the Faculty of Biology, Baku State University, in collaboration with researchers from the Institute of Biotechnology of ANAS. The presentation was awarded a certificate in recognition of its scientific contribution. The study contributed to understanding the anthropogenic impacts on aquatic ecosystems, highlighted the importance of environmental safety and sustainable management of nanomaterials, and supported the development of evidence-based policies and strategies for mitigating ecological risks.

For more information please [click](#).

BSU participates in "Sustainability Exhibition: Art and Innovation for the Planet"

Baku State University participated with two innovative projects in the "Sustainability Exhibition: Art and Innovation for the Planet" event held as part of "Baku Climate Action Week." The "Irrigo" project aimed at conserving water resources, treating wastewater for reuse in irrigation, and establishing an ecological circular system, while the "Hydroponics" project promoted the transition to sustainable agriculture and efficient resource use through the application of soilless cultivation technologies. At the exhibition, the "Irrigo" project was selected among the top six



contribution to sustainable production

projects and was awarded a certificate for its



and green innovation.

For more information please [click](#).



Training for BSU students: “Modern Geotechnologies and Mineral Resource Processing”

A training session titled "Modern Geotechnologies and Processing of Mineral Raw Materials" was organized for students at Baku State University. The training covered topics such as the stages of mineral deposit



processing, the application of innovative technologies, and ensuring environmental safety within production processes. The





event served to enrich students' scientific knowledge with practical experience and to foster new approaches toward sustainable resource utilization.

For more information please [click](#).

BSU students present their startups within the project “Application of artificial intelligence in precision agriculture”

Baku State University students presented their startup within the framework of the project "Application of Artificial Intelligence in Precision Agriculture." During the event, an innovative system named



"AgroScan" aimed to monitor plant health and soil conditions at an early stage using



hyperspectral analysis and artificial intelligence, delivering real-time data to farmers via a mobile application. The project contributed to increasing productivity through efficient resource utilization and the development of ecologically sustainable agriculture.

For more information please [click](#).



Seminar on “18 October – Restoration of Independence” held at the faculty of Geography

A scientific seminar titled “Food Security Issues of the Republic of Azerbaijan” was held at the Faculty of Geography. The seminar contributed to the optimization of the balance between production and consumption, the efficient use of resources, and the strengthening of the sustainability of the food supply chain. Moreover,



the initiative played a significant academic platform role in reinforcing the structural



foundations of food security and in shaping scientifically grounded approaches to the sustainable development of the national economic system.

For more information please [click](#).

“Waste-for-Gifts” festival held at BSU



A new edition of the "Gift for Waste" festival was held at Baku State



University. The purpose of the event was to promote proper waste



management, sorting, and a culture of recycling, as well as to increase the active participation of youth in environmental initiatives.



During the festival, participants handed over thousands of liters of plastic and glass

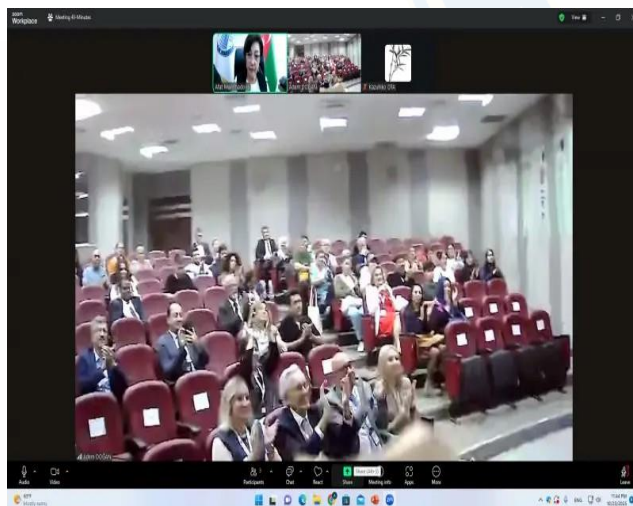


waste, as well as used batteries, contributing to the strengthening of a responsible approach toward the environment.

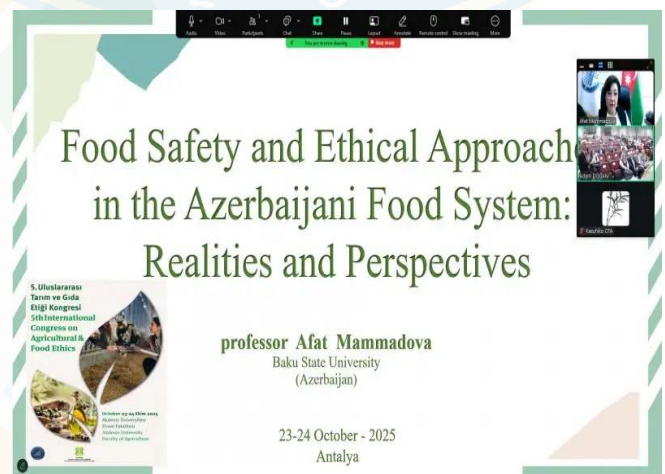
For more information please [click](#).

Dean of the faculty of Biology represents Azerbaijan's Food Safety Sector on an international scientific platform

Afət Məmmədova, Dean of the Faculty of Biology at Baku State University, delivered a presentation at the 5th International Congress on Agriculture and Food Ethics, hosted by Akdeniz University.



The congress brought together scholars, experts, and professionals from the food sector representing various countries, providing a platform for discussing contemporary issues related to food ethics, food safety, and the development of sustainable food systems.





The event promoted the exchange of knowledge on safe and sustainable food systems, encouraged the implementation of ethical practices within the food sector, and highlighted Azerbaijan's contributions to global food safety governance.

For more information please [click](#).

Visit of BSU students to “Herba-Flora” LLC for practical training

Fourth-year students majoring in Food Engineering at Baku State University participated in a practical training session on technological processes in the food industry at "Herba-Flora" LLC. During the training, students became closely acquainted with the setup of modern technological production lines, the operating principles of equipment, quality preservation, and the processes of product packaging and transportation. This activity served to promote sustainable production approaches and the efficient use of resources through education.



For more information please [click](#).

Scientific seminar on the application of green chemistry principles in secondary school chemistry lessons held



A scientific seminar on “The Application of Green Chemistry Principles in Secondary School Chemistry Lessons” was held at the Faculty of Chemistry. The seminar emphasized the importance of an ecological approach in chemistry education, efficient use of resources, and safe experimental practices.

The event continued with active discussions and contributed to the integration of green chemistry principles into the educational process.

For more information please [click](#).



Student Scientific Society seminar held

The Student Scientific Society (SSS) of the Faculty of Ecology and Soil Science at Baku State University organized a scientific seminar.



During the seminar, second-year master's students from the Department of Environmental Chemistry presented the results of their research. Banu Huseynova delivered a presentation entitled “Analysis of

the Physicochemical Parameters of Water Samples from the Hekeri River,” while Aydan Imanova presented her study on “Determination of Cobalt, Zinc, and Iron in Local and Imported Fruits.”

The presentations stimulated active discussion among participants, who raised questions and engaged in scholarly dialogue on the research topics. At the conclusion of the seminar, the presenters were awarded certificates and received books as commemorative gifts.

For more information please [click](#).



Scientific seminar on the ecological problems caused by the mining industry

A scientific seminar on “Investigation of Ecological Problems Caused by the Mining Industry in the Dashkasan District Using GIS Technology” was held at the Faculty of Geography. The seminar contributed to understanding the environmental impacts of the mining industry and promoting sustainable resource management. It highlighted the role of GIS technology in environmental monitoring, risk assessment,



and ecological rehabilitation, supporting informed decision-making for the



protection of terrestrial and aquatic ecosystems and sustainable development.

For more information please [click](#).

Training on “Modern Approaches to Solid Waste Management” held at BSU

Baku State University (BSU) organized a training session entitled “Modern Approaches to Solid Waste Management” through the BSU Volunteers initiative. The session was delivered by Orkhan Jabbarov, Head of Department at Tamiz Shahr OJSC.



The training focused on promoting environmentally responsible thinking, strengthening environmental

awareness, encouraging proper waste management practices, and emphasizing the importance of recycling in sustainable development.





During the event, it was also announced that BSU has joined the “Card to Art” project initiated by Tamiz Shahar OJSC. Within the framework of the project, collected plastic cards are transformed into artistic works. Special collection boxes have been installed in the university’s buildings, and the artworks produced from these materials will be exhibited at the “From Waste to Art” Museum under the Heydar Aliyev Foundation.



For more information please [click](#).

Scientific seminar held: Ecological aspects of the use of polyene antibiotics in plant protection

A scientific seminar entitled “The Role of Polyene Antibiotics in Plant Protection” was held at Baku State University. The presentation was delivered by Vafa Gasimova, Associate



Professor of the Department of Soil Science and Real Estate Cadastre.

The seminar addressed global and national challenges related to increasing agricultural productivity and improving crop quality, emphasizing the importance of environmentally safe plant protection products. Dr. Gasimova’s research focused on eco-friendly strategies that utilize specific soil microorganisms-particularly



Actinomycetes-to produce biologically active polyene antibiotics effective against pathogenic bacteria and fungi.

Through the application of modern biotechnological methods, molecularly purified polyene antibiotics with high membrane activity and selective effects against pathogenic infections were obtained. The developed preparation was successfully applied to vegetable crops cultivated under both open-field and greenhouse conditions. Compared with conventional treatments, these antibiotics demonstrated superior penetration into plant tissues, maintained effectiveness under adverse climatic conditions, and exhibited strong antibacterial activity, thereby offering a sustainable approach to plant protection.

For more information please [click](#).

Regular seminar of the Student Scientific Society (SSS) held

The Faculty of Ecology and Soil Science at Baku State University held a regular seminar of the Student Scientific Society (SSS).

During the session, second-year student Elvin Aliyev delivered a



fourth-year student Zuleykha Gadirli presented on “Climate Change and the Efficient Use of Resources.”

The presentations generated considerable interest among participants, who raised numerous questions and actively engaged in



presentation entitled “Innovative Approaches in Horticulture,” while





discussion of the topics. At the conclusion of the seminar, the presenters were awarded certificates and received books as commemorative gifts.

For more information please [click](#).

BSU becomes the South Caucasus leader in “UI GreenMetric 2025” Ranking

Baku State University (BSU) has been selected as the leading university in the South Caucasus according to the "UI GreenMetric World University Ranking 2025," ranking 493rd among 1,745 universities and advancing 114 places compared to the previous year. The ranking evaluates the environmental sustainability activities of universities, considering criteria such as the environmental impact of campuses, energy policy, management of water and paper resources, sustainable transportation, and ecological education. BSU's result reflects the university's environmental initiatives and the environmental responsibility of its students and academic staff; in the future, the university plans to expand the application of modern ecological practices and strengthen its activities in the field of sustainable development.

For more information please [click](#).





Director of the Scientific Research Institute of Medical Prophylaxis delivers a masterclass to BSU students



A masterclass titled "Vaccine Biotechnology: Nanovaccines" was organized by the SABAH Center at Baku State University, featuring a presentation by Professor Adil Abdullayev,



Director of the Scientific-Research Institute of Medical Prophylaxis named after V.Y. Akhundov. The masterclass explained the working principles and advantages of nanovaccines, the role of liposome, polymer, and metal-based nanocarriers, as well as their potential applications in cancer immunotherapy. The event also highlighted challenges such as high production costs, long-term toxicity, and bioaccumulation, alongside ethical aspects; the session concluded with a Q&A with the students.

For more information please [click](#).

Excursion and agro-Training organized at BSU for Children of the Child Shelter Reintegration Center





An excursion and agro-training were organized at Baku State University for the children of the "Children of Azerbaijan" Child Rehabilitation Center as part of the "Agro School" project, within the "100 Days – 100 Initiatives" campaign by the "Regional Development" NGO. The event began with a

visit to the Aquaponic and Hydroponic Systems Laboratory under BSU's "Eco Space" project, where children were given an interactive presentation on the advantages of hydroponic technologies and soil-less cultivation methods. Subsequently, the participants visited the Museums of Genetics and Evolution and Natural Mineral Resources, learning about biological development and geological stages; certificates were presented to the children who actively participated in the project.

For more information please [click](#).



CONCLUSION

This report highlights the efforts and achievements of BSU in advancing Sustainable Development Goal 12: Responsible Consumption and Production. The university has made significant progress in efficient resource use, waste reduction, recycling promotion, and environmental awareness-raising. Implemented projects, adopted policies, and active student engagement demonstrate BSU's leadership in promoting sustainable consumption and production. The key findings presented below provide an overview of the university's accomplishments in this area.

BSU has implemented a Sustainable Procurement Policy (SPP) for responsible consumption and production.

Plastic bottles are completely banned on campus, with separate bins for paper and plastic waste.

Promoting recycling and waste minimization is a key priority.

Courses such as "Ecology," "Organic Chemistry," and "Sustainable Development" educate students on the dangers of plastic pollution.

The "Eco Space" project introduced aquaponics, bioreactors, solar panels, and digital eco-monitoring systems.



12 RESPONSIBLE CONSUMPTION AND PRODUCTION

SDG FOCUSED MEMBERSHIPS



ISCN
International Sustainable Campus Network



SDG FOCUSED RANKING RESULTS



Rated for Excellence

Baku State University

Through rigorous and independent data collection and analysis of performance metrics as set out in the QS Stars™ methodology Baku State University has been awarded 5 Stars.



TEACHING



FACILITIES

QS Stars

The QS Stars™ rating system evaluates universities across a wide spectrum of important performance indicators as set against pre-established international standards. By assessing a broader scope of criteria than any world ranking exercise, QS Stars™ illuminates the unique strengths and diversity of the rated institution with both precision and clarity.



EMPLOYABILITY



GOOD GOVERNANCE



ENVIRONMENTAL IMPACT



ACADEMIC DEVELOPMENT



GLOBAL ENGAGEMENT



CHEMISTRY

Leigh Kamolins, Head of Evaluation



DIVERSITY, EQUITY & INCLUSION



Baku State University

941-950

in overall performance

December 2024

Date

Ben Sowter
Senior Vice-President
QS Quacquarelli Symonds



UI GreenMetric World
University Rankings 2025

CERTIFICATE

This certificate is awarded to
Baku State University
as The 493rd World's Most Sustainable University
in 2025 UI GreenMetric World University Rankings

5 December 2025

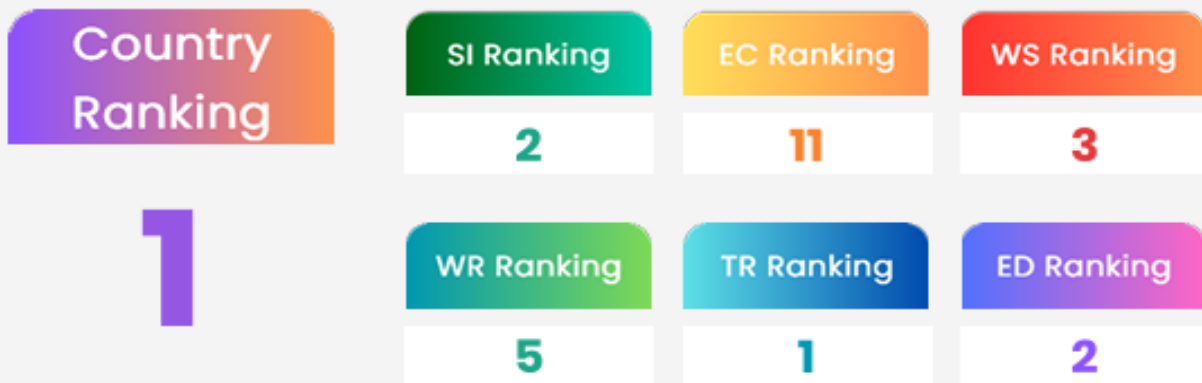


Dr. Vishnu Juwono, S.E., MIA
Chairperson of UI GreenMetric





4. RANKING IN AZERBAIJAN



2. RESULTS SUMMARY



3. WORLD RANKINGS HISTORY





UNIVERSITY PROFILE

NAME : BAKU STATE UNIVERSITY
EST. : 1919
COUNTRY : AZERBAIJAN

1. VERIFIED DATA

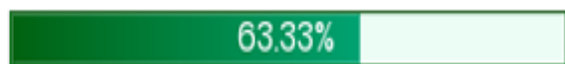
Campus Sustainability Scores

Overall Performance
68.75 %

Total Score
6875 / 10000



SI Setting & Infrastructure
Current: **950** Maximum: 1500



WR Water
Current: **662.5** Maximum: 1000



EC Energy & Climate Change
Current: **1000** Maximum: 2100



TR Transportation
Current: **1625** Maximum: 1800



WS Waste
Current: **1075** Maximum: 1800



ED Education & Research
Current: **1562.5** Maximum: 1800





THE IMPACT RANKINGS

OVERALL RANK

401–600 out of **2318** institutions

OVERALL SCORE

71.8 out of **100**

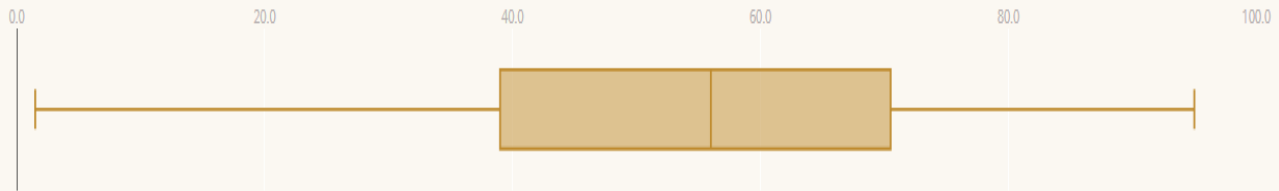


12 RESPONSIBLE CONSUMPTION AND PRODUCTION

12 ∞

RESPONSIBLE CONSUMPTION AND PRODUCTION

SCORE RANK
N/A **N/A** out of 973 institutions



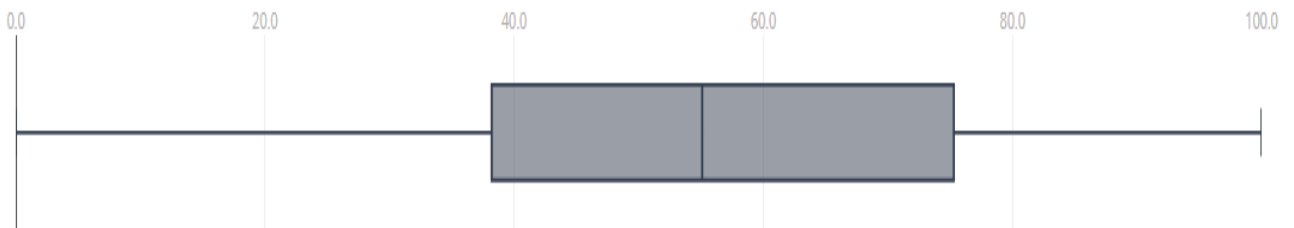
SCORE
N/A Research on responsible consumption and production

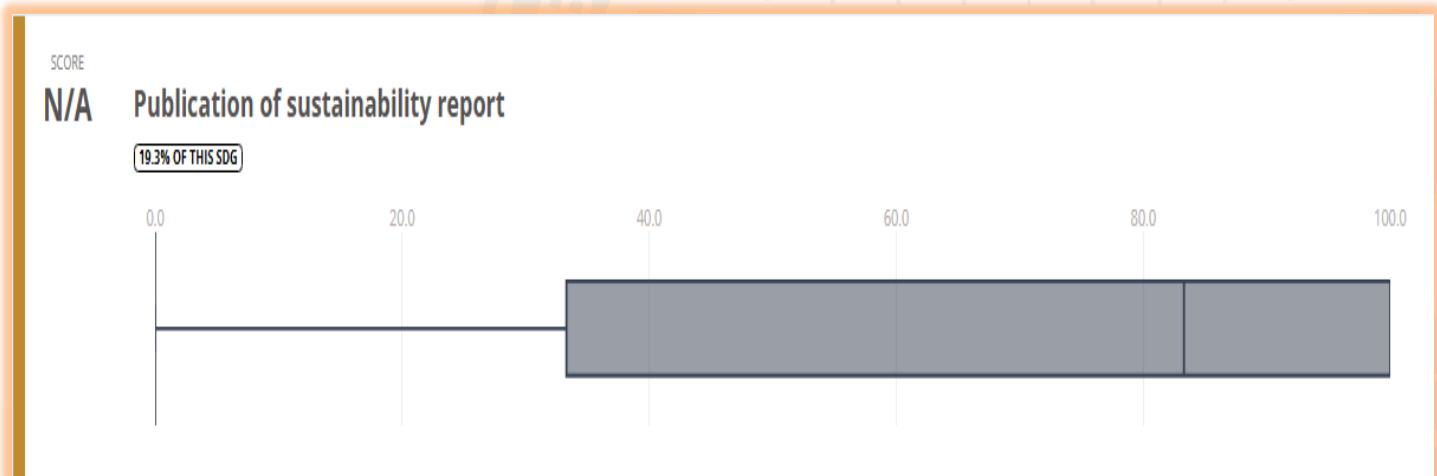
27% OF THIS SDG



SCORE
N/A Operational measures

26.7% OF THIS SDG





SDG FOCUSED RESEARCH

Baku State University (BSU) actively supports Sustainable Development Goal 12: Responsible Consumption and Production through its research and innovation activities. The university addresses key environmental challenges such as unsustainable industrial practices, excessive waste generation, and inefficient resource use.

BSU researchers conduct studies on sustainable agriculture, industrial waste management, renewable energy technologies, and circular economy solutions. These include the development of biodegradable agricultural materials, improved methods for wastewater treatment and metal recovery, and research on environmentally sustainable materials and plastic alternatives. In addition, research on renewable energy technologies, such as solar-based hydrogen production, demonstrates the university's commitment to advancing clean energy solutions.



Through these research initiatives, BSU contributes to promoting sustainable production systems, reducing environmental impacts, and supporting national and global sustainability goals under the SDG framework.

1. Authors: Mukhametov, A.E., Moreva, E.L., Bayramli, M., Smirnov, A.V., Egorov, I.

Focus: Economic diversification in Arabian Peninsula countries.

Methods: Analysis of economic structure and global oil price trends (1970–2023).

Findings: Non-oil sectors like digital technology, renewable energy, and tourism are crucial for economic resilience.

Recommendation: Adopt SMART diversification strategies to improve long-term stability and macroeconomic performance.

[Full text](#)

2. Authors: Humbatova, S., Abbasova, G., Humbatov, M.F.O.

Focus: Caspian Sea coastline transformations in Azerbaijan.

Methods: Analysis of sea level fluctuations, hydrodynamics, and pollution impacts on ecosystems and communities.

Findings: Shoreline displacement and morphological changes affect tourism, population well-being, and ecosystems.

Recommendation: Monitor and manage coastal areas to mitigate environmental and social impacts.

[Full text](#)

3. Authors: Geidarov, A.A., Babayeva, P.G., Turan, M.D., Nizamoğlu, H.

Focus: Phosphorus removal from alunite ore.

Methods: Thermal treatment, caustic dissolution, gypsum and CO₂ precipitation.

Findings: Reduced phosphorus from 4.8 g/L to 2 mg/L; valuable metals recovered (Al, V, Ga).

Recommendation: Apply method for industrial phosphorus control and resource recovery.

[Full text](#)

4. Authors: Mustafazade, T., Maharram, M., Akhundzada, H.V.N., Khankishiyeva, R.F.

Focus: Eco-friendly wheat seed coatings.

Methods: Chitosan-biochar (CS-BC) composites tested under controlled conditions.

Findings: CS-BC 4:1 improved germination, seedling vigor, and soil organic carbon.

Recommendation: Further field testing to confirm sustainable alternative to synthetic agrochemicals.

[Full text](#)

5. Authors: Guliyeva, Z., Maxsudov, S., Garibova, S., Novruzova, S., Guliyev, S.



Focus: Vermicompost effects on tomato yield.

Methods: Greenhouse experiments with varying vermicompost rates and irrigation.

Findings: 1.0 t/da vermicompost enhanced yield, nutrient uptake, and soil health; mitigated water stress effects.

Recommendation: Combine organic fertilization with irrigation management for sustainable cultivation.

∞ [Full text](#)

6. Authors: Macnunlu, K., Baba-Zade, R.H., Hasanova, T.

Focus: Agroecosystem sustainability in Barda district, Azerbaijan.

Methods: Biodiversity and organic matter analysis, remote sensing (NDVI, SAVI), GIS, precision farming.

Findings: Green manure and barley straw increase weeds; optimized land use can enhance productivity.

Recommendation: Integrate remote sensing and precision farming for sustainable agriculture.

∞ [Full text](#)

7. Authors: Nasibova, A.N., Bakhishzada, A., Khalilov, R.I.

Focus: Environmental hazards of micro- and nanoplastics.

Methods: Review of sources, accumulation, and toxic effects of microplastics.

Findings: Microplastics disrupt biological systems and carry toxic chemicals like BPA.

Recommendation: Reduce plastic production, improve waste management, and limit human exposure.

∞ [Full text](#)

8. Authors: Nizamoğlu, H., Turan, M.D., Sari, Z.A., Babayeva, P.G.

Focus: Metal recovery from copper slag and mill scale.

Methods: Two-stage hydrochloric acid leaching, Response Surface Methodology (RSM).

Findings: 97.22% copper recovery using recycled Fe(III)/Fe(II) solution from mill scale.

Recommendation: Promote greener, sustainable metal recovery using recycled solutions.

∞ [Full text](#)

9. Authors: Khang, A., Abdullayev, V.H., Litvinova, E.I., Gadirova, E.M., Avramović, Z.Ž.

Focus: IoT and bioelectronics in automated waste treatment.

Methods: Comprehensive guidance on green technologies, smart systems, and sustainable infrastructure.

Findings: IoT-enabled systems enhance environmental sustainability and resource efficiency.




















Recommendation: Implement innovative waste treatment technologies to tackle climate change and resource depletion.

[Full text](#)

For all SDGs related articles please visit: [Scopus - Baku State University](#)

SDG contributions

 Goal 1: No poverty	9 documents	 Goal 10: Reduced inequalities	40 documents
 Goal 2: Zero hunger	74 documents	 Goal 11: Sustainable cities and communities	37 documents
 Goal 3: Good health and well-being	241 documents	 Goal 12: Responsible consumption and production	44 documents
 Goal 4: Quality education	21 documents	 Goal 13: Climate action	55 documents
 Goal 5: Gender equality	12 documents	 Goal 14: Life below water	50 documents
 Goal 6: Clean water and sanitation	83 documents	 Goal 15: Life on land	31 documents
 Goal 7: Affordable and clean energy	353 documents	 Goal 16: Peace, justice and strong institutions	36 documents
 Goal 8: Decent work and economic growth	68 documents	 Goal 17: Partnership for the goals	47 documents
 Goal 9: Industry, innovation and infrastructure	101 documents		