



Baku State University

2025 REPORT ON

**11 SUSTAINABLE CITIES
AND COMMUNITIES**





INTRODUCTION

This report highlights the sustainable initiatives and contributions of Baku State University (BSU) to Sustainable Development Goal 11 (SDG 11), which focuses on Sustainable Cities and Communities. BSU, founded in 1919, has established itself as a prominent educational institution in Baku, Azerbaijan, with a significant role in promoting sustainability at the local and national levels.



BSU has a rich Scientific Library, numerous museums, and a Cultural and Creative Center that contributes to the cultural and educational fabric of the local community. The university offers flexible education, integrates with the European education system, and provides affordable housing options, ensuring that students and staff can thrive in the city. These initiatives align with SDG 11 by fostering a more inclusive, sustainable, and culturally rich urban environment.

In conclusion, BSU's comprehensive efforts align with SDG 11 by enriching the city and community through education, culture, infrastructure, and inclusivity, fostering a more sustainable and vibrant urban environment.



SDG 11. SUSTAINABLE CITIES AND COMMUNITIES

Baku State University (BSU) is one of the leading higher education institutions in Azerbaijan, distinguished not only by its academic excellence but also by its contribution to sustainable urban and cultural development in line with SDG 11: Sustainable Cities and Communities.

The Scientific Library of BSU, established in the university's foundation year, is among the richest academic libraries in the country. By maintaining information exchange with 49 universities across 21 countries, the library strengthens knowledge accessibility and international cooperation. As an intellectual hub for students, researchers, and the wider public, it promotes inclusive access to educational resources—an essential component of sustainable and resilient communities.

Cultural heritage preservation is a key dimension of BSU's contribution to SDG 11. The university established the first university museum in Azerbaijan in 1919. Today, several museums operate within BSU, including the Heydar Aliyev Museum, the History Museum of BSU, the Museum of Minerals, the Museum of Archaeology and Ethnography, and the Museum of Evolutionary Education. These institutions safeguard national heritage, promote cultural awareness, and create interactive learning environments that strengthen cultural identity and social cohesion.

The Cultural and Creative Center further enhances community engagement and social sustainability. Through instrumental and dance ensembles, choir groups, and drama clubs, the Center supports artistic expression and youth participation in cultural life. It actively contributes to national celebrations, public festivals, and international cultural events, reinforcing the role of universities as active contributors to vibrant urban communities.

BSU also supports sustainable campus development and inclusive living conditions. The "Student House" provides affordable accommodation for local and international students, helping address urban housing challenges. Equipped with modern facilities—including study rooms, a library, leisure spaces, kitchen areas, and essential services—the dormitory reflects the university's commitment to safe, inclusive, and accessible living environments, aligned with SDG 11 targets related to inclusive urbanization.



By integrating the European three-cycle education system (Bachelor's, Master's, PhD) and implementing the European Credit Transfer System (ECTS), BSU ensures internationally compatible education standards. Its digital learning platforms enable remote communication and flexible teaching practices, contributing to sustainable and adaptive educational infrastructure.

Through its academic, cultural, and social initiatives, BSU plays a significant role in promoting sustainable communities, protecting cultural heritage, ensuring inclusive access to education and housing, and strengthening institutional resilience. These efforts position the university as an active contributor to the achievement of SDG 11 within the national and regional context.

NEXT LECTURE-CONCERT UNDER THE "GEMS OF ART" PROJECT OF THE MINISTRY OF CULTURE HELD AT BSU

At Baku State University, a lecture-concert under the “Gems of Art” project was held within the framework of the 17th Uzeyir Hajibayli International Music Festival, organized by the Heydar Aliyev Foundation and the Ministry of Culture of the Republic of Azerbaijan. The event highlighted the significant role of Uzeyir Hajibayli in the development of Azerbaijani professional music and compositional school. The program included a thematic lecture and artistic performances by leading cultural institutions and students, featuring works by Uzeyir Hajibayli and Muslim Magomayev, and was warmly received by the audience.





[For more information click links here](#)

BSU AND “REGIONAL DEVELOPMENT” PUBLIC UNION SIGN MEMORANDUM OF UNDERSTANDING



Baku State University and Regional Development Public Union (RDPU) have signed a Memorandum of Understanding to expand their long-standing cooperation. The agreement envisages joint projects and initiatives in social, economic, environmental, scientific, cultural, educational, and IT fields, with a strong focus on youth engagement and sustainable development. The partnership will support the organization of conferences,

competitions, and projects aligned with labor market demands, as well as provide students with volunteer and internship opportunities to enhance their professional skills, civic responsibility, and practical experience.



[For more information click links here](#)

RESEARCH ON THE SOCIO-ECONOMIC AND DEMOGRAPHIC DEVELOPMENT CHALLENGES OF AZERBAIJANI CITIES AT BSU

On the eve of the 13th session of the World Urban Forum (WUF13), to be hosted in Baku in 2026, Baku State University organized an academic seminar titled “Sustainable Socio-Economic and Demographic Development Characteristics of Azerbaijani Cities.” The event, initiated by the Faculty of Geography and the Student Youth Organization, highlighted the importance of sustainable urban governance in a globalized context. During the seminar, Associate Professor Etibar Badalov presented an analysis of urbanization dynamics, demographic processes, migration flows, and environmental pressures affecting Azerbaijani cities, emphasizing that sustainable urban development depends not only on economic growth but also on social well-being, ecological balance, and adaptive urban management. The





seminar concluded with discussions and a Q&A session on future urban development prospects.



Members of the Geology Faculty of the “BSU Volunteers” organization at Baku State University visited the Heydar Aliyev Center on the occasion of the Commemoration Day of National Leader Heydar Aliyev. The visit aimed to deepen students’ understanding of the National Leader’s life, political legacy, and his significant role in the development of Azerbaijani statehood. During the tour,

participants explored exhibitions featuring archival materials, photographs, and multimedia presentations highlighting key stages of the country’s history, while also receiving information about the architectural concept and cultural significance of the Center.

[For more information click links here](#)

SCIENTIFIC SEMINAR TITLED “OUR HISTORICAL-CULTURAL HERITAGE AND MODERN SOCIETY” HELD

A scientific seminar titled “Our Historical-Cultural Heritage and Modern Society” was jointly organized by the volunteers of the History Faculty of Baku State University and the volunteers of ASAN Service No. 3 Baku Center. During the event, a presentation highlighted Azerbaijan’s rich historical and cultural heritage, stressing the importance of preserving monuments, particularly those in Western Azerbaijan, and safeguarding sites included in the UNESCO World Heritage List. The seminar aimed to strengthen youth awareness of





cultural heritage protection and its vital role in shaping modern society.

[For more information click links here](#)

BSU STAFF PARTICIPATES IN THE EVENT DEDICATED TO THE 21ST ANNIVERSARY OF THE CREATION OF HIRKAN NATIONAL PARK

Professors from the Faculty of Biology of Baku State University participated in a roundtable in Lankaran marking 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 of academic institutions and international organizations, including World Wide Fund for Nature (WWF), to discuss the protection of the park's rich biodiversity, expansion of scientific research, development of ecotourism, and the importance of including the Hirkan forests in the UNESCO World Heritage List.

[For more information click links here](#)

MEETING ON “THE ROLE OF HIGHER EDUCATION IN THE IMPLEMENTATION OF THE SUSTAINABLE DEVELOPMENT GOALS” HELD AT BSU

A meeting titled “The Role of Higher Education in the Implementation of the Sustainable Development Goals” was held at Baku State University within the framework of the “Urban Talks” project initiated by the “BSU Volunteers” organization. During the event, the Rector’s Advisor for Quality Assurance provided an overview of the SDGs, emphasizing the role of universities in



advancing sustainable development through academic, research, and institutional initiatives, as well as their impact on international sustainability rankings. The “Urban Talks” platform also aims to enhance student engagement in sustainable urban development discussions, particularly in connection with the upcoming World



Urban Forum (WUF13), offering interactive sessions and practical learning opportunities related to modern urban approaches.

[For more information click links here](#)

PHD STUDENTS OF THE FACULTY OF GEOGRAPHY PRESENT AT NASCO XXVIII CONFERENCE

PhD students from the Faculty of Geography of Baku State University presented their research at the 28th Republican Scientific Conference of Doctoral Students and Young Researchers (NASCO XXVIII), organized by the Ministry of Science and Education of the Republic of Azerbaijan and held at the Azerbaijan State University of Oil and Industry. The presentations covered diverse topics, including tourism development, transport infrastructure, demographic trends, migration, climate change, GIS applications, and regional agricultural development. The participants' research contributions were highly appreciated, and each doctoral student was awarded a certificate in recognition of their active participation.



[For more information click links here](#)



MEETING WITH BSU VOLUNTEERS ON INTERNATIONAL VOLUNTEER DAY

On the occasion of 5 December – International Volunteer Day, the Rector of Baku State University met with active members of the “BSU Volunteers” organization, including former volunteers who now serve as university staff. During the meeting, the Rector highlighted the significant role of volunteers in supporting the university’s social, academic, and educational initiatives, noting that the organization currently unites over 2,000 members and has contributed to the professional development of many young people, 27 of whom have become full-time BSU employees since 2019. Certificates of appreciation were presented to volunteers for their outstanding dedication and contributions.



[For more information click links here](#)



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MASTERCLASS BY AYHAN TUĞLU

Ayhan Tuğlu, Director of the Presidential Library of Turkey, delivered a masterclass at the Faculty of Information and Document Management of Baku State University on the role of libraries in preserving cultural heritage. He discussed the historical development of Turkish libraries from the Seljuk and Ottoman waqf traditions to the modern Republican era, emphasizing their transformation into dynamic social and cultural centers. The presentation also introduced the structure, collections, and international initiatives of the Presidential Library, highlighting its contribution to safeguarding Turkic heritage and promoting cultural diplomacy. The session concluded with discussions on expanding cooperation between the two institutions, including joint academic events and student internship opportunities.



[For more information click links here](#)

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AYNA HOLDS INFO SESSION ON SUSTAINABLE URBAN MOBILITY AT BSU

An information session on “Sustainable Urban Mobility: Ongoing and Planned Initiatives in Baku” was held at Baku State University and organized by the Azerbaijan Urban Transport Agency (AYNA). During the event, speakers discussed the importance of sustainable city concepts and presented ongoing micromobility initiatives in Baku, including the development of dedicated lanes currently covering 31 streets, with plans to expand the network to 100 km. The session featured an interactive discussion with students on future improvements in urban mobility and concluded with a bicycle tour on campus to promote practical engagement with sustainable transportation practices.



[For more information click links here](#)



WORLD SOLIDARITY DAY OF AZERBAIJANIS CELEBRATED AT BSU STUDENT HOUSE

World Solidarity Day of Azerbaijanis was celebrated on 31 December at the Student House of Baku State University, jointly organized by the BSU Student Trade Union Committee and the Student House administration. During the event, the Vice-Rector congratulated students on the occasion and extended his best wishes for academic success. A tea gathering was arranged for residents of the Student House, followed by musical performances presented by both local and international students, fostering a spirit of unity, cultural exchange, and solidarity.



[For more information click links here](#)



THE BSU TEAM WINS INTELLECTUAL GAME COMPETITION



Within the framework of the youth camp “Traces of History: Our Memory is Our Future III,” the team of the “BSU Volunteers” from Baku State University won first place in the “What? Where? When?” intellectual game. The competition included questions related to the history, literature, geography, prominent figures, and folklore of Western Azerbaijan. Among 14 participating teams, BSU’s “Evrika” team secured 1st place, followed by “Sərdar Sarayı” and “Çuxursəd.” The winners were awarded diplomas, medals, trophies, and gifts. The youth camp was jointly organized by the Ministry of Youth and Sports of the Republic of Azerbaijan, the Western Azerbaijan Community, ASAN Volunteers Organization, and the Regional Development Public Union.

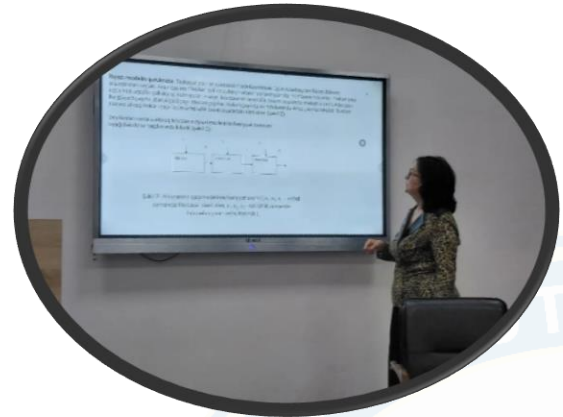
SCIENTIFIC SEMINAR ON MODELING THE HAKARI RIVER AT BSU

A scientific seminar on “Modeling the Hakari River Using MATLAB” was held at the Faculty of Geography of Baku State University. During the event, speakers emphasized the importance of scientific seminars for improving teaching and research, particularly in studying water resources in the liberated territories. The presentation focused on mathematical modeling of the Hakari River and its tributaries using MATLAB, addressing issues such as average annual flow, flood events, and efficient water resource management. The seminar concluded with an interactive discussion on the research findings.





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ECODAY-2025 COMPETITION AT BSU DEDICATED TO WORLD ENVIRONMENT DAY



A competition-exhibition was organized at the university on the occasion of World Environment Day to raise environmental awareness among students and promote sustainable practices. The event focused on encouraging recycling, responsible use of resources, and strengthening environmental responsibility among young people.



Students presented various creative projects prepared mainly from recyclable materials, demonstrating innovative approaches to waste reduction and environmental protection.

Such initiatives help develop ecological



thinking and encourage students to participate more actively in sustainability-related activities within the university

environment. The event also reflected the principles of the United Nations Sustainable Development Goals by supporting environmentally responsible behavior and sustainable development practices that contribute to more sustainable communities and living environments.



For more information click links here





INTERNATIONAL STUDENTS OF BSU VISIT GANJA



International students of Baku State University visited the city of Ganja as part of a cultural and educational trip aimed at strengthening intercultural dialogue and encouraging interaction among students from different countries. During the visit, participants explored various historical and cultural sites, gaining a broader understanding of the city's rich heritage and cultural environment. Such initiatives contribute to cultural exchange, promote mutual understanding among students from diverse backgrounds, and support the development of inclusive and socially connected communities within the university environment.



A summer student camp was organized at the Quba Training, Education, and Recreation Center of Baku State University to promote student engagement, foster collaboration, and strengthen connections among student organizations.

During the camp, participants took part in recreational activities, team-building exercises, and social games, providing opportunities for communication and



cooperation. At the conclusion of the camp, students who demonstrated active involvement in university life were recognized and commended for their contributions, highlighting the importance of student initiatives and engagement.

[For more information click links here](#)

SUMMER STUDENT CAMP HELD AT BSU GUBA TRAINING AND RECREATION CENTER

A summer student camp was held at the Quba Training, Education, and Recreation



Center of Baku State University. The camp aimed to enhance students' social engagement, promote collaboration, and strengthen cooperation among the university's student organizations.

Participants took part in recreational activities, team-building games, and social exercises, providing opportunities for communication and interaction. At the conclusion of the camp, students

recognized for their active involvement in university life were awarded, and the contributions of student organizations were commended.

[For more information click links here](#)

BSU STUDENTS PLAY AESOP WINS THE PILLE-3 STUDENT THEATRE FESTIVAL

The play “**Aesop**”, staged by students of the Culture and Creativity Center at Baku State University, won the “**Best Performance**” award at the “Pillə-3” National Student Theatre Festival, held among universities and organized jointly by the Ministry of Science and Education, the Ministry of Culture, and the Azerbaijan State University of Culture and Arts.





The festival featured 19 performances from various higher education institutions and concluded with a closing and award ceremony. The play, directed by Vahid Orucoglu, drew on the life and fables of the ancient Greek fabulist Aesop, whose stories use animal characters to convey philosophical lessons and critique human nature and society. The performance highlighted the enduring relevance of Aesop's fables while showcasing the creativity and talent of BSU students.



[For more information click links here](#)

ANKARA SOCIAL SCIENCES UNIVERSITY OF TURKEY HOLDS A THREE-DAY SEMINAR AT BSU ON THE IMPLEMENTATION OF THE SOCIOVILLAGE SYSTEM

Representatives from Ankara Social Sciences University conducted a three-day seminar at Baku State University on implementing the Sociovillage system and ecosystem within universities.

During the seminar, faculty highlighted the ongoing collaboration between the two universities, including a 2023 Memorandum of Understanding and participation in the Erasmus+ K171 exchange program, which facilitates joint social science research projects. Presentations covered the structure and application of the Sociovillage system, emphasizing the creation of innovation ecosystems, technology parks, and support for social innovation activities and student-driven projects. The seminar also reinforced knowledge sharing and the development of human capital in the field of innovation.



[For more information click links here](#)



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EXHIBITION AT BSU: “THE IDENTITY OF UZBEK WOMEN”

A delegation from Mirzo Ulugbek National University of Uzbekistan visited the Faculty of Social Sciences and Psychology at Baku State University to strengthen academic cooperation and exchange experience in the field of psychology.

During the visit, discussions were held on expanding collaboration in education and research. The delegation also organized an exhibition dedicated to the role of women in society, highlighting their contributions to science, culture, and sports. The event promoted intercultural dialogue and academic exchange between the universities.



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CONCLUSION

The activities carried out throughout the reporting period demonstrate the university's commitment to contributing to sustainable and socially responsible community development. Various academic seminars, educational meetings, cultural events, student initiatives, and international cooperation activities provided students with opportunities to expand their knowledge, develop practical skills, and actively participate in social and cultural life.

Through scientific discussions, research presentations, environmental initiatives, cultural programs, and awareness-raising events, the university created platforms that encouraged dialogue on urban development, environmental responsibility, cultural heritage, and social engagement. These initiatives helped students better understand the relationship between education, society, and the urban environment, while also promoting responsible attitudes toward community development and sustainability.

Student engagement played a significant role in many of these activities. Volunteer initiatives, educational visits, student camps, intellectual competitions, exhibitions, and creative performances supported students' personal and social development, strengthened communication among diverse groups, and encouraged active participation in community life.

In addition, cooperation with national and international institutions, as well as the organization of academic exchanges, seminars, and collaborative projects, further enhanced knowledge sharing and institutional development. Such partnerships contributed to strengthening academic dialogue, cultural interaction, and innovative approaches within the university environment.

Overall, the initiatives highlighted in this report illustrate the university's ongoing efforts to promote socially inclusive, culturally vibrant, and sustainable communities through education, research, and student engagement. These activities contribute to building a more aware, active, and responsible generation capable of supporting sustainable urban and social development in the future.



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SDG FOCUSED MEMBERSHIPS



ISCN
International Sustainable Campus Network





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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



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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

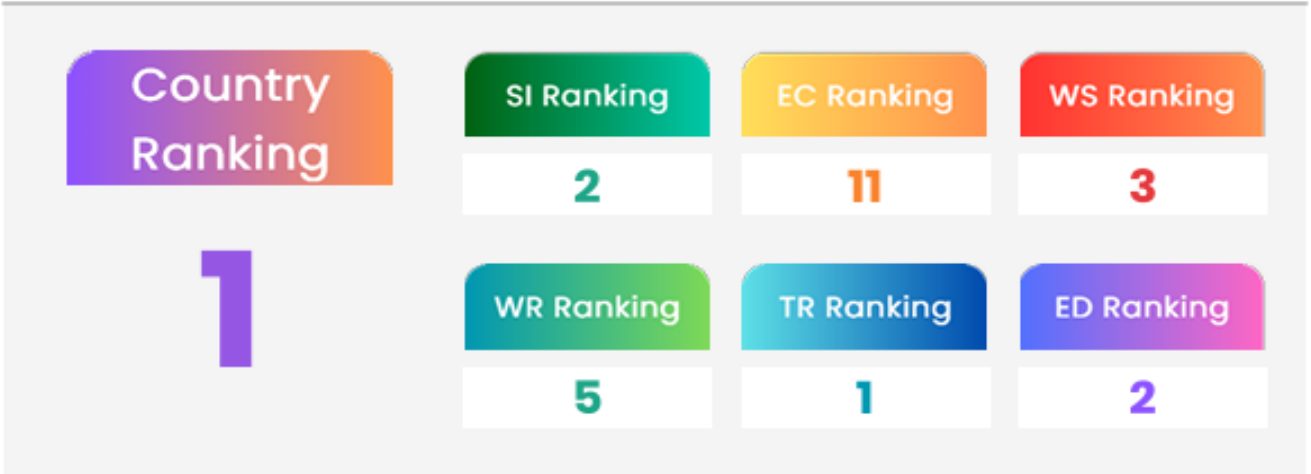


Dr. Vishnu Juwono, S.E., MIA
Chairperson of UI GreenMetric





4. RANKING IN AZERBAIJAN



2. RESULTS SUMMARY



3. WORLD RANKINGS HISTORY





UNIVERSITY PROFILE

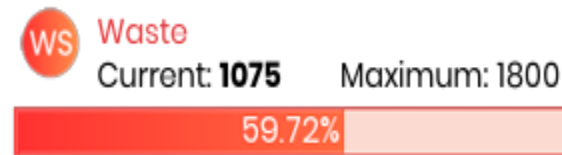
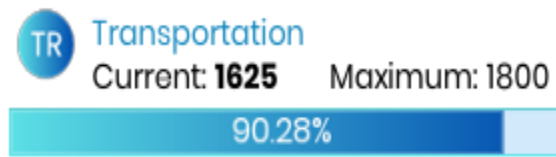
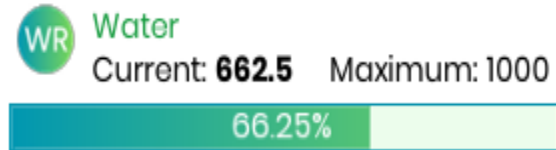
NAME : BAKU STATE UNIVERSITY
 EST. : 1919
 COUNTRY : AZERBAIJAN

1. VERIFIED DATA

Campus Sustainability Scores

Overall Performance
68.75 %

Total Score
6875 / 10000





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THE IMPACT RANKINGS



THE Impact Rankings 2025 ▾

Download

OVERALL SCORE

71.8 out of 100

OVERALL RANK

401-600 out of 2318 institutions

SDG PARTICIPATED

15 out of 17 Sustainable Development Goals



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Baku State University

941-950

in overall performance

December 2024

Date

Ben Sowter
Senior Vice-President
QS Chair/Andrea Symonds



OVERALL RANK

401-600 out of **2318** institutions

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OVERALL SCORE

71.8 out of 100

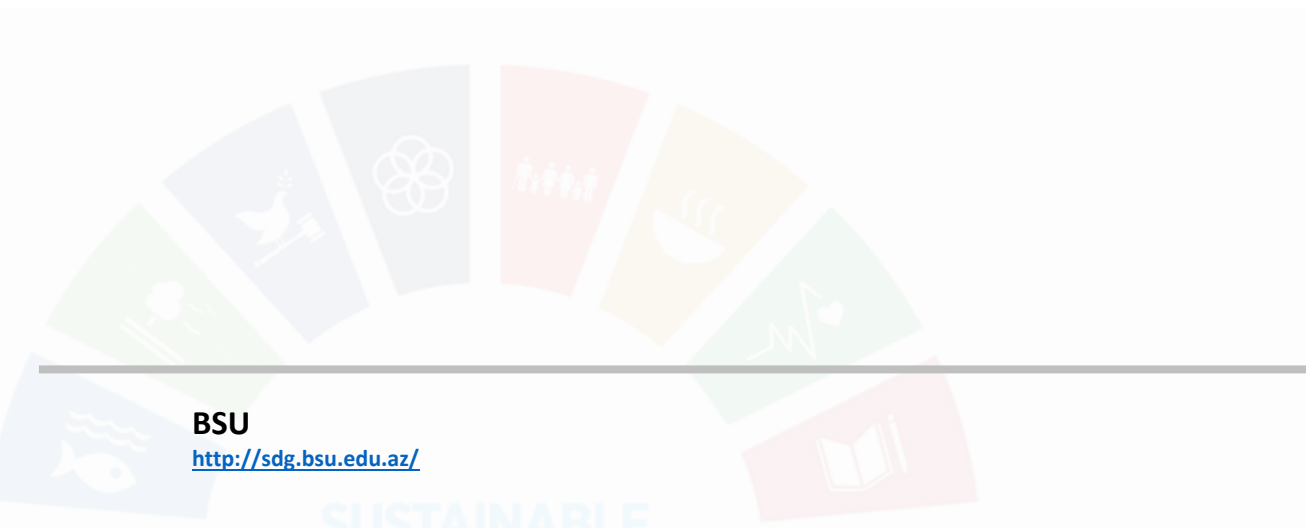
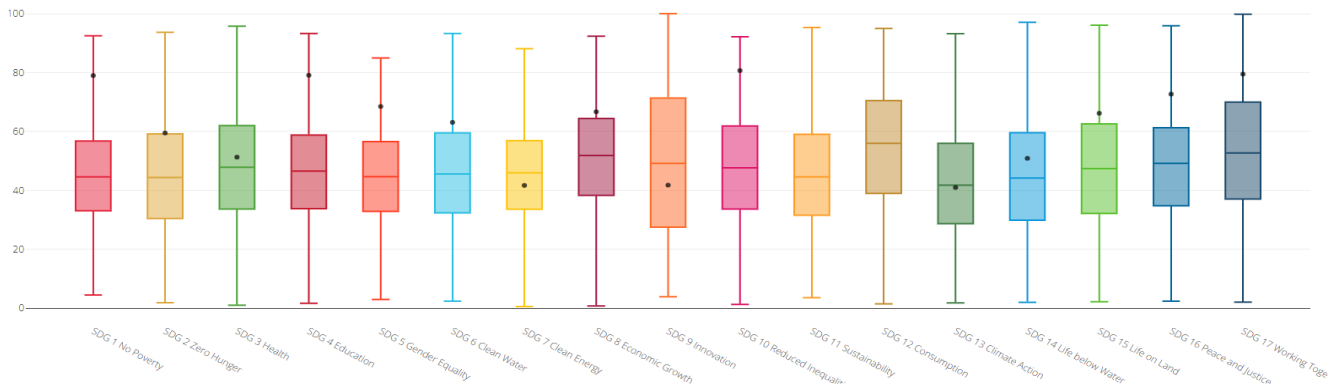
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15 out of 17 Sustainable Development Goals

SDG SCORES



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SDG FOCUSED RESEARCH

Introduction

Building sustainable, inclusive, and resilient cities is a key objective of global development efforts. In this context, universities play an important role in supporting urban sustainability through research, education, and community engagement. At Baku State University (BSU), academic and institutional initiatives aligned with Sustainable Development Goal 11 (SDG 11) focus on promoting sustainable urban development, improving environmental awareness, strengthening cultural heritage preservation, and encouraging responsible social participation.

As Azerbaijan continues to experience urban growth and socio-economic transformation, issues such as sustainable urban planning, environmental protection, mobility, and the preservation of cultural heritage have become increasingly important. BSU contributes to addressing these challenges by generating scientific knowledge, organizing educational events, and creating platforms for dialogue on sustainable urban development and environmental responsibility.

Researchers and students at BSU explore a range of topics related to sustainable cities and communities, including urbanization processes, environmental management, climate change impacts, mobility systems, and the protection of historical and cultural heritage. Academic seminars, conferences, and research projects provide opportunities to examine urban challenges from interdisciplinary perspectives and to develop practical solutions that support sustainable urban environments.

In addition to academic research, the university promotes student engagement through educational programs, awareness campaigns, and community-oriented activities that encourage responsible attitudes toward the urban environment. These initiatives strengthen students' understanding of sustainability principles and support the development of more livable and inclusive communities.


















Through its academic research, institutional cooperation, and student-centered initiatives, BSU continues to contribute to sustainable urban development and the creation of resilient communities. These efforts reinforce the university's role as an important platform for knowledge generation and dialogue on sustainability in Azerbaijan and the wider region.



For all SDGs related articles please

visit: <https://www.scopus.com/pages/organization/60071969#tab=sdgs>

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		



1. Authors: Yetirmishli G.J., Kazimova S.E., Samedzade A.V.

Focus: Geodynamic features and seismic risks in the Bulla-Deniz gas field.

Methods: Seismic tomography, GPS monitoring, drilling data.

Findings: Identified deep structural anomalies, active faulting, and complex tectonics impacting hydrocarbon extraction.

Recommendation: Use results for safer, more efficient gas resource management.

 [Full text](#)

2. Authors: Aliyev A.A., Nurubeyli T.K., Haziyeu Y.H., Najafov E., Mammadov F.I.

Focus: Reducing noise pollution from transportation systems.

Methods: Acoustic modeling, case studies (Germany, Japan, U.S.).

Findings: Low-noise surfaces, sound barriers, and electric vehicles reduce noise by 15–25 dB.

Recommendation: Integrate multi-method approaches for cost-effective urban noise reduction.

 [Full text](#)

3. Authors: Mammadzada V.T., Aliyeva M.M., Rzayeva A.L., Nasirova A.I., Mammadova R.N.

Focus: Biological activity and self-healing capacity of urban soils in Lankaran.

Methods: Enzymatic activity tests, microbial population analysis.

Findings: Decline in microbial counts with depth; dominance of non-spore-forming bacteria and actinomycetes; moderate humus decrease.

Recommendation: Monitor soil microbiota for sustainable land management.

 [Full text](#)



4. Authors: Aliyev E.R., Rzayeva I.R., Aliyeva A.A., Aghayev F.

Focus: Identifying anchor objects in tourism clusters using fuzzy inference.

Methods: Voronoi diagrams, fuzzy logic (alternative-based & MATLAB-based).

Findings: Consistent identification of central, attractive anchor sites.

Recommendation: Apply fuzzy logic tools to support regional tourism planning.

 [Full text](#)

5. Authors: Amiraslanova M.S., Babazade R.A.H., Musabayli K.K.M.

Focus: Vegetation mapping using satellite/UAV imagery with AI.

Methods: Multispectral imagery, ML and DL algorithms.

Findings: Accurate automatic plant species classification across scales.

Recommendation: Apply in urban planning, agriculture, biodiversity, and climate monitoring.

 [Full text](#)

6. Author: Hashimova L.F.

Focus: Cultural heritage protection and human rights.

Methods: Analysis of legal literature, international law, and court practices.

Findings: Heritage damage = violation of cultural rights; stronger role of human rights in protection.

Recommendation: Strengthen international legal instruments for heritage safeguarding.

 [Full text](#)

7. Author: Dostiyev T.M.

Focus: Development of medieval Muslim cities in Azerbaijan.

Methods: Historical and archaeological analysis.

Findings: Growth during Islamic/Seljuk periods; uneven Mongol impact; stagnation by 16–17th centuries.

Recommendation: Use insights to deepen understanding of Azerbaijan's urban



cultural history.

 [Full text](#)

8. Authors: Artunov N.B., Pashayev N.A., Gasimova E.

Focus: Urban growth in Shaki City (2016–2023).

Methods: Satellite imagery, machine learning.

Findings: Expansion of settlements, slight forest cover decrease.

Recommendation: Apply remote sensing and ML for monitoring urban change.

 [Full text](#)

9. Author: Nasib K.

Focus: Role of space technologies in disaster management.

Methods: Remote sensing, satellite data analysis.

Findings: Satellites improve prediction, coordination, recovery.

Recommendation: Expand space-based monitoring for resilient disaster response.

 [Full text](#)

10. Authors: Badalova A.N., Ismatova H.R., Jafarova N.R., Guliyeva S.H.

Focus: GIS & satellite use for natural/man-made risk monitoring.

Methods: Multi-temporal imagery, DEM analysis.

Findings: Identified high-risk flood, landslide, and desertification zones.

Recommendation: Apply GIS for early warning and risk prevention.

 [Full text](#)

11. Authors: Gadirova E.M., Abdullayev V.H.

Focus: Sorption properties of rutile-phase TiO₂ nanoparticles for water purification.

Methods: Sol-gel synthesis, XRD, Varian Cary 50, adsorption modeling.

Findings: Weak phenol adsorption despite photocatalytic potential.



Recommendation: Improve TiO₂ modification for Smart City environmental use.

 [Full text](#)

12. Authors: Huseynli A.M., Bayramov G.I.

Focus: Industrial wastewater ecotoxicants from petroleum processing.

Methods: Spectral and analytical methods.

Findings: Harmful pollutants present even within discharge limits.

Recommendation: Strengthen monitoring and treatment for wastewater safety.

 [Full text](#)

13. Author: Piriye R.H.

Focus: Ultra-low frequency (ULF) signals in earthquake prediction.

Methods: Comparative analysis of past and recent seismic data.

Findings: ULF signals promising for ±100 km epicenter forecasting.

Recommendation: Expand ULF monitoring networks for seismic prediction.

 [Full text](#)

14. Authors: Mammadova S.V., Rostamnia S.

Focus: Air pollution sources in Azerbaijani cities and nanotech solutions.

Methods: Ecological data, nanomaterials (adsorbents, catalysts).

Findings: Industrial and transport emissions dominate pollution; nanotech effective for control.

Recommendation: Promote green nanotechnology for urban air quality improvement.

 [Full text](#)

15. Authors: Abdullayev V.H., Ragimova N.A., Abuzarova V.A., Hajiyeva V.M.

Focus: Cyber-Physical Systems (CPS) integration with IoT, AI, and Digital Twins.

Methods: Theoretical analysis, case applications.



Findings: CPS–IoT integration supports high-quality development.

Recommendation: Advance CPS adoption for smart infrastructure and industry.

 [Full text](#)

16. Authors: Hajiyeva S.R., Aliyeva T., Yusifova M.M.

Focus: Severe pollution of Boyuk Shor Lake, Absheron.

Methods: Laboratory analysis of water, sediments, and soils.

Findings: Extremely high hydrocarbon, heavy metal, and particle levels.

Recommendation: Urgent restoration and ecological rehabilitation needed.

 [Full text](#)

17. Authors: Abdullin T.M., Sabirzyanov R.G., Gilmanshin I.R., Kashapov N.F., Gilmanshina S.I.

Focus: Waste disposal challenges and plasma gasification.

Methods: Comparative analysis of destruction vs. thermal destruction.

Findings: Traditional MSW methods ineffective; plasma gasification more promising.

Recommendation: Invest in plasma-based waste management systems.

 [Full text](#)



3. WORLD RANKINGS HISTORY



Figure 3.1 World Rankings History Diagram

4. RANKING IN AZERBAIJAN





UNIVERSITY PROFILE

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

1. VERIFIED DATA

Campus Sustainability Scores

Overall Performance **63.35 %** Total Score **6335 / 10000**

