



UI GreenMetric Questionnaire

University : Baku State University
Country : Azerbaijan
Web Address : <http://bsu.edu.az/>
SDG Focused Web Adress: <https://sdg.bsu.edu.az/>

[2] Energy and Climate Change (EC)

[2.15] Impact of Energy and Climate Change programs in supporting the Sustainable Development Goals (SDGs)





Energy Efficient Appliances Usage: Use of LED lighting and lamps with light detection (Baku State University, Azerbaijan)



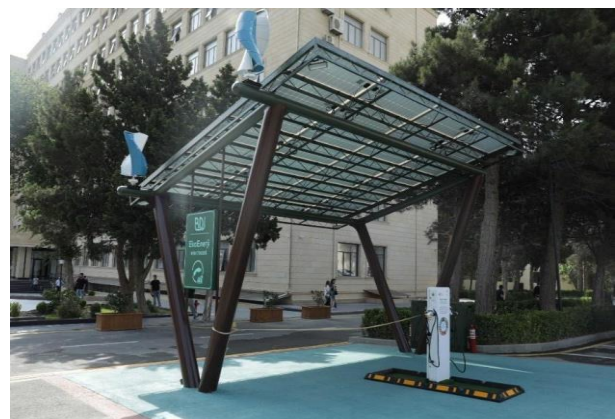


Daylight-saving bulbs (Baku State University, Azerbaijan)





Energy Efficient Appliances Usage: Solar absorption Air Conditioning system (Baku State University, Azerbaijan)





Charge parking (Baku State University, Azerbaijan)



Description:

Baku State University (BSU) has undertaken a comprehensive range of energy and climate initiatives that actively contribute to the achievement of the Sustainable Development Goals (SDGs). These initiatives demonstrate the university's strong commitment to reducing greenhouse gas emissions, improving energy efficiency, strengthening climate resilience, and promoting environmentally responsible practices throughout campus operations. Through the integration of innovative technologies, sustainable infrastructure, and awareness-driven programs, BSU continues to position itself as a leading institution in environmental stewardship and sustainable campus development.

Key initiatives include:

- Deployment of renewable energy systems such as solar photovoltaic (PV) panels installed on building rooftops and open campus areas to generate clean electricity, decrease reliance on fossil fuels, and significantly reduce overall campus carbon emissions. Wind and hybrid renewable energy solutions are also being explored to diversify sustainable energy sources.
- Integration of smart building technologies, including automated lighting systems, motion sensors, occupancy controls, and digital energy meters, to optimize electricity consumption, minimize waste, and improve operational efficiency across academic and administrative facilities.



- Campus-wide energy awareness campaigns featuring “green office” guidelines, no-AC days, sustainability workshops, environmental competitions, and awareness events designed to encourage responsible energy behavior among students, faculty, and staff.
- Implementation of a centralized Building Management System (BMS) to continuously monitor and regulate heating, ventilation, air conditioning (HVAC), lighting, and water systems, enabling real-time data analysis and evidence-based energy management decisions.
- Energy efficiency retrofit programs replacing conventional lighting, outdated appliances, and inefficient equipment with LED lighting systems and other high-efficiency alternatives in classrooms, laboratories, offices, and public spaces.
- Application of passive design strategies in new construction and renovation projects, including natural ventilation, daylight optimization, thermal insulation, reflective materials, and energy-conscious architectural planning to reduce long-term energy demand.
- Annual carbon footprint assessments covering Scope 1 (direct emissions), Scope 2 (purchased electricity), and Scope 3 (transportation, procurement, waste, and commuting), providing essential data to guide sustainability strategies and climate action planning.
- Green mobility and low-carbon transport policies, including vehicle access restrictions, pedestrian-friendly zones, campus bicycles, electric shuttle buses, and electric vehicle (EV) charging stations, aimed at reducing transport-related emissions and improving campus air quality.
- Pursuit of green building certifications such as EDGE, LEED, and relevant national sustainability standards for new and renovated facilities, ensuring high levels of environmental performance and resource efficiency.
- Development of collaborative climate action partnerships with local authorities, private sector organizations, and international institutions to advance joint sustainability projects, research initiatives, and alignment with global climate frameworks such as the Paris Agreement and the UN SDGs.

These initiatives make a direct and meaningful contribution to the achievement of the following ten Sustainable Development Goals (SDGs) indirectly all SDGs:

- **SDG 3 – Good Health and Well-being:** Creating healthier campus environments through improved indoor air quality, lower emissions, safer public spaces, and climate-resilient infrastructure that supports the physical and mental well-being of students and staff.
- **SDG 4 – Quality Education:** Enhancing teaching and learning by providing safe, energy-efficient, technologically advanced, and comfortable educational spaces that foster academic excellence and innovation.
- **SDG 6 – Clean Water and Sanitation:** Improving water efficiency through smart monitoring systems, reuse of treated water, leak prevention measures, and sustainable water resource management practices.
- **SDG 7 – Affordable and Clean Energy:** Expanding the use of renewable energy sources across campus operations while promoting energy efficiency, conservation measures, and responsible energy consumption.
- **SDG 9 – Industry, Innovation, and Infrastructure:** Advancing innovation through the adoption of smart building systems, digital energy management technologies, resilient infrastructure, and sustainable engineering solutions.
- **SDG 11 – Sustainable Cities and Communities:** Developing a low-carbon, environmentally responsible campus that serves as a model for sustainable urban planning, mobility, and community resilience.
- **SDG 12 – Responsible Consumption and Production:** Encouraging energy conservation, efficient resource use, waste reduction, circular economy principles, and sustainable procurement practices.



- **SDG 13 – Climate Action:** Actively reducing greenhouse gas emissions while implementing both climate mitigation and adaptation strategies to address long-term environmental challenges.
- **SDG 15 – Life on Land:** Supporting campus greening, biodiversity conservation, tree planting, and sustainable landscape management as part of broader ecological resilience efforts.
- **SDG 17 – Partnerships for the Goals:** Strengthening cooperation with local, national, and international organizations to advance sustainable energy development, climate action, research collaboration, and knowledge exchange.

Through these coordinated efforts, the university demonstrates its commitment to integrating sustainability principles into institutional development while contributing to global progress on the SDGs.

Additional evidence link (i.e., for videos, more images, or other files that are not included in this file):

- <https://sdg.bsu.edu.az/> Official SDG portal of Baku State University showcasing sustainability initiatives, policies, reports, and achievements aligned with the United Nations Sustainable Development Goals.
- <https://sdg.bsu.edu.az/allnews> News archive featuring the latest sustainability-related events, projects, and announcements from Baku State University.
- <https://sdg.bsu.edu.az/climate-action-plan> Page outlining BSU's strategic climate action plan focused on emissions reduction, resilience, and sustainable campus development.
- <https://sdg.bsu.edu.az/university-policies> Collection of institutional policies supporting sustainability, governance, education quality, and environmental responsibility at BSU.
- <https://sdg.bsu.edu.az/climate-action-policy> Dedicated page presenting BSU's climate action policy and commitments toward environmental sustainability.
- <https://sdg.bsu.edu.az/uploads/files/Climate%20action%20policy.pdf> Downloadable PDF version of Baku State University's official climate action policy document.
- <https://sdg.bsu.edu.az/sdg-reports> Central hub containing BSU's annual and thematic reports on progress toward achieving the SDGs.
- <https://sdg.bsu.edu.az/report-on-sdg-3-good-health-and-well-being> Report detailing BSU's contributions to health promotion, well-being, and supportive campus environments under SDG 3.
- <https://sdg.bsu.edu.az/uploads/files/SDG%203%202025.pdf> PDF report summarizing BSU's 2025 progress on SDG 3: Good Health and Well-being.
- <https://sdg.bsu.edu.az/report-on-sdg-4-quality-education> Report highlighting BSU's actions to improve inclusive, equitable, and high-quality education under SDG 4.
- <https://sdg.bsu.edu.az/uploads/files/SDG%204%202025.pdf> PDF report presenting BSU's 2025 achievements related to SDG 4: Quality Education.
- <https://sdg.bsu.edu.az/report-on-sdg-6-clean-water-and-sanitation> Report describing BSU's efforts in water conservation, sanitation, and sustainable resource management under SDG 6.
- <https://sdg.bsu.edu.az/uploads/files/SDG%206%202025.pdf> PDF report covering BSU's 2025 progress on SDG 6: Clean Water and Sanitation.
- <https://sdg.bsu.edu.az/report-on-sdg-7-affordable-and-clean-energy> Report presenting BSU's renewable energy and energy efficiency initiatives supporting SDG 7.
- <https://sdg.bsu.edu.az/uploads/files/SDG%207%202025.pdf> PDF report summarizing BSU's 2025 actions on SDG 7: Affordable and Clean Energy.
- <https://sdg.bsu.edu.az/report-on-sdg-9-industry-innovation> Report highlighting innovation, research, and infrastructure development activities aligned with SDG 9.
- <https://sdg.bsu.edu.az/uploads/files/SDG%209%202025.pdf> PDF report showing BSU's 2025 progress on SDG 9: Industry, Innovation and Infrastructure.
- <https://sdg.bsu.edu.az/report-on-sdg-11-sustainable-cities> Report describing BSU's initiatives supporting sustainable urban development and resilient communities under SDG 11.
- <https://sdg.bsu.edu.az/uploads/files/SDG%2011%202025.pdf> PDF report summarizing BSU's 2025 achievements for SDG 11: Sustainable Cities and Communities.



- <https://sdg.bsu.edu.az/report-on-sdg-12> Report detailing BSU's responsible consumption, waste reduction, and sustainability practices under SDG 12.
- <https://sdg.bsu.edu.az/uploads/files/SDG%2012%202025.pdf> PDF report presenting BSU's 2025 results for SDG 12: Responsible Consumption and Production.
- <https://sdg.bsu.edu.az/report-on-sdg-13-climate-action> Report highlighting BSU's climate mitigation, awareness, and resilience measures under SDG 13.
- <https://sdg.bsu.edu.az/uploads/files/SDG%2013%202025.pdf> PDF report summarizing BSU's 2025 contributions to SDG 13: Climate Action.
- <https://sdg.bsu.edu.az/report-on-sdg-15-life-on-land> Report describing BSU's biodiversity protection, forestry, and ecosystem conservation activities under SDG 15.
- <https://sdg.bsu.edu.az/uploads/files/SDG%2015%202025.pdf> PDF report presenting BSU's 2025 progress on SDG 15: Life on Land.
- <https://sdg.bsu.edu.az/report-on-sdg-17-partnership-for-the-goals> Report highlighting BSU's collaborations and partnerships supporting sustainable development under SDG 17.
- <https://sdg.bsu.edu.az/uploads/files/SDG%2017%202025.pdf> PDF report summarizing BSU's 2025 achievements for SDG 17: Partnerships for the Goals.
- <https://sdg.bsu.edu.az/uploads/files/ANNUAL%20PROGRESS%20REPORT%202025.pdf> Annual progress report presenting BSU's overall sustainability performance and SDG achievements in 2025.
- <http://sdg.bsu.edu.az/news/bsu-and-kobia-open-ecoenergy-station-on-campus> BSU and KOBIA opened an eco-energy station on campus to promote the use of renewable and green energy.
- <http://sdg.bsu.edu.az/news/new-unique-project--eco-space-at-the-university> A new "Eco-Space" project was launched at the university to enhance environmental awareness and sustainability.
- <http://sdg.bsu.edu.az/news/dedicated-lanes-for-bicycles-and-small-electric-vehicles-at-the-main-entrance-of-bsu> Dedicated lanes for bicycles and small electric vehicles were established at BSU's main entrance to support eco-friendly transportation.
- <http://sdg.bsu.edu.az/news/research-on-hybrid-energy-systems-is-conducted-at-bsu> BSU conducts research on hybrid energy systems aimed at developing sustainable energy solutions.
- <http://sdg.bsu.edu.az/news/a-young-scientist-of-bsu-is-conducting-research-on-green-energy-production> A young BSU scientist is carrying out research on innovative green energy production methods.
- <http://sdg.bsu.edu.az/news/bsu-nano-research-laboratory-hosts-scientific-seminar-titled-nanomaterials-for-hybrid-solar-cells> A scientific seminar on nanomaterials for hybrid solar cells was held at BSU's Nano Research Laboratory.
- <http://sdg.bsu.edu.az/news/scientific-seminar-on-prospects-of-rechargeable-sodium-ion-batteries> BSU hosted a scientific seminar on the prospects of rechargeable sodium-ion batteries.
- <http://sdg.bsu.edu.az/news/training-at-bsu-the-role-of-youth-in-the-transition-to-green-energy> A training session at BSU focused on the role of youth in the transition to green energy.
- <http://sdg.bsu.edu.az/news/an-event-on-green-chemistry-was-held-at-bsu> An awareness event on green chemistry was organized at BSU.
- <http://sdg.bsu.edu.az/news/event-on-cop29-and-global-climate-change-at-bsu> BSU held an event dedicated to COP29 and global climate change issues.
- <http://sdg.bsu.edu.az/news/bsu-represented-at-baku-energy-week> BSU was represented at Baku Energy Week.
- <https://sdg.bsu.edu.az/news/a-training-session-at-bsu-dedicated-to-world-reserves-and-national-parks-day> A training session was held at BSU dedicated to World Reserves and National Parks Day.
- <https://sdg.bsu.edu.az/news/537-students-of-bsu-were-awarded-for-their-active-volunteer-work-at-cop29> 537 BSU students were awarded for their active volunteer work at COP29.
- <https://sdg.bsu.edu.az/news/an-international-scientific-conference-on-the-topic-application-of-modern-equipment-and-methods-in-improving-food-and-water-security-is-being-held-at-bsu> An international scientific conference on improving food and water security through modern methods was held at BSU.



- <https://sdg.bsu.edu.az/news/an-assessment-of-the-ecological-situation-in-the-hekerichay-reservoir-was-conducted-at-bsu> An ecological assessment of the Hekerichay reservoir was conducted at BSU.
- <https://sdg.bsu.edu.az/news/bsu-volunteers-participate-in-tree-planting-campaign-dedicated-to-azerbaijan-youth-day> BSU volunteers participated in a tree-planting campaign dedicated to Azerbaijan Youth Day.
- <https://sdg.bsu.edu.az/news/methodology-for-calculating-biomass-and-carbon-sequestration-potential-in-azerbaijan-forests-brochure-published-by-bsu-staff> BSU staff published a brochure on calculating biomass and carbon sequestration potential in Azerbaijani forests.
- <https://sdg.bsu.edu.az/news/bsu-staff-participates-in-the-event-dedicated-to-the-21st-anniversary-of-the-creation-of-hirkan-national-park> BSU staff participated in an event marking the 21st anniversary of Hirkan National Park.
- <https://sdg.bsu.edu.az/news/a-scientific-seminar-titled-the-glaciation-phases-of-our-planet-was-held-at-bsu> A scientific seminar on the glaciation phases of our planet was held at BSU.
- <https://sdg.bsu.edu.az/news/bsu-volunteers-organize-awareness-event-dedicated-to-international-recycling-day> BSU volunteers organized an awareness event dedicated to International Recycling Day.
- <https://sdg.bsu.edu.az/news/the-ecolead-project-is-being-successfully-implemented> The ECOLEAD project is being successfully implemented at BSU.
- <https://sdg.bsu.edu.az/news/field-training-programs-commence-at-bsu> Field training programs have commenced at BSU.
- <https://sdg.bsu.edu.az/news/bsu-students-learn-ways-to-protect-the-environment> BSU students are learning practical ways to protect the environment.
- <https://sdg.bsu.edu.az/news/republic-scientific-conference-on-the-new-stage-of-land-reform-and-the-resolution-of-ecological-problems-at-bsu> A republican scientific conference on land reform and ecological problem-solving was held at BSU.
- <https://sdg.bsu.edu.az/news/an-event-titled-green-economy-held-at-bsu> An event titled “Green Economy” was held at BSU.
- <https://sdg.bsu.edu.az/news/ecoday-2025-competition-at-bsu-dedicated-to-world-environment-day> The ECO DAY 2025 competition was held at BSU to mark World Environment Day.
- <https://sdg.bsu.edu.az/news/bsu-presents-results-of-active-biomonitoring-of-atmospheric-air-in-baku-and-absheron> BSU presented results of active biomonitoring of atmospheric air in Baku and Absheron.
- <https://sdg.bsu.edu.az/news/bsu-volunteers-participate-in-protect-the-caspian-2025-international-coastal-cleanup> BSU volunteers participated in the “Protect the Caspian 2025” international coastal cleanup campaign.
- <https://sdg.bsu.edu.az/news/scientific-seminar-on-the-transformation-of-caspian-coastal-landscapes> A scientific seminar on the transformation of Caspian coastal landscapes was held at BSU.
- <https://sdg.bsu.edu.az/news/scientific-seminar-on-the-ecological-problems-caused-by-the-mining-industry> A seminar on ecological problems caused by the mining industry was conducted at BSU.
- <https://sdg.bsu.edu.az/news/bsu-young-researchers-projects-reach-the-final-of-the-earth-observation-competition> BSU young researchers’ projects reached the final stage of the Earth Observation competition.