UI GreenMetric Questionnaire

University : Baku State University
Country : Azerbaijan
Web Address : http://bsu.edu.az/en
SDG focused Web Adress: https://sdg.bsu.edu.az/

[4] Water (WR)

[4.5] Consumption of treated water (WR.5)

BAKU
STATE
UNIVERSITY

UI GreenMetric
Sustainable University Rankings

Description:

At Baku State University, the use of treated water is an important component of campus water management and serves to safely meet the daily drinking water needs of students and staff. Water filtration and purification systems are installed in various campus buildings, including academic blocks, administrative units, and student dormitories. The water provided through these systems is directly used as drinking water and is monitored in accordance with quality standards.

Drinking water dispensers and centralized water supply points located across the campus enable students and staff to have continuous access to clean and safe drinking water. This infrastructure contributes both to improving hygienic water quality and to reducing the consumption of bottled water. As a result, the university helps to reduce environmental impact and minimize waste generation.

The use of treated water is also part of an efficient water resource management strategy. The university implements relevant policies and management mechanisms aimed at preventing water losses, ensuring rational water consumption, and strengthening environmental sustainability.

Baku State University has undertaken comprehensive measures to ensure the conservation, efficient use, and ecological sustainability of water resources across its campus. The university's water management programs are designed not only to support the continuous development of educational and research activities but also to reinforce the principles of a "Green Campus," fostering a culture of environmental responsibility among students, faculty, and staff. In sports facilities, water from swimming pools is carefully treated through advanced filtration and disinfection systems and then reused for irrigating greenery, maintaining campus landscapes, and supporting plant growth, thereby minimizing wastage. Similarly, the Eco-space aquaponics system integrates fish habitats and plant cultivation, where water is continuously filtered and recycled, demonstrating a closed-loop ecosystem model that serves as a practical learning resource for students studying biology, ecology, and environmental sciences. Across the campus, between nearly 79% of treated water is effectively reused, including in irrigation, toilet flushing, and technical operations, demonstrating a significant reduction in freshwater consumption.

Campus fountains and water features operate with closed-loop circulation systems, significantly reducing the need for fresh water, while modern water-saving fixtures—including dual-flush toilets, low-flow faucets, and sensor-activated taps—have been installed in all university buildings to maximize water efficiency. Laboratory and cafeteria facilities have also been upgraded with water-efficient appliances, ensuring that research, teaching, and daily operations align with sustainability goals. In addition, domestic and technical wastewater is treated using state-of-the-art purification equipment, enabling safe reuse for irrigation and technical applications in accordance with environmental standards.

Beyond operational efficiency, these initiatives support experiential learning, allowing students to engage with practical sustainability projects and fostering awareness of global water challenges. Through these comprehensive measures, Baku State University actively contributes to multiple United Nations Sustainable Development Goals (SDGs), particularly SDG 6 (Clean Water and Sanitation) and SDG 12 (Responsible Consumption and Production), while strengthening collaboration with international organizations, sharing best practices, and fulfilling its responsibilities as an active member of several prominent global academic and sustainability networks. The university's commitment to water stewardship exemplifies how higher education institutions can integrate ecological responsibility with academic excellence, research innovation, and community engagement.

University and Location	Total Treated Water Generated (liters/year)	Main Treatment Source	Treated Water Consumption Areas	Annual Treated Water Consumed (liters/year)	Percentage of Treated Water Consumed
Baku State University; Main Campus	850,000	Domestic + Technical Wastewater Treatment Plant	Toilet Flushing, Irrigation, Cleaning Systems	680,000	80%
Baku State University; Eco-Space & Green Zones	420,000	Eco-Space Filtration & Recycling System	Aquaponics, Plant Irrigation, Ecological Maintenance	330,000	79%
Baku State University; Research & Training Facilities	310,000	Laboratory & Utility Water Treatment System	Technical Operations, Facility Cleaning, Utility Systems	240,000	77%

INDICATOR	VALUE (APPROX.)
TOTAL ANNUAL TREATED WATER GENERATED	**1,580,000 liters**
TOTAL ANNUAL TREATED WATER CONSUMED / REUSED	**1,250,000 liters**
TREATED WATER USED FOR IRRIGATION	**420,000 liters**
TREATED WATER USED FOR TOILET FLUSHING	**310,000 liters**
TREATED WATER USED FOR CLEANING OPERATIONS	**240,000 liters**
TREATED WATER USED FOR TECHNICAL OPERATIONS	**180,000 liters**
TREATED WATER USED IN ECO-SPACE SYSTEMS	**100,000 liters**
PERCENTAGE OF TREATED WATER CONSUMED	**79%**

WATER REUSE APPLICATION	ANNUAL CONSUMPTION (LITERS)	SHARE OF TOTAL TREATED WATER
LANDSCAPE IRRIGATION	420,000	27%
TOILET FLUSHING SYSTEMS	310,000	20%
SWIMMING POOL WATER SECONDARY REUSE	180,000	11%
ECO-SPACE AQUAPONICS CIRCULATION	100,000	6%
CAMPUS CLEANING & MAINTENANCE	240,000	15%
TECHNICAL AND LABORATORY OPERATIONS	180,000	11%
FOUNTAIN CLOSED CIRCULATION SYSTEMS	70,000	4%

System / Facility	Implementation at BSU	Function	Sustainability Impact
Water Filtration Systems	Installed in academic, administrative, and residential buildings	Purifies water for direct human consumption	Ensures safe drinking water for students and staff
Central Drinking Water Points	Distributed across campus	Provides continuous access to treated drinking water	Reduces bottled water consumption
Drinking Water Dispensers	Installed in high-traffic campus areas	Provides safe, monitored drinking water supply	Improves hygiene and accessibility
Water Quality Monitoring	Regular testing under institutional standards	Ensures compliance with safety and quality requirements	Guarantees safe consumption

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

1. The document outlines the governance and operational principles of the institution. It includes key rules related to sustainability and environmental responsibility.
   For more information please click link:
   https://sdg.bsu.edu.az/university-policies

2. Baku State University actively participates in education, research, and community engagement in line with the Sustainable Development Goals. The university implements sustainable development initiatives through collaboration with various local and international organizations.

   For more information please click link:
   https://sdg.bsu.edu.az/bsu%60s-commitment-to-sdgs

3. Regulations on water resource management and protection are provided in this document. Efficient usage and pollution prevention are key focus areas.

   For more information please click link:
   https://sdg.bsu.edu.az/uploads/files/Clean%20Water%20Policy.pdf

4. Measures addressing climate change are explained in this plan. Reducing carbon emissions and maintaining ecological balance are primary objectives.

   For more information please click link:
   https://sdg.bsu.edu.az/climate-action-plan-action
5. Actions in clean water and sanitation are presented in this report. Outcomes related to water management and efficient resource use are shown.
   For more information please click link:
   https://sdg.bsu.edu.az/report-on-sdg-6-clean-water-and-sanitation
6. Activities carried out within partnership frameworks are reflected here. Joint projects with local and international partners are presented.
   For more information please click link:

https://sdg.bsu.edu.az/report-on-sdg-17-partnership-for-the-goals

7. Information about joining the International Sustainable Campus Network is provided. This step strengthens global environmental collaboration.
   For more information please click link:
   https://sdg.bsu.edu.az/news/bsu-joins-the-international-sustainable-campus-network
8. Participation in the international exhibition is described here. Innovative approaches in environmental and agricultural fields were showcased.
   For more information please click link:
   https://sdg.bsu.edu.az/news/bsu-is-represented-at-caspian-agro--the-18th-azerbaijan-international-agriculture-exhibition
9. The eco-space initiative developed at the institution is presented here. It aims to create a sustainable and green environment for students.
   For more information please click link:
   https://sdg.bsu.edu.az/news/new-unique-project--eco-space-at-the-university
10. The SDG reports demonstrate the university's commitment to sustainability, environmental management, and efficient use of natural resources across the campus. Institutional progress toward sustainable campus infrastructure and water-related goals is clearly presented.
    For more information please click link:
    https://sdg.bsu.edu.az/sdg-reports
11. The Climate Action Plan outlines strategies for sustainable campus development, climate resilience, and environmentally responsible resource management. Measures supporting water conservation and ecological infrastructure are emphasized.
    For more information please click link:
    https://sdg.bsu.edu.az/climate-action-plan-action
12. The governance framework reflects the university's commitment to sustainability-oriented management and environmental planning. Policies supporting efficient infrastructure and resource management are integrated into institutional governance.
    For more information please click link:
    https://sdg.bsu.edu.az/governance
13. The university sustainability platform presents initiatives, policies, and projects related to environmental protection and sustainable campus development. Institutional efforts toward efficient resource use and ecological responsibility are highlighted.
    For more information please click link:
    https://sdg.bsu.edu.az/
14. Research activities related to SDG 6 demonstrate the university's contribution to sustainable water management and clean water solutions. Scientific studies addressing water conservation and environmental sustainability are actively supported.
    For more information please click link:
    https://sdg.bsu.edu.az/research-on-sdg-6
15. The research platform highlights scientific studies and innovation activities focused on sustainability and environmental challenges. Contributions to sustainable resource management and ecological development are demonstrated through academic research.
    For more information please click link:

https://sdg.bsu.edu.az/research

16. The news platform presents sustainability-related projects, environmental initiatives, and campus development activities implemented by the university. Efforts supporting ecological awareness and sustainable resource management are regularly highlighted.
    For more information please click link:
    https://sdg.bsu.edu.az/allnews