



UI GreenMetric Questionnaire

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

[3] Waste (WS)

[3.15] Total volume toxic waste treated this year

Type of waste	Produced (Last Year)	Produced (This Year)	Reduced (tons)	Treated – Reused (tons)	Treated – Down-cycled (tons)	Treated – Up-cycled (tons)	Total Treated (tons)
Toxic waste	1.30	0.65	0.65	0.05	0.44	0.15	0.64 (98%)
- Electronics (e-waste)	0.40	0.20	0.20	0.03	0.08	0.09	0.20
- Laboratory chemicals	0.90	0.45	0.45	0.02	0.36	0.06	0.44
- Other hazardous waste	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	1.30	0.65	0.65	0.05	0.44	0.15	0.64

Description:

During the reporting year, Baku State University significantly improved its hazardous waste management performance by reducing the total amount of toxic waste generated from 1.30 tons in the previous year to 0.65 tons, representing a 50% reduction (0.65 tons). This achievement reflects the university's commitment to minimizing hazardous waste through improved laboratory management, responsible procurement, efficient inventory control, proper maintenance of electronic equipment, and the adoption of safer and more sustainable operational practices.

The hazardous waste generated consisted primarily of electronic waste (0.20 tons) and laboratory chemicals (0.45 tons). Electronic waste included obsolete computers, laboratory instruments, and electronic components, while laboratory chemical waste originated from teaching and research activities.

Of the 0.65 tons of toxic waste generated, 0.64 tons (98%) were successfully treated through environmentally responsible waste management practices. Treatment included 0.05 tons reused, 0.44 tons down-cycled, and 0.15 tons up-cycled, ensuring that almost all hazardous waste was safely recovered, recycled, or treated by licensed hazardous waste management companies. Only 0.01 tons (2%) remained untreated.

The university applies strict hazardous waste management procedures, including source segregation, secure temporary storage, regular monitoring, detailed record-keeping, and transportation by authorized hazardous waste contractors in accordance with national environmental and health and safety regulations. Continuous staff training and laboratory safety programs further strengthen compliance and reduce environmental and occupational risks.

By achieving a 50% reduction in toxic waste generation and a 98% treatment rate, Baku State University demonstrates excellent environmental stewardship, minimizes pollution risks, promotes responsible hazardous



waste management, and supports its Green Campus Strategy. These efforts contribute directly to SDG 3 (Good Health and Well-being), SDG 12 (Responsible Consumption and Production), and SDG 13 (Climate Action).

Baku State University systematically monitors and records the total volume of toxic waste generated annually across its academic, laboratory, and research facilities as part of its environmental management and sustainability framework. Toxic waste primarily includes hazardous chemical residues, laboratory reagents, contaminated containers, expired chemicals, and other hazardous materials generated during teaching, research, and scientific experimentation activities.

To ensure environmental safety and regulatory compliance, all toxic waste is segregated at the source, collected in designated hazardous waste containers, and temporarily stored in secure, controlled areas before being transferred for specialized treatment and disposal. The annual measurement of toxic waste volume enables the university to evaluate hazardous waste generation trends, improve laboratory safety practices, strengthen waste minimization strategies, and support sustainable campus operations aligned with international environmental standards.

Baku State University manages and treats toxic waste generated from its laboratories, research units, and technical facilities through a controlled hazardous waste management system designed to ensure environmental and human safety. Toxic waste treatment activities are carried out in accordance with institutional laboratory safety procedures and national environmental regulations, including the segregation, temporary secure storage, neutralization where applicable, and transfer of hazardous waste to authorized treatment or disposal providers.

The university records the total volume of toxic waste treated each year as part of its environmental sustainability and waste management monitoring framework. Treated toxic waste may include chemical residues, contaminated laboratory materials, hazardous reagents, expired chemicals, and other regulated toxic substances.

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

1. At Baku State University, the results of research on the development and application of bio-nanoadsorbents for the purification of oil-contaminated water were presented during a scientific seminar. The study is focused on developing innovative and environmentally sustainable solutions for the effective removal of oil pollutants from the environment.

For more information click: <https://sdg.bsu.edu.az/news/bsu-conducts-research-on-purification-of-oil-contaminated-water-using-bio-nanoadsorbents>

2. Baku State University's research on SDG 6 demonstrates its commitment to advancing clean water and sanitation through scientific studies focused on water quality monitoring, wastewater treatment, aquatic ecosystem protection, and sustainable water resource management. These interdisciplinary research efforts support practical solutions to regional water challenges while contributing to national and global sustainability priorities related to clean water and public health.

For more information click: <https://sdg.bsu.edu.az/research-on-sdg-6>

3. Baku State University's research on SDG 8 demonstrates its contribution to promoting decent work and sustainable economic growth through studies on labor market dynamics, workforce development, human capital, and inclusive economic policy. The university's interdisciplinary research also addresses innovation, entrepreneurship, digital transformation, and sustainable economic diversification to support resilient and equitable development.

For more information click: <https://sdg.bsu.edu.az/research-on-sdg-8>

4. Baku State University's research on SDG 11 demonstrates its commitment to sustainable cities and communities through interdisciplinary studies on urban planning, environmental protection, smart infrastructure, disaster resilience, and cultural heritage preservation. These research initiatives support evidence-based solutions for inclusive, safe, and resilient urban development while contributing to sustainable city planning and environmental quality improvement in Azerbaijan.



For more information click: <https://sdg.bsu.edu.az/research-on-sdg-11>

5. Baku State University's research on SDG 12 reflects its commitment to responsible consumption and production through studies focused on sustainable resource use, waste reduction, recycling systems, circular economy practices, and environmentally responsible procurement. These interdisciplinary research efforts support the development of practical solutions for minimizing environmental impact and promoting sustainable production and consumption patterns across institutional and societal contexts.

For more information click: <https://sdg.bsu.edu.az/research-on-sdg-12>

6. The study presented at Baku State University on the "Results of Active Biomonitoring of Atmospheric Air in Baku and Absheron" assesses the impact of industry and transport on air quality using the moss transplants method. The findings reveal that heavy metals and other pollutants exceed permissible levels in certain areas, providing important scientific data on the region's environmental condition.

For more information click: <https://sdg.bsu.edu.az/news/bsu-presents-results-of-active-biomonitoring-of-atmospheric-air-in-baku-and-absheron>

7. Director of the Scientific Research Institute of Medical Prophylaxis delivered a masterclass to BSU students, focusing on public health, disease prevention, and modern approaches to medical prophylaxis. During the session, students were introduced to practical knowledge and scientific perspectives aimed at strengthening their understanding of healthcare and preventive medicine.

For more information click: <https://sdg.bsu.edu.az/news/director-of-the-scientific-research-institute-of-medical-prophylaxis-delivers-a-masterclass-to-bsu-students>

8. The scientific seminar titled "Assessment of the Assimilation Potential of Coastal Landscapes of the Caspian Sea under Technogenic Impacts" held at Baku State University focused on the scientific analysis of changes in coastal ecosystems caused by human activities. The seminar highlighted the importance of research aimed at improving ecological sustainability in coastal zones and reducing anthropogenic impacts.

For more information click: <https://sdg.bsu.edu.az/news/scientific-seminar-held-assessment-of-the-assimilation-potential-of-coastal-landscapes-of-the-caspian-sea-under-technogenic-impacts>

9. At Baku State University, Faculty of Biology, research is being conducted on the effects of salinity stress on plants, focusing on how increased salinity influences plant growth and physiological processes. The study aims to develop scientific approaches for improving plant tolerance to saline conditions and supporting sustainable agriculture under environmental stress.

For more information click: <https://sdg.bsu.edu.az/news/research-on-the-effects-of-salinity-stress-on-plants-is-being-conducted-at-bsus-faculty-of-biology>

10. At Baku State University, a training session on "Modern approaches to solid household waste management" was held, where information was provided about innovative methods of waste collection, sorting, and recycling. The main aim of the training was to promote environmental responsibility and encourage the application of modern approaches for more efficient waste management.

For more information click: [Bakı Dövlət Universiteti](https://www.bsu.edu.az)

11. The "Waste for Gifts" festival held at Baku State University was an environmental awareness event organized to promote environmental protection and proper waste management. Participants exchanged waste materials for various gifts, contributing to the development of eco-friendly behavior habits.

For more information click: [Bakı Dövlət Universiteti](https://www.bsu.edu.az)

12. Baku State University's report on SDG 13 (Climate Action) presents the university's measures in addressing climate change, reducing carbon emissions, and promoting sustainable development. It also highlights the strengthening of environmental sustainability through climate education, research activities, and international cooperation.

For more information click: <https://sdg.bsu.edu.az/report-on-sdg-13-climate-action>

IMAGES





**BAKU
STATE
UNIVERSITY**

