



D. Serikbayev

**EAST
KAZAKHSTAN
TECHNICAL
UNIVERSITY**

SDG 6

Policy of NJSC «D. Serikbayev EKTU»



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1. GENERAL PROVISIONS

1.1 Goal



The D. Serikbayev EKTU, as a responsible educational institution, implements a sustainable development policy in accordance with the international goals of the United Nations and the national legislation of the Republic of Kazakhstan, including the Environmental Code of the Republic of Kazakhstan (2021, as amended and supplemented), which establishes requirements for the protection of water resources and a ban on

the discharge of untreated wastewater into water bodies. The University provides all staff, students and visitors with access to clean drinking water, sanitation and hygiene products.

Objective: to ensure the rational use of water resources, the development of infrastructure for sustainable water use and the preservation of water quality in accordance with SDG 6 "Clean water and sanitation".

Tasks:

- reduction of freshwater consumption through the introduction of innovative technologies and recycling programs;
- improving the efficiency of wastewater treatment and preventing its polluting effects;
- Ensuring universal access to drinking water and sanitation facilities on campus;
- Involvement of the public and partners in water management initiatives.

2. CURRENT MEASURES AT EKTU

2.1 Comprehensive program for the conservation of water resources

The University implements a comprehensive program for the conservation and sustainable management of water resources:

Water conservation programs:

- rainwater harvesting;
- waste water collection from parking lots;
- a program for installing water-saving devices;
- a program for using purified water for technical purposes.

As a result of the implementation of the programs, it was possible to reduce the consumption of fresh water by 51%.

Implementation of the water recycling program:

- surface wastewater collection systems;
- water purification for irrigation and technical needs;

- combined tanks and oil traps.

Use of water-saving appliances (100%):

- washbasins and faucets with sensors for turning on water;
- automatic shut-off systems in case of leaks;
- aerators and plumbing with dual-mode flush.

The use of purified water for irrigation (sprinkling, drip irrigation, sweating).

2.2 Water pollution control

- connection to the urban sewerage system and sewage treatment plants;
- local treatment at facilities outside the city («Prostor»);
- prohibition of wastewater discharge into the Bukhtarma reservoir;
- wastewater and river monitoring is carried out by the services of the municipal water utility.

2.3 Monitoring and scientific research



The Center for Competence and Technology Transfer in the field of water management and water use (created as a platform for practice-oriented training; it includes laboratories "Hydraulics", "Pumps, Networks and Water treatment", "Integrated Water Resources Management", "Hydrochemistry"; provides services and conducts projects/monitoring). He also monitors the state of the waters of the Bukhtarma reservoir.

2.4 Educational programs and popularization



- EKTU implements specialized training areas: bachelor's degree 6B08601 "Water resources and water use" and Master's degree 7M07310 "Water Supply and Sewerage", aimed at training specialists in the field of water management, protection and rational use of water resources. Students receive both theoretical knowledge (hydraulics, hydraulic engineering, water purification) and practical skills: hydrometry, sampling, water quality analysis, and water supply system design.



– Within the framework of the EKTU Science Week, a round table "Water Day" is being held with graduates and students, where issues of water security, sustainable water resources management and industry reform are discussed. Communication with graduates is maintained and platforms for interaction between the scientific community and students are being created.

2.5 Practice-oriented training



Students are trained in the disciplines of "Water Chemistry and SMA", "Water quality improvement" with the involvement of chemical engineering practitioners, which allows them to form professional competencies for work in the field of water management.

2.6 Scientific research and projects

The University is implementing the BR21881921 project "Assessment of the aquatic ecosystem of the Yertis River Basin", which conducts hydrographic research using modern technologies: the RiverSurveyorM9 Doppler acoustic flow profiler and the APACHE 3 unmanned water drone. The data obtained is used to create a geoportal for assessing the spread of pollution in the Yertis River basin.

2.7 Professional development of teachers



EKTU teachers completed the CAR@WAN course on the protection and restoration of water resources, where SDG 6 "Clean water and sanitation" was considered, including indicators, methods for the protection and restoration of freshwater ecosystems in Kazakhstan.

3. EKTU IN RANKINGS ON SDG 6

In 2024, the university entered the group of 1001-1500 best universities in the world according to the Times Higher Education Impact Rankings, which assess the contribution of universities to achieving the SDGs.

According to SDG 6, "Clean water and sanitation" EKTU ranks 601-800, which confirms the importance of the measures being implemented in the field of rational water use and protection of water resources.



4. PLANNED MEASURES

1. Expansion of water reuse and recycling programs at the university.
2. Strengthening the system of electronic monitoring of water consumption with the publication of open data.
3. Organization of educational campaigns among students and staff on rational water use.
4. Development of initiatives to involve the public in issues of water consumption and conservation.
5. Expanding the research of the Competence Center for Water Management.

5. EXPECTED RESULTS

1. Reducing freshwater consumption per person through the introduction of new technologies and improving the effectiveness of existing programs.
2. Complete transition of the university to a system of sustainable water use with recycling and use of purified water.
3. Strengthening the position of EKTU in the international rankings on the SDGs, including improving the indicators for SDG 6.
4. Formation of a culture of rational water use among students, staff and partners of the university.
5. Increasing the university's contribution to the implementation of national and international strategies for clean water and sanitation.