SUSTAINABLE DEVELOPMENT GOAL NO. 6 “CLEAN WATER AND SANITATION”

Water is one of the most fundamental conditions for the existence of life and, at the same time, one of the most vulnerable natural resources in the modern world. Access to clean water and adequate sanitation is an indicator of social justice, environmental safety, and the resilience of states.

In the twenty-first century, the issue of water resources has become particularly acute due to climate change, urbanization, industrial pressure, and the consequences of armed conflicts. For Ukraine in 2025, these challenges are intensified by the war, which has affected water supply infrastructure, the ecological condition of water bodies, and sanitation systems in certain regions.

Under these circumstances, universities serve as centers of environmental monitoring, analytical research, and the formation of a new culture of responsible attitudes toward natural resources.

In 2025, V. N. Karazin Kharkiv National University continued implementing Sustainable Development Goal No. 6 “Clean Water and Sanitation” through:

- scientific research on water resources;
- environmental monitoring;
- educational programs;
- interdisciplinary projects;
- international cooperation;
- awareness-raising activities.

SCIENTIFIC RESEARCH ON WATER RESOURCES

In 2025, the University continued comprehensive research in the fields of hydrology, hydrogeology, and the ecology of water systems.

The main directions included:

- monitoring the condition of surface and groundwater;
- analyzing drinking water quality;
- studying the impact of anthropogenic factors on aquatic ecosystems;
- assessing the consequences of climate change for the regional water balance.

Particular attention was devoted to studying the impact of military actions on water infrastructure and natural water bodies, especially the risks of contamination and disruption of natural hydrological processes.

ENVIRONMENTAL MONITORING AND ASSESSMENT OF ENVIRONMENTAL CONDITIONS

In 2025, Karazin University continued participating in environmental monitoring programs aimed at assessing the condition of water resources and the environment.

Research activities included:

- analysis of the chemical composition of water;
- identification of pollutants of various origins;
- assessment of aquatic ecosystem conditions;
- monitoring the impact of urbanization.

Special attention was devoted to regions experiencing increased environmental pressure and territories affected by military actions. The University emphasizes the importance of a systematic approach to environmental monitoring as a basis for managerial decision-making.

EDUCATION IN WATER SECURITY AND ECOLOGY

In 2025, the University continued integrating the topic of water security into the educational process.

Students acquired knowledge concerning:

- sustainable water resource management;
- environmental hydrology;
- the impact of climate change on water systems;
- sanitation and hygiene;
- environmental law.

Education in this field is aimed at fostering responsible attitudes toward natural resources as a foundation of sustainable development.
The University regards environmental literacy as an integral component of modern university education.



The principal directions included:

- ensuring hygiene standards;
- monitoring water supply quality;
- modernization of engineering infrastructure;
- compliance with sanitary regulations.

Particular attention was devoted to creating a safe environment for students and employees, especially under increased risks associated with wartime conditions.

SANITATION CONDITIONS AND ENVIRONMENTAL SAFETY

In 2025, the University continued maintaining proper sanitation conditions in academic buildings, laboratories, and dormitories.

6 CLEAN WATER AND SANITATION



THE IMPACT OF WAR ON WATER RESOURCES AND INFRASTRUCTURE

In 2025, the University continued analytical research on the consequences of war for water systems.

The following issues were examined:

- risks of destruction of water infrastructure;
- environmental consequences of contamination;
- changes in regional water balances;
- long-term environmental risks.

These studies possess considerable social significance, as they form the basis for the future restoration of ecological balance.

INTERNATIONAL COOPERATION IN THE FIELD OF WATER SECURITY

In 2025, Karazin University continued participating in international scientific initiatives related to:

- water resource management;
- environmental safety;
- climate research;
- sustainable development.

International cooperation enabled the University to:

- exchange experience;
- participate in joint research projects;
- integrate Ukrainian science into global environmental programs.

The University regards water security as a global challenge requiring coordinated international efforts.

DEVELOPMENT OF ENVIRONMENTAL CULTURE

In 2025, the University continued awareness-raising activities aimed at fostering environmental consciousness.
The following activities were organized:

- *lectures and seminars;*
- *popular science events;*
- *student projects;*
- *discussions on the sustainable use of resources..*

CONCLUSIONS

In 2025, Karazin University continued implementing Sustainable Development Goal No. 6 “Clean Water and Sanitation” through:

scientific research;
environmental monitoring;
educational programs;
support for sanitary safety;
analysis of the impact of war;
international cooperation;
development of environmental culture.

The University regards access to clean water as a fundamental condition of human dignity, health, and sustainable societal development. Under modern conditions, this issue acquires civilizational significance, since the quality of life of present and future generations depends on the condition of water resources.

6 CLEAN WATER AND SANITATION