WATER MANAGEMENT POLICY
NAVOI STATE UNIVERSITY OF MINING AND TECHNOLOGIES



WATER MANAGEMENT POLICY
of Navoi State University of Mining and Technologies

1. Purpose

This policy outlines NSUMT's commitment to sustainable water management as a core component of its environmental strategy. Recognizing water as a critical and finite resource, the university aims to minimize water consumption, maximize efficiency, and contribute to local and national water security. Through innovation, awareness, and infrastructure, NSUMT seeks to advance a campus-wide water conservation culture aligned with Uzbekistan's environmental priorities and global sustainability goals.

2. Objectives

The primary objectives of this policy are to:

- Promote the responsible and efficient use of water across all university operations.
- Integrate water conservation, recycling, and treatment into campus infrastructure and behavior.
- Utilize ICT tools and innovation to monitor, evaluate, and continuously improve water-related performance.
- Support Uzbekistan's national water resource management strategy and contribute to public awareness and capacity building.

Specific goals include:

- Achieving 100% water conservation efficiency and water recycling by 2030.
- Enhancing groundwater recharge and minimizing water pollution.
- Promoting student and staff engagement in sustainable water use.

3. Scope

This policy applies to:

- All academic, administrative, residential, and recreational facilities on NSUMT campuses.
- All water-related infrastructure, including irrigation, cooling, sanitation, and water treatment systems.
- All departments, contractors, and partners operating within university premises.

- All university-led or affiliated research, development, or outreach programs related to water use.

4. Strategic Water Management Approach

Rainwater Harvesting & Storage

- Rainwater is collected from rooftops and impermeable surfaces and directed into centralized reservoirs and recharging pits.
- Reservoirs with a capacity of 200,000 liters and recharge pits with a capacity of 30,000 liters are operational across campuses.
- Rainwater is used for irrigation, flushing, and cooling systems.

Water Recycling & Reuse

- Recycled water is used for:
  - Drip and sprinkler irrigation of gardens and greenhouses.
  - Toilet flushing in all facilities.
  - Building cooling systems.
  - Drinking water *(after advanced solar-based treatment)*.
- Approximately 65% of all water is recycled.

Efficient Appliances

- Use of low-flow toilets, automatic taps, and water-efficient lab and kitchen equipment.
- Smart applications promote responsible personal water consumption among staff and students.

ICT-Enabled Monitoring & Control

- Smart water meters and custom-developed autonomous monitoring systems provide real-time tracking and analytics.
- Digital platforms are used for awareness campaigns and operational efficiency.
- Data-driven decision-making is used to identify inefficiencies and optimize usage.

5. Water Pollution Prevention and Treatment

NSUMT is committed to:

- Preventing water pollution through separation of wastewater and rainwater.
- Using infiltration wells and solar-powered filtration systems to treat and reuse water.
- Monitoring water bodies on campus in cooperation with local environmental

authorities.

- Implementing plastic and waste reduction policies to prevent waterway contamination.

6. Education, Research, and Community Engagement

- **Awareness & Training:** Regular seminars, workshops, and campaigns titled *"Let's Preserve Water Together"* are held to promote water conservation.
- **Innovative Research Projects:**
  - Development of autonomous control systems for hot water supply.
  - Solar-powered groundwater filtration systems available for public and educational use.
- **Outreach:** NSUMT collaborates with city authorities and conducts public education sessions in alignment with national water policy.

7. Governance and Implementation

The policy will be implemented and overseen by:

- **Sustainability Commission**
- **Facility Management Department**
- **Digital Education Technologies Centre**
- **Department of Electro Energetics** *(for innovation and engineering solutions)*

Responsibilities include:

- Monitoring implementation of all water systems.
- Maintaining infrastructure for rainwater harvesting and treatment.
- Providing staff training and student involvement opportunities.
- Ensuring compliance with water quality standards and legal obligations.

8. Review and Continuous Improvement

This policy will be reviewed biennially to ensure:

- Alignment with new technologies, scientific findings, and regulatory changes.
- Responsiveness to environmental challenges, especially climate variability.
- Integration with other sustainability policies and institutional objectives.

The university remains committed to continuous improvement through performance tracking, stakeholder feedback, and innovation in water management systems.