



## Üsküdar University

### Clean Water and Sanitation Sustainability Report

#### Monitoring Water Consumption

Water consumption in Uskudar University including South campus, Çarşı, North campus, faculty of medicine and NP health campus is monitored and recorded. It is reported that the amount of water consumption is determined as 27.856 m<sup>3</sup>, per person in 2022.

#### Discharge of Waste Water and Accidents in the Water System

Uskudar University is included in the sewer network of İSKİ (Istanbul water and sewerage administration). In accordance with the criteria of the Regulation on Discharge to Sewerage, wastewater generated on campus is sent to Istanbul Water and Sewerage Administration. At Uskudar University, precautions are taken against accidents that may occur in the water system by permanent administrative staff working at the Department of Construction and Technical Affairs ([Link 1](#)). Appropriate plumbing materials are used and replaced when necessary to prevent any contaminants from entering the water system.

#### Providing Free Drinking Water

Our university offers services to provide free drinking water. Uskudar University has a total of 147 water dispensers and drinking and utility water is provided throughout the campus at the standards specified in the "Regulation on Water Intended for Human Consumption". Drinking water is provided free of charge to students, staff and visitors through the dispensers located in our university, and free drinking water is also provided in the staff and student dining hall. In order to reduce the amount of plastic waste, support water saving, and protect the environment and human health, thermoses were distributed to academic and administrative staff. Water is safely consumed in thermos and glass cups, and the passage of microplastics that threaten human health is prevented by not using plastic cups.

Uskudar University Faculty of Medicine Hospital NP Campus has a drinking water treatment unit where municipal water is treated. After the mains water is stored, it is delivered to the drinking water treatment unit for treatment. There is a pre-filtration system on the raw water inlet line. The unit uses a reverse osmosis membrane system, a water softening system and an antiscalant solution used to prevent calcium and magnesium ions in the water from precipitating on the membrane. Water is delivered from the drinking water unit to 14 different dispensers located in the dining hall and on the floors. Samples are taken from the dispensers every three months to check whether the water is suitable for drinking water. The water used meets the drinking water quality standard.



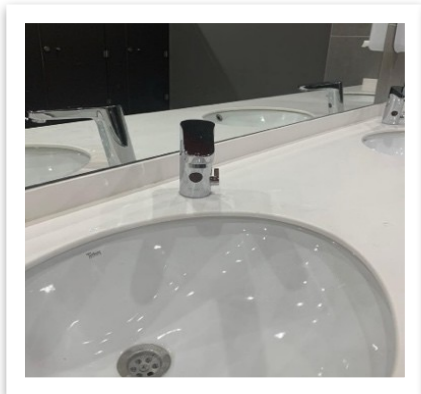
**Reverse osmosis system**



**Water softening system**

### **Water Awareness Standards and Practices**

In order to minimize water use at our university, there are 16 photocell faucets in the Health Campus and 50 photocell faucets in Feneryolu Medical Center. In addition, in order to save water, aerators are installed on the spout of the faucets used in all administrative buildings and campuses to prevent irregular water use and reduce water consumption.



**Photocell faucets**



**Aerator usage**



Irrigation of green areas at our university is done in the evening or at night to minimize evaporation. Green areas are irrigated using sprinkler systems to minimize water use. Our university has coniferous trees that consume less water and provide significant water

savings. The image taken during irrigation is representative. Links showing the South ([Link 2](#)) and Çarşı campuses ([Link 3](#)) and green areas of our university are presented.



#### **Green areas and irrigation images from a part of our campus**

Our university attaches importance to the environment and public health. In this context, the Al-Mizan World Environment Charter ([Link 4](#)), a joint work text carried out under the umbrella of the United Nations Environment Program (UNEP) Faith for the Earth Initiative and contributed by Muslim thought leaders around the world, is published at our university, emphasizing that natural resources such as water will not be able to renew themselves due to the increase in anthropogenic pollution and that pollutants will increase in natural resources. People are reminded of their responsibilities regarding the protection of natural resources and biodiversity, which are the common heritage of our world, and climate change. There are also working groups in the field of public health at our university ([Link 5](#)).



**Al-Mizan World Environment Convention**

## **Implementation and Activities within the Scope of Water in Society**

In our university, there is a "Water Quality and Treatment" course in which the importance of water, conscious use, surface water resources, wastewater and treatment methods are taught at the associate degree level. Wastewater and water management is of great importance for a sustainable environment, protection of the quality and sustainable use of natural water resources. Wastewater management includes the processes of recycling and treatment of wastewater generated as a result of domestic, industrial, and agricultural activities without harming the nature. Thanks to these methods, water resources are protected, and clean water is provided for future generations. At the undergraduate level, the "Environmental Health" course teaches the protection and improvement of natural resources. In addition, free seminars ([Link 6](#)), news ([Link 7](#)) awareness raising on water use and treatment are organized in the community. In the seminar held by Prof. Dr. Sevil ATASOY who is Director of the Institute of Addiction and Forensic Sciences and Head of the Department of Forensic Sciences, the epidemiology of wastewater was explained. Moreover, it was stated that the drugs used can be detected by analyzing the substances in wastewater. By ensuring the reuse of water through wastewater analysis, epidemiological data in the society can be revealed. In the Faculty of Medicine of our university, water is obtained from the underground by utilizing sustainable water extraction technologies and the extracted water is used for irrigation purposes.

## **Collaborations on Water Security**

Our university cooperates with local, regional and national administrations regarding water security. United Nations Drug Control Board (INCB) 2022 Report has been explained by Vice Rector Prof. Dr. Sevil ATASOY who member of the United Nations Drug Control Board 2005-2010, 2015-2022 and 2022-2027. It was mentioned that drug consumption and public health issues are discussed, and it is stated that consumed drugs can be detected by analyzing wastewater ([Link 8](#)). Determining the wastewater compound is of great importance for the selection of appropriate treatment processes.



**United Nations Drug Control Board Meeting**

Our university has adopted a holistic approach to human and human health as its mission. Uskudar University Health Application and Research Center (SUAM) provides health services

and conducts scientific research ([Link 9](#)). Since wastewater-borne diseases can lead to various epidemics, studies are carried out at our Health Practice and Research Center to protect public health.

Our occupational physicians raise public awareness on water safety and epidemics. In the Advanced Toxicology Analysis Laboratory of our university, toxic and addictive substances (opiates, amphetamine group, cannabis, synthetic cannabinoids, alcohol, cocaine) are analyzed quantitatively in urine. Urine analysis gives an idea about wastewater content.