



SDG 6 - CLEAN WATER AND SANITATION

The aim is to secure accessible water and wastewater services and sustainable water management for all.

Water consumption per person

- Does your university as a body measure the total volume of water used in the university that is taken from mains supply, desalinated, or extracted from rivers, lakes, or aquifers?

The amount of water consumed in Üsküdar University campuses (North Campus, South Campus, Etiler Medical Centre, Feneryolu Medical Centre, Faculty of Medicine, Ümraniye Health Campus, Çarşı Campus) is monitored and data on water use is kept. The total volume of water used in our university was 35.074 m³ in 2023.

Evidence:

- In 2023, the water consumption report used in our campuses is presented as evidence.

- Does your university as a body have a process in place to treat waste water?

Üsküdar University is located within the sewerage network of Istanbul Water and Sewerage Administration. Since there is no wastewater treatment process in our campuses, wastewater is transmitted to Istanbul Water and Sewerage Administration. Wastewater complies with the requirements of the “Regulation on the Discharge of Wastewater into Sewage”.

Evidence:

- “Istanbul Water and Sewage Administration General Directorate Regulation on Discharge of Wastewater to Sewage” has been added as evidence.
- **Regulation on Discharge of Wastewater to Sewage:**

<https://iski.istanbul/kurumsal/iski-tesisleri/atik-su-aritma-tesisleri/>

- Does your university as a body have processes to prevent polluted water entering the water system, including pollution caused by accidents and incidents at the university?

Üsküdar University Department of Construction and Technical Affairs can intervene immediately against accidents that may occur in the water system and prevent water pollution. Water losses caused by evaporation and leaks can be reduced by regular maintenance against possible leaks. Regular inspections are carried out for broken and leaking pipes and valves. By covering the top of the manholes, solid compounds such as garbage are prevented from entering when it rains and possible pollution is prevented.

Evidence:

- **Department of Construction and Technical Affairs:**
<https://uskudar.edu.tr/en/construction-and-technical-affairs-about>



- Does your university as a body provide free drinking water for students, staff and visitors, e.g. drinking water fountains)?

“Instruction to Supply the Uninterrupted Water Requirement” has been established to provide drinking water constantly from the network or alternative sources in order to supply the maintenance needs of the university. The total water tank volume is 958 m³ in all campuses including South Campus (A, B, C, D and E Block), Faculty of Medicine, Çarşı Campus, North Campus (A, B, C, D and E Block), Dental Hospital, Student Dormitory, Etiler Campus, Feneryolu Medical Centre.

The tanks located in different campuses of our university are automatically filled with water and the amount of water is monitored daily. In case of a water shortage, the reservoir can provide enough water for the university for about 3 days. In addition, a protocol has been signed with the supplier company for uninterrupted water supply. If the water cut continues, water is supplied by the contracted water company within 3 hours. In case of interruption, the water supplied from the company is sent to the warehouse pre-filters through the network and taken into the warehouse. The water used in the Dental Hospital is analysed at 3-month intervals and reported to the Infection Control Committee. Samples are taken once a year according to the Central Water Systems Control Procedure. Maintenance and repairs of water systems at our university are provided by the technical service. Periodic analyses of drinking water are carried out and evaluated by certified laboratories.

In our university, disposable plastic cups were removed and thermos were distributed to all our staff in order to support water saving. In this way, the passage of microplastics from plastic cups in which hot drinks are placed is prevented and the health of the personnel is also protected. Thanks to the dispensers in our university, drinking water can be safely consumed in thermos or glass cups. In addition, in order to promote zero waste and reduce the use of plastic, the statement “**We say no to disposable products for a cleaner world!**” is placed on the water dispensers. Üsküdar University supports the Zero Waste project launched in 2017 by the Ministry of Environment, Urbanisation and Climate Change within the framework of sustainable development goals in order to ensure waste management and leave a clean and livable world for future generations. In our university, Zero Waste Management System has been established in the Zero Waste Regulation, which entered into force after being published in the Official Gazette dated 12 July 2019 and numbered 30829. On 8 June 2021, Zero Waste Certificates were received on our campuses.

In addition, Üsküdar University Faculty of Medicine Hospital NP Campus has a drinking water treatment unit where municipal water is treated. Mains water is stored in the tank and supplied to the unit for treatment. There is a pre-filtration system on the raw water inlet line. In filters with 1 micron pore diameter, particles larger than 1 micron are retained. Reverse osmosis membrane system, water softening process and antiscalant solution are used in the



unit. The antiscalant solution used in the system is used to prevent calcium, magnesium and silica ions in the water from precipitating on the membrane. Water leaves the drinking water unit and is delivered to 18 different points including tanks, eye showers and dispensers. Samples are taken from these points every three months and the suitability of the water for drinking water is monitored. It is seen in all reports that the water used is potable and usable. The report on the results of the analyses is presented as evidence.

Evidence:

- Report on the results of the analyses has been submitted.
- Instruction on Meeting the Uninterrupted Water Requirement was presented.
- The link related to the Regulation on Water Intended for Human Consumption has been shared.

<https://www.resmigazete.gov.tr/eskiler/2005/02/20050217-3.htm>

- The link to our web page about our Zero Waste Certificates is presented.

<https://uskudar.edu.tr/tr/sifir-atik-belgelerimiz>

- Does your university as a body apply building standards to minimise water use? (relevant standards to be indicated)

Water consumption is saved by using sensor faucets at our university. There are 76 photocell taps in our campuses. There are a total of 253 toilets with double-stage cisterns in all our campuses. Thanks to the two water areas in double-stage cisterns, water savings of up to 60% can be achieved. In addition, there are 20 photocell urinals in our health campus. The number of aerators in all sinks in our university is 722. Thanks to the aerator, which increases the volume of water and allows it to flow in a pressurised way, 50% water saving can be achieved.

Evidence:

- Photocell faucet, double stage reservoir, photocell urinal and aerator visuals are shared.

- Does your university as a body plant landscapes to minimise water usage? (e.g. use drought-tolerant plants)

Coniferous trees and plants that need less water are used in our university. Therefore, the amount of water given for irrigation in the summer months is saved. When evaluated in terms of climatic characteristics, irrigation is not carried out in green areas since precipitation occurs between 15 October and 15 April. In order to ensure that the plants receive sufficient water and to prevent excessive water consumption, irrigation is carried out at night and with sprinkler system. Thus, evaporation is minimised.



Evidence:

- Representative visuals of our Çarşı and South Campuses during irrigation are presented.
- Visuals of the irrigation at night in our Çarşı Campus are also presented.
- The links where our Çarşı and South Campuses can be seen in detail have been shared.

<https://uskudar.edu.tr/sanaltur/guney-verleske/tr.html>

<https://uskudar.edu.tr/sanaltur/carsi-verleske/tr.html>

Water Reuse

- Does your university as a body have a policy to maximise water reuse across the university?

In line with the 2019-2023 Strategic Plan, Üsküdar University has published the Islamic Forum for Environmental Ethics Directive and Al-Mizan World Environmental Charter. Environmental problems caused by Global Warming and the resulting Climate Change (such as decreasing water resources, drought) threaten all humanity and living things today. The destructive consequences of Climate Change appear in the form of fires, floods, storms, rainfall and droughts and bring economic, ecological and social consequences. For this reason, moral sensitivity towards the environment and environmental awareness are created.

In addition, the Al-Mizan World Environment Convention emphasises the importance of water and states that natural resources cannot replenish themselves due to the increase in anthropogenic pollution.

In the Strategic Plan of our university covering the years 2024-2028; important targets have been set for environmental protection, sustainability, water saving, combating climate change and increasing energy efficiency. **"Sustainability Coordinatorship"** was established in order to realise and monitor these goals. The fields of activity of the Sustainability Coordinatorship include waste management, water management, energy management, sustainable transport, sustainable land management, protection and sustainable use of biodiversity and ecosystems, and climate change. The fields of activity in the Sustainability Coordination Directive are presented below.

Üsküdar University Sustainability Coordination Directive:

Areas of Activity:

a) Establishing commissions and ensuring coordination in the fields of environmental impact, waste management, water management, energy management, sustainable transport, sustainable land management, protection and sustainable use of biodiversity and ecosystems, and climate change,



b) Social impact; to establish commissions, project groups, student clubs and ensure coordination in order to carry out studies in the fields of safe and sustainable food, food safety supervision, accessible and barrier-free university, environment and public health, sustainable education,

c) Global impact is defined as taking a competitive place in country and world rankings in internationally recognised rankings such as THE (Times Higher Education) impact ranking, QS (Quacquarelli Symonds) sustainability ranking, Scimago social impact ranking by implementing the Sustainable Development Goals defined by the United Nations and the strategies of the Sustainability Coordinatorship.

In line with the strategic plan of our university, the application for “**Green Metric**” accreditation, which is among the short-term goals, has been completed. “Green Metric” is a platform that encourages internationalisation with the participation of reputable universities from all over the world, draws attention to issues related to sustainability and aims to raise global awareness on environmental awareness. Universities are evaluated in areas such as infrastructure, energy and climate change, waste, water resources, transport and education and ranked according to their total scores.

Also, in order to ensure sustainability and effective water management in our university, it is planned in a laboratory environment. In the laboratory, it is planned to purify the wastewater of the evolutionary cycle and find its reuse again. For this purpose, price offers were received from two different companies.

Our university has working groups and application and research centers that are effective in creating policies on water management. Water and wastewater management is important in terms of ensuring sustainable water resource use and wastewater disposal. There are working groups in the field of public health to combat epidemic diseases that may occur due to wastewater. Occupational Safety, Occupational Health and Environmental Health Application and Research Center was established to ensure occupational/employee safety, protection of our environment and sustainable water management.

Evidence:

- **Islamic Environmental Ethics Forum Directive:**

<https://uskudar.edu.tr/assets/uploads/sayfa/18/file/islam-cevre-ahlaki-forumu-yonergesi.pdf>

- **Al-Mizan World Environment Convention UNEP Project:**

<https://uskudar.edu.tr/en/icerik/8409/al-mizan-a-covenant-for-the-earth-was-introduced>

- **Sustainability Coordination Directive:**

<https://uskudar.edu.tr/assets/uploads/sayfa/18/file/nihai-surdurulebilirlik-koordinatorlugu-yonergesi.pdf>



- GreenMetric invitation letter has been submitted.
- Price offer for the planned wastewater laboratory has been submitted.
- **Working Groups and Application and Research Centers:**

<https://uskudar.edu.tr/tr/calisma-grubu/halk-sagligi-ve-saglik-politikalari-calisma-grubu>

<https://uskudar.edu.tr/usgumer/tr/genel-bilgiler>

- Üsküdar University Environmental Ethics Department Head Professor Dr. İbrahim Özdemir presented panels and conferences emphasizing the negative impact of climate change on water resources within the scope of “**13-Climate Action**”.
- **Opening Speech:** Qur'anic Ecology and Resonances with Laudato Si', London, October 19, 2023.
- **Panel:** The Role of Migration in Addressing Economic and Ecological Crises, Cambiare rotta. I migranti e l'Europa, Università Cattolica del Sacro Cuore, Milan, September 28, 2023.
- **Conference:** Islamic Ethics for the Environment, Center for Islamic Studies, Universitas Nasional, Indonesia, August 21, 2023

Water in the community

- Does your university as a body provide educational opportunities for local communities to learn about good water management?

Üsküdar University Environmental Health Program includes a Water Quality and Treatment course that covers comprehensive topics on conscious use of water, protection of natural water resources, detection of pollution and removal of pollution from water. In addition, since our university attaches importance to the management of water resources, there are courses in different courses that cover issues related to wastewater, water resources and protection (Environmental Impact Assessment, Environmental Health, Sustainability in Environmental and Business Management).

Evidence:

- Content related to the courses has been shared.

<https://sis.uskudar.edu.tr/oibs/bologna/index.aspx?lang=en&curOp=showPac&curUnit=31&curSunit=1066#>

<https://sis.uskudar.edu.tr/oibs/bologna/index.aspx?lang=en&curOp=showPac&curUnit=31&curSunit=1066#>

<https://sis.uskudar.edu.tr/oibs/bologna/index.aspx?lang=en&curOp=showPac&curUnit=03&curSunit=145#>



<https://sis.uskudar.edu.tr/oibs/bologna/index.aspx?lang=en&curOp=showPac&curUnit=03&curSunit=145#>

- Does your university as a body support water conservation off campus?

Üsküdar University attaches importance to news about the protection of water resources and water use, and ensures that society is informed. News about the protection of water resources and the efficient use of water for 2023 has been shared. It has been stated that if water resources are not used and managed correctly, there will be difficulties in accessing water resources in the coming years. It has been stated that water resources have decreased in recent years due to factors such as global warming, climate change, rapid population growth and urbanization. It has been emphasized that approximately 57 billion cubic meters of water are used annually in our country, 77% of which is used for agricultural irrigation, 12% for personal consumption and 11% for industrial activities. It has been stated that an open tap consumes approximately 10-15 liters of water per minute, and approximately 20-30 liters of water is consumed if the tap is left open for 2 minutes of brushing teeth, and that significant amounts of water can be saved with measures taken in daily life.

Evidence:

<https://uskudar.edu.tr/en/icerik/42932/in-the-next-20-30-years-we-are-expected-to-be-a-country-experiencing-water-scarcity>

<https://uskudar.edu.tr/tr/icerik/41504/dr-ahmet-adiller-su-fakiri-olma-yolunda-emin-adimlarla-ilerliyoruz>

<https://uskudar.edu.tr/en/icerik/42017/individual-measures-to-fight-with-the-global-water-crisis-can-be-a-savior>

- Does your university as a body, where water is extracted (for example from aquifers, lakes or rivers), utilise sustainable water extraction technologies on associated university grounds on and off campus?

Water is drawn from underground at the Üsküdar University Faculty of Medicine NP Health Campus and the water drawn from the well is used for irrigation purposes. Sprinkler irrigation is used to save water and irrigation is done at night to prevent evaporation.

Use of groundwater is carried out in accordance with the provisions of the Law No. 167 on Groundwater dated 16/12/1960.

Evidence:

- Law on Groundwater:

<https://www.mevzuat.gov.tr/MevzuatMetin/1.4.167.pdf>



- Does your university as a body cooperate with local, regional, national or global governments on water security?

There are working groups, application and research centres and laboratories in our university in order to ensure water safety. It is aimed to protect public health by ensuring water safety. Public health problems and wastewater epidemiology were discussed for at the United Nations International Narcotics Control Board, where Prof. Dr. Sevil Atasoy was the chairman of the Permanent Committee on Estimates. In the Advanced Toxicology Analysis Laboratory, which has ISO17025 accreditation certificate, toxic and addictive substances (opiate, amphetamine group, marijuana, synthetic cannabinoids, alcohol, cocaine) were analyzed quantitatively in urine analyzes are carried out. Analyzes made in urine also give an idea about wastewater. Also, Students studying in the Environmental Health Programme do internship in the units affiliated to the Health Directorate by making a wide variety of analyses in water.

Üsküdar University Health Application and Research Center

Our university has adopted the holistic view of humans and human health as its mission. Health services are provided and scientific research is carried out at the Health Application and Research Center (SUAM) at Üsküdar University. Since wastewater-borne diseases can lead to various epidemics, studies are carried out in our Health Application and Research Center in order to protect public health. Our doctors give lectures and write articles in this context. In addition, our workplace physicians share their experiences and research both at home and abroad with students and the scientific community. Our workplace physicians raises public awareness about water safety and epidemic diseases.

Occupational Safety, Occupational Health and Environmental Health

Üsküdar University Occupational Safety, Occupational Health and Environmental Health Application and Research Center provides cooperation between our university and our country's industry and local governments. It was established to carry out important scientific activities to ensure health and safety.

United Nations International Narcotics Control Board

Public health problems were discussed at the United Nations International Narcotics Control Board, where Prof. Dr. Sevil Atasoy was the chairman of the Permanent Committee on Estimates.

INCB 2023 Report it makes recommendations to Governments, United Nations bodies and relevant international and national organisations to prevent this growing threat to public health, focusing on the trafficking of synthetic drugs, including non-medical synthetic opioids, cocaine and precursors used in their synthesis.



The share of methamphetamine-related deaths in total drug-related deaths has also steadily increased in recent years. In 2018 it was 6.2 per cent (41 out of 657 deaths), in 2020 it was 31.2 per cent (98 out of 314 deaths), and in 2022 it was 59.9 per cent (140 out of 246 deaths). By determining the content of wastewater, appropriate treatment methods can be applied and water reuse can be ensured.

Üsküdar University Public Health and Health Policies Working Group

Public health is one of the most important factors in improving health, which is one of the general objectives of health systems. Health managers are actively involved in the determination of health policies in the sector. It aims to provide scientific contribution to the determination and implementation of policies for health promotion by working together with health managers and public health experts.

Üsküdar University Advanced Toxicology Analysis Laboratory:

In the Advanced Toxicology Analysis Laboratory, toxic and addictive substances (opiates, amphetamine group, cannabis, synthetic cannabinoids, alcohol, cocaine) are analyzed quantitatively in urine analysis. Analysis performed on urine also provides an idea about wastewater. The Advanced Toxicology Analysis Laboratory has the internationally valid ISO17025 accreditation certificate.

Üsküdar University Career Center Contracted Institutions

The Career Center cooperates with many institutions and Health Directorates. Studies on water safety and wastewater analysis are carried out in health directorates. Since health directorates and public health laboratories work in coordination, drinking water and pool water analyses are carried out. Students are interns in these institutions, and awareness is created in society about water use and water safety.

Evidence:

- **Health Application and Research Center (SUAM):**

<https://uskudar.edu.tr/suam/>

- **Occupational Safety, Occupational Health and Environmental Health:**

<https://uskudar.edu.tr/usgumer/en>

- **United Nations International Narcotics Control Board:**

<https://uskudar.edu.tr/tr/icerik/44493/birlesmis-milletler-dunya-2023-uyusturucu-raporu-aciklandi>

- **Üsküdar University Public Health and Health Policies Working Group:**

<https://uskudar.edu.tr/tr/calisma-grubu/halk-sagligi-ve-saglik-politikalari-calisma-grubu>



- **Üsküdar University Advanced Toxicology Analysis Laboratory:**

<https://uskudar.edu.tr/tr/laboratuvar/67/ileri-toksikoloji-ve-analiz-laboratuvari>

- **Uskudar University Career Center Contracted Institutions**

<https://uskudar.edu.tr/en/career-center-contracted-companies>

- **Water Analyzes in Public Health Laboratories:**

<https://istanbulism.saglik.gov.tr/TR-54321/su-analizleri.html>

- Does your university as a body actively promote responsible water use on campus?

Üsküdar University shares suggestions for the efficient use of water through its social media accounts and encourages the conscious use of water. In addition, within the scope of the social responsibility course, Environmental Health Programme students prepared posters with the idea of “Saving is the biggest water source” in order not to waste clean water resources, and the posters were hung in the toilets where the most water consumption occurs.

Evidence:

Posters and social media sharing

- Does your university actively promote responsible water use in the wider community?

Project calls opened by BrainPark TTO are shared with academicians. Within the scope of TÜBİTAK-Malta Science and Technology Council bilateral cooperation programme, the project call on ‘Water Management’ was announced to academicians.

The other call shared by BrainPark TTO was the PRIMA Programme, which will support multi-partner international projects on different themes, especially ‘Water Management’ in the Mediterranean Region in the international arena in 2023. With the announced project calls, academicians apply for projects. The project application on chromium removal from synthetic wastewater where water reuse is investigated is presented as evidence.

Evidence:

- Shared calls for projects on water management
- 2209-A Project Application