



**ISO 14046:2016**

**INSTITUTIONAL WATER FOOTPRINT  
INVENTORY REPORT**

**Reporting Period: 2025**

**Prepared by: Sustainability & QHSE Department**



**Report Date: April 3, 2026**

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# 1. INTRODUCTION

Water is a finite and strategically vital natural resource essential for life. The world is currently grappling with a water crisis, driven by factors including population growth, industrialization, climate change, and other environmental issues. In our country, the annual per capita usable water supply has decreased from **1,652 m<sup>3</sup>** in 2000 to **1,544 m<sup>3</sup>** in 2009 and further to **1,346 m<sup>3</sup>** in 2020 according to data from the General Directorate of State Hydraulic Works in 2020. This downward trend is expected to persist. Over the recent years, reducing water consumption and reusing water have taken on more importance, driven by national and international policies, regulatory frameworks, and organizational initiatives. Enhancing water efficiency relies heavily on the identification, monitoring, reporting, and verification of water inventory and water footprint within the framework of ISO 14046 Water Footprint Standard. Prepared in accordance with the transparency principle, this report is intended to analyze Özyeğin University's institutional water footprint, showcase its commitment to the responsible management of water resources, and promote sustainability.

A water footprint is the amount of freshwater used either directly or indirectly. The direct water footprint represents the volume of water used in activities such as showering, washing dishes, doing laundry, and washing cars. In contrast, the indirect water footprint represents the volume of water used in production and the supply chain. Virtual water, on the other hand, refers to the water used to produce goods and services.

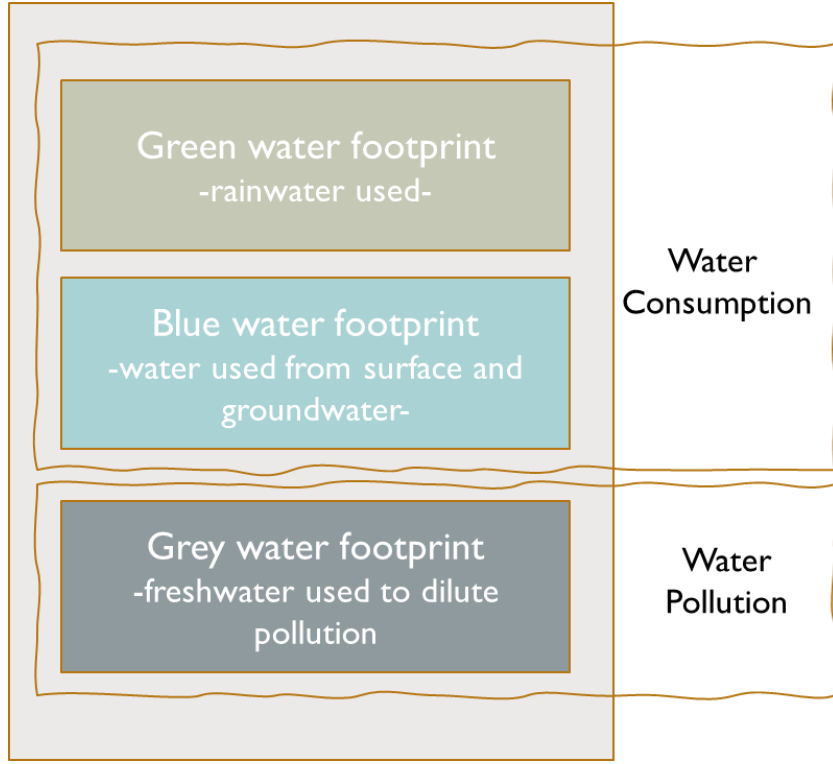
The concept of virtual water is calculated based on a specific product or material, whereas the indirect water footprint generally refers to the indirect use of water in an individual's or society's overall water consumption. In other words, the virtual water footprint constitutes a part of the indirect water footprint.

**Water footprint:** Calculated as three distinct components that reflect both usage and quality: blue, green, and grey water footprints.

**Blue water footprint:** Represents the amount of freshwater resources used directly or indirectly in the production of goods or services.

**Green water footprint:** Represents the total volume of rainwater used directly and indirectly in the production of goods or services.

**Grey water footprint:** Represents the volume of freshwater required to dilute the pollutant concentration in wastewater to meet the water quality standards.



*Figure SEQ Şekil \\* ARABIC 1. Water Footprint Components*

Organizations should assess their impact on the water crisis and climate change, adhere to national and international climate change policies, and proactively manage their risks. This is a critical issue that has significant implications for both corporate and financial performance. The ISO 14046 Water Footprint Standard specifies basic requirements at the organizational level for identifying, reporting, and reducing the water footprint. It includes requirements for the design, development, management, reporting, and verification of an organization's water inventory. It also serves as a tool for limiting and mitigating greenhouse gas emissions.

This report is Özyeğin University's annual Institutional Water Footprint Inventory Report. This report constitutes Özyeğin University's annual Institutional Water Footprint Inventory Report. The inventory refers to the quantification of the water footprint directly attributable to the University's activities within the defined organizational boundaries for the specified reporting period.

The reporting processes and calculations in this report are consistent with international protocols and standards. This report has been prepared in compliance with the requirements outlined in Section 6.2 of the International Organization for Standardization (ISO) 14046 Water Footprint Standard.

**Terminology:**

**Direct water:** For the purpose of this study, direct water refers to water consumed or used directly at Özyeğin University. This type of water use includes domestic use, garden irrigation and other human activities. Blue and green water footprints fall within the scope of direct water.

**Indirect water:** For the purpose of this study, indirect water refers to the water used in the production of consumed goods. This water includes the amount of water used to grow, process, or produce such goods. Virtual water footprint falls within the scope of indirect water.

**Virtual water:** Virtual water is a concept that refers to the total volume of water used throughout the production of goods and services. It measures the hidden or indirect water consumption, indicating that water is transported not only geographically but also through products and supply chains. The concept of virtual water plays an important role in the sustainable management of water resources and in developing strategies to address water stress.

**Chemical Oxygen Demand (COD):** An indicator of water quality that measures the amount of oxygen required to oxidize organic and oxidizable inorganic compounds in a water sample.

**Suspended Solids (SS):** The term refers to small solid particles present in water and sewage, typically measuring around 1 micron or larger in size, but smaller than a grain of sand, for instance.

## 2. GOAL

This report was prepared for Özyeğin University with the following goals:

- Calculating the impact of the University's activities on the water crisis,
- Preparing for current and future legal regulations,
- Identifying risks and issues in water management,
- Reporting water footprint in compliance with ISO 14046,
- Contributing to the development of the Water Efficiency Action Plan,
- Raising all stakeholders' awareness of climate change, water efficiency, and sustainability.

This study is expected to have the following benefits for Özyeğin University.

In-house benefits:

- Transparency about the institution's water consumption
- Identification of opportunities for water efficiency
- Raising institutional awareness
- Laying the groundwork for the Water Management Plan
- Strengthening Özyeğin University's sustainability vision

External benefits:

- Reinforcing the institution's sustainability vision, and highlighting its environmental awareness
- Leading as a pioneer in the sector with similar studies
- Contributing to the preservation of water resources and the fight against climate change.

The **ISO 14046 - Water Footprint Standard** provides detailed information about the principles and conditions for designing, developing, managing, and reporting an institution's water inventories on the institutional or organizational scale. This standard includes requirements for identifying water inventories, calculating an institution's water footprint, setting forth water efficiency measures, and providing the institution with recommendations for specific activities to ultimately enhance water management. This standard also covers requirements and guidelines related to inventory analysis, quality management, reporting, internal audits, and the institution's responsibilities for verification purposes.

The principles outlined in the ISO 14046 standard for calculating and reporting water footprints are essential to guarantee the precise and fair assessment of water footprint-related data.

The ISO 14046 principles are as follows:

**General:** These principles are fundamental and will be used as a guide for decisions relating to the planning, conducting, and reporting of a water footprint assessment. The assessment can be conducted and reported separately as well as part of a life cycle analysis.

**Life Cycle Perspective:** An institution's water footprint assessment is performed just like a product's water footprint assessment, factoring in all activities over the entire life cycle.

**Environmental Focus:** A water footprint assessment covers the potential environmental impacts associated with a product, process, or organization. Economic or social impacts are, typically, fall outside the scope of the water footprint assessment.

**Relative approach and functional unit:** A water footprint assessment is related to a functional unit and the result(s) are calculated based on this functional unit.

**Iterative approach:** A water footprint assessment is an iterative technique. The stand-alone phases of a water footprint assessment use the results of the other phases. The iterative approach within and between the phases contributes to the comprehensiveness and consistency of the assessment and the reported results.

**Transparency:** The results are disclosed by providing sufficient and appropriate information in order to allow users to make decisions with reasonable confidence.

**Relevance:** Data and methods are selected such that they are appropriate to the user's needs.

**Completeness:** All data which make a significant impact on the water footprint are included in the inventory.

**Consistency:** Assumptions, methods and data are applied in the same way throughout the water footprint assessment to arrive at conclusions in accordance with the defined goals and scope.

**Accuracy:** Systematic errors and uncertainties are minimized as far as possible.

**Priority of scientific approach:** Water footprint assessments are performed based on natural sciences. Where this is not possible, other scientific approaches or international conventions can be used. If there is neither a scientific basis nor a justifiable approach based on other scientific methods or international conventions, decisions may be made, as deemed suitable, through value-based choices.

**Geographical Relevance:** Water footprint assessment is conducted at a scale that provides relevant results aligned with the defined goals and scope while taking into the local context.

**Comprehensiveness:** A water footprint considers all environmentally relevant attributes or aspects of natural environment, human health and water-related resources.

### **3. PROCEDURE**

#### **3.1. SYSTEM BOUNDARIES**

This report has been prepared for Özyeğin University's Çekmeköy Campus located at the address given below, and the system is limited to the respective campus only.

Address: Nişantepe Mah. Orman Sok. 34794 Çekmeköy - İSTANBUL



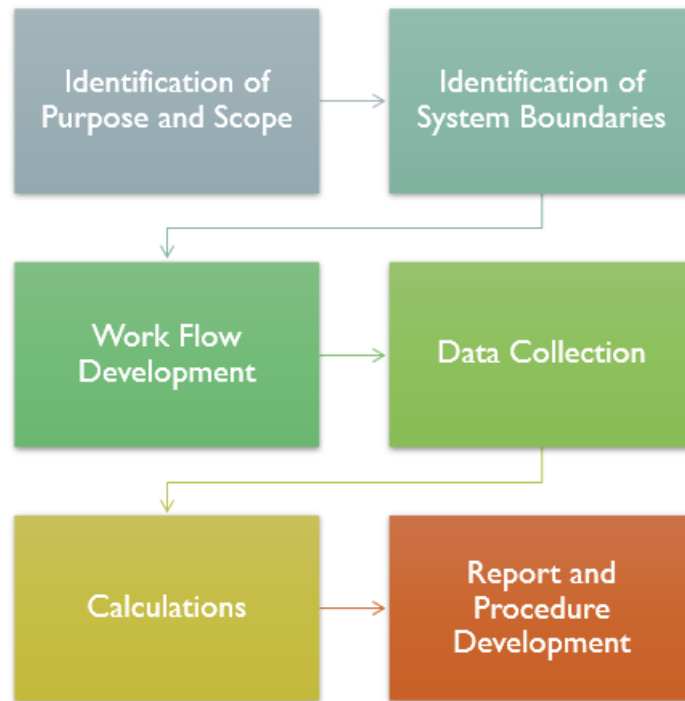
*Picture Error! Bookmark not defined.. Özyeğin University Çekmeköy Campus*

### **3.2. WATER FOOTPRINT CALCULATION METHODOLOGY**

The methodology used for calculating blue, green and grey water footprint values of the water inventory complies with the requirements and principles of ISO 14046. It covers all the basic principles. The calculation methodology consists of the following:

- Definition of the purpose and scope,
- Water footprint inventory analysis,
- Development of a water flow diagram,
- Identification of water resource types used, including water withdrawal and intake structures,
- Identification of water use areas,
- Determination of the volume of water used, including water withdrawal and discharge amounts,

- Analysis of water quality data,
- Calculation of blue and grey water footprints, including uncertainty analysis,
- Interpretation of the results,
- Assessment of land use changes, land management activities and changes in drainage, stream flow, and water evaporation within the study boundaries.



*Figure 2. Water Footprint Inventory and Reporting Steps*

In this report, Özyeğin University’s virtual water footprint was calculated using data from 2025, outside the scope of ISO 14046. In order to determine the overall virtual water consumption on the campus, on-campus businesses were requested to provide data regarding the quantity of food and materials consumed in 2025.

In calculating the virtual water footprint, selected categories of water use have been taken into account in order to reveal the scale of “invisible” water consumption. The virtual water footprint refers to the total volume of freshwater used throughout the production, transportation, and consumption of a product, all of which remains invisible to the end user. Through this approach,

the magnitude of water consumed in everyday life, often without awareness, becomes more transparent and visible.

The food and materials to be included in the calculation were chosen by taking into account both their frequency of use and the volume of water consumed in their production. Relevant products and their virtual water footprints are listed in the table below.

*Table 1. Products And Virtual Water Footprint Values*

<b>Product</b>	<b>Virtual Water Footprint</b>	<b>Unit</b>
<b>PET bottle (piece)</b>	5.3	(liter/piece)
<b>Bread (loaf)</b>	1,625	(liter/piece)
<b>Rice (kg)</b>	2,497	(liter/kg)
<b>Potato (kg)</b>	287	(liter/kg)
<b>Sugar (kg)</b>	920	(liter/kg)
<b>Tomato (kg)</b>	214	(liter/kg)
<b>Mutton (kg)</b>	10,412	(liter/kg)
<b>Chicken Meat (kg)</b>	4,325	(liter/kg)
<b>Coffee (kg)</b>	18,900	(liter/kg)
<b>Tea (kg)</b>	8,860	(liter/kg)
<b>Paper (pack)</b>	2,550	(liter/pack)

### **3.3. PROJECT OWNERS**

The people involved in the preparation of this report and responsible for coordinating the reporting of institutional water footprint calculations in accordance with the ISO 14046 standard are given in Table 2. With the guidance of the project owners, the data provided by Özyeğin University was used in the calculations.

Table 1. Project Owners for Özyeğin University’s Institutional Water Footprint Inventory Report

Owner	Title	E-mail
Deniz EREN	Sustainability & QHSE Director	deniz.eren@ozyegin.edu.tr
Meral IŞIK	Sustainability and Quality Manager	meral.isik@ozyegin.edu.tr
Erdi TÜZÜN	Sustainability and Quality Specialist	erdi.tuzun@ozyegin.edu.tr

### 3.4. DATA COLLECTION

Water footprint inventory data was provided by the Sustainability & QHSE Department at Özyeğin University. Mains water supplied to the campus through a single connection point is distributed through three separate branches, each equipped with dedicated utility metering systems. There are three rainwater collection systems on campus, which are named as follows according to their locations: Dorm 2 (1), AB4 Car Park (2), Business Parking Lot (3). The Dorm 2 Rainwater Tank fulfilled its function in 2018 and 2019, and the stored rainwater was used for landscape irrigation. However, it could not be used after 2019 due to drought and infrastructural problems. Nevertheless, the Rainwater Tanks No:2 and 3 are still being actively used. There are no meters in rainwater tanks. Therefore, the calculations were made theoretically, relying on specific assumptions related to their storage capacity.

Water is used for domestic use, garden irrigation, and pool maintenance purposes on the university campus. There is no wastewater treatment facility within the campus, and used water is transported to Paşaköy Advanced Biological Wastewater Treatment Facility via the sewage system. The water treated here is discharged into the Riva River. Grey water footprint was calculated based on the discharge limits outlined in the Urban Wastewater Treatment Regulation and used as the effluent standard at the Paşaköy Wastewater Treatment Plant.

On the university campus, water is used for garden irrigation, pool maintenance and domestic purposes in most areas.

Water flow data of the Özyeğin University Çekmeköy Campus as well as information about water source, intended use, affected basin and receiving water body are given in Table 3.

*Table 2. Water Flow Data*

<b>Water Source</b>	<b>Intended Use</b>	<b>Location</b>	<b>Basin</b>	<b>Latitude</b>	<b>Longitude</b>	<b>Receiving Water Body</b>	
<b>Rainwater Tank 1 (Dorm 2)</b>	Rain water	Garden Irrigation	Çekmeköy Campus	Marmara Basin	41.031	29.258	-
<b>Rainwater Tank 2 (AB4 Parking Lots)</b>	Rain water	Garden Irrigation	Çekmeköy Campus	Marmara Basin	41.031	29.258	-
<b>Rainwater Tank 3 (AB2 Parking Lots)</b>	Rain water	Garden Irrigation	Çekmeköy Campus	Marmara Basin	41.031	29.258	-
<b>Mains</b>	Ömerli Dam	Domestic Use, Pool Maintenance, Garden Irrigation	Çekmeköy Campus	Marmara Basin	41.031	29.258	Riva River

The water flow diagram created during the inventory analysis is given in Figure 3.

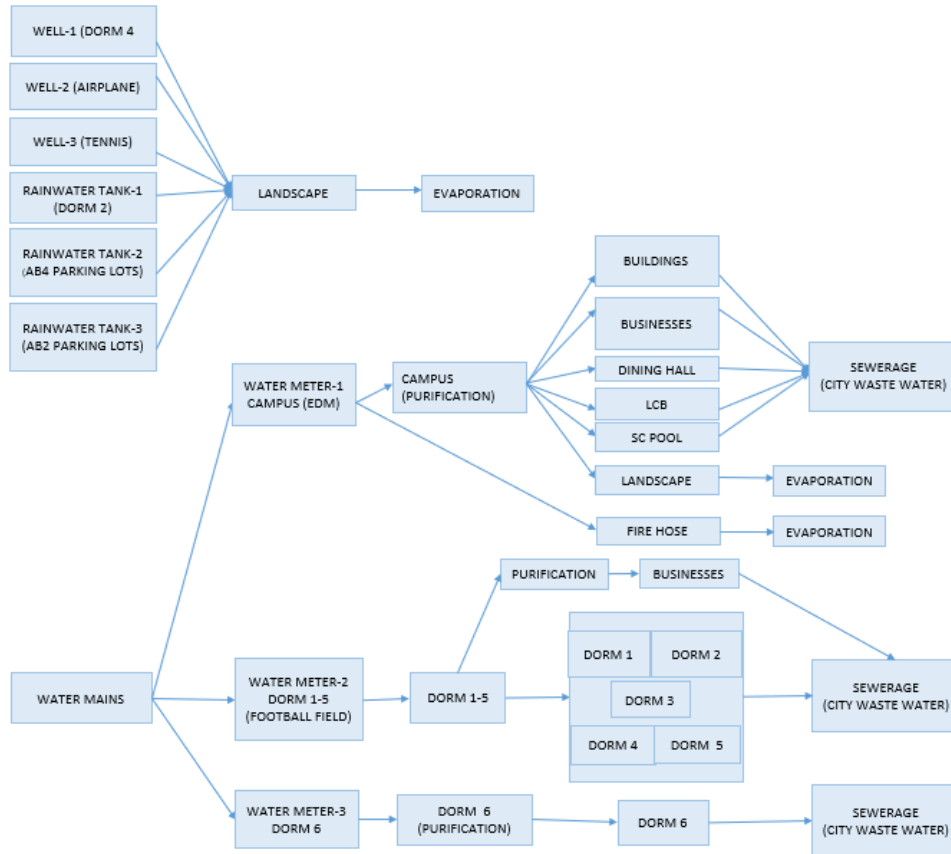
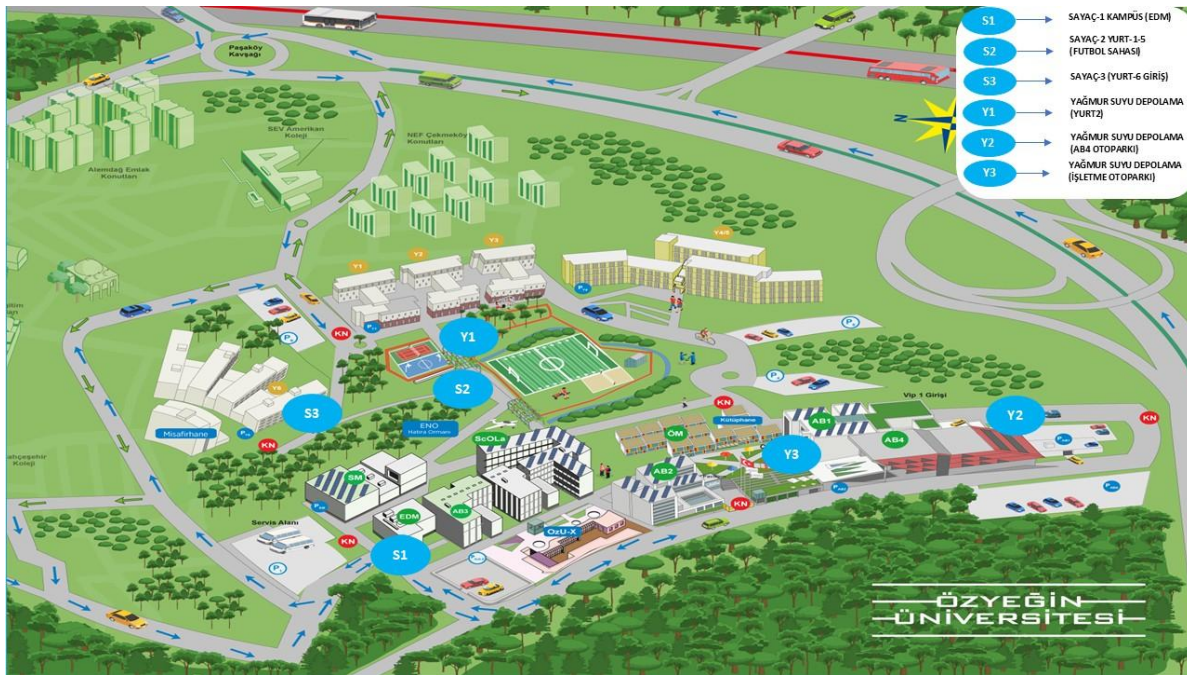


Figure 1. Özyeğin University Çekmeköy Campus Water Flow Diagram



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## 4. RESULTS

Özyeğin University's water values are given in Table 4. The total water withdrawal calculation includes mains water supply. The calculations for the total evaporated water and wastewater were based on the assumption that 10% of the water sourced from the mains evaporates, while 90% is discharged as wastewater. (Öztürk, İ. (2017))

*Table 4. Total Amount of Withdrawn Water, Evaporated Water and Wastewater*

	2018	2019	2020	2021	2022	2023	2024	2025
<b>Total Water Withdrawal (m<sup>3</sup>)</b>	234,239	418,383	153,488	77,981	189,190	196,513	252,150	256,819
<b>Total Evaporated Water (m<sup>3</sup>)</b>	28,148	45,838	18,769	11,218	21,799	21,991	25,935	26,445
<b>Total Wastewater (m<sup>3</sup>)</b>	207,251	372,945	135,439	67,483	168,111	175,242	226,935	231,137

In 2025, Özyeğin University's blue water footprint value is 256,819 m<sup>3</sup>. The grey water footprint value amounted to 336,974 m<sup>3</sup> for COD (Chemical Oxygen Demand), 75,606 m<sup>3</sup> for SS (Suspended Solids), and 412,579 m<sup>3</sup> in total. The virtual water footprint was calculated as 1,633,254 m<sup>3</sup>.

The Institutional Water Footprint results of the Özyeğin University Çekmeköy Campus are given in Table 5.

*Table 5. Institutional Water Footprint Results*

Özyeğin University WF Values (m <sup>3</sup> )	2018	2019	2020	2021	2022	2023	2024	2025	
<b>Blue Water Footprint</b>	234,279	417,663	153,488	77,981	189,190	196,513	252,150	256,819	
<b>Grey Water Footprint</b>	COD	302,150	543,714	197,456	98,384	245,088	255,485	330,848	336,974
	SS	67,792	121,991	44,302	22,074	54,990	57,322	74,231	75,606
	Total	369,943	665,706	241,758	120,458	300,078	312,807	405,079	412,579
<b>Green Water Footprint</b>	1,120	1,120	720	720	720	720	720	764	
<b>Total Water Footprint</b>	605,341	1,084,489	395,966	199,159	489,988	510,040	657,949	670,162	

The water footprint calculations factored in the total number of faculty, staff, and students of Özyeğin University as well as other employees on campus. The density values are given in Table 6.

Table 6. Water Footprint Density Values

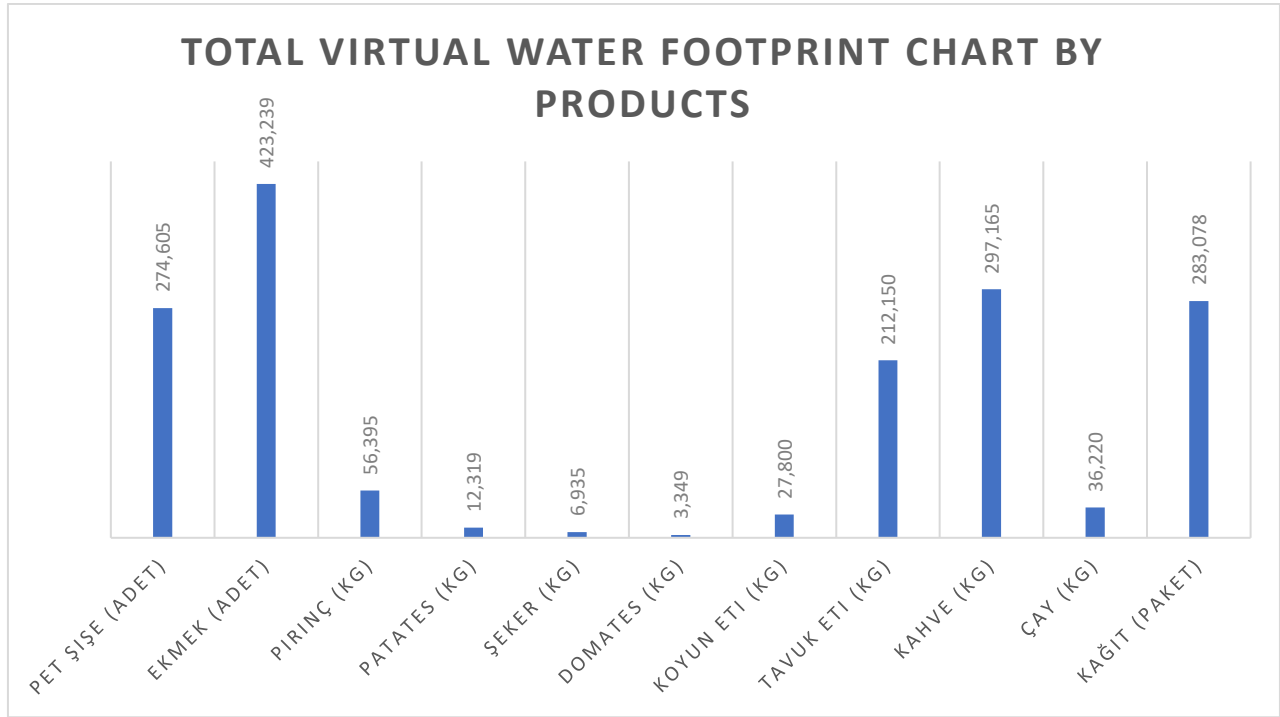
Water Footprint Density (m <sup>3</sup> / person )	2018	2019	2020	2021	2022	2023	2024	2025
<b>Blue Water Footprint</b>	24.31	43.62	15.59	7.80	18.92	19.65	25.22	25.68
<b>Grey Water Footprint</b>	38.39	69.52	24.56	12.05	30.01	31.28	40.51	41.26
<b>Green Water Footprint</b>	0.12	0.12	0.07	0.07	0.07	0.07	0.07	0.08
<b>TOTAL</b>	62.82	113.25	40.23	19.92	49.00	51.00	65.79	67.02
<i>Total Number of People (Faculty, Staff, Students)</i>	<b>9,636</b>	<b>9,576</b>	<b>9,843</b>	<b>10,000</b>	<b>10,000</b>	<b>10,000</b>	<b>10,000</b>	<b>10,000</b>

Table 7. Water Footprint Density Values for 2025

(Virtual Water Footprint included.)

Water Footprint Density (m <sup>3</sup> / person )	
<b>Blue Water Footprint</b>	25.68
<b>Grey Water Footprint</b>	41.26
<b>Green Water Footprint</b>	0.08
<b>Virtual Water Footprint</b>	163
<b>TOTAL</b>	230.34
<i>Total Number of People: 10,000</i>	

The virtual water footprint was calculated based on the data received from the on-campus businesses and the main dining hall on the Özyeğin University Campus. When the results are examined, it can be seen that coffee and bread are the highest contributor to the total water footprint among the products consumed by faculty, staff, and students, as illustrated in in Figure 4.



*Figure 4. Total Virtual Water Footprint By Products*

## 5. UNCERTAINTIES

In this inventory, the activity data used in the calculations is based on primary data derived from invoices verified by Özyeğin University and/or company meters, as well as software records and other documented sources. 90% confidence interval was taken as basis when calculating uncertainty.

As a result of calculations made with data from Özyeğin University, the overall uncertainty was calculated as  $\pm 6.4\%$ . Since this value remained below 10%, the calculation was deemed safe, and there was no need to conduct any sensitivity analysis.

## 6. CONCLUSION

While the total amount of water that forms the basis of life on Earth is approximately 1.4 billion cubic kilometers, 97.5% of this amount is salt water and is not suitable for consumption. Freshwater resources suitable for the use of living organisms are very limited. Many of these freshwater resources are found underground or in glaciers. However, the world population is constantly increasing, leading to a parallel surge in water demand, which is causing the already limited

freshwater resources to be depleted uncontrollably. It is becoming more evident every day how important it is to make water footprint calculations to ensure the sustainability of water resources.

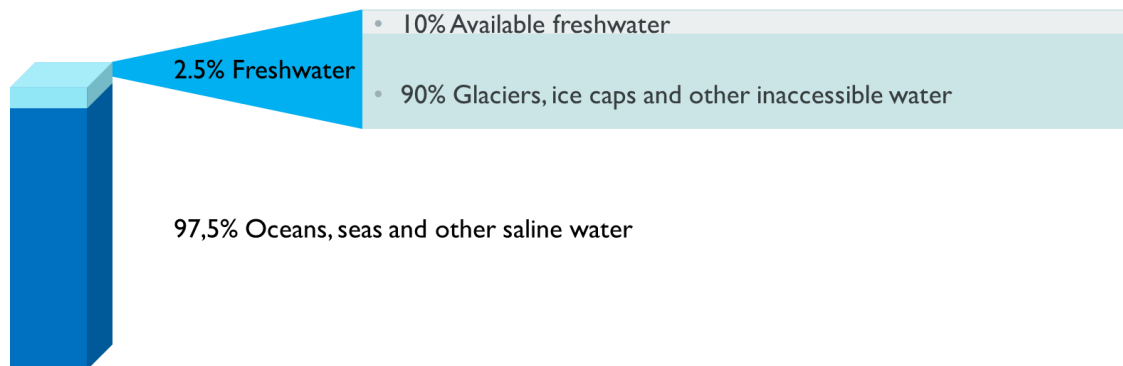


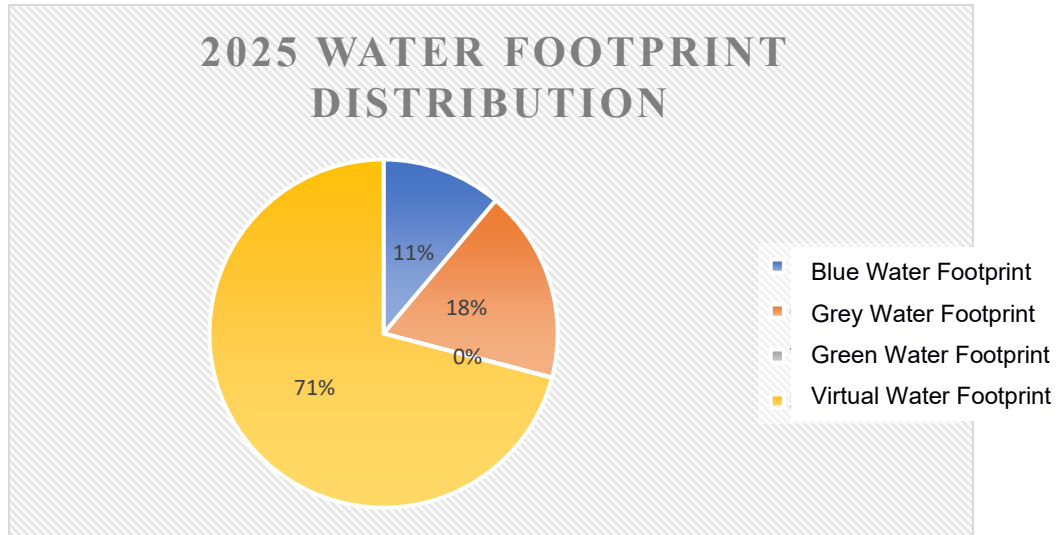
Figure 2. *Distribution of Water Resources in the World*

The global distribution of freshwater resources is not equal. In regions with ample water resources and high population density, water stress diminishes, whereas less populated areas experience this stress due to their limited water resources. Water is indispensable for both human existence and economic activities, prompting certain countries to secure their economic sustainability through the prudent utilization of their water resources.

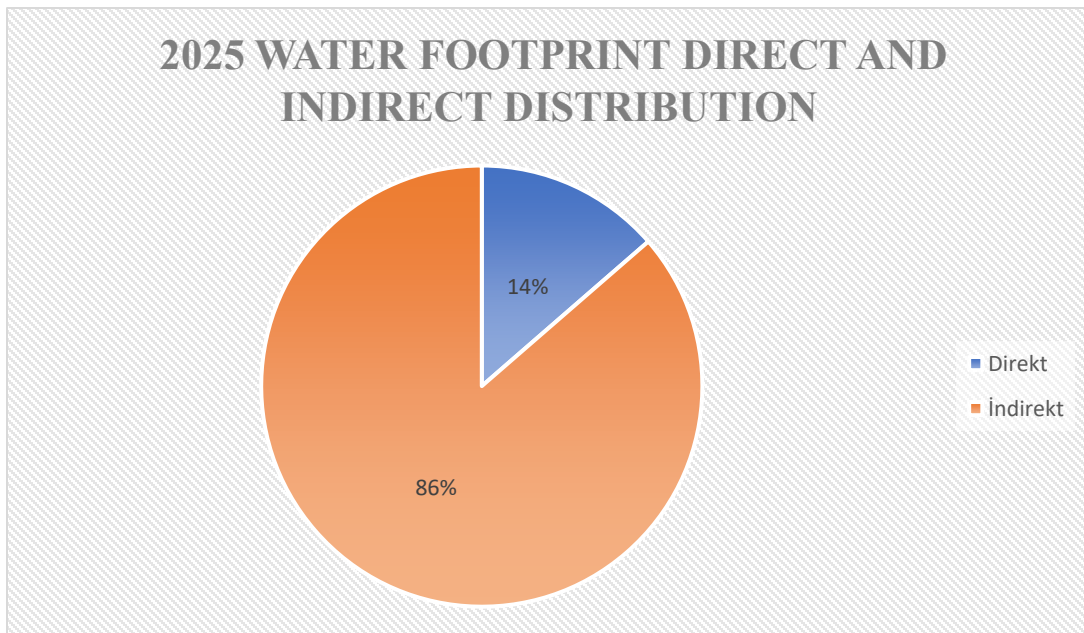
Although water usage varies depending on the level of sectoral development, the agricultural sector retains its position as the principal global consumer of water resources. Water is used in agriculture, especially to provide food for the growing population. At the same time, in underdeveloped or developing countries, water is also used as a source of income since a large part of the economy is based on agriculture.

Although domestic water consumption is quite low compared to other sectors, this type of consumption is a part of our daily life and creates both blue and grey water footprints. It can be said that changing our daily individual habits and making conscious choices in our domestic use of water can make a huge difference. Therefore, it is of paramount importance to conduct studies to increase awareness of water efficiency and sustainable water use.

In this study, Özyeğin University's total water footprint for 2025 was calculated as 2,303,416 m<sup>3</sup>, including the virtual water footprint. 11% of this amount comes from blue water footprint, 18% from grey water footprint, and 71% from virtual water use. If the values are analyzed in terms of direct and indirect use of water, it is seen that 14% is due to direct use and 86% is due to indirect use.



*Figure 3. 2025 Water Footprint Distribution By Constituents*

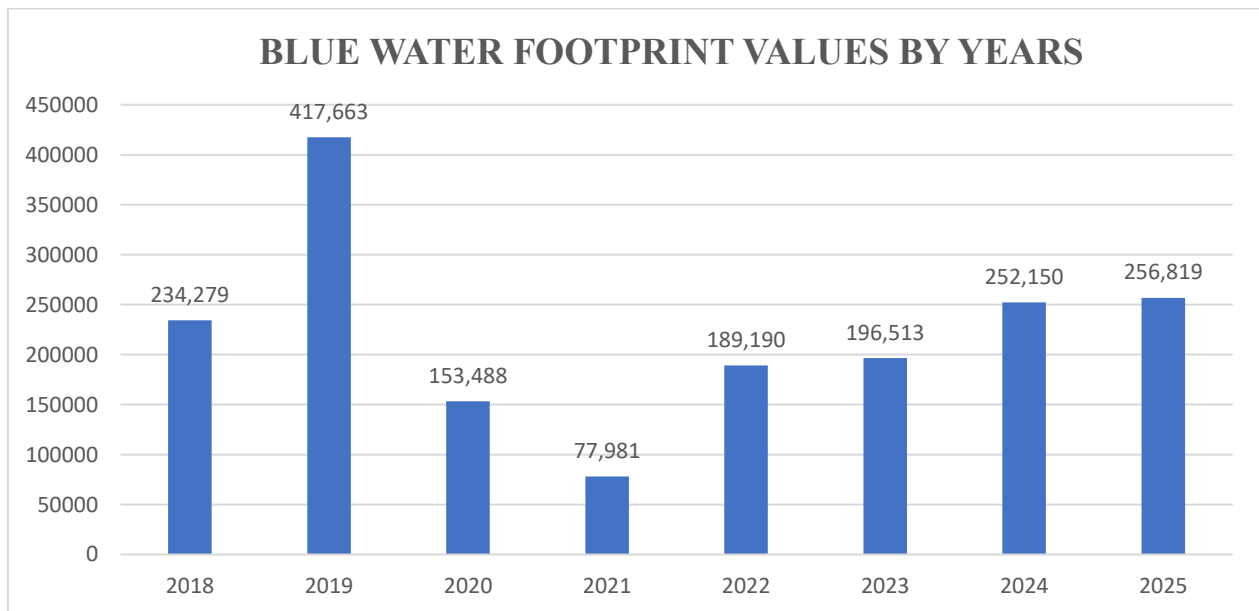


*Figure 4. 2025 Direct/Indirect Water Footprint Distribution*

While the total water footprint per capita in Türkiye is 79 m<sup>3</sup>, this figure increases to 1,977 m<sup>3</sup> when virtual water is factored into the calculations. (WWF, 2014). At Özyeğin University, this

value was calculated as 230 m<sup>3</sup>. The implementation of water-saving measures across the campus and various water efficiency projects undertaken by the University account for this difference. Additionally, the fact that most students, faculty, and staff are on campus only during class times has a significant impact.

The table below compares the past and present blue water footprint calculations conducted for Özyeğin University. Upon reviewing the table, it is evident that there was a significant increase in water usage in 2019 compared to other years. The increased water usage can be attributed to the meter failures and infrastructure issues that arose after 2018, alongside the inauguration of newly constructed buildings. Additionally, it is seen that water consumption reduced drastically on campus following the transition to online education in 2020 and 2021 due to the pandemic. The reasons for the increase in 2024 and 2025 include changes in user habits, losses and leakages, and operational changes due to the change of the cleaning company.



*Figure 5. Blue Water Footprint Values By Years*

## **6.1. WATER MANAGEMENT AND WATER EFFICIENCY AT ÖZYEĞİN UNIVERSITY**

In line with its sustainability goals, Özyeğin University treats water as a strategic resource and adopts an integrated water management approach centered on measurement, monitoring, and continuous improvement. To that end, the University carries out a comprehensive set of initiatives that encompass technical, managerial, and behavioral dimensions, with the aim of conserving water resources, enhancing efficiency, and ensuring their transfer to future generations.

While the domestic water consumption rate is approximately 11% worldwide, this rate is 16% in Türkiye. Given that the majority of water use at Özyeğin University stems from domestic consumption, targeted interventions in this area play a critical role in reducing the University's overall water footprint.

### **6.1.1. Water Footprint and Institutional Governance Approach**

Since 2018, the University has been periodically calculating and reporting its water footprint. These efforts are conducted systematically based on measurement, monitoring, and continuous improvement.

- The water footprint is calculated and reported in accordance with the ISO 14064 standard.
- Regular reporting is carried out under the Water Efficiency Mobilization initiative led by the Ministry of Agriculture and Forestry of the Republic of Türkiye.
- Özyeğin University is the first university in Türkiye and the first institution in Istanbul to be awarded the ISO 46001 Water Efficiency Management System certification. ISO 46001 is an international management system standard that enables systematic water management through measurement, monitoring, and continuous improvement of water use, ensuring the sustainable institutional management of water efficiency.
- The application process for the Blue Water Certificate has been completed as required by the Water Efficiency Regulation.
- Annual reports are submitted to the Ministry of Agriculture and Forestry of the Republic of Türkiye in accordance with the Circular on the Principles and Procedures for Xeriscaping (Drought-Resistant Landscaping).

### **6.1.2. Campus Water Efficiency Improvement Initiatives**

A series of technical and infrastructural initiatives are being implemented across the campus to improve water efficiency:

- Aerators, sensor-based systems, high-efficiency fixtures, and dual-flush toilet systems are utilized to reduce water consumption in buildings.
- Drip irrigation, smart irrigation, and automated irrigation systems are employed in landscape areas to optimize irrigation efficiency.
- Xeriscaping practices are being expanded, with a preference for low-water-use plants.
- Rainwater harvesting systems are used to reduce the demand for mains water, providing alternative water sources for irrigation and cleaning purposes.
- Smart metering systems enable real-time monitoring and analysis of water consumption patterns.
- Infrastructural improvement efforts include regular leak detection and loss control.

### **6.1.3. Wastewater Management and Water Reuse**

Wastewater recovery and reuse play a significant role in the efficient management of water resources:

- The necessary infrastructure for the greywater system is in place; however, it is not currently operational due to technical constraints. Assessments for its activation are ongoing.
- These practices contribute to reduced freshwater water consumption and support circular water use within the campus.

### **6.1.4. Strategy, Goals, and Action Plans**

Water management initiatives are integrated into the University's broader institutional sustainability strategy:

- A Water Efficiency Action Plan has been developed and is subject to periodic review.
- A cumulative 8% reduction in water consumption has been targeted over a four-year period.
- Progress toward defined goals is regularly monitored by senior management.
- Water management is periodically addressed within Health, Safety, and Environment (HSE) Board meetings.

### **6.1.5. Awareness, Training, and Behavioral Change**

In addition to technical interventions, awareness-raising and behavioral change initiatives constitute a key pillar of the University's water management approach:

- QR-coded signage installed in wet areas raises awareness of water conservation.
- The “Water Meter” application enables individuals to calculate their personal water footprint.
- Regular communications are disseminated through sustainability screens, the University website, and social media channels.
- The 2025–2026 Academic Year has been designated by the President as the “Year of Water.” To that end, the University organizes a series of awareness-raising initiatives.
- Environmental sustainability training sessions are organized for students, faculty and staff.
- Water awareness materials published by the Ministry are actively utilized across campus.

Awareness initiatives also address the concept of the **virtual water footprint**. The virtual water footprint refers to the total volume of freshwater used throughout the production, transportation, and consumption of a product, all of which remains invisible to the end user. This approach encourages individuals to recognize indirect water consumption and supports the development of more informed and sustainable consumption behaviors.

#### **6.1.6. Operational Awareness and Stakeholder Participation**

Water management is considered as a shared responsibility across all stakeholder groups:

- Water efficiency training programs are provided for cleaning staff.
- Technical Services, Sustainability & QHSE, and all relevant operational teams act with heightened awareness regarding water losses and leak prevention.
- Active reporting mechanisms are in place for reporting any nonconformity.
- Students and employees are encouraged to share their observations and give feedback related to water use and water management.

#### **6.1.7. Stakeholder Collaboration and Applied Learning**

- The seminar “The Journey of Water” was held in collaboration with ISKI.
- A technical visit to the Ömerli Drinking Water Treatment Plant was conducted with students to support experiential learning in water management practices.
- Özyeğin University is part of the Water Working Group established with the participation of group companies within Fiba Group, contributing to knowledge exchange, the sharing of best practices, and collaborative development processes.

### **6.1.8. Individual Water Conservation Recommendations**

In addition to campus-wide initiatives, individual contributions play an important role in improving water efficiency:

- Shower durations should be reduced.
- Washing machines and dishwashers should be used only on full loads.
- Taps should not be left running while brushing teeth or washing dishes.
- Leaks and plumbing issues should be reported promptly.
- Irrigation systems should incorporate scheduling and automation solutions to optimize water use.
- More conscious consumption choices should be made regarding water-intensive products.

### **6.1.9. Continuous Improvement Approach**

At Özyeğin University, water management is addressed through an integrated approach centered on measurement, monitoring, continuous improvement, and awareness-building. The University aims to serve as a role model for the sustainable and efficient management of water resources while continuously strengthening this approach in collaboration with all stakeholders.

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