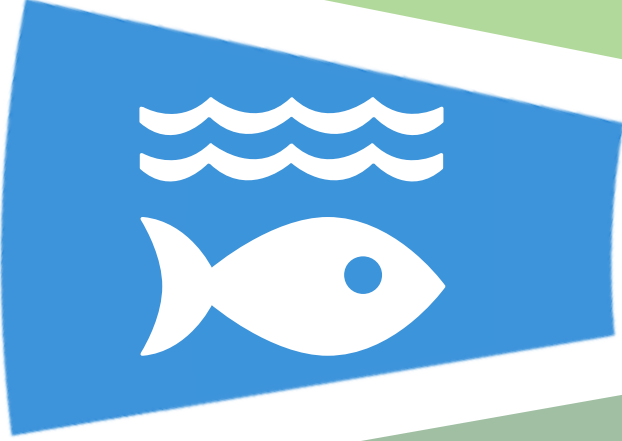


SDG PROGRESS REPORT

on **SDG-14 LIFE BELOW WATER**

**20
21**



SDG PROGRESS REPORT

ISTANBUL MEDENIYET
UNIVERSITY

**Istanbul Medeniyet University
Sustainability Office**

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SDG Icons

<https://www.un.org/sustainabledevelopment/news/communications-material/>

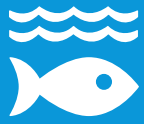
Sustainable Development Report Maps

<https://dashboards.sdgindex.org/profiles/turkey>

SDG Statics

<https://www.un.org/sustainabledevelopment/sustainable-development-goals/>

https://www1.undp.org/content/seoul_policy_center/en/home/sustainable-development-goals.html



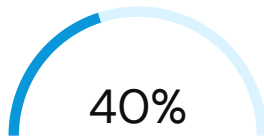
The world's oceans – their temperature, chemistry, currents and life – drive global systems that make the Earth habitable for humankind. How we manage this vital resource is essential for humanity as a whole, and to counter balance the effects of climate change. Over three billion people depend on marine and coastal biodiversity for their livelihoods. However, today we are seeing 30 percent of the world's fish stocks overexploited, reaching below the level at which they can produce sustainable yields.

Oceans also absorb about 30 percent of the carbon dioxide produced by humans, and we are seeing a 26 percent rise in ocean acidification since the beginning of the industrial revolution. Marine pollution, an overwhelming majority of which comes from land-based sources, is reaching alarming levels, with an average of 13,000 pieces of plastic litter to be found on every square kilometre of ocean.

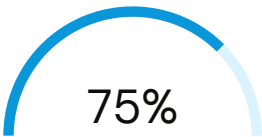
The SDGs aim to sustainably manage and protect marine and coastal ecosystems from pollution, as well as address the impacts of ocean acidification. Enhancing conservation and the sustainable use of ocean-based resources through international law will also help mitigate some of the challenges facing our oceans.

200K SPECIES

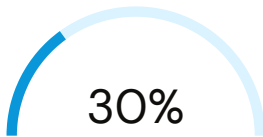
that can be identified live in the ocean



40% of the ocean is heavily affected by pollution, depleted fisheries, loss of coastal habitats



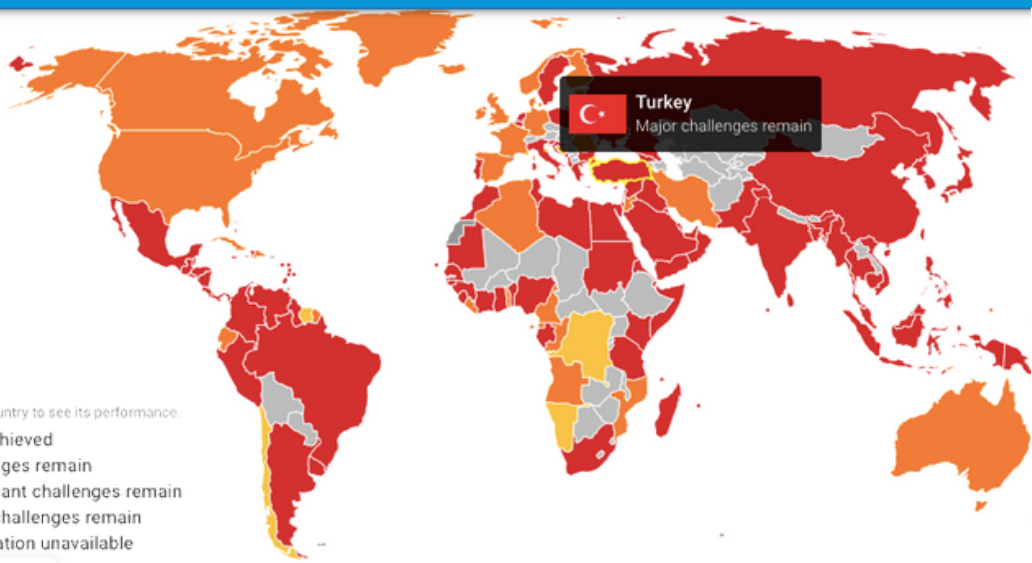
75% of the Earth's surface is covered by oceans



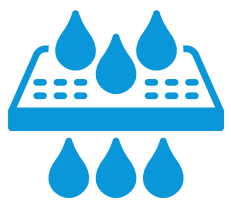
30% of carbon dioxide produced by humans absorbs by the ocean

3 BILLION

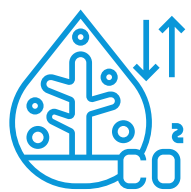
people depend on marine and coastal biodiversity for their livelihoods



2 R&D LABS are researching aquatic ecosystem damage prevention



filtering systems for wastewater



transnational ocean biodiversity research

1 R&D LAB is researching for maintaining aquatic ecosystems and their biodiversity



reduce plastic waste to prevent pollution of water ecosystems



Water Discharge Guidelines and Standards

Istanbul Medeniyet University cleans the wastewater inside the campus areas using certain **filtering systems** before discharging it. For instance, we have oil filters installed in the dishwashing sites in our campus kitchen and other facilities to prevent the oily wastewater from polluting the discharged water. These filters are regularly cleaned and the oil waste collected are delivered to ISTAC Inc., an affiliation of Istanbul Metropolitan Municipality that is in charge of waste management.

Wastewater from campus use is collected by the **wastewater network** and dispatched to the treatment facilities of Istanbul Water and Sewerage Administration (İSKİ), which is in charge of treating wastewater using various systems from preliminary treatment to advanced biological treatment so that wastewater is eliminated without environmental damage and water resources, Istanbul Strait, and the Marmara Sea are protected from the threat of wastewater.

Actions to Reduce Plastic Waste

Istanbul Medeniyet University primarily follows a policy of reducing consumption to reduce waste. Therefore, certain strategies have been implemented to gradually **reduce single-use plastics in the campus areas**. For instance, our contract with the catering service provider for our lunch services contains a clause on serving meals in chinaware and using metal cutlery. Thanks to these practices, we prevent the use of single-use plastics in eating utensils and thereby reduce plastic waste generation in all our campus areas.

In 2019, Istanbul Medeniyet University joined the "Zero Waste" program carried out under the auspices of the Presidency of the Republic of Turkey as part of the **"Zero Waste Regulation"** to contain waste in line with the sustainable development goals and to leave a clean Turkey for future generations. Issues such as reducing the generation of waste and chiefly of plastic, which greatly damages aquatic, terrestrial, and aerial ecosystems, and recycling plastic waste

form an integral part of our university's vision. In this context, we removed the waste bins from the university's indoor areas and started to collect and sort recyclable waste and chiefly plastic waste in six categories. Plastics that are thus saved from becoming garbage are delivered to the relevant municipal authorities for recycling.



"Zero Waste" Project Recyclable Waste Boxes

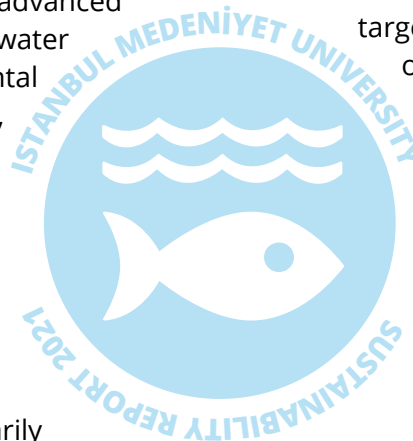
Istanbul Medeniyet University carries out practices that will contribute to the plastic reduction targets throughout Turkey. For example, in order to contribute to the goal of the **Packaging Waste Control Regulation** of 2017, which aims to reduce the annual use of plastic bags per capita by no more than 40, cloth bags are distributed to our staff members, which can be used as an alternative to plastic bags, every year.



IMU Cloth Bags that are Distributed to Our Staff Members

“**1420**
CLOTH BAGS
distributed to staff members to
reduce using of plastic bag”

Thanks to all such measures to reduce plastic use and waste, IMU aims to prevent plastics from polluting natural areas and water resources and thus to avoid the death of organisms in the aquatic ecosystem due to plastics and microplastics.



Istanbul Medeniyet University leads numerous public institutions, research institutions, universities, local schools, and NGOs toward numerous goals that would help us achieve the objective of conserve and sustainably use the oceans, seas and marine resources for sustainable development.

Leading the Technologies towards Aquatic Ecosystem Damage Prevention

Developing technologies to prevent aquatic ecosystem damage is an important field for our institution. In this context, IMU Science and Advanced Technology Application and Research Center (IMU BILTAM) contains two [R&D Laboratories](#) researching the technologies that can prevent the aquatic ecosystem pollution and reduce the aquatic ecosystem damage.

A R&D laboratory established under the leadership of Prof.Dr. Erkan ŞAHİNKAYA to conduct research on the optimization of the simultaneous nitrification and denitrification process in an intermittently aerated membrane bioreactor to treat wastewater.

BILTAM also has another R&D laboratory led by Asst.Prof.Dr. Senem TEKSOY BAŞARAN, conducting research on maximizing energy conservation potential by wastewater treatment and organic matter recovery with super fast membrane bioreactor (SFMBR) process.

Maintaining Ecosystems and their Biodiversity

Protecting and maintaining ecosystems and biodiversity is crucial for the Earth's future. Being aware of the importance of the issue, our university established an [R&D laboratory](#) in BILTAM under the leadership of Prof.Dr. Turgay ÇAKMAK to conduct research on determining the coastal microalgae and cyanobacterial diversity of Horseshoe island, creating a culture collection, and evaluation of the general biotechnological characteristics of cultured species.

In addition to our operational efforts, we, as a university, also see our students as leaders of the future. Therefore, we aim for each and every one of our students to become leaders in the society in implementing sustainable development goals through their research and social responsibility projects and thus, support them in their conserve and sustainably use marine resources for sustainable development efforts.

The seventh edition of Istanbul Medeniyet University English Language Teaching Department's aimed to develop ecological awareness. "[Ecospiracy](#)" themed ELT Monthly magazine has been issued with the personal hard work of our students. In this issue, included topics are ecology and its history, the unknown side of commercial fishing and its effects on the oceans, secrets of the meat industry, eco-friendly buildings, and urban planning, art representing ecological culture, cruelty-free emblems, mysterious places to visit, music by recycling and its effects on the human brain.

In the issue, it is stated that all the wastes from the factories are separated to the other lands or poured into our rivers and lakes. For our oceans, fishing creates devastation as well. Some methods of fishing destroy the coral reefs that are quite crucial. Coral reefs protect the biodiversity in the oceans and many people depend their lives on them as they prevent storms, floods, and other natural disasters that could happen.

The issue gave informations about the harm of commercial fishing and how it is being a danger for the oceans, our planet, and its future. Also, the article shed light on even fishermen are responsible for making unwanted species go back to the ocean; they usually do not spend energy on it.



The academic staff members of our university carry out research on reducing marine pollution; protecting and improving marine and coastal ecosystems; minimization of ocean acidification; sustainable fishing; conservation of coastal and marine areas; eliminating subsidies that contribute to overfishing; increasing the economic benefits from the sustainable use of marine resources; increasing scientific knowledge, research, and technologies on ocean health; supporting small-scale fishers; and implementing the international law of sea, publish the results of their research and share them with other researchers, decision-makers, stakeholders, and the public as a foundation for policies toward achieving SDGs.

The book [Denizden Gastronomiye](#) (From Sea to Gastronomy) co-edited by Asst.Prof.Dr. Esra DOĞU BAYKURT of Istanbul Medeniyet University Faculty of Tourism Department of Gastronomy was published. The book covers various topics including fish culture in the world and in Turkey, fish in gastronomic tourism, the benefits of fish consumption for human health and healthy nutrition, fish oil and its importance for health, marine pollution and biodiversity with life in the aquatic ecosystem, and nutritional values in aquatic products.

