



2022 Sustainability Report SDG 14



LIFE BELOW WATER



LETTER FROM THE REPORT RECTOR

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Ege University is a leading university, an example of the Turkish higher education system, which has received Turkey's first Institutional Full Accreditation Certificate and has the identity of a Student-Focused Research University.

Our University, with its 68-year deep-rooted history, strong academic staff, qualified scientific studies, distinguished students, and graduates, is to make a supreme effort to build a solid future for new generations by being sensitive to the realities of the world, our country and the society we live in. Ege University is a strong research institution with an entrepreneurship and innovation ecosystem where R&D, innovation, knowledge, and technology transfer take place between industry and university.

Ege University has adopted all the goals of eliminating inequalities, strengthening economic growth and employment, improving cities and residential areas, ensuring industrialization, protecting oceans and ecosystems, producing and consuming energy more sustainably, combating climate change, developing sustainable production and consumption, and empowering human rights. Our university operates within an adequate ultrastructure designable to implement all academic and operational activities within the SDGs framework.

We steadfastly persist in our pursuit of elevating Ege University into a vanguard research institution dedicated to pioneering technological advancements in support of sustainable development.

This report not only contains in-depth information about Ege University's remarkable efforts in each of the United Nations Sustainable Development Goals throughout 2022 but also reveals the key strategies of our institution. Moreover, it serves as a guiding compass, not only illuminating our efforts but also enabling a keener determination of our evolving needs and strategic plans.

In harmonious unity, we ardently endeavor to steer our institution towards a guiding and pioneering role by meticulously realizing our objectives through a management philosophy of fairness, equity, and accessibility.

I appreciate all my esteemed colleagues whose collective efforts have shaped this report.

With warm regards and respect..."

Prof. Dr. Necdet BUDAK
Rector



LETTER FROM THE REPORT TEAM

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As the Sustainability Report Team, Ege University, we are proud and excited to present the third annual Sustainability Report of Ege University, one of Turkey's pioneering universities, prepared to concretize the University's commitment to sustainability and enable you to follow our sustainability-related efforts closely.

Sustainability lies at the heart of Ege University's main objectives. Besides, our university bears the responsibility of leaving a more livable world to future generations, and it emphasizes its determination to integrate sustainability principles in the fields of education, research, social contribution, and campus management. Over the years, Ege University has built a strong track record of offering sustainable solutions to address the challenges facing the university and society. In 2020, all these efforts culminated in establishing the Rankings Office. This move not only strengthened the university's commitment to sustainability but also led to the formation of sub-commissions focusing on various Sustainable Development Goals. These sub-working groups brought together academics and administrative staff from every faculty and the Rectorate, each contributing diverse perspectives and professional expertise.

What makes the Rankings Office even more dynamic is its inclusion of the Sustainability Report Team, which actively participates in all activities, thus enhancing the visibility of the office across the university.

Ege University aims to extend influence far beyond the boundaries of our institution. The EGE Sustainability Team seeks to be a trailblazer in instilling a culture of sustainability in other higher education institutions. Our Sustainability Team and its sub-working groups are going to serve as advisors to our university as well as to other universities, offering insights into Sustainable Development Goals and impact management. Furthermore, we are going to continue to be actively involved in educational initiatives that support schools on their sustainability journeys.

Beyond our campuses, we actively engage with local communities, businesses, and government entities to foster sustainable relationships, collaborate on solving common issues, and share our wealth of knowledge.

Ege University is unwavering in its commitment to the responsible management of resources to mitigate their impact on society, the environment, and the economy. This report offers a transparent and current source of information, providing valuable guidance to universities and stakeholders seeking to expand their knowledge on sustainability.

EGE University is actively dedicated to advancing sustainability through research, education, and innovation to become a leading institution in Turkey and worldwide. Our primary focus is on enhancing the accessibility, inclusivity, and affordability of our university for the benefit of our community. We cultivate positive partnerships with industry leaders to strengthen our engagement and ensure the use of environmentally sustainable practices that support innovation and research.

This report offers insight into EGE UNI's position in 2022 regarding enhancing sustainability in Turkey. We share our initiatives and commitments related to environmental, social, and economic sustainability, along with their corresponding impacts. We extend our gratitude to our sub-working groups, the Sustainability Report team, our dedicated students, EGE's esteemed academicians, and the Rectorate for their unwavering efforts this year to further our sustainable impact.

Our journey towards securing the sustainability of our world is an extensive and long way one. As the EGE Sustainability Team, we place our trust in the dedication of our university's staff and students to continue their improvements this year and sustain their endeavors well into the future.

We appreciate your interest in the Ege University Sustainability Report and eagerly welcome the feedback of our readers.

Assoc. Prof. Gökür ŞİŞMAN AYDIN
Coordinator of Sustainability Studies
Office of Institutional Development
Planning and Monitoring



LIFE BELOW WATER

14



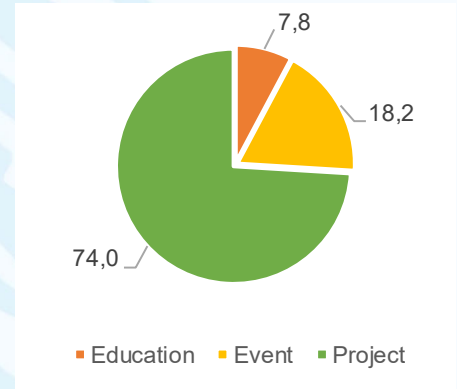
EGE FOCUSES ON LIFE BELOW WATER

Ege University has a leading role not only in education and research, but also in sustainability and environmentally friendly approaches. In this context, a comprehensive Life Below Water Policy has been established in parallel with SDGs. The sustainability vision created by these plans and policies is implemented in cooperation with local governments and communities. With this proactive approach, Ege University demonstrates its sensitivity and commitment to Life Below Water.

As an institution, Ege University organizes events that aim to promote the protection and sustainable use of aquatic systems and water resources. In this context, many units of our university, especially the Faculty of Fisheries, continue to raise awareness with different activities.

Within the scope of World Water Day, students from Esin Özgener Primary School in Menderes district were hosted at the Faculty of Fisheries. In our event, which was followed with interest by the students, 'Ecosystem Themed' training was given.

At the Ege Promotion Days event, many young participants' questions about aquatic life and our courses were actively answered at the stands of the Faculty of Fisheries and Urla Maritime Vocational School, which attracted great attention.

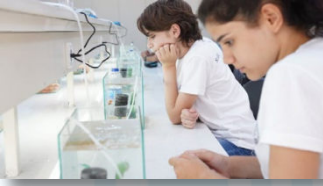




The number of junior “AQUATIC SYSTEMS EXPLORERS-2” is increasing...



The Project, led by Assoc. Prof. Dr. Tolga Tolon from Ege University, which draws attention to transferring the awareness of the aquatic system to individuals at a young age, aims to contribute to future generations living in harmony with nature. The project is supported by the TÜBİTAK 4004 Nature Education and Science Schools Program and Fisheries Faculty host the project.



“Blue Agriculture, Green Future” is our slogan for 2022



“Aquatic Systems Explorers-3” Project, led by Assoc. Prof. Dr. Tolga Tolon, was entitled to be supported for the third time within the scope of TÜBİTAK 4004 Program. This year’s slogan of Aquasystem Explorers is “Blue Agriculture, Green Future”. High school students attended the program from 14 public schools in Izmir districts. Practical training was given on the fundamental properties of water, aquatic science and sustainability, and the cultivation of different types of aquaculture.

[Click here to access the news](#)



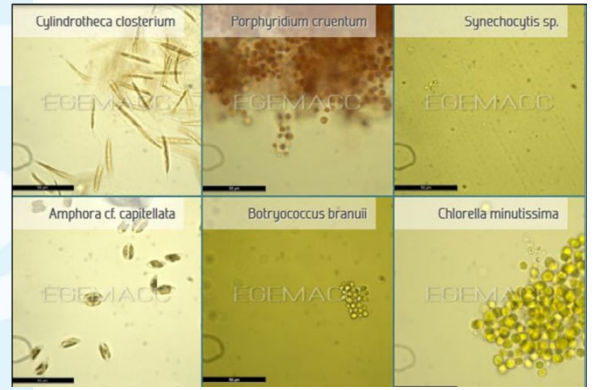
SUPPORTING WATER ECOSYSTEMS THROUGH EDUCATION

Academicians of the Faculty of Fisheries and our graduate students made presentations on different dates at the meeting attended by approximately 100 people in the training activities organized by the Antalya Provincial Directorate of Agriculture and Forestry. With the "blue agriculture" approach, information sharing and awareness raising on sustainable fishing and healthy aquatic ecosystem issues were ensured.

SUPPORTING WATER ECOSYSTEMS THROUGH ACTION

Our University's basic facilities, which support sustainable water goals and the development-oriented global goals of Life Under Water in a versatile way, have culture collections for the sustainability of the life of microorganisms in water and the biotechnological use of microalgae..

There is a 'Microalgae Technology Laboratory' where research is carried out under the chairmanship of Prof. Dr. Meltem CONK DALAY, a faculty member of the Faculty of Engineering, Department of Bioengineering. There is also a Microalgae Culture Collection (Ege-MACC).



Faculty of Fisheries has an 'Ecotechnology Laboratory' where R&D projects are carried out under the leadership of faculty member Assoc. Prof. Dr. H. Gökür ŞİŞMAN AYDIN.

The projects are carried out for the treatment of wastewater and the development of reuse models by utilizing aquatic organisms, especially microalgae.

A research and development pilot facility was established at the Urla Campus of the Faculty of Fisheries to commercially produce sea cucumber, which is under hunting pressure due to its collection from nature. The project, was supported by KOSGEB, affiliated with the Ministry of Industry and Technology.





In addition, there is the Ege University Fisheries Faculty Museum (ESFM) within our institution, where Prof. Dr. Melih Ertan ÇINAR is the chairman of the commission.

The museum contains aquatic creatures collected by monitoring surveys from Turkey since the 1930s. There are approximately 4100 marine species, including fishes, phytoplankton, sponges, annelids, mollusca, arthropoda, and other invertebrates. ESFM's inland water fish collection contains ~46,000 individuals collected from various habitats in 26 river basins of Turkey. The museum collection also includes 31 new species discovered by researchers of the Fisheries Faculty.

Most specimens are used as comparison material by scientific researchers worldwide. The main goal of the museum is to preserve individuals belonging to all species living in Turkish waters by international standards, to make contributions to scientific and educational studies, and to raise public awareness of our biological diversity and richness.



HOMA LAGOON

We are the only university in the world that has a lagoon system with high conservation status.

Ege University has been supporting local and regional governments in the protection and sustainable management of water resources for many years. In addition, the 40,000-hectare Homa Lagoon System and its wetland, located within the borders of the internationally important RAMSAR Region, was allocated to the Ege University Faculty of Fisheries with a triple decree in 1986. The lagoon system is used for education, research, and application. It is for recreational purposes and supports local governments in preparing wetland management plans. In addition, seminars on water-saving technologies are given to regional farmers, and national and international projects are implemented.

In Homa Dalyan, which has been successfully operated by the Faculty of Fisheries for nearly 40 years, in addition to scientific research, the sale of fish caught in the catchment is carried out.



Ege University Journal of Fisheries (EgeJFAS) has been published since 1984. It makes an important contribution to the dissemination of the information contained in a large number of studies carried out for the protection, sustainability, and healthy of water ecosystems and biodiversity to society and related persons.

Ege University took part in COP27

Assoc. Prof. Dr. İnci TÜNEY Kızılkaya represented Ege University at the 27th Conference of the Parties to the United Nations Framework Convention on Climate Change (COP27). She made a presentation on "Efforts to Combat Climate Change in Gökova Special Environmental Protection Areas."

Assoc. Dr. Kızılkaya is the Science Coordinator of the "Research on the Effects of Climate Change on Marine and Terrestrial Ecosystems in Gökova Special Environmental Protection Area and Increasing Adaptation Capacity Project" carried out by the Ministry of Environment, Urbanization and Climate Change.

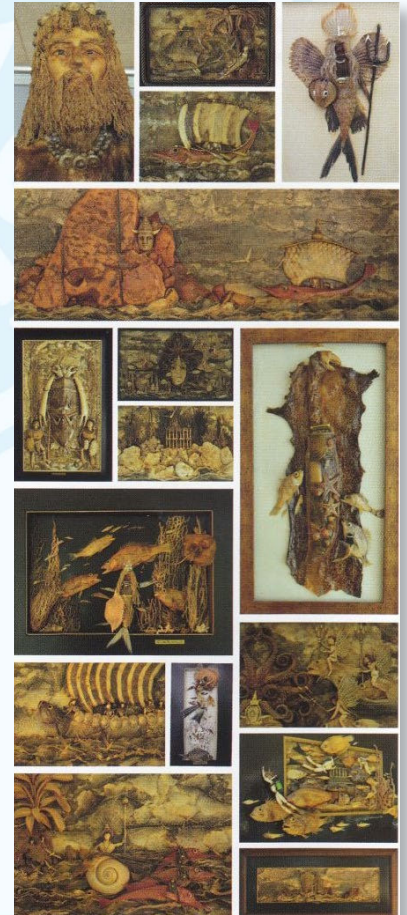


Our Scientist Represented Turkey At The Un Regional Forum For Sustainable Development.

Instructor Dr. Huriye GÖNCÜOĞLU Bodur was invited to contribute to the Regional Sustainable Development organized by the United Nations Economic Commission for Europe, and she represented our University at the meeting held at the United Nations Headquarters in Geneva.



The Faculty of Fisheries hosted the 99th Solo Painting Exhibition of Nedim ÇELKAN, a Turkish painter and fisherman who produces artistic structures from seafood. All of the exhibited products were produced using aquatic organisms.

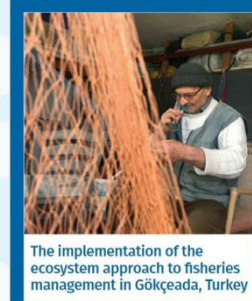




II. The National Artificial Reef Workshop was held at the Faculty of Fisheries. In the meeting held with the participation of all academicians interested in the subject at a national level, research on artificial reefs was shared.

An Ocean Day panel was organized at Ege University on 08 June 2022. Many of our faculty members supported the panel with their presentations.

A detailed work on Gökçeada Fisheries, organized by FAO and including our Faculty of Fisheries faculty members Prof. Dr. Zafer TOSUNOĞLU and Prof. Dr. Vahdet ÜNAL, has been published.



The implementation of the ecosystem approach to fisheries management in Gökçeada, Turkey



Member of the Faculty of Fisheries, Research Assist. Dr. Irmak KURTUL participated in the meetings held in six different cities of the project 'Assessing the threats of invasive alien species in terrestrial environments and inland waters in Turkey (TERIAS)' funded by the European Union and the Republic of Turkey.

The project called MariPet, coordinated by Assoc. Prof. Dr. İlker AYDIN, contributes to the fisheries sector. It will be effective in reducing waste and protecting sustainable food stocks.



An international project led by Ege University academician Prof. Dr. Ninel ALVER has received a grant of 13 million 500 thousand Yen from Japan. Within the scope of the project, a new damage detection method will be developed by applying artificial intelligence algorithms to detect damages that may occur in water infrastructure such as water storage structures, dams, reservoirs, water transportation structures, coastal and port structures during their service life due to environmental effects or dynamic loading such as earthquakes.



BIODIVERSITY AND ECOSYSTEMS WORKSHOP

With the collaboration of TUBA (Turkish Academic of Sciences) and Ege University, Biodiversity and Ecosystems Workshop was held at Ege University on 01-02 December 2022.

6 sessions



- Turkey and Biodiversity
- Agricultural Biodiversity
- Biodiversity of Aquatic Ecosystem

19 topic



- Terrestrial Ecosystems and Changing Biodiversity
- Indicators of Healthy Ecosystems
- Sustainability of Biodiversity in Turkey

25 scientists



Representatives from relevant ministries, faculty members from different universities and professional associations, as well as researchers, experts, and managers from the private sector attended the workshop. Faculty of Fisheries faculty member Prof. Dr. Murat ÖZBEK contributed to the workshop with a seminar on Turkey's freshwater ecosystems and their sustainability.

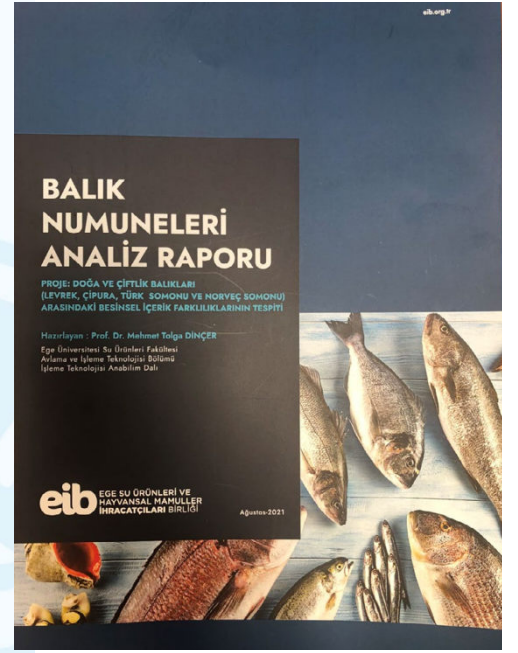


The "Fish Samples Analysis Report" book, which includes the project outputs carried out with the Ege University Faculty of Fisheries and the Ege Exporters' Associations (EİB) and the comparison of the nutritional values of marine and cultured fish, was published.



FISH SALES UNIT

The fish sales unit within the Faculty of Fisheries is an exemplary sales unit approved by the Ministry of Agriculture and Forestry and with the necessary hygiene certificates within the framework of the Food Hygiene Regulation. We offer quality fish, which we process with utmost care in our unit, especially our students and staff, and then the whole of Izmir City.



Healthy and hygienic exemplary-model aquaculture products sales unit on the campus ...

"Online ordering system"

Anyone who visits the official website of Ege University Faculty of Fisheries has the opportunity to order the healthy and hygienic fish we produce 24/7. Orders placed can be picked up from our Fish Sales Unit at the requested time or the next day.





Policy for Minimization of Wastes

In order to reduce our water footprint, E.U. It started to use the electronic documentation system (ENVISION), which was entitled to receive the "green office certificate".

«The Principal of Zero-Waste» is taught for two weeks within the scope of the "Introduction to University Life" course to first-year students of most departments at the university, and students are required to take this course.



Hazardous Waste Management

Hazardous waste generated in our research and education laboratories, to prevent it from mixing with the aquatic system, is first collected at waste storage stations and disposed of within legal periods.

The Portable Battery Manufacturers and Importers Association (TAP, <https://tap.org.tr>) was contacted and provided Waste Battery boxes for all our departments on each floor. At the same time, posters prepared by TAP were procured and placed on these waste battery boxes on the floors to raise awareness. On the other hand, it was aimed to raise awareness of environmental protection by distributing Small Waste Battery boxes to the rooms of all our academic and administrative personnel in our departments, and this service was offered up to the offices.



The TUBITAK project, led by our Faculty of Science faculty member Prof. Dr. Ferah SAYIM, will contribute to the development of strategies to clean the coasts of Izmir Bay.



Water dispensers prevent our students from using plastic by filling their own water bottles.



The 'Waste-Free Gulf Transforming Future' project, coordinated by the Konak District Directorate of Agriculture and Forestry and in which the Faculty of Fisheries, Urla Maritime Vocational School, and EGESAT are partners on behalf of our University, it is aimed to bring the fishing nets and plastic bottle wastes that pollute the Izmir Bay into the economy. Within the scope of the project, "Ghost Network" and a waste cleaning event were held.

PROTECTION OF WATER SYSTEMS

Faculty of Fisheries was awarded in 2022 for its contribution to the Future Fish Event.

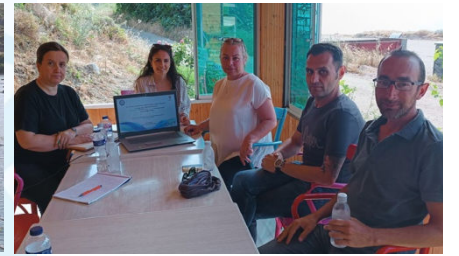
Ege University Özdere Recreation Facility was awarded the Blue Flag.



PROVISION OF A LOCAL ECOSYSTEM

The project, supported by TÜBİTAK-1001, titled Mussel Farming Example in the Investigation of Carbon Footprint, Life Cycle Environmental Impact Assessment and "Green Production" Potential in the Aquaculture Sector, focuses on the EU Green Deal.

The project, whose project manager is Assoc. Prof. Dr. Gökür ŞİŞMAN AYDIN, Faculty Member of the Faculty of Fisheries, will be completed in 2024, and the project team is working on a climate-friendly, low-carbon, green and sustainable mussel production model.



The book titled "Gediz Delta Fisheries" prepared by Ege University members was brought to the world of science.

The first meeting of 2022 of the Küçük Menderes Basin Management Committee, which was established by our Governorship in accordance with the "Declaration on the Establishment, Duties, Working Procedures and Principles of the Central Board of Basin Management, Basin Management Committees and Provincial Water Management Coordination Boards", was held on, November 25, 2022, the Ege Meeting Hall of the 2nd Regional Directorate of State Hydraulic Works and our Faculty of Fisheries faculty member Prof. Dr. Murat ÖZBEK participated in the meeting and contributed to the design of management plans.



In addition to revealing information about different areas of aquatic life, the research carried out by the academicians of our university also contributes to the knowledge of the floristic and faunistic richness of our country.

In this report period, as a result of the research carried out by the faculty members of the Faculty of Fisheries and Faculty of Science, a total of 9 new species were identified for the scientific world and introduced to the scientific literature.

Tür Adı	Türü Tanımlayan Araştırmacılar	Türlerin Yayımlandığı Araştırmanın Künyesi
<i>Oxydromus digitifera</i>	Melih Ertan ÇINAR, Ertan DAĞLI, Deniz ERDOĞAN- DERELİ	<i>Journal of Natural History</i> , 56:33-36, 1383-1426, Doi: 10.1080/00222933.2022.2118641
<i>Leitoscoloplos mediterranea</i>		
<i>Paraonis lobulata</i>		
<i>Barantolla cryptogenica</i>		
<i>Levincenia longobranchiata</i>	Deniz ERDOĞAN- DERELİ, Melih Ertan ÇINAR	<i>Zootaxa</i> , 4908 (2): 151–180. Doi:10.11646/zootaxa.4908.2.1
<i>Levincenia vulgaris</i>	Sevgi KUŞ, Güley KURT, Melih Ertan ÇINAR	<i>Zootaxa</i> , 5060 (2): 183–214. Doi: 10.11646/zootaxa.5060.2.2
<i>Inermonephthys turcica</i>		
<i>Nephtys sinopensis</i>		
<i>Polysiphonia sukatarii</i>	Pilar DIAZ-TAPIA, İnci TÜNEY-KIZILKAYA, Ergün TAŞKIN	<i>Phycologia</i> , 61 (3): 265-273. https://doi.org/10.1080/00318884.2022.2035169

PROVISION OF A LOCAL ECOSYSTEM

Our Faculty of Fisheries faculty member Prof. Dr. Adnan TOKAÇ is a full member of the Scientific Committee of the 'Scientific and Technical Advisory Board of the Ministry of Agriculture and Forestry of the Republic of Turkey - Marine Fisheries' and contributes to the protection of aquatic ecosystems with his services. In addition, the academicians of our institution have editor, deputy editor, and scientific board membership positions in internationally competent journals (Mediterranean Marine Sciences, BioInvasion Records, Turkish Journal of Zoology and Turkish Journal of Aquatic Sciences Ege Journal of Fisheries and Aquatic Sciences_EgeJFAS etc.) where current articles on the functioning and protection of aquatic ecosystems are included.

The award was presented to our faculty Lecturer Dr. Huriye GÜNCÜOĞLU BODUR, who was selected as "one of the 100 most influential women leaders in Europe" within the scope of European social enterprises and impact-oriented leaders.





COOPERATION FOR LIFE BELOW WATER

Ege University, Assoc. Prof. Dr. İnci Tüney Kızılkaya, in collaboration with the Mediterranean Conservation Association, analyses the impact of climate change on marine ecosystems and living life in detail. In this context, the project team carries out studies on the potential effects of climate change on marine biodiversity, strategic planning on the importance of protecting marine areas and

Gökova Bay to Cape Gelidonya Turkey Project

Restoring marine ecosystem connectivity in south western Turkey. This project is removing barriers to the recovery of marine ecosystem from Gökova Bay to Cape Gelidonya, triggering the revival of healthy ecosystem processes. A fully functioning ecosystem which keeps invasive species in check will generate sustainable benefits for local people and increase resilience to climate change.

[Click here to access the news](#)



Gökova Gulf – Sponge Monitoring



Marine ecosystem restoration experiments



THE Impact Rankings Methodology 2024 & GRI Index Matrix

THE	Impact Rankings Methodology 2024 Version 1.1	GRI	Disclosure	Reported	Page
14.1	Research on life below water			Fully	
14.2	Supporting aquatic ecosystems through education			Fully	
14.2.1	Fresh-water ecosystems (community outreach) Offer educational programmes on fresh-water ecosystems (water irrigation practices, water management/conservation) for local or national communities	GRI 304: Biodiversity 2016	304-1 Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	Fully	1, 3
14.2.2	Sustainable fisheries (community outreach) Offer educational programme or outreach for local or national communities on sustainable management of fisheries, aquaculture and tourism			Fully	2, 3
14.2.3	Overfishing (community outreach) Offer educational outreach activities for local or national communities to raise awareness about overfishing, illegal, unreported and unregulated fishing and destructive fishing practices			Fully	3
14.3	Supporting aquatic ecosystems through action			Fully	
14.3.1	Conservation and sustainable utilisation of the oceans (events) Support or organise events aimed to promote conservation and sustainable utilisation of the oceans, seas, lakes, rivers and marine resources	GRI 304: Biodiversity 2016	304-1 Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	Fully	4, 5, 6, 12
14.3.2	Food from aquatic ecosystems (policies) Have a policy to ensure that food on campus that comes from aquatic ecosystems is sustainably harvested			Fully	8
14.3.3	Maintain ecosystems and their biodiversity (direct work) Work directly (research and/or engagement with industries) to maintain and extend existing ecosystems and their biodiversity, of both plants and animals, especially ecosystems under threat		304-2 Significant impacts of activities, products and services on biodiversity	Fully	3, 4, 6
14.3.4	Technologies towards aquatic ecosystem damage prevention (direct work) Work directly (research and/or engagement with industries) on technologies or practices that enable marine industry to minimise or prevent damage to aquatic ecosystems			Fully	3, 6, 7
14.4	Water sensitive waste disposal			Fully	
14.4.1	Water discharge guidelines and standards Have water quality standards and guidelines for water discharges (to uphold water quality in order to protect ecosystems, wildlife, and human health and welfare)			Fully	SDG6 pgs.1-6
14.4.2	Action plan to reducing plastic waste Have an action plan in place to reduce plastic waste on campus	GRI 306: Waste 2020	306-4 Waste diverted from disposal	Fully	9
14.4.3	Reducing marine pollution (policy) Have a policy on preventing and reducing marine pollution of all kinds, in particular from land-based activities	GRI 304: Biodiversity 2016	304-2 Significant impacts of activities, products and services on biodiversity	Fully	10
14.5	Maintaining a local ecosystem			Fully	
14.5.1	Minimizing alteration of aquatic ecosystems (plan) Have a plan to minimise physical, chemical and biological alterations of related aquatic ecosystems	GRI 304: Biodiversity 2016	304-3 Habitats protected or restored	Fully	10
14.5.2	Monitoring the health of aquatic ecosystems Monitor the health of aquatic ecosystems			Fully	3, 6, 7
14.5.3	Programs towards good aquatic stewardship practices Develop and support programmes and incentives that encourage and maintain good aquatic stewardship practices			Fully	11
14.5.4	Collaboration for shared aquatic ecosystems Collaborate with the local community in efforts to maintain shared aquatic ecosystems			Fully	11-13
14.5.5	Watershed management strategy Have implemented a watershed management strategy based on location specific diversity of aquatic species	GRI 304: Biodiversity 2016	304-2 Significant impacts of activities, products and services on biodiversity	Fully	11-13



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