



2023
Sustainability Report
SDG 14



LIFE BELOW WATER



LETTER FROM THE REPORT RECTOR

14



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 2023 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 2023 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. Göknur ŞİŞMAN AYDIN
Coordinator of Sustainability Studies
Office of Institutional Development
Planning and Monitoring



EGE FOCUSES ON LIFE BELOW WATER



All activities aligned with the Sustainable Development Goals (SDGs) concerning Life Below Water are categorized in our university under four main headings: Projects, Events, Education, and Publications. Totally 172 activities were conducted during the reporting period (Fig. 1). Publications constitute the largest portion of all activities, representing 45% of the total. Subsequently, projects make up 24%, events 20%, and education 11% of the total distribution. When analyzing publications related to the sub-goals of Life Below Water, SDG 14.3 holds the largest share at 50%, followed by SDG 14.2 at 42% (Fig. 2).

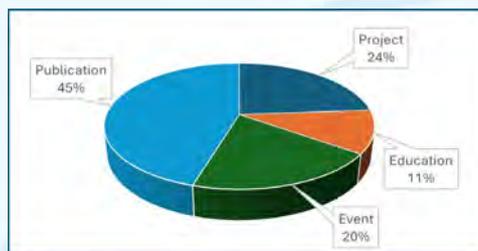


Figure 1

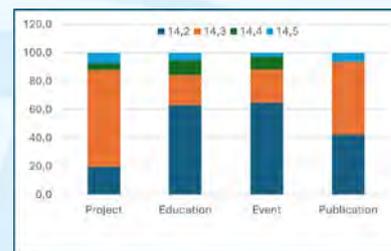


Figure 2

SUPPORTING WATER ECOSYSTEMS THROUGH ACTION

MICROALGAE CULTURE COLLECTION



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 Faculty of Engineering, Department of Bioengineering. There is also a Microalgae Culture Collection (Ege-MACC).

ECOTECHNOLOGY LABORATORY

Faculty of Fisheries has an 'Ecotechnology Laboratory' where R&D projects are carried out for the treatment of wastewater and the development of reuse models by utilizing aquatic organisms, especially microalgae.



EGE UNIVERSITY FISHERIES SCIENTIFIC MATERIALS (ESFM) COLLECTION

Since the 1930s, specimens have been collected in the Ege University Fisheries Scientific Materials (ESFM) collection, comprising approximately 4,100 marine species, including fish, phytoplankton, sponges, annelids, mollusks, arthropods, and other invertebrates. Beyond marine species, ESFM's inland water fish collection includes around 46,000 specimens gathered from various habitats across 26 river basins in Türkiye, among them 32 newly discovered species identified by faculty researchers. This collection serves as comparison material for scientists worldwide and is one of the first of its kind in Türkiye to preserve aquatic species by international standards. Materials obtained through monitoring surveys and field studies or donated from across Türkiye, are registered and stored under appropriate conditions within the Faculty of Fisheries. ESFM's primary goals include preserving the diversity of Turkish waters, contributing to scientific and educational research, and raising public awareness about the country's rich biodiversity.



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MARINE FISH OF TÜRKİYE

During this reporting period, a BAP project (FHD-2021-23431) has been completed, adding the "Marine Fish of Türkiye" section to our collection. This section now includes 346 species from 125 families, representing 64% of Türkiye's marine fish fauna, all of which have been preserved.



EUHAYMER - Fisheries Research Laboratory is housed within the Laboratory Animal Application and Research Center. This laboratory provides facilities for creating experimental environments using aquatic organisms and supports scientific research activities.

HOMA LAGOON

We are the only university in the world that has a lagoon system with high conservation status. Ege University has supported local and regional governments in protecting and sustainably managing water resources for many years. In addition, the 40,000-hectare Homa Lagoon System and its wetlands, located within the internationally significant RAMSAR Region, were allocated to the Ege University Faculty of Fisheries by a triple decree in 1986. The lagoon system is utilized for education, research, and practical applications. It also serves recreational purposes and assists local governments in developing wetland management plans. In addition, seminars on water-saving technologies are given to regional farmers, and national and international projects are implemented. In Homa Lagoon, 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

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.





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.



Research and educational expeditions are conducted with the research vessel named EGESÜF, which operates under the Faculty of Fisheries.



Ege University's Özdere Recreation Facilities have been awarded the Blue Flag certification.



Our campus implements an "Integrated Waste Management System" to ensure the environmentally safe disposal of hazardous wastes generated from educational, academic, research, and service activities. Ege University has an 'Integrated Waste Management' system for the disposal of all other waste, including plastic waste. In addition, hazardous wastes generated in all our units are disposed of with the methods specified in the relevant booklet.



As a result of the studies carried out within the scope of the "Zero-Waste" Project initiated by the Ministry of Environment and Urbanization, our University was awarded a "Zero Waste Certificate". Ege University became the first educational institution in Izmir to receive this certificate on a campus basis. Ege University implements an "Integrated Waste Management System" to ensure the environmentally safe disposal of hazardous wastes generated from educational, academic, research, and service activities.



Gains achieved by recycling paper and packaging wastes in 2023



Zero Waste Action Plan



STUDENT PROJECTS

The Faculty of Fisheries at Ege University also leads in "Student Projects." Aligned with Ege University's student-centered educational mission, the Faculty of Fisheries consistently supports its students, enabling them to fully benefit from the research university ecosystem. Through its robust research infrastructure and collaborations with public and private sectors, the faculty provides unwavering support to its students.



This year, high school students are receiving education in aquatic sciences under the slogan 'Blue Agriculture, Green Future.' Hosted by Ege University's Faculty of Fisheries and led by Dr. Mustafa Tolga Tolon, an Associate Professor in the Department of Aquaculture, the "Aquatic Explorers" project has been awarded funding for the third time under TÜBİTAK's 4004 Nature Education and Science Schools Support Program. This year's project theme, "Blue Agriculture, Green Future, includes training sessions on aquatic sciences for high school students from 14 public schools in İzmir.

WORLD WATER DAY

As part of the World Water Day events on March 22, 2023, Faculty of Fisheries's members delivered presentations on "The Importance of Clean Water and Aquatic Life" and "The Importance of Water and Aquatic Environments" to students from Bornova Kaymakamlığı Özel Bahçeşehir Middle School, Gaziemir Kaymakamlığı Özel Ege Eğitim Vakfı School, and Bahçeşehir College Bornova Branch. The importance of water was highlighted, and students were informed about organisms living in aquatic environments through these presentations and an exhibition of marine organisms.



As part of the World Water Day events on March 22, 2023, Faculty of Fisheries's member gave a presentation titled "The Impending Global Water Crisis and Preventive Measures" at an event organized by the Urla City Council.



Faculty members from Ege University participated in the Climate Crisis Summit program.



The little princesses from the Karşıyaka Children's Protection Institution were warmly welcomed at the Fisheries Culinary Workshop. As part of a social project, these young chefs had a delightful experience making healthy fish burgers and decorating cookies, while also learning valuable information.



"Aquaculture Engineering" course has been successfully completed.



OUR FUTURE LIES IN THE SEAS

"Our Future Lies in the Seas" was conducted as one of three projects. In coordination with KONTAK Innovative Learning Center, middle school students were provided with practical demonstrations of maritime connections and navigation skills on designated days.



Training for Women Fishers at the Faculty of Fisheries: The United Nations Women's Unit (UNWOMEN) provided training on "Advocacy and Lobbying" for 20 women fishers from various regions of Türkiye. This initiative allowed these women fishers to be in a university setting for the first time, enabling them to experience lifelong learning. It also contributed to creating equal opportunities in education for women and girls engaged in fishing professions and played a role in securing the future of our seas.



Within the Ege University Continuing Education Center (EGESEM), the "Net Making and Rigging Technique Certificate Program" held. This 40-hour, 5-day training took place in the Fishing Technology Laboratories at our Urla campus. The program aims to train instructors who will educate fishermen and crew members on net cutting and calculations, the construction and rigging of fishing gear, as well as net repair and weaving techniques.



EU Faculty of Fisheries, was invited to a forum organized by the United Nations Economic Commission for Europe in Geneva.



Faculty of Fisheries's member participated in the Small-Scale Fisheries Forum: 2023-2024 Program Definition meeting organized by the Food and Agriculture Organization (FAO) of the United Nations and the General Fisheries Commission for the Mediterranean (GFCM) on March 9-10, 2023, in Central Italy. The meeting aimed to amplify the voices of small-scale fishers in the region and to directly contribute to the development of the 2023-2024 SSF Forum program, facilitating the full implementation of the Regional Action Plan for Small-Scale Fisheries (RPOA-SSF) in the Mediterranean and Black Sea.



The second international meeting of the Erasmus+ MARI PET project was held in January 2023 in Kaunas, Lithuania. Presentations were delivered, and decisions were made regarding the development of the MARI PET training curriculum.



The third international meeting of the Erasmus+ MARI PET project was held in June 2023 in Dubrovnik, Croatia. Presentations of the MARI PET e-learning modules were conducted, and the modules were uploaded to the project website.

The international meeting of the Erasmus+ MARI PET project took place in December 2023 in Reykjavik, Iceland. Trials of the MARI PET e-learning platform were conducted, and pilot testing began.



Faculty of Fisheries's members participated in the "1st International Conference on Conservation of Eurasian Biodiversity: Contemporary Problems, Solutions and Perspectives," held from May 15-17 in Andijan, Uzbekistan, at the official invitation of Andijan State University. During the conference, he delivered two oral presentations titled "Benthic Invertebrates as Ecological Indicators in the North Aegean Basin (Türkiye)" and "Biodiversity and Threats in Türkiye's Inland Waters." Following the conference, a two-day field study was conducted, laying the groundwork for scientific activities through bilateral collaborations. Additionally, cooperation protocols were signed between Ege University Faculty of Fisheries and Andijan State University to contribute to the university's internationalization goals.



Dr. Huriye GÖNCÜOĞLU BODUR from Ege University's Faculty of Fisheries has been awarded the "Disruptive Woman Award" as part of the "Türkiye's Leading Women Awards" organized by Ekonomi Gazetesi in strategic partnership with Koç University's Center for Gender and Women's Studies (KOÇ-KAM).



The International Symposium on Fisheries and Aquatic Sciences (SOFAS 2022) was held, at the National Fisheries Gene Bank in Trabzon. Organized in collaboration with the Ministry of Agriculture and Forestry (TOB), the Central Research Institute for Fisheries (SUMAE), and the Food and Agriculture Organization (FAO) - General Fisheries Commission for the

Mediterranean (GFCM), the SOFAS-2022 symposium saw participation from over 200 scientists from 22 countries. Ege University Faculty of Fisheries doctoral students participate from Türkiye, received their certificates during the workshops.



AN INNOVATIVE APPROACH FOR MICROPLASTIC STUDIES IN MARINE ORGANISMS: RADIO-LABELING AND RADIO-IMAGING (PET)

The project from Ege University Institute of Nuclear Sciences, has received support under the TÜBİTAK 1001 Scientific and Technological Research Projects Support Program. This project is significant as it represents the first application of radio-labeling studies to assess micro plastic uptake in marine organisms, members the Faculty of Fisheries.

Ege University (EU) studies at national and international levels to raise awareness about environmental issues and promote environmental consciousness. Leading numerous sustainability projects with an environmental theme, the center is spearheading quality initiatives aimed at positioning Ege University within the top 100 of the World Green Universities Greenmetric ranking in the upcoming term.



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.



Ege University Laboratory of Animal Application and Research Center (EGEHAYMER), in collaboration with the Faculty of Science and the Ege University Continuing Education Center (EGESEM), has organized a course titled "Aquatic Toxicity Test Models with a Sustainable Environmental Approach."

CLEAN SEA



A public awareness event on marine pollution was held at Cumhuriyet Square on June 5th, 2024.

Department of Chemical Engineering at Ege University Faculty of Engineering have developed a four-stage treatment system that enables the use of wastewater from textile factories in agriculture, following two years of research.

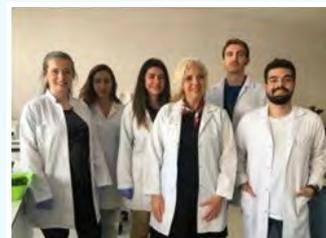
Prof. Dr. Nalan KABAY, a faculty member in the Department of Chemical Engineering at Ege University's Faculty of Engineering, was included in the working group for the "Desalination Technologies Technology Roadmap," formed by the Presidency's Science, Technology, and Innovation Policies Board.



Egeli akademisyen Prof. Dr. Kabay, "Teknoloji Yol Haritaları" hazırlayacak ekip içinde yer alacak



Ege University (EU) continues to serve science in line with its mission of internationalization, supported by its qualified academic staff and strong scientific activities. Ege University members are actively involved in numerous new projects focused on enhancing educational quality and reinforcing the university's commitment to being a student-centered, fully accredited research institution.





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

Educational staff from the EU Faculty of Fisheries participated in the management plan meetings.

Ege University and Tokyo University of Agriculture and Technology join forces for "smart agriculture."



The international project led by Ege University academics receives funding of 13.5 million yen from Japan. A new damage detection method will be developed using artificial intelligence algorithms.



Academics from Ege University contribute to the Mediterranean Conservation Society as advisors and board members.

The Sustainable Development Youth Leaders Training Program (SÜGEP), developed by the Academy, aims to utilize sea lettuce—responsible for environmental pollution and unpleasant odors—as raw material in the packaging industry. The project is being carried out under the guidance of a faculty member from Ege University, who also serves as the Training Coordinator of SÜGEP Academy.



İnci Tüney Kızılkaya



Vahdet Ünal



Esra Öztürk Yiğit



Zafer Tosunoğlu



TRACKING FISH MOVEMENTS

Ege University, in collaboration with the European Union, is conducting a project to monitor the movements of aquatic organisms between the Mediterranean Sea, the Sea of Marmara, and the Black Sea.

The image displays three promotional posters for the 'Tracking Fish Movements' project. The left poster is in Turkish, the middle is in English, and the right is in Turkish.

Left Poster (Turkish): Titled 'Sıcıl canlıların Akdeniz, Marmara Denizi ve Karadeniz arasındaki hareketlerinin izlenmesi' (Monitoring the movements of warm-blooded organisms between the Mediterranean, Marmara Sea, and Black Sea). It mentions a project duration from August 2023 to 2026, an EU investment of 471,250€, and lists species to be tracked: Lifter, Mavi Yüzgeçli Orkinos, Yılan Balığı, Kumral Köpek Balığı, and Diğerleri. It also features the '25 AKUSTİK ALICI' (25 Acoustic Receivers) logo and contact information for Aytaç Özgül.

Middle Poster (English): Titled 'We're tracking aquatic life across four major swimways in Europe'. It highlights an EU investment of 3,500,000€ and focuses on 'TRACKING FISH MOVEMENTS' and 'LISTENING FOR CETACEANS & THE BROADER SOUNDSCAPE'. It shows a map of Europe with labels for the North Sea, Baltic Sea, Irish Sea, and Mediterranean Sea, and mentions 'USING ACOUSTIC RECEIVERS'.

Right Poster (Turkish): Titled 'We're tracking aquatic life across four major swimways in Europe'. It features a map of Europe with labels for the North Sea, Baltic Sea, Irish Sea, and Black Sea. It includes the 'WANT TO KNOW MORE? GET IN TOUCH!' section with contact information for Kim Birnie-Gausman (kbir@aquas.dtu.dk) and a QR code for more information.





THE Impact Rankings Methodology 2025 & GRI Index Matrix

THE	Impact Rankings Methodology 2025 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	1-2
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	4-5
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	6-7
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	7-8
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	3
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		Fully	2	
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	7-8	
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	7
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	3
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	4-5-8
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	9
14.5.2	Monitoring the health of aquatic ecosystems Monitor the health of aquatic ecosystems			Fully	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	10
14.5.4	Collaboration for shared aquatic ecosystems Collaborate with the local community in efforts to maintain shared aquatic ecosystems			Fully	9
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	9



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