



**2023**  
**Sustainability Report**  
**SDG 15**



**LIFE ON LAND**



## LETTER FROM THE REPORT RECTOR

15



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

15



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**

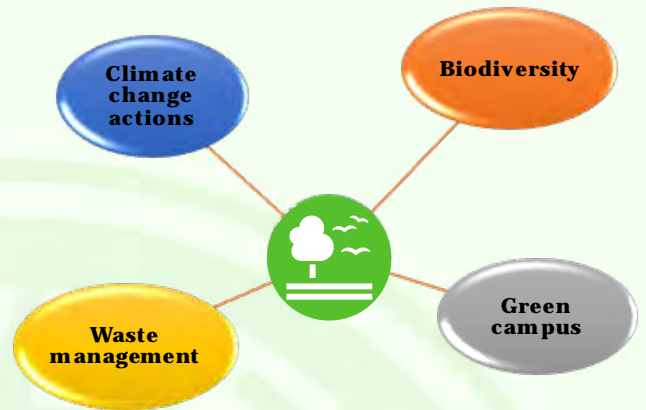


# LIFE ON LAND

15



SDG 15 aims to protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss. Healthy biodiverse ecosystems are essential to sustain humans' lives. Therefore, protecting life on land are among the main global concerns of all nations. Yet, land degradation, deforestation and climate change, extinction loss of biodiversity have been reached to critical level in recent years.



Ege University is actively engaged in pioneering efforts aimed at preserving and enhancing biodiversity, rehabilitating degraded natural habitats and ecosystems for the sustainable inheritance of terrestrial areas for future generations. In this manner, Ege University has been working on these targets through research, education, trainings and organizing events. Various Committee have been established in Ege University in the fields of green management, eco-friendly transportation, energy management, climate and awareness, integrated waste management, and climate change action and more.

<p><b>103</b> National and International Scientific Projects*</p>	<p><b>1448</b> Publications and <b>58</b> Thesis*</p>	<p>Greenmetric <b>96<sup>th</sup></b> World's Most Sustainable University Campus in 2023</p>	<p>Corporate social responsibility activities</p>

## BIODIVERSITY



The focus of the research in Botanical Garden & Herbarium Research and Application Center is identification and conservation of biodiversity. They have made significant contributions through collaborations with both government ministries and local authorities.



*EU Botanic garden is a member of the International Association of Botanical Gardens*





**108 new plant species** have been discovered by researchers at Ege University Botanical Garden & Herbarium Research and Application Center since 1965.

Within Sustainable Green University Strategic Plan, one of the strategic goals of Ege University is to establish the standardization, which is compatible with national green building standards, considering the geographical characteristics of the university's location.

Researchers at Ege University has been intensively working on development of sustainable action plans and determination of threat categories for endangered species.



Research on determination of International Union for Conservation of Nature (IUCN) categories for Turkish plants has been conducting by researchers at Ege University since 2020.

### New species were discovered by researchers at Ege University!



*"Stachys cuhacioglu"*



*"Leopoldia buseana"*



*"Acantholimon riyatguelii"*



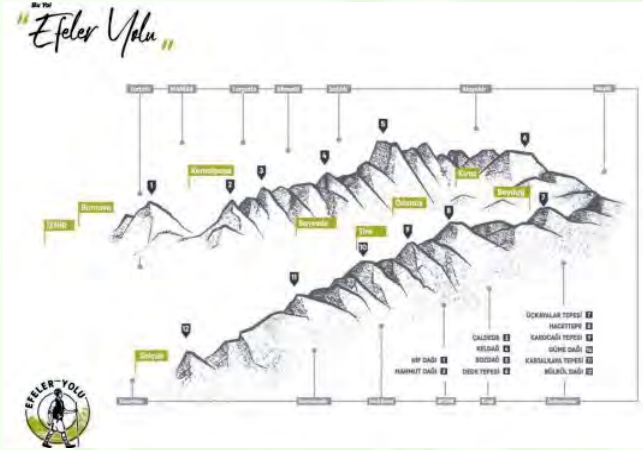
*"Pinguicula habilii"*

In collaboration with the Ministry of Agriculture and Forestry, Directorate General for Nature Conservation and National Parks, IV. Regional Directorate, a research on determination of the flora, fauna, special species, and special habitats in the province of Izmir has been successfully conducted from 2019 to 2022.

## “Efeler Yolu” Project coordinated by researcher from Ege University

The overall objective is to trigger sustainable and comprehensive rural development in the region by preserving and harnessing the natural, historical, and cultural richness, thereby creating socio-economic development.

*The route was officially opened!*

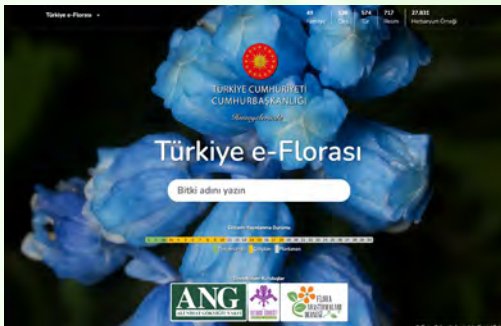


*Nature, Exploration, Travel, Trekking, Mountaineering  
Culture, Tourism, History, Local Values*

The Efeler Yolu Culture Route passes through 28 villages and has a length of 500 km. In addition, the Efeler Yolu Culture Route offers the opportunity to learn about the historical and cultural heritage of the region while exploring a rich ecosystem with the caravan routes used by many civilizations in the historical process.

## Illustrated Flora of Turkey Project

A unique, scientific and most comprehensive Flora book series ever, supported by illustrations, that will include all of Turkey's natural plants. A Scientist from the Ege University (Prof. Hasan Yıldırım), is one of the scientific editor for this project and has also contributed as an author in several volumes.



This project addresses to introduce the plant diversity found in Turkey to the public without language barriers. It is designed to ensure the sustainable utilization and protection of this diversity.

The project, which has been published in 4 volumes, is expected to be completed with **30 volumes** by the year 2030.

This project is being conducted under Presidency's Aegis under the auspices of the Presidency in collaboration between;

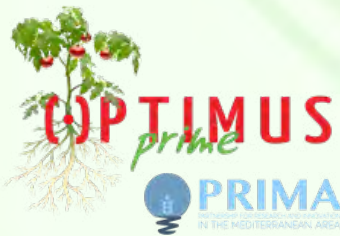




## SOME OF SCIENTIFIC PROJECTS are...



H2020 Projesi, CLIMOS Climate Monitoring and Decision Support Framework for Sand Fly-borne Diseases Detection and Mitigation Composed of 29 partners, including Ege University, this project brings together researchers, practitioners, health institutions, technology platform designers, and at-risk communities to conduct innovative and applied research seeking to be better prepared for current and future impacts of climate and environmental changes on human and animal health, using sand flies and the multiple sand fly-borne diseases (SFBDs) that they transmit as a model system.



### Optimal Usage Of Natural Product And Biological Priming Agents To Improve Resilience Of Agrosystems To Climate Change

**OPTIMUS Prime** aims to design, optimize and deliver a cost-efficient seed priming technology based on the combination of natural compounds and microorganisms to improve crop performance and productivity under adverse environmental conditions contributing to a sustainable agriculture.



**ValueFarm Project**, of which Ege University is a partner, focuses on valorizing Mediterranean small farms by introducing wild edible plants of the Mediterranean (WEPs) complementary crops within a competitive farming sector and a climate-changing world and cropping them in a sustainable point of view. Moreover, the contribution of WEPs cultivation to soil property improvement will be assessed by reducing or eradicating the use of agrochemicals, and by introducing the use of a more sustainable agriculture with biostimulants, biofertilizers and biopesticides and the use of tailored composts.



13 partners from 5 different countries



**EU funded project on** "Reducing the water scarcity in Mediterranean regions where the risk is increased by a combined effect of water resources overuse and climate change"

Scientists at Ege University have developed a four-stage treatment system that enables the wastewater from textile factories to be used for agricultural purpose. This innovation reflects a significant step toward sustainable water management by repurposing industrial wastewater for agricultural use, thus promoting environmental conservation and resource efficiency.



**Bilateral project on** "Development of a Variable Rate Irrigation Management System Using Remote Sensing Techniques" between Ege University and Tokyo University of Agriculture and Technology.

The project aims to optimize water usage in cotton farming through advanced technology, contributing to resource efficiency and potentially enhancing crop yields in the region.



**Project supported by Turkish National Agency:** "The Potential Use of Innovative Compost as a Soil Amendment in Organic Waste Management: Evaluation in Terms of Production Technology, Climate Change Mitigation, Soil Quality, and Plant Growth."



Conversion of chicken manure and olive pruning waste into compost was successfully achieved resulting in increased yield in the field.



**"IZMIR GULF WITH ZERO WASTE" PROJECT**

Izmir Gulf With Zero Waste Project with the participation of 10 partners has been carried out by addressing sustainable valorisation of the plastic wastes collected from Izmir Gulf





## Recycling of fishing nets and plastic bottle wastes collected from Izmir Gulf

- i-collection of waste collected from the region of Izmir Gulf
- ii-transform into value added products
- iii- Fabrication of end-use product



*Diving activity for cleaning sediment layer of the sea was organized by Faculty of Fisheries and Urla Maritime Vocational School*

## Agriculture, Forestry and Aquaculture Education Council Meeting



In the meeting which was held at Ege University, the quality of education and training in the disciplines of agriculture, forestry and aquaculture, the research and development infrastructure, the establishment of departments, curriculum updates, and the national and international academic status of the field were discussed.

Ege University Rector Prof. Dr. Necdet Budak was elected as the President of the "Agriculture, Forestry and Aquaculture Education Council" by the Interuniversity Board.



## Engagement with Agriculture



R&D and innovation collaborations between Ege University and the Azerbaijan Ministry of Agriculture.

Ege University Faculty of Agriculture celebrated "Agriculture Day"





## Partnership with Universities

### Agreement of Dual Degree on Agricultural studies



Azerbaijan State  
Agricultural University



Azerbaijan State  
University of Economics



Ashkent State  
Agricultural University

## EGE FOREST SCHOOL PROJECT



T.C. ORMAN GENEL MÜDÜRLÜĞÜ  
İzmir Orman Bölge Müdürlüğü

### «Green is Life»



In order to mitigate the significant impacts of the global climate crisis, educational programs been organized for primary, secondary, and high school students with the aim of effectively restoring our degraded forest areas. The Ege Forest School Project was carried out during the 2019-2020 and 2021-2022 academic years. Approximately 4000 students have received training on various topics including the concept of forests, the importance and functions of forests, the organisms in forests, soil formation, the effects of global climate change on forests, afforestation techniques, forest fires, and prevention of forest fires. Thanks to the Ege Forest School project, awareness about sustainable forests has been raised, and knowledge has been shared to instill in future generations the significance of forest preservation and restoration.



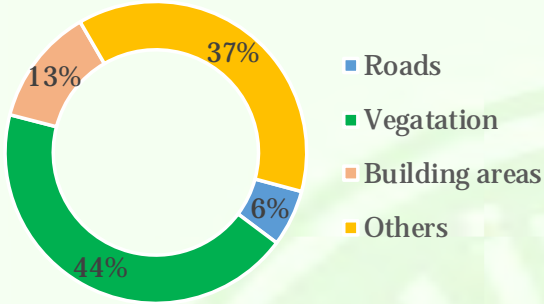
Different educational materials have been prepared, including a forest education presentation, fundamental forest information booklet, book markers indicating tree species, life tree posters, etc.





## CAMPUS EMBRACED BY BEAUTIFUL NATURE

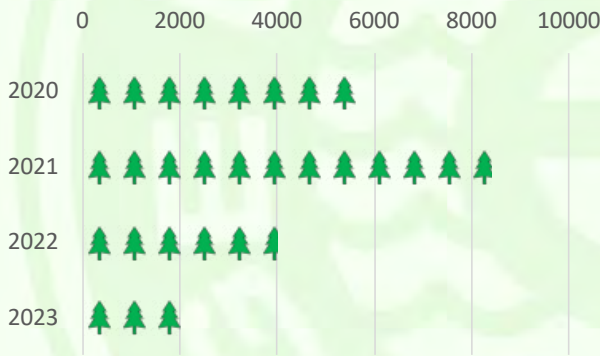
### Campus area



Ege University has a total vegetation area of 1,446,579 m<sup>2</sup>, consisting of 184,306.00 m<sup>2</sup> of wooded area, 474,502 m<sup>2</sup> of agricultural application area, 361,627 m<sup>3</sup> of green area, and 426,144 m<sup>2</sup> of pine groves.

A protocol to create the "100<sup>th</sup> Anniversary of the Republic Ege University Memorial Forest" was signed between Izmir Regional Directorate of Forestry and Ege University. This initiative includes the silvicultural maintenance of forested areas within the campus, consisting of forest trees, and the reforestation of suitable areas.

### Number of trees planted in campus



The first saplings met the soil on "December 5<sup>th</sup>, World Soil Day."

A sustainable campus life in harmony with nature and with the goal of zero waste

				
<b>420.000 m<sup>2</sup> green area</b>	<b>3.000 m tartan track</b>	<b>+3500 plant taxon</b>	<b>5.500 m cycle route</b>	<b>16.000 m<sup>2</sup> Botanical Garden</b>

Ege University is proud to have the one of the largest and greenest campus in Turkey. Ege University has successfully moved up its place in Green metrics ranking and now is in the 4th place among universities in Turkey. As Ege University, we aim for a sustainable campus life with a nature-friendly and zero-waste goal.





## ZERO WASTE PROJECT



Ege University was selected as one of the first pilot university under the 'Zero Waste Project' initiated by the Ministry of Environment, Urbanization, and Climate Change in 2018. Within the scope of Zero Waste project, Ege University aims to implement strategies for efficient resource utilization and waste reduction.

### Silent witnesses of the Campus: Monument Trees

The monument trees located in the garden of the Ege University Rectorate serve as both cultural and scientific bridges between the past and the future.

The Ege University Campus hosts 10 pavilions built in various periods. The monument trees on our campus carry traces of the past into the future. These monument trees, which are among the most important natural elements of the landscape, hold significant ecological, aesthetic, and health-related values.



Ege University carefully protects to preserve these valuable assets. Ege university is committed to conserving its natural and historical



heritage, particularly the monument trees that embody ecological and cultural importance. The presence of historical pavilions further enriches the campus's heritage and landscape, linking past and present in a meaningful way.

### Botanical Garden & Herbarium Research and Application Centre

Ege University Botanical Garden Herbarium Research and Application Center, with an area of approximately 16,000 m<sup>2</sup>, 13 research and application greenhouses, a nursery, a fruiting plants garden, a medicinal plants garden, systematic plots, show garden, a geophyte garden and approximately 3500 plant species in wetland plant pools and also a herbarium with a collection of 44,000 plants, is an important center that is free to access for all the public and students. Every year, approximately 50,000-75,000 students and civilians visit this center to get information and learn about plants they cannot see in the nature of Turkey, such as tropical, subtropical and desert habitats.



Every year, around 15,000 primary, secondary, and high school students are given an educational tour of approximately 1

hour in the Botanical Garden by pedagogically trained undergraduate, master or PhD students, explaining nature, plant diversity, and plant habitats.





## SUSTAINABILITY IN CAMPUS

Ege University adopts a policy for the sustainable utilization, protection, and restoration of campus ecosystem by following “**Sustainable Green University Strategic Plan**”. It prioritizes its environmental strategic plan in all of its activities by integrating the concept of sustainability into the culture of life for students, staff, media, local governments, regional businesses, and other stakeholders of the campus.

### Sustainable Food Supply

The Faculty of Agriculture performs plant and animal production at its facilities, produces various processed end products, and offers these products for purchase at store in campus. Faculty of Agriculture also provides services such as breeding animals, high-quality seeds, seedlings, saplings, and leaf fertilizers.



#### Research and Production Fields

Menemen Research, Application and Production Farm  
Mordogan Research, Application and Trial Farm

### Recyclable Waste

The amount of Recyclable Wastes collected on our campus in 2023



249,160 kg of paper waste



4,480 kg of glass waste



32,194 kg of metal and plastic waste

### Application and Research Center of Seed Technology

#### TURKEY'S FIRST SEED RESEARCH AND HEALTH TESTING CENTER

Application and Research Center of Seed Technology (TOTEM) is dedicated to preserve the genetic inheritance of native heirloom. TOTEM also provides accredited analytical services.



ASR (Seed Technology Application and Research Center) has received the 'ISO 9001:2015 "INTERNATIONAL QUALITY SYSTEM" accreditation certificate in the field of seed quality and seed testing and analysis services by the ANSI American National Accreditation Board.



TOTEM has become the 7th university in the world to be ISTA (International Seed Testing Association) Laboratory Member.

**Serological and molecular analysis**

Seed quality and health analysis

Certification, Courses and training

Pathogenic and genetic variation analysis

Sampling on behalf of ISTA

Attendance and representation  
ISTA congress

## HAPPY PLACE FOR ANIMALS

Ege University volunteers care about the street dogs and cats in campus which need food, shelter and medicine, and most importantly **LOVE...**



Ege University Animal Rights Community was founded on 14.09.2017 aiming at sustaining common life together with campus animals, students, and staff.



Construction of shelters



Automatic feeding units in campus



Rehabilitation

## E.U. CENTRE FOR ENVIRONMENTAL STUDIES



Green University Handbook



Composting campus wastes



Recycling bins



The Center for Environmental Studies, within the framework of its goals to preserve nature and ensure the sustainable management of natural resources, conducts a wide range of activities both within the university and in collaboration with various institutions and organizations. Significant efforts are made to evaluate wastewater and to efficiently manage and recycle all types of wastes. Ege University has been substantially progressing towards a sustainable campus model with a special effort in the disposal of hazardous waste. Besides, several social responsibility projects have been carried out, particularly focusing on educational activities to foster young generations and researches for building a sustainable and clean future.



Second-hand market



Waste meets with the art



Water dispensers

## Public Dissemination

Ege University creates sustainable environmental awareness by organizing activities for people of all ages on various topics including knowledge of biodiversity, training on seed and seedling planting, and the environmental impact of wastes.



## The "100<sup>th</sup> Anniversary of the Republic Events Project

With the participation of Academicians from Ege University, The Izmir City Council Meeting Series were held as part of the '100<sup>th</sup> Anniversary of the Republic Events Project', specific focus on;

*Mountainous Area Management  
and Awareness Analysis*

*The Phenomenon of Drought and  
Desertification*



## Social Responsibility Projects

Ege University creates sustainable environmental awareness by organizing activities for people of all ages on various topics including knowledge of biodiversity, training on seed and seedling planting, and the environmental impact of wastes in scope of Social Responsibility Projects

*Zero Waste Coast Project*



*Protecting Tomorrow*



The trash on the coast was collected.

*A trip to Nif Mountain*



*The harmful effect of citrus pesticides*



to training high school students on the knowledge of floristic structure, vegetation layers, and endemic plant taxa

## Online courses

EGESEM (Continuous Education Service) aims to develop unique and high-quality educational programs that can meet the needs of a wide range of participants who believe in the necessity of self-improvement, including not only university students, but also employees and unemployees, young individuals not having university degree, housewives etc. For this purpose, certified online courses related to fundamental knowledge on forests and nature have been conducted through EGE-SEM system.







## Media



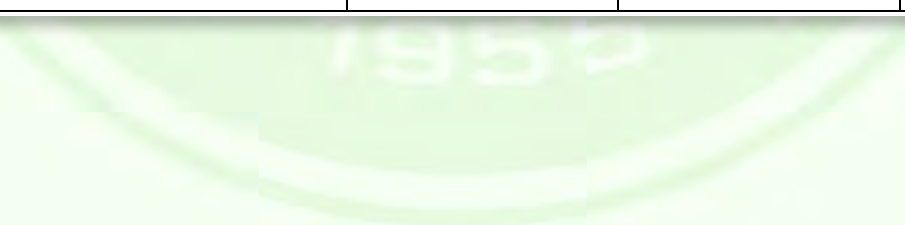
Ege University TV features interviews and discussions with various experts, researchers, and academicians about agriculture, environment, and waste assessment topics can be reached to publics. Moreover, all academic and non-academic activities and recent developments at Ege University can be also followed through Kalem newspaper.





## THE Impact Rankings Methodology 2025 & GRI Index Matrix

THE	Impact Rankings Methodology 2025 Version 1.1	GRI	Disclosure	Reported	Page
15.1	<b>Research on land ecosystems</b>			Fully	1,2,3,4,5,6,9
15.2	<b>Supporting land ecosystems through education</b>			Fully	
15.2.1	Events about sustainable use of land Support or organise events aimed to promote conservation and sustainable utilisation of the land, including forests and wild land			Fully	3,4,5,6,7,8,9,11, 12,13
15.2.2	Sustainably farmed food on campus Have policies to ensure that food on campus is sustainably farmed			Fully	10,11
15.2.3	Maintain and extend current ecosystems' biodiversity Work directly to maintain and extend existing ecosystems and their biodiversity, of both plants and animals, especially ecosystems under threat	GRI 304: Biodiversity 2016	304-1-a	Fully	1,2,3, 4, 8, 9, 13
15.2.4	Educational programmes on ecosystems Offer educational programmes on ecosystems (looking at wild flora and fauna) for local or national communities?			Fully	3, 7, 13, 14
15.2.5	Sustainable management of land for agriculture (educational outreach) Offer educational programme/outreach for local or national communities on sustainable management of land for agriculture	GRI 304: Biodiversity 2016	304-2 Significant impacts of activities, products and services on biodiversity	Fully	3, 7
15.2.6	Sustainable management of land for tourism (educational outreach) Offer educational programme/outreach for local or national communities on sustainable management of land tourism.			Fully	3, 7
15.3	<b>Supporting land ecosystems through action</b>			Fully	
15.3.1	Sustainable use, conservation and restoration of land (policy) Have a policy to ensure the conservation, restoration and sustainable use of terrestrial ecosystems associated with the university, in particular forests, mountains and drylands			Fully	1,8,9
15.3.2	Monitoring IUCN and other conservation species (policies) Have a policy to identify, monitor and protect any IUCN Red Listed species and national conservation list species with habits in areas affected by the operation of your university		304-4 IUCN Red List species and national conservation list species with habitats in areas affected by operations	Fully	1,2
15.3.3	Local biodiversity included in planning and development Include local biodiversity into any planning and development process (e.g. construction of new buildings)	GRI 304: Biodiversity 2016	304-2 Significant impacts of activities, products and services on biodiversity	Fully	9, 11
15.3.4	Alien species impact reduction (policies) Have a policy to reduce the impact of alien species on Campus		304-2 Significant impacts of activities, products and services on biodiversity	Fully	6
15.3.5	Collaboration for shared land ecosystems Collaborate with the local community to maintain shared land ecosystems			Fully	4, 5,6
15.4	<b>Land sensitive waste disposal</b>			Fully	
15.4.1	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	9,10,11, 13
15.4.2	Policy on plastic waste reduction Have a policy on reducing plastic waste on campus		306-4 Waste diverted from disposal	Fully	9,10
15.4.3	Policy on hazardous waste disposal Have a policy, process or practice on waste disposal covering hazardous materials	GRI 306: Waste 2020	306-2 Management of significant waste related impacts	Fully	9





**EDITOR:** Assoc. Prof. Dr. Gökür ŞİŞMAN AYDIN

**AUTHORS:** Prof. Dr. Hasan YILDIRIM - Assoc. Prof. Dr. Güzde DUMAN TAÇ

**GRAPHIC DESIGN:** İpek TEKİN

[www.surdurulebilir.ege.edu.tr](http://www.surdurulebilir.ege.edu.tr)