



2024 Sustainability Report SDG 7



AFFORDABLE AND CLEAN ENERGY



LETTER FROM THE REPORT RECTOR



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 69-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 2024 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

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 2024 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.

Prof. Dr. Gökür ŞİŞMAN AYDIN
Coordinator
EU Sustainability Office

Having a Policy That All Repairs and New Buildings Are Constructed to Energy-Efficient Standards

Under the University's 2024–2028 Strategic Plan, energy-efficient design and implementation are institutional policy for all repair/retrofit works and new buildings. Projects comply with national energy-efficiency standards, prioritize high-efficiency equipment and automation, and verify energy performance at acceptance. The process is monitored and continuously improved within the ISO 50001 Energy Management System framework.

Making Plans to Retrofit Existing Buildings to Achieve Higher Energy Savings

Within the scope of the "Sustainable and Climate-Friendly Campus" goal, the strategic plan clearly states that energy and water conservation efforts should be prioritized throughout the campus, new buildings should be equipped with smart technologies, and energy and water efficiency should be taken as a basis in the improvement of old buildings. In addition, the high number of old buildings on campus shows why these actions are prioritized.

Izmir's Pilot City Activity: Digital Solutions for Electricity Consumption by Global Climate Community Izmir (GCC-SYNERGY)



GCC-SYNERGY project (İZMİR)

As part of Net Zero Cities, GCC-SYNERGY is a digital management platform that brings together all types of consumers and renewable producers under the same roof, designed to reduce Izmir's electricity emissions. It covers seven different consumer types (university, industry, organized industrial zone, residential, agricultural irrigation, public lighting and municipal building); Ege University Solar Energy Institute (EGE-GEE) building was selected as a pilot for the university component. It aims to increase consumption efficiency through real-time monitoring, analytics and digital twins, and to reduce emissions from electrical energy through recommendations and changes in consumption behavior offered by the platform by

monitoring consumption data, as well as through renewable energy integration. The GCC Izmir governance model coordinates the city transparent data, strong monitoring and evaluation processes, and financing capacity.

40 kW thermal capacity fluidized bed unit

According to the results of the periodic monitoring,

the fluidized bed unit with a thermal capacity of 40 kW operated within the Institute realized 680 kWh net energy production per year. The energy produced meets a portion of the institutional consumption in line with the principle of on-site renewable resource utilization; thus, it constitutes a regular and measurable contribution within the scope of energy management targets.



40 kW thermal capacity fluidized bed unit

Solar Energy Assisted Heating System



The solar thermal system with a surface area of 10 m², located in the Ege University Solar Energy Institute, regularly contributes to the use of on-site renewable energy and the reduction of CO₂ emissions with an annual net production of 250 kWh.

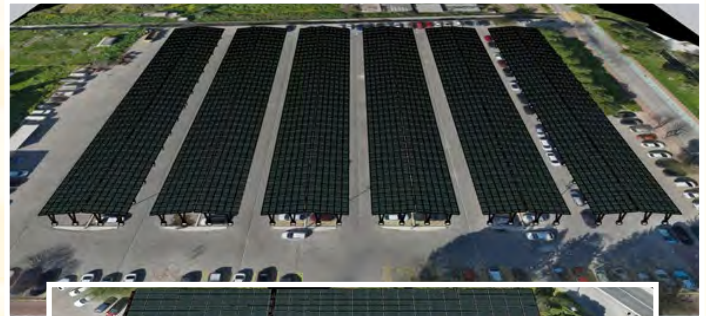


Solar Energy Assisted Heating System.

2,049.66 kWp Photovoltaic Power System Grant

The solar thermal system with a surface area of 10 m², located in the Ege University Solar Energy Institute, regularly contributes to the use of on-site renewable energy and the reduction of CO₂ emissions with an annual net production of 250 kWh.

Within the scope of the grant program of the Republic of Turkey Ministry of Environment, Urbanization and Climate Change, SPP installation is planned in three different parking areas within the campus and a total of 3,474 photovoltaic modules and 16 100 kW and 2 50 kW inverters will be installed; in the inverter configuration, one 100 kW inverter will be operated at 110 kW output power, total inverter (AC) power will be limited to 1. 870 kWe and the projected DC/AC installed capacity of the project will be 2,049.66 kWp / 1,870 kWe; procurement, installation, test-commissioning and acceptance processes will be carried out in accordance with the applicable legislation and relevant technical standards.



Campus Parking Lots PV Layout Plan - 2,049.66 kWp (Grant Project)



Photovoltaic Installation



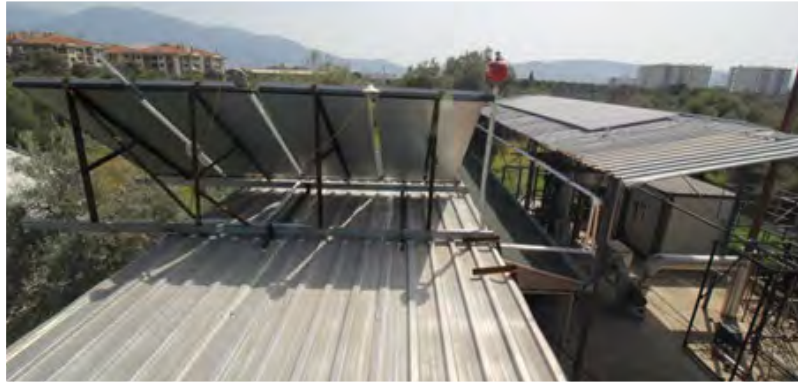
27 TOTAL TE2000 200 Wp Photovoltaic Panel (Ege University Solar Energy Institute's roof)



11 AXITEC 150 Wp Photovoltaic Panels, 28 TOTAL TE2000 200 Wp Photovoltaic Panels and 10 Institute Made 120 Wp Photovoltaic Panels (Ege University Solar Energy Institute's Parking Lot).



A total of 16kWp photovoltaic power system within Ege University Solar Energy Institute and BESTMER.



395 Wp Photovoltaic Panel
(Green Process Technologies Implementation Site)

Developing an Energy Conservation Plan To Reduce Total Energy Consumption

The university's 2024-2028 Strategic Plan clearly includes the prioritization of energy and water saving efforts across the campus, prioritizing energy efficiency and water efficiency in renovation activities, increasing the use of renewable energy and obtaining ISO 50001 Energy Management System certification; these provisions prove the existence of an institutional energy saving plan to reduce total energy consumption.

Preparation Of a Policy For The Divestment Of Investments In Carbon-Intensive Industries, Particularly Those Involving Coal and Oil

Although the Strategic Plan does not include an explicit policy of 'investment liquidation' for coal/oil-based sectors, the adoption of a green procurement policy, increasing the use of renewable energy, implementing ISO 14001/ISO 50001 management systems and conducting carbon footprint studies support the move away from fossil fuel-intensive investments and prioritizing low-carbon preferences at the corporate level.

Total Energy Consumption

Energy data, expressed in kWh, were supplied by the Ege University Energy Management Coordination Office based on verified campus metering logs, and the university's total building floor area of 914,564 m² has been confirmed against the current bill of quantities and the inventory and project archive of the Ege University Directorate of Building Works and Technical Department, and is included in this report as an official source.

Providing Programs for the Local Community to Learn About the Importance of Energy Conservation and Clean Energy

The 2024 Annual Report of Ege University Solar Energy Institute clearly shows that regular awareness-raising programs were conducted for local communities and students to promote the importance of energy saving and clean energy in society. Throughout the year, institute introductions, renewable energy presentations and laboratory visits were organized for secondary and high school students from different schools; hands-on demonstrations were carried out with solar and wind energy experiment sets. In addition, as part of the climate-neutral city vision, a public event titled 'Towards a Climate-Neutral City: Actions and Opportunities for İzmir' and a summer school titled 'The Sustainable Future of Renewable Energy' were organized with the support of TÜBİTAK 2237-A to raise public awareness on energy efficiency and clean energy.



The Sustainable Future of Renewable Energy Summer School



Informing and Supporting Administrations on Policy Development Related to Clean Energy and Energy Efficiency Technologies

The University's 2024-2028 Strategic Plan envisages cooperation with external stakeholders and the pursuit of support mechanisms (İZKA, EU projects, Ministry supports) for the dissemination of clean and efficient energy technologies; in this context, it is aimed to implement renewable energy applications in pilot regions. The plan stipulates the prioritization of energy and water conservation efforts across the campus, equipping new buildings with smart technologies and taking energy efficiency as a basis for the improvement of existing buildings; it also supports the adoption of a green procurement policy and the implementation of ISO 14001 and ISO 50001 processes. In addition, it is aimed to inform the relevant administrations and support policy development processes at the institutional level through regulations to ensure coordination between departments in sustainable environmental studies, to support and encourage activities and to increase external project collaborations.

Total Energy Consumed

The total electrical energy consumption of the university is 35,545,821.84 kWh and the data was provided by Ege University Energy Management Coordinatorship by verifying the campus meter records. Within the scope of annual production from low carbon sources, 54,355 kWh was obtained from photovoltaic systems with an installed capacity of 39.33 kWp, 680 kWh from a fluidized bed unit with a thermal capacity of 40 kW and 250 kWh from a solar thermal system with a surface area of 10 m².



THE Impact Rankings Methodology 2026 & GRI Index Matrix

THE	Impact Rankings Methodology 2026 Version 1.1	GRI	Disclosure	Reported	Page
7.1	Research on clean energy			Fully	1-3
7.2	University measures towards affordable and clean energy			Fully	1-5
7.2.1	Energy-efficient renovation and building Have a policy in place for ensuring all renovations or new builds are following energy efficiency standards	G4 CONSTRUCTION AND REAL ESTATE SECTOR G4-DMA SECTOR SPECIFIC GUIDANCE FOR Disclosure on		Fully	1
7.2.2	Upgrade buildings to higher energy efficiency Have plans to upgrade existing buildings to higher energy efficiency	G4 CONSTRUCTION AND REAL ESTATE SECTOR G4-DMA SECTOR SPECIFIC GUIDANCE FOR Disclosure on		Fully	1
7.2.3	Carbon reduction and emission reduction process Have a process for carbon management and reducing carbon dioxide emissions	305: Emissions 2016	305-1 Direct (Scope 1) GHG emissions 305-4 GHG emissions intensity 305-5 Reduction of GHG emissions	Fully	1-5
7.2.4	Plan to reduce energy consumption Have an energy efficiency plan in place to reduce overall energy consumption	GRI 302: Energy 2016	302-4 Reduction of energy consumption	Fully	1-5
7.2.5	Energy wastage identification Undergo energy reviews to identify areas where energy waste is highest	GRI 302: Energy 2016	302-4 Reduction of energy consumption	Fully	5
7.2.6	Divestment policy Have a policy on divesting investments from carbon-intensive energy industries notably coal and oil			Fully	4
7.3	Energy use density			Fully	5
7.3.1	Energy usage per sqm		305-1 Direct (Scope 1) GHG emissions	Fully	5
	Total energy used			Fully	5
	University floor space			Fully	5
7.4	Energy and the community			Fully	4
7.4.1	Local community outreach for energy efficiency Provide programmes for local community to learn about importance of energy efficiency and clean energy			Fully	4
7.4.2	100% renewable energy pledge Promote a public pledge toward 100% renewable energy beyond the university	G4 Sector Disclosure 2012 G4-EN3 ENERGY CONSUMPTION WITHIN THE ORGANIZATION OG2 TOTAL AMOUNT INVESTED IN RENEWABLE ENERGY		Fully	4
7.4.3	Energy efficiency services for industry Provide direct services to local industry aimed at improving energy efficiency and clean energy (energy efficiency assessments, workshops, research renewable energy options)	G4 CONSTRUCTION AND REAL ESTATE SECTOR G4-DMA SECTOR SPECIFIC GUIDANCE FOR Disclosure on Management Approach		Fully	4
7.4.4	Policy development for clean energy technology Inform and support governments in clean energy and energy- efficient technology policy development			Fully	4
7.4.5	Assistance to low-carbon innovation Provide assistance for start-ups that foster and support a low- carbon economy or technology			Fully	
7.5	Low-carbon energy use			Fully	1-3
	This indicator asks for the amount of low-carbon energy used in the university, and the total amount of energy used. Total energy used Total energy used from low-carbon sources			Fully	1-5



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