



# Sustainable KTU

## SUSTAINABILITY REPORT 2024

**11** SUSTAINABLE CITIES  
AND COMMUNITIES



[www.ktu.edu.tr/sustainability](http://www.ktu.edu.tr/sustainability)



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Sustainable development is not only a global vision, but also a shared responsibility that our country bears towards future generations. In this sense, the Sustainable Development Goals (SDGs) set by the United Nations, Turkey's 11th and 12th Development Plans, the Green Deal Action Plan, and the Higher Education Council's sustainability vision form a roadmap for higher education institutions.

As Karadeniz Technical University, we consider it our primary duty to contribute to these goals in line with our mission of education, research, and community service. Our university produces science-based knowledge, develops policies, and implements projects in interaction with the community across a wide range of areas, from quality education to climate action, from poverty reduction to the construction of innovative and sustainable cities.

In line with our country's national policies, our university leads regional development and assumes global responsibility through international collaborations, while also aiming to educate our students to become conscious individuals for a sustainable future. The report prepared in this context reflects not only the activities carried out but also our university's determination on its sustainability journey.

Our belief in the future is strengthened by the guidance of science and the dynamism of our youth. Karadeniz Technical University will continue to contribute to sustainable development goals and support our country's vision in this area.

Prof. Dr. Hamdullah ÇUVALCI  
**Rector, Karadeniz Technical University**



## 11 SUSTAINABLE CITIES AND COMMUNITIES



SDG 11 aims to make cities and human settlements inclusive, safe, resilient, and sustainable. Currently, more than half of the world's population lives in urban areas, and this proportion is expected to rise to two-thirds by 2050. Therefore, making cities sustainable involves providing safe and accessible housing for all, transforming informal settlements, investing in public transportation, creating green spaces, and improving urban planning and governance to be both participatory and inclusive. In this context, national and local governments must undertake planned efforts to accommodate growing urban populations and enhance infrastructure and essential services.

Since its establishment, Karadeniz Technical University (KTU) has not only produced scientific knowledge but also served as a higher education institution leading social development and sustainability initiatives. Within this framework, SDG 11: Sustainable Cities and Communities is among the university's priority areas, guiding our education, research, and community engagement activities.

KTU takes concrete steps in campus life to promote environmentally friendly practices, including energy efficiency, waste management, preservation of green spaces, and increased accessibility of facilities. Moreover, through collaborations with local governments, public institutions, and civil society organizations, the university directly contributes to the sustainable development of the city of Trabzon. Projects implemented through student communities and academic units extend beyond the campus, raising awareness at local and national levels and strengthening societal consciousness.

This report provides a general overview of KTU's activities under SDG 11 throughout 2024 and highlights the strategic orientations of our sustainability approach focused on cities and communities.



# Institutional Structure

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## Faculty of Engineering

The KTU Faculty of Engineering plays a significant role within SDG 11: Sustainable Cities and Communities, thanks to its multidisciplinary structure and extensive research capacity. The faculty contributes to this goal through scientific studies, applied projects, and collaborations that support the safe, resilient, and sustainable development of societal life. Its various departments conduct research and educational activities directly related to urban sustainability, including:

- Department of Civil Engineering
- Department of Geophysics Engineering
- Department of Geological Engineering
- Department of Surveying Engineering

Moreover, the Faculty of Engineering collaborates with public institutions, local governments, and the private sector to help make cities safer, more resilient, environmentally conscious, and livable. Its undergraduate and graduate programs equip future engineers with a sustainability perspective, generating long-term societal impact.



[KTU Civil Engineering](#)

[KTU Geophysical Engineering](#)

[KTU Geological Engineering](#)

[KTU Geomatics Engineering](#)





# Institutional Structure

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## Faculty of Architecture

The Faculty of Architecture at Karadeniz Technical University plays a strategic role within SDG 11: Sustainable Cities and Communities through its scientific and applied efforts aimed at designing cities and living spaces in a sustainable, safe, and human-centered manner. The faculty contributes to the development of settlements that meet societal needs and are compatible with the natural environment through its education and research activities in the fields of architecture, urban and regional planning, and interior architecture and environmental design, including:

- Department of Architecture
- Department of Urban and Regional Planning
- Department of Interior Architecture

## Contributions of Research Centers within the Scope of SDG-11

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KTU collaborates with four key centers that research disaster risks and develop preventative solutions to contribute to the safe, resilient, and sustainable development of cities.

The Earthquake and Structural Health Application and Research Center conducts scientific research aimed at improving the resilience of buildings in the Black Sea Region, a region characterized by high earthquake risk. The center directly contributes to the creation of disaster-resilient cities by conducting academic and practical studies on earthquake performance analyses, structural strengthening techniques, and structural health monitoring systems.



[KTU Architecture](#)

[KTU Interior Architecture](#)

[KTU Urban and Regional Planning](#)

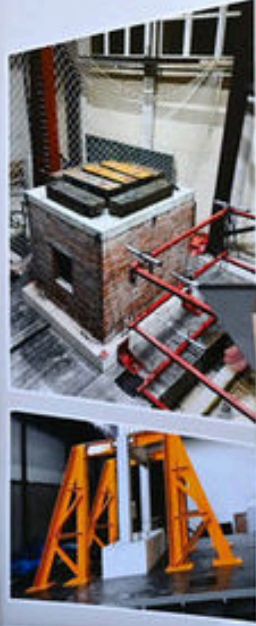


# DEPREM VE YAPI SAĞLIĞI UYGULAMA VE ARAŞTIRMA MERKEZİ

## DEPREM SARSMA MASASI

## YANGIN GÜVENLİĞİ

## YAPI SAĞLIĞI İZLEME



- The Landslide Application and Research Center focuses on the identification, monitoring, and management of landslide risks. Its research contributes to reducing losses caused by natural disasters, planning safe settlements, and strengthening urban sustainability. The center also collaborates with local governments and public institutions to ensure that scientific data are integrated into urban planning and infrastructure projects.
- The Environmental Issues Application and Research Center contributes to SDG 11 through its research on the conservation of natural resources, reduction of environmental pollution, and sustainable environmental management. The center conducts academic and community-oriented studies on the protection of urban ecosystems, monitoring air and water quality, and mitigating environmental risks.
- The Zero Waste Coordination Unit operates across the campus and university facilities to minimize waste, promote recycling practices, and raise environmental awareness. In line with the Sustainable Cities and Communities goal, the unit plays a leading role in the eco-friendly management of the university campus and the efficient use of resources.

KTU, with its relevant units, makes significant contributions to the construction of safe and resilient cities, raising public awareness of disasters and supporting sustainable urban development processes in line with the SDG-11 targets.



[Earthquake and Structural Health Application and Research Center](#)

[Landslide Application and Research Center](#)

[Environmental Problems Application and Research Center](#)

[Zero Waste Coordination](#)



Throughout 2024, Karadeniz Technical University (KTU) organized numerous academic, cultural, and community-based activities aimed at contributing to the sustainable, safe, and resilient development of cities. These activities reflect the university's strategic approach to SDG 11 and its mission of knowledge sharing with society.

- In February 2024, the university hosted a panel and exhibition titled “February 6: What Have We Learned?” to mark the anniversary of the February 6, 2023 earthquakes. Organized in collaboration with the KTU Environmental Issues Application and Research Center, the Landslide Application and Research Center, the Earthquake and Structural Health Application and Research Center, the TMMOB Trabzon Provincial Coordination Board, and the Department of Urban and Regional Planning at the Faculty of Architecture, the event facilitated the sharing of professional experiences gained after the disaster and increased public awareness. During the panel and exhibition, experts working in the earthquake-affected region presented multidisciplinary perspectives on disaster management, building safety, urban planning, and reconstruction processes, sharing field observations and analyses with participants.
- In June 2024, as part of World Environment Day, Prof. Dr. Dilek Beyazlı from the Faculty of Architecture delivered a public seminar entitled “Environment and Sustainable Urban Life” in collaboration with the Trabzon Chamber of Architects. The event addressed urbanization and environmental issues, exemplifying effective university-city collaboration.
- During the same period, Prof. Dr. Cenap Sancar, Dean of the Faculty of Architecture, appeared on the KTU Radio program “Resilient Cities,” informing the public about cities’ resilience to climate change and disasters. Such broadcasts form part of the university’s mission to transfer its expert knowledge to society.
- Additionally, as part of KTU Environment Week, a workshop titled “Art from E-Waste” was organized under the leadership of the Zero Waste Coordination Unit, with contributions from the KTU Environmental Issues Application and Research Center and student clubs. In this workshop, students created artworks from electronic waste, raising environmental awareness and developing creative solutions for sustainable urban living.
- On the occasion of June 5th World Environment Day, a Tree Planting Event was held in the back courtyard of the Landscape Architecture Department in collaboration with the Department of Landscape Architecture and the Trabzon Branch of the TMMOB Chamber of Landscape Architects.

Moreover, KTU also develops protocols and collaborations with local authorities to contribute to the city’s vision and carries out awareness and social responsibility initiatives through student communities. These comprehensive activities and projects demonstrate Karadeniz Technical University’s commitment to disaster-resilient cities, sustainable settlements, and societal awareness, concretely reflecting the university’s SDG 11 vision.



[Panel and Exhibition Event](#)  
[Urban Life Seminar](#)

[Resilient Cities Seminar](#)  
[Environment Week Event](#)





# Peyzaj Mimarlığı Günü ve PARKTAPARK Etkinliği

The "PARKTAPARK Event," organized in collaboration with the Trabzon Branch of the Chamber of Landscape Architects of the Turkish Grain Board of Turkey (TMMOB) to celebrate National Landscape Architecture Day on May 13th, took place on Monday, May 13, 2024, in the North Parking Area of the Landscape Architecture Department Building on the Kanuni Campus of Karadeniz Technical University.

Based on the theme of "Parking Day," the "Park in the Park Event" is a global, participatory project in which people around the world temporarily redesign parking spaces, transforming them into public parks and social spaces to create safer and greener places for people. The event aims to reclaim streets from vehicles and transform them into places for art, music, recreation, and, of course, people. The event was carried out as a dissemination effort for an Erasmus project led by Prof. Dr. Arzu KALIN on behalf of KTÜ, with seven partners including Italy, Spain, and France, along with Kanuni Anatolian High School as coordinator and school. Participants visited the mini parks that the students designed and implemented in an area large enough to park a car within the exhibition and parking area.



[Panel and Exhibition Event](#)  
[Urban Life Seminar](#)

[Resilient Cities Seminars](#)  
[Environment Week Events](#)



KARADENİZ  
TEKNİK ÜNİVERSİTESİ  
Kurumsal İletişim Koordinatörlüğü  
KTÜ Radyo-TV

KTÜ  
BİLGİLENDİRİYOR

**Dirençli Kentler**

**Prof. Dr. Cenap SANCAR**  
KTÜ Mimarlık Fakültesi Dekanı  
Şehir ve Bölge Planlama Bölümü

**16 Haziran** | **KTÜ Radyo/TV**  
10.00 | Canlı Yayın

Radyo KTÜ 101.7 • [ktu.edu.tr/radyotv](http://ktu.edu.tr/radyotv) • [www.youtube.com/ktutv](http://www.youtube.com/ktutv)

Mimarlar Odası  
Trabzon Şubesi

**ÇEVRE VE SÜRDÜRÜLEBİLİR  
KENTSEL YAŞAM**

Prof. Dr. Dilek Beyazlı

Yer: Mimarlar Odası Seminer Salonu  
Tarih: 5 Haziran 2024, 18.00



**Dirençli Kentler Semineri**





In addition, as a result of the selection committee evaluation within the scope of the 15th National Landscape Architecture Awards organized by KTU TMMOB Chamber of Landscape Architects in 2024, our academics were deemed worthy of the Urban Design Project Award with their project titled "Balavca Stream and Its Immediate Surroundings as a Multi-Layered Natural and Cultural Life Corridor Idea Project Competition".

## KENTSEL TASARIM PROJE ÖDÜLÜ

854729 Rumuzlu "Çok Katmanlı Doğal ve Kültürel Bir Yaşam Koridoru olarak Balavca Deresi ve Yakın Çevresi Fikir Projesi Yarışması"

Proje Ekibi: Cemil Hamdi OKUMUŞ, Ezel Yağmur ÇEBİ OKUMUŞ, Prof. Dr. Banu ÇİÇEK KURDOĞLU, Burcu BALABAN YILMAZ, Kenan AYDINOĞLU, Selçuk AKSOY, Doç. Dr. Demet YILMAZ YILDIRIM, Öğr. Gör. Ayşegül ÖZYAVUZ, Gizem Yağmur GÖLBAŞI, Pınar Özge PARLAK, Recai TOYLAN, Nazlı Hilal ERSOY



2024 15. Ulusal Peyzaj Mimarlığı Ödülleri





## Academic Contributions

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Our university continues to carry out high-quality work under the theme of Sustainable Cities and Communities. According to the Scopus database, the number of scientific publications related to this Sustainable Development Goal increased from 55 in 2023 to 71 in 2024. In the AVESIS database, 7 conference papers and 12 book chapters are among the publications contributing to this field. In the 2025 results (using 2024 data), the university remained within the same ranking band among 1,154 universities, with an indicator score of 50.2. The report also determined that research in this area had a score of 58.8.

Throughout 2024, KTU made tangible contributions to the Sustainable Cities and Communities (SDG-11) goal through its activities, research projects, and collaborations. The university's academic units, research centers, and coordination offices carried out significant work in resilient structures, sustainable urban planning, environmental management, and social awareness. Moreover, student clubs and community-oriented seminars, panels, workshops, and publications facilitated the sharing of knowledge with society, contributing to the enhancement of urban livability.

All these activities demonstrate that KTU not only produces academic knowledge but also supports societal benefit and sustainable development through a holistic approach. The university continues its strategic efforts with determination to ensure that cities and communities develop in a safer, more resilient, and environmentally compatible manner in the future.





# Sustainable KTU

This publication has been prepared by KTU Office of  
Research Coordination



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