

IMU SDG PROGRESS REPORT

on **SDG-9 INDUSTRY, INNOVATION AND INFRASTRUCTURE**

2023



9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



SDG PROGRESS REPORT

ISTANBUL MEDENIYET
UNIVERSITY

**Istanbul Medeniyet University
Sustainability Office**

Kuzey Kampüs BİLTAM No: 508, Unalan Mah. Unalan Sok. D-100
Karayolu Yanyol 34700 Usküdar/Istanbul/TURKEY



<https://sdg.medeniyet.edu.tr>
[@surdurulebilir_imu](https://www.instagram.com/surdurulebilir_imu)

Published
October, 2024

Coordinated by

Prof.Dr. Yaşar BÜLBÜL

Written by

Res.Asst. Ayça ÇELİKBİLEK

Lecturer Zehra SAVAN

Res.Asst. Furkan ERUÇAR

Proofread by

Lecturer Zehra SAVAN

Designed by

Res.Asst. Ayça ÇELİKBİLEK

SDG Icons

<https://www.un.org/sustainabledevelopment/news/communications-material/>

Sustainable Development Report Maps

<https://dashboards.sdgindex.org/profiles/turkey>

SDG Statics

<https://unstats.un.org/sdgs/report/2023/progress-midpoint/>

<https://sdgs.un.org/goals>

FOREWORD

The 17 Sustainable Development Goals adopted by the United Nations in 2015 with the mission statement “a blueprint to achieve a better and more sustainable future for all people and the world by 2030” have become guiding principles for all of us as countries, institutions, and individuals today. In this context, the new vision for universities has now shifted from the older scholastic concept of education solely oriented toward professional training to an understanding that prioritizes human and social responsibility. Therefore, universities are central to the achievement of sustainable development goals. Thus, as İstanbul Medeniyet University,

We always consider sustainable development goals in our university’s high-level strategies, organize our management and implementation processes in line with these principles, and follow up on our activities and process of sustainability through reports for continuous improvement. **(OPERATIONS)**

While we help our students gain professional and personal skills and qualifications, we are raising future leaders, decision-makers, entrepreneurs, teachers, and more importantly, individuals with the awareness of creating a better world through the sustainability trainings we include in our course contents. **(LEARNING)**

We carry out a wide range of activities and events to share our knowledge, experience, and best practices about the implementation of SDGs with our students, staff, and local community with the ultimate aim of building a more conscious society. **(EVENTS)**

In 2022, IMU Sustainability Office was established to assume the role to place “Sustainable Development Goals” in the center of our institutional practices, educational planning, and research activities and to lead toward the realization of these goals. IMU Sustainability Office plays a significant part in developing our institutional strategies for SDGs, planning and carrying out our related activities and reporting on our progress. In addition to its contribution to institutional development, the Office also organizes public training programs and workshops.

Our Sustainability Office has planned to create annual sustainability development goals progress reports that will include all the goals and all areas of activity of our university so that we can see our progress in achieving SDGs to create new and better strategies and the report you are reading has been issued for the year 2023 as a result of these efforts. I thank everyone who have contributed to the creation of the report and especially Res.Asst. Ayça ÇELİKBİLEK, Lect. Zehra SAVAN and Res.Asst. Furkan ERUÇAR, who have edited and published all the content for our SDG website and our reports. I hope that our efforts will inspire new ideas, actions, and collaborations to take action for a more sustainable and livable future.

Prof. Dr. Yaşar BÜLBÜL

Vice-Rector and Sustainability Office Coordinator
İstanbul Medeniyet University

The Times Higher Education Impact Rankings, which assesses the contribution of universities around the world to sustainable development goals, has been an important source of motivation for us to see our place in the world and measure our contribution with all the activities we carry out for sustainable development as a higher education institution. As Istanbul Medeniyet University, we were included in THE Impact Ranking for the first time in 2021 by applying with only 4 SDGs, while we applied with 11 SDGs for 2024, being ranked 601-800 in the global ranking. The table below shows IMU's continued rise on this ranking.

Sustainable Development Goals	THE Impact Rankings 2024	THE Impact Rankings 2023	THE Impact Rankings 2022	THE Impact Ranking 2021
General Ranking	601-800	801-1000	1001+	1001+
SDG 1 No Poverty	601-800	601-800	-	-
SDG 2 Zero Hunger	301-400	401-600	401+	301-400
SDG 3 Good Health and Well-being	301-400	301-400	401-600	401-600
SDG 4 Quality Education	1001-1500	801-1000	801-1000	601-800
SDG 5 Gender Equality	801-1000	801-1000	-	-
SDG 8 Decent Work and Economic Growth	401-600	401-600	401-600	-
SDG 9 Industry, Innovation and Infrastructure	801-1000	601-800	601+	-
SDG 10 Reduce Inequalities	401-600	401-600	401-600	-
SDG 11 Sustainable Cities and Communities	601-800	401-600	601+	-
SDG 12 Responsible Consumption and Production	201-300	201-300	-	-
SDG 17 Partnerships for the Goals	401-600	601-800	1001+	601-800

9

**INDUSTRY, INNOVATION
AND INFRASTRUCTURE**





Investment in infrastructure and innovation are crucial drivers of economic growth and development. With over half the world population now living in cities, mass transport and renewable energy are becoming ever more important, as are the growth of new industries and information and communication technologies.

Technological progress is also key to finding lasting solutions to both economic and environmental challenges, such as providing new jobs and promoting energy efficiency.

Promoting sustainable industries, and investing in scientific research and innovation, are all important ways to facilitate sustainable development.

More than 4 billion people still do not have access to the Internet, and 90 percent are from the developing world. Bridging this digital divide is crucial to ensure equal access to information and knowledge, as well as foster innovation and entrepreneurship.



95%
population rate with mobile broadband access in 2022 (3G and above)



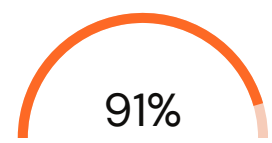
36.8 BILLION
tons of Co are released from energy combustion and industrial processes



16%
global manufacturing value added per capita rose by 16% from 2015 to 2021



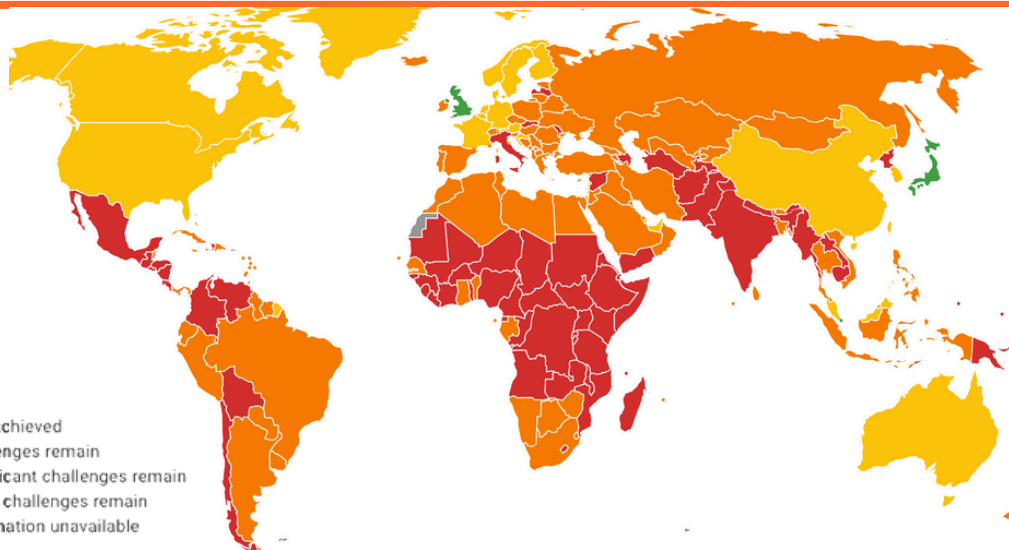
1,352 PEOPLE
number of researchers per million people in 2021



91%
Industrial economies currently account for 91% of global manufacturing output

Legend

- SDG achieved
- Challenges remain
- Significant challenges remain
- Major challenges remain
- Information unavailable



801-1000

"Industry, Innovation and Infrastructure" category
2024 ranking



2

number of patent applications
filed in 2023



6

number of university spin-offs



100%

CAPACITY

occupancy in IMU Technopark's
operations

3,489,483

TURKISH LIRAS

research income from industry
and commerce



129

PEOPLE

number of the academic staff in
the STEM field

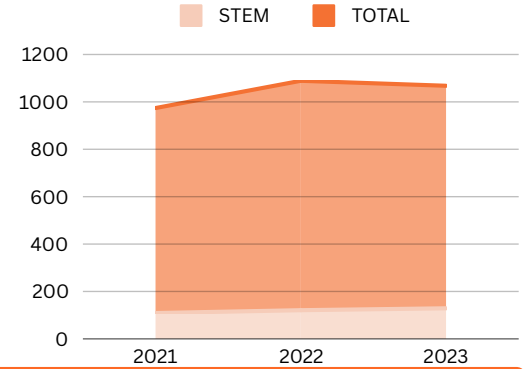


Istanbul Medeniyet University is committed to the mission of being an innovative and entrepreneurial world university that adds universal values to science, technology, and art. Founded on the five pillars of 'Innovative,' 'Entrepreneurial,' 'Society- and Civilization-Oriented', 'International', and 'Research-Oriented', our University has a **Technopark** to carry out its innovation activities; a **Technology Transfer Office**; an **Incubation Center**; 15 application and research centers; **2 research laboratories**, **7 service laboratories** and **30 R&D laboratories** within the **Science and Advanced Technologies Research Center**; and **5 department laboratories** operated by our departments.

IMU **Scientific Research Projects Coordination Unit (BAP)** is in charge of selecting the scientific research projects, dissertation projects, and other projects conducted by our faculty members, to carry out the secretarial work for and finalizing the procedures for these projects, and to provide funds for scientific research projects. In this context, a total of **9 scientific research projects** were started to be supported in 2023 with total funding of 1,306,940 TRY. Our BAP unit also informs our researchers about the projects supported by different institutions such as TUBITAK and ISTKA projects, EU Grant Projects, the projects supported by the Ministries of Youth, Culture, and Development, and SANTEZ projects and coordinates all the projects receiving support from other institutions.

Istanbul Medeniyet University has a **Technology Transfer Office (TTO)** which is in charge of licensing the technologies developed and produced within the institution and securing industrial collaboration. TTO carries out activities to protect and coordinate the intellectual properties developed by our faculty members, students or researchers and promotes the intellectual properties and technological products owned by the institution so that they can reach more users for further improvement.

In 2023, the total number of our academic staff decreased by 3%, while the number of our academic staff working in STEM fields increased by 6,6%.



Number of Academic Staff between 2022-2023

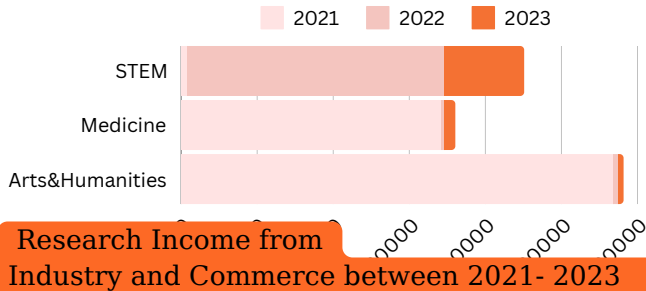
As a result of the academic studies conducted by our academic staff members, **2 patent applications were made in 2023.**

1,306,940 ₺
FUND
given to our academic staff
for their research projects

OPERATIONS

There are **6 R&D firms** that were founded/partnered by our academic staff members at least 3 years ago and that are still active.

The **research income** IMU earned from **industry and commerce** in 2023 amounted to TRY 1,252,737. While 5% of this income came from Humanities/Social Sciences, this rate was followed by Medicine with 12% and STEM with 83%. Compared to 2022, the highest increase in research income was achieved in the Medicine field with 3987%.



Istanbul Medeniyet University has a technopark that serves firms using or working on advanced technologies. In **IMU Technopark** located in Tuzla/ Akfirat, companies develop technologies or software; transform their technological inventions into commercial products, methods or services and thereby contribute to regional development. With a capacity occupancy of 100%, IMU Technopark houses 40 firms.



IMU Technopark

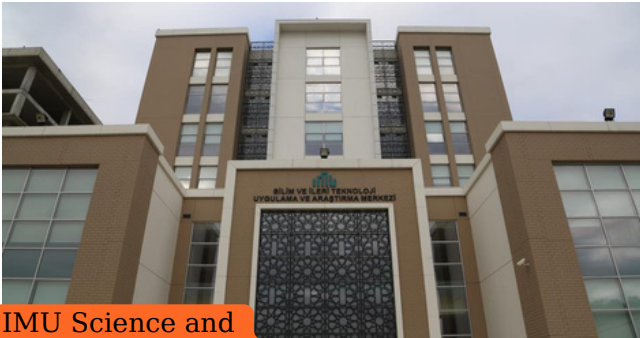
Istanbul Medeniyet University has an **incubation center** that supports all entrepreneurs and chiefly our students and academic staff members who would like to start their own business. IMU incubation center helps people gain the practical knowledge and skills required for this process and provides entrepreneurs with business ideas with entrepreneurship training programs, consulting support, office space, infrastructure services, and meeting halls.

Istanbul Medeniyet University **Laboratory Animal Facility (DEHAL)** was established within the body of our university's Science and Advanced Technologies Research Center (BİLTAM) in order to provide the husbandry and breeding services of laboratory animals needed in the fields of scientific research, testing and training in accordance with national and international standards. DEHAL, as a unit licensed by the Ministry of Agriculture and Forestry in the fields of research, breeding, use and procurement, provides high quality in vivo research infrastructure to academia and R&D institutions within the framework of legislation and ethical principles. All studies to be carried out within DEHAL are subject to the approval of IMU Animal Experiments Local Ethics Committee (HADYEK).



Experimental Animals Application and Research Laboratory

İMÜ **Tobacco and Tobacco Products Analysis, Research and Development Laboratory** was established according to the **collaboration protocol** between the Tobacco and Alcohol Department of the Ministry of Agriculture and Forestry and Istanbul Medeniyet University. In the world and in our country, the usage of tobacco and tobacco products is widespread and it has also become one of the most important public health problems due to the negative effects of the substances in its smoke on human health. In this laboratory, analyses are carried out during the production, export, import, and marketing of tobacco products. Our laboratory aims to contribute to the country's economy by ensuring that the analyses previously made abroad are carried out in the country. The internationally accredited laboratory also has the capacity to meet the analysis demands from abroad. The fact that the laboratory has been established within the university allows it to contribute to the research and development of existing tobacco and tobacco products analysis techniques.



IMU Science and
Advanced Technologies Research Center

IMU BILTAM houses **7 service laboratories** that offer analysis, measurement, imaging, and equipment services for our academic staff members and students as well as **for all researchers**. Institutions or researchers can fill in a request form to have their analyses made; to perform their own analyses using the devices and 41 pieces of equipment provided or to attend the analyses performed as observers.

Istanbul Medeniyet University collaborates with numerous public institutions, research institutions, universities, local schools, and NGOs toward numerous goals that would help us achieve the objective of building resilient infrastructure, promoting inclusive and sustainable industrialization and fostering innovation.

A collaboration protocol was signed between **BMC** and Istanbul Medeniyet University concerning project development and execution and staff training on subjects to be determined according to R&D needs of the university and company.

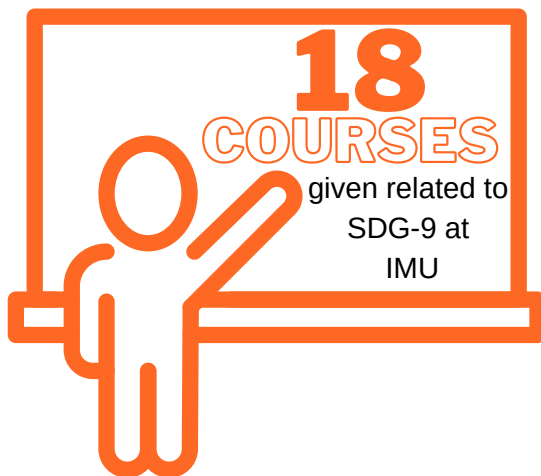
Another collaboration protocol was signed between **Özen Group** and Istanbul Medeniyet University. This collaboration provides co-operation within the framework of Project Development, Execution and Training on the subjects determined within the scope of natural R&D needs of the university and company.

LEARNING

Learning processes are key in achieving SDGs. Thus, universities play a critical role both by training professionals who will prioritize SDGs in their future practices and by increasing local, national, and global capacity to successfully achieve SDGs. As Istanbul Medeniyet University, we are aware of our critical role and therefore, we primarily inform our students, the leaders and decision-makers of the future, about the Sustainable Development Goals through course contents, co-curricular activities and student club activities and strengthen their awareness. For this purpose, each of our faculties and departments prepares SDG-related course contents, including courses that address the Sustainable Development Goals holistically, as well as specific contributions that can be made by the expertise of the relevant professional field in which they provide training. In 2023, 18 bachelor degree courses related to SDG-9 were given at IMU.

Some of these are listed below.

Faculty	Course
Education Sciences	GNK062 - Innovation and Entrepreneurship
Engineering and Natural Sciences	END407 - Production Information Systems
	BYM416 - Micropollutants, Treatment and Effects on Human Health
Health Sciences	HEM113 - Health and Technology
Political Sciences	İŞL323 - Entrepreneurship and Small Business Management
	İŞL434 - Enterprise Resource Planning
Tourism	TİŞ407 - Entrepreneurship and Innovation
All- Elective	IMU053 - Innovation and Entrepreneurship



The **“BioTalks”** event organized by the IEEE Student Club of our university was held on 15 December 2023 at the Bankkart Hall in the Ziraat Bank Library of Istanbul Medeniyet University. Dr. Mete Bora TÜZÜNER, business development and project manager at Boğaziçi University Life Sciences and Technologies Application and Research Center, and Asst.Prof.Dr. Ömer Faruk SARIOĞLU, one of the academicians of the Department of Molecular Biology and Genetics of our University, attended the event as a speaker.

In the event; It was aimed for our students and professors who are interested in biological sciences and who carry out studies in this field to gain new gains in biological sciences and to be aware of the studies that combine biological sciences and technology.

In the first session, TÜZÜNER, in his presentation on “Breast Cancer and Steroidogenesis”, mentioned that as our understanding of regional steroid metabolism in breast cancer tissues increases, metabolomic biomarkers will be increasingly used to best tailor the treatment approach of this deadly disease. In this way, he stated that it can contribute to reducing cancer-related mortality.

In the second session, SARIOĞLU, in his presentation titled “The Use of Microbial Biotechnology Applications in Treatment and Health”, stated that it is aimed to contribute to the development and accessibility of medical research centers and primary health systems. Finally, it was pointed out that R&D investments in the field of biotechnology should be increased in order to improve public health and increase quality of life.

Istanbul Medeniyet University collaborated with Kadıköy, Üsküdar, Ümraniye, Sultanbeyli, Sancaktepe district governorships as project partners; Istanbul Academy of Sciences Foundation, Sultanbeyli and Üsküdar municipalities as project associates; Sancaktepe and Ümraniye municipalities as project supporters for the **“Five Dimensional Future” Project**.

The aim of the ‘Five Dimensional Future’ project was determined as ‘to increase the level of socialisation in five basic areas by equipping young people with positive elements that will increase their social and psychological well-being in cooperation with universities, local and local authorities, non-governmental organisations and the private sector’. These five main areas are; personality-character formation and development, life skills and development in social relations, academic and professional development, consciousness development, physical and physical development.

Within the scope of the project, 556 hours of training on 20 different subjects were organised in 17 schools in 2023.



Five Dimensional Future Project
2023 Spring Semester Opening Meeting

IMU collaborated with the Ministry of Industry and Technology, Istanbul Development Agency, Sancaktepe Municipality and Sancaktepe District Directorate of National Education for the Sancaktepe Technology Leaders **“Technology of the New Generation”** project.

The project aims to support the initiatives of young people in the field of technology and to establish an area that will enable young people to take part in many national and international competitions such as TEKNOFEST.

There are 270 registered students, 6 workshops and 50 projects within the scope of the project, which includes robotic coding and drone workshop, 3D design workshop, production workshop, virtual reality, game and digital content development workshop, open source workshop and autonomous vehicles and artificial intelligence workshop.



Technology of the New Generation Opening Ceremony

Istanbul Medeniyet University, participated as a project partner in the **“Commercialisation-Oriented Sustainable Collaboration Platform: Istanbul Innovation and Technology Licensing Centre”** Project which was supported by Istanbul Development Agency. ‘Project Market and Project Closing Programme with Digital Pathway Demoday’ organised within the scope of this project by Turkish - German University.

Within the scope of the event, which aims to bring investors together with the products of these entrepreneurs and project owners who receive training and mentoring support, entrepreneurs tried to find support by presenting their business ideas to investors. In this context, activities that support the dissemination of knowledge, development and transfer of technology with a focus on commercialisation were carried out.

After the presentations made within the scope of the event, the winning projects were determined as a result of the jury's evaluations.



Project Market and Project Closing Programme with Digital Pathway Demoday