ISTANBUL TECHNICAL UNIVERSITY

SUSTAINABILITY REPORT - 2020

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Istanbul Technical University, as an established and strong institution heading toward its 250th year, with the experience it takes from its past, its strong academic staff, as a leading research university in the national and international arena, will continue to do good works and to add value to our country's education quality with the dedicated efforts of all of us.

Within the framework of the 2030 vision, which envisages that the direction of development all over the world and in our country will evolve into a sustainable route; our University has adopted 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 strengthening human rights.

We continue our efforts to become a leading research university, to develop technology for sustainable development, to create qualified employment with a strong alumni network, and to realize projects that go beyond the borders of the country with technology entrepreneurship. In our report, which refers to the Sustainable Development Goals that ITU has achieved throughout 2020, we present the activities carried out while also revealing the basic strategies of our institution.

This report also has guiding features in terms of being able to better determine our needs in addition to our achievements and our field of action in every new situation that may arise. We will all work in unity for a guiding and leading university by realizing our goals with a fair, equitable and accessible management philosophy. I would like to thank all my colleagues who contributed to the preparation of the report.

With love and respect...

Prof. Dr. İsmail Koyuncu

Rector

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INTRODUCTION

This report aims to present the sustainability performance of ITU in 2020. Constituting the first "sustainability report" of the university, it also introduces the general practices and policies of the university on sustainability.

SCOPE

"Sustainability" is not only considered for the environmental aspects, but also with its social and economical components. The majority of the data that this report is based on is gathered including all five campuses of the university. However some metrics are measured based on regarding only the main campus (Ayazağa).

FRAMEWORK

Information presented under this report is structured followintg the "THE Impact Rankings" framework which is one the most recent and promising reporting methodologies for university sustainability progresses. In this framework university practices are groupped under the 17 Sustainable Development Goal (SDG) titles, which were defined by the United Nations in September 2015 and became effective in January 2016. Through the THE Impact Rankings Methodology, universities are guided by numerious indicators under each SDG. This indicators are specifically designed for higher education institutions, based on the Global Indicator Framework for the Sustainable Development Goals and Targets of the 2030 Agenda for Sustainable Development.

FREQUENCY

Annual

DATE OF RELEASE

November 2021

RELEASE DATE OF THE LAST SUSTAINABILITY REPORT

This report is the first "sustainability report" of the Institute. For previous years, University Annual Reports can be referred, presenting the achievement rates to the targets defined in the university strategic plan. These targets are heavily shaped by the sustainable education and campus strategies of the university. Last Annual Report of ITU "2020 Annual Report" is published in February 2021.

GOAL 1: END POVERTY IN ALL ITS FORMS EVERYWHERE

Indeed, even before the pandemic, the movement of worldwide destitution decrease was decelerating, and it was expected that the worldwide objective of finishing neediness by 2030 would be missed. The pandemic is pushing a huge number of people once more into extraordinary neediness. While the pandemic has featured the need to fortify social insurance and crisis readiness and reaction, those measures are not sufficient to defend poor people and the helpless, who most need them.

The accompanying exploration ventures have been explicitly adjusted to Sustainable Development Goal 1 and the plan to end poverty in the entirety of its structures all over. Academics and researchers in ITU work on various subjects following SDG 1. These undertakings and activities are instances of the University's commitment to the SDGs.

and Necessity Scholarship. Also, students receive computers donated from the graduates association. Despite the pandemic and the distance education practices, ITU provided a total of 28.296.345TL financial support to 7146 students in the 2019 – 2020 Academic Year.

LOCAL COMMUNITY ASSISTING

ITU provides Certificate programs offered at ITUSEM that are designed to support basic education for everyone. In 2020, 31 certificate programs, 124 events were held and 3155 people participated. Also, 7 different certificate courses were conducted to companies. ITU Çekirdek (The Incubation Center) has several trainings and mentorship supports for all entrepreneurs, including locals. More than 20 Million Turkish Lira has been invested in the start-ups by ITU Çekirdek since January 2020.

SCHOLARSHIPS

ITU provides lots of scholarships for students who are successful in the University Entrance Exam and cannot afford their studies during their entire university life. ITU has lots of support for the bottom 20% of household income groups. ITU provides support like food, housing, transportation, legal services for students from low-income families to enable them to complete university. ITU provides Achievement Scholarship, Athlete Scholarship, Food Scholarship

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GOAL 2: END HUNGER, ACHIEVE FOOD SECURITY AND IMPROVED NUTRITION AND PROMOTE SUSTAINABLE AGRICULTURE

The complete number of people experiencing severe food frailty has been on the ascent since 2015, and there are as yet a great many malnourished youngsters. The financial lull and the disturbance of food esteem chains brought about by the pandemic are worsening appetite and food frailty. Also, the upsurge in desert beetles stays disturbing in East Africa and Yemen, where 35 million people experience intense food frailty. Attributable to the pandemic, about 370 million school children feel the loss of the free school suppers they depend on. Measures to reinforce food creation and dissemination frameworks must be taken promptly to moderate and limit the pandemic's effects.

The accompanying examination ventures have been explicitly adjusted to Sustainable Development Goal 2, which aims to end hunger, accomplish food security, and improve sustenance and advance economic farming. ITU has numerous projects related to SDG2. These tasks and activities are instances of the University's commitment to the SDGs.

ITU RESTAURANTS AND FOOD SERVICES PROVIDES PARTICULAR PROGRAMS TO PREVENT FOOD WASTE

In 2019, ITU Cafeterias served lunch and dinner to an average of 14,000 people a day, with more than 2 million food production, without compromising their quality. The data of 2019 show that an average of 6% of the food produced is sent to be used as waste. However, as of March 2020, the Pandemic period started and takeaway meals were served only in the cafeterias affiliated to the Food Businesses Branch Directorate on our campuses. The Amount of Food Waste in Dining Halls Affiliated to the Catering Branch Directorate is 137486,54 TL in 2020 per year (Per person 3.38 TL). When the increase in food

prices is evaluated, and our Green Campus philosophy principles, it is meaningful and essential for all our employees to prevent waste and bring it to the dining hall economy.

While determining the number of meals to be produced in our existing dining hall system; Production estimation is made using components such as the academic calendar. The intensity of the current course program, the exam schedule, the number of choices depending on the menu, the weather, the number of meals consumed in previous weeks/months/years. In case the food produced is less than the incoming demand, an alternative fast menu is prepared and served, and when the production exceeds the request, the increased food is evaluated for non-food uses due to food safety.

ITU provides access to food security and sustainable agriculture knowledge/skills/technology to local farmers and food producers. In order to provide access to skills and technology to local food producers, our university's Food Engineering BSc Program offers special internships, technical trips and graduation projects. ITU organizes several events for local farmers and producers to provide awareness about the importance of Turkey's geographical farm system and establish ideal local farm products supporting sustainable rural development and the protection of biodiversity. However, due to COVID-19 pandemic any technical trips or graduation projects over local farmers could not be held in 2020 and were suspended.

FREE SOUP TRUCK PROGRAM

There are a number of places to go to for a hot meal, whether breakfast, lunch, or a dinner service at ITU. Free Soup Truck program "Bee Çorba" provides all students free soup service. The soup service will be given from a truck traveling around ITU Campus every morning. The program is developed in 2020 and launched in 2021.

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GOAL 3: ENSURE HEALTHY LIVES AND PROMOTE WELL-BEING FOR ALL AT ALL AGES

Progress in numerous well-being regions proceeds; however, the pace of progress has eased back and will not be adequate to meet the majority of the Goal 3 targets. The pandemic is destroying well-being frameworks all around the world and compromises well-being results previously accomplished. Most nations, specifically underdeveloped ones, have inadequate well-being offices, clinical supplies, and medical services laborers to satisfy the need for basic medical care. Nations need specific well-being techniques and expanded spending on well-being frameworks to address pressing issues and secure well-being laborers, while a worldwide composed exertion is expected to help nations out of luck.

The following activities have been specifically aligned to Sustainable Development Goal 3 and the aim to ensure healthy lives and promote well-being for all at all ages. These projects and initiatives are examples of the University's contribution to the SDGs.

SOCIALLY ASSISTIVE ROBOTICS IN ITU AS AN INTERVENTION TOOL FOR CHILDREN WITH AUTISM

The project is implemented in the years 2019-2022 under EU Erasmus Plus Strategic Partnership for Higher Education Programme. Project combines social robots, that are already used in therapy for children with autism with algorithms for automatic emotion recognition. Detailed information can be found on **https://emboa.eu**.

ROBOREHAB: ASSISTIVE AUDIOLOGY REHABILITATION ROBOT

A humanoid robot Pepper enhanced with emotion/attention/stress recognition based on physiological data, and facial data, and gamification of conventional auditory tests are used in this project to assist children at audiology departments of hospitals. This is an interdisciplinary project with audiologists, psychologists, and electrical engineers.

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INSTITUTIONAL SUPPORT

ITU has a Mental health support unity, called ITU Psychological Counseling and Guidance Center. It provides the following services: Individual Psychological Counseling service, Group Counseling service, Orientation Service which is a repeatable application during the academic year, Consultation Services to families so that the student can develop his / her unique talents in social, emotional and intellectual aspects according to their interests and needs, Coordination services in coordination with faculty, administration and our students. Detailed information can be found on **pdr.itu.edu.tr**. ITU also follows the Government's smoke-free regulation policies [1]

GOAL 4: ENSURE INCLUSIVE AND EQUITABLE QUALITY EDUCATION AND PROMOTE LIFELONG LEARNING OPPORTUNITIES FOR ALL

Education is a public good. Education reveals the potential of individuals and creates their capacity to participate in social, economic and cultural life. A literate and educated society; It forms the basis of a productive workforce that is entrepreneurial, innovative, open to technological developments and capable of developing sustainable solutions to business-related problems. In addition, education creates more stable and prosperous societies that can create sustainable markets. In order to ensure their continuity in business life, institutions need to appeal to employees who can create value and provide competitive advantage and to retain this human resource. In our increasingly technology-driven world, employees will need new and more qualified talent. In particular, science, technology, engineering and mathematics (STEM) is vital for the future. The following research projects specifically address SDG 4, aiming to ensure inclusive and fair quality education and promote lifelong learning opportunities for all. These projects and initiatives are examples of İTÜ's contributions to the Sustainable Development Goals.
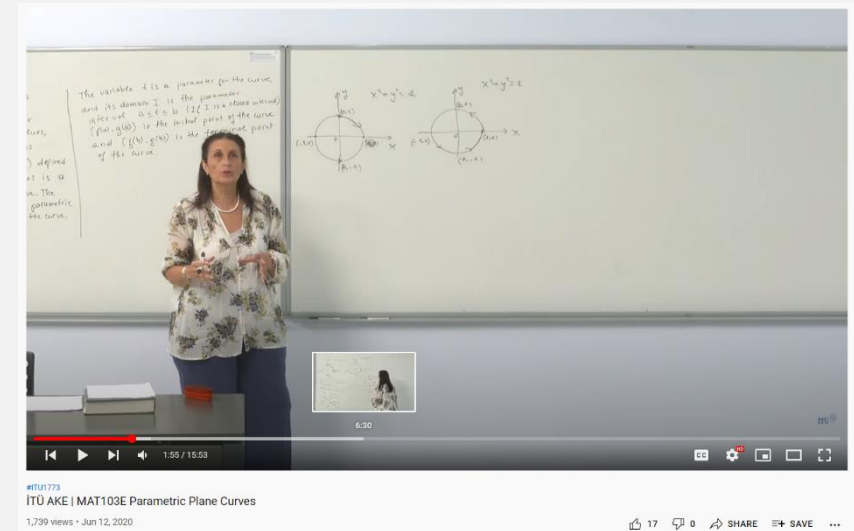
TAKING PART IN NATIONAL & PUBLIC EDUCATION

In 2020, ITU had a total of 19665,8 FTE (Full Time Equivalent) students. 8183 students started their degree in 2020 and 6375 of them were estimated to be the first generation. In 2020, a total of 4637 students graduated from undergraduate and graduate programs. 1277 of these new graduates are from programs that potentially satisfy the criteria declared by the Turkish Ministry of Education to be qualified as primary school teachers.

ITU makes its educational resources completely available to researchers from other institutions and also provides partial availability to the general public. In 2020, 316 students and academicians from other academic institutions accessed various resources of our library. In addition, 367 resources and publications were shared with other libraries through a sharing system, called ILL (Inter Library Loan), which is easy to use, efficient and free of charge. All our Master and PhD theses/dissertations are completely available to the public free of charge via **www.polen.itu.edu.tr**. In 2020, our dissertations were a total accessed 9783672 times.

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ITU also performs numerous educational outreach events open to the public both for general and vocational purposes; both on and out of the ITU campuses. In 2020 ITU Continuing Education Center (SEM) has provided a total of 46 programmed community educational events within 13 public programs on art and foreign language education that are open to the general public.

A total of 713 people not affiliated with our university have attended these lectures and events. SEM provided executive training programs and professional development/vocational training in 25 programs, 145 groups to 2377 attendees from the general public. Furthermore, ITUNova provided 3 accredited vocational trainings. Our departments provided a wide range of ad-hoc seminars that can be followed by anyone online. Some examples are as follows: ITU Astronomy Days, ITU Science and Technology Summit Seminars, Library Seminars, Itu Ginova Seminars, ITU Economy Department Seminar Series, ITU Molecular Biology and Genetics Department-Molecular Biology-Biotechnology &Genetics Research Center Seminars etc. Events are announced in the department websites. In addition to performing a high variety of outreach events, ITU also actively performs outreach and education through online platforms such as youtube and its webpage Ninova. In 2020, ITU added a total of 118 new online lectures in ITU AKE (Open Source Education) Youtube Channel.

In 2020 ITU was also actively involved in outreach activities in local schools. These activities are based on the protocols signed between ITU and the Turkish Ministry of Education (MEB). ITU academicians participated in the educational and administrative activities at Institutions such as Doga College, MTAL Highschool and ITU Music Middle School. In 2020, a total of 180 students of the high school are given educations by the ITU Academicians.

Within the scope of "Zero Waste Education" jointly coordinated by Eyüpsultan Municipality and ITU Environmental Engineering Department, ITU Environmental Engineering Department students gave 141 training (22800 students in total) in 31 Primary Schools between 24.02.2020-04.03.2020. All applications for the abovementioned events and activities are taken through an online application form, without asking the gender, religion or ethnicity of the participants. Thus, preventing any possibility of discrimination.

Prof. Ibrahim Akduman, dean of ITU Electric & Electronics Faculty, at the opening of the DOGA College Technology Course

TO MORE THAN,

23 K

EDUCATIONAL SERVICES
ARE PROVIDED

BY **ITU ACADEMICIANS**

STUDENTS OUTSIDE OF ITU

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GOAL 5: ACHIEVE GENDER EQUALITY AND EMPOWER ALL WOMEN AND GIRLS

The duty to propelling sex equity has achieved upgrades in certain territories, yet the guarantee of a world where each lady and young lady appreciate full sexual orientation balance and all legitimate, social, and financial boundaries to their strengthening have been taken out remaining parts unfulfilled. The current pandemic is likewise hitting ladies and young ladies hard. All around the world, ladies make up seventy-five percent of clinical specialists and nursing faculty. Ladies as of now burn through three-fold the number of hours as men on unpaid consideration work at home. The conclusion of school and day-care focuses requires guardians, ladies, especially, to think about youngsters and encourage their learning at home. Reports from a few nations recommend abusive behavior at home against ladies and youngsters is likewise ascending during the worldwide lockdown.

The accompanying exploration ventures have been explicitly adjusted to Sustainable Development Goal 5 and the mean to accomplish sex equity and engage all ladies and young ladies. These ventures and activities are instances of the University's commitment to the SDGs.

ITU has a directive and a code of practice to prevent gender discrimination. The aim of the directive is to support academic, administrative, and contract

personnel working part-time or full-time for Istanbul Technical University or its associated units and ITU students in matters of sexual harassment and gender discrimination and seek solutions. Every faculty in ITU provides mentorship programs for accepted students, where at least %10 are women. Moreover, our ITU Teknokent provides several mentorship programs.

ITU SUPPORTS UNDERREPRESENTED GROUPS

In 2020, ITU published its annual activity report which contains several statistics, financial standing, administrative works and relevant activities regarding distributed scholars and women students as well as measures for disabled and low-income students. Disabled Students Unit conducted their

activities, to take measures for disabled students and gather data for relevant awards and certifications, to test and prove the university accessibilty. ITU Gender Identity and Sexual Orientation Studies Student Club held a total of **5 events** in 2020.

GENDER EQUALITY AND HUMAN RIGHTS

ITU Women's Studies Center in Science, Engineering and Technology (**KAUM** in Turkish) supports and enhances gender equality in science, engineering, technology and art. KAUM has its regulation and organizes many activities to increase awareness of gender quality. In 2020 KAUM applied for an TUBITAK Above-Treshold-Awards with one of its research projects, ICONS. 3 events are held and one declaration is published [1]. ITU has a policy of prevention of sexual harassment and gender discrimination, including women and transgender people [2], and follows the Government's maternity and paternity policies that support women's participation [3]. ITU also provides childcare supports for students and employees.

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GOAL 6: ENSURE AVAILABILITY AND SUSTAINABLE MANAGEMENT OF WATER AND SANITATION FOR ALL

Water is vital for heating and cooling and in many cases is an important operational input. Provision of water supply is a basic need not only for institutions but also for society and the environment at large. It is important that institutions recognize the value of water, use it responsibly, and minimize pollution of waterways. Organizations need to conduct risk assessments regarding water use and implement strategies to ensure that suppliers take a responsible approach to water use. Billions of individuals worldwide actually need admittance to securely oversaw water and disinfection administrations and virtual handwashing offices at home, which are necessary to forestalling spreading the spread of COVID-19. Prompt activity to improve Water, Sanitation, and Hygiene for All (WASH) is essential to forestalling disease and containing its spread. The following research projects specifically address SDG 6, aiming to ensure availability and sustainable management of water and sanitation for all. These projects and initiatives are examples of ITU's contributions to the Sustainable Development Goals.

SUSTAINABLE GARDENING MINIMIZING WATER USE IN ITU

ITU as a body prefers landscaping applications with plant species, which consume less water and are suitable for the local climate. Due to the high water demand, grass areas are created in certain areas. In most areas, the land is leveled and the area becomes a meadow by itself without planting.

SUSTAINABLE WATER MANAGEMENT IN ITU

In 2020, ITU Academicians conducted studies which constituted a base for the Water Management Directive, to manage the water, including protection of freshwater and evaluating water recovery alternatives from rainwater and grey water. It is aimed to track water consumption in all buildings and thus to reduce water losses as well as to minimize water use. The efforts also targetted to protect water resources in ITU campuses and prevent polluted water from entering the water system.

In ITU campuses, all infrastructures about rainwater and wastewater are separated from each other and the whole generated wastewater is collected from the buildings and conveyed out of the campus. In line with sustainable water management, ITU promotes water reuse and recovery through installing advanced wastewater treatment systems such as producing reclaimed water

from greywater especially in recently built buildings. In order to follow the rate of recycled water across the campus, the water used in the campus is monitored and measured. In 2020, the rainwater collected in the artificial pond located at Ayazağa Campus, which receives rainwater through surface runoff, accounted for 77,000 m^3 and it was approximately 17% of total water consumption. The collected water in the pond is used for green area irrigation on campus and significantly reduces freshwater demand.

A social responsibility project called Tears of Water (Suyun Gözyaşları in Turkish) aims to give free seminars and workshops to primary school students in order to increase their consciousness in water use. Water-saving practices

and consciousness of water use are the main concerns in these seminars. During the COVID-19 pandemic, these seminars and activities were held online.

77K M³

RAINWATER IS COLLECTED
IN ITU POND

EQUAL TO THE,

17%

OF TOTAL
WATER CONSUMPTION

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Since the industrial revolution, fossil fuels have been helpful in lifting society out of poverty and have enabled improvements in health, education, and nearly every aspect of human life. Even something as simple as a lamp lit after dark has been quite effective for development. However, today it has been understood that the energy obtained from fossil fuels has a cost. The increasing carbon level in the atmosphere causes a climate change that threatens the ecosystem we live in. Ecosystem degradation risks social turmoil and economic instability, so a shift to low-emission and low-impact energy sources has become inevitable to sustain the gains of past centuries. The following research projects specifically address SDG 7, aiming to ensure access to afforable, reliable, sustainable and modern energy for all. These projects and initiatives are examples of İTÜ's contributions to the Sustainable Development Goals.

SUSTAINABLE ENERGY MANAGEMENT IN ITU

ITU pledges itself to conduct both departmental and interdisciplinary energy research. Numerous faculty and researchers are working on renewable energy resources such as rooftop photovoltaics, small-scale wind turbines, biomass and biogas as well as storage technologies. On the other hand, we work on energy reliability and equity through socio-economic and techno-economic analysis. As an education provider, ITU plans to further extend its teaching

programs in the sustainable energy field via introducing new masters and training modules.

All these efforts in 2020 constituted a background for the valuable outputs such as ITU Energy Management Directive (released in 2021), Climate Action Plan (CAP) (released in 2021) and ITU's new Stategic Plan. These studies aimes to establish policies for effective use of energy by increasing energy efficiency in existing and newly planned buildings, conducting energy audits to identify areas where energy waste is high, to reduce investments in carbon-intensive energy industries, especially coal and oil, to protect the environment and increase efficiency in the use of energy resources within the responsibility and authority of the ITU Rectorate.

In 2020, total energy consumption in ITU (all campusses, including heat and electricity) decreased to 212374.917 GJ, where it was 257672.009 GJ in 2019. However a significant amount of this is expected to be due to the remote

education following the pandemic. Majority of the reduction is seen in the natural gas consumption.

ENERGY EFFICIENT BUILDINGS

ITU thrives to increase the number of sustainable buildings in terms of water and energy efficiency. Energy-efficient mechanical and electrical appliances are used in these buildings. Mercury-free LED lighting is one of the applications within this scope. In order to increase the share of renewable energy use in total energy consumption, photovoltaic panels were installed on top of the roofs. In general, LEED standards are followed during the installations. Two new buildings (Information Technologies and Agro – Informatics Research Center Buildings) on the campus have applications to get a LEED certification. In 2020 the evaluation process of the LEED application of ITU continued. In 2020, 9 buildings are separated from the central heating system and local heating systems were installed. In the coming period (Faculty of Electrical and Electronics Faculty of Civil Engineering, Faculty of Management, Motor

Vehicles Lab. Building, Institute of Informatics, Medico Social Center Building, Former Rectorate Building (L1, L2, L3)), 4 more buildings will be switched to local heating system and energy efficiency will be ensured.

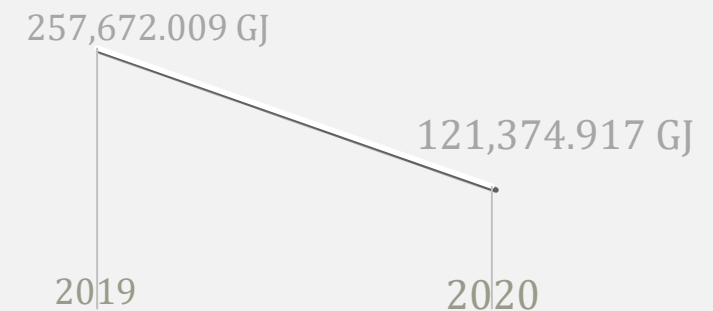## ENERGY-EFFICIENT LIGHTING AND APPL IANCES

Safe, economic and aesthetic lighting armatures with low energy consumption and energy-efficient appliances have been adopted in indoor and outdoor areas. All washing machines, refrigerators and other electronic devices in campus dormitories had been already replaced by Class A energy-efficient appliances. The majority of electronic devices used in the tea rooms on campus are also energy-efficient devices. The whole rehabilitation works regarding reducing the energy footprint of the existing buildings are conducted according to the **ITU Strategic Plan covering the period of 2017-2021**.

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MORE BUILDINGS ARE SEPERATED FROM THE CENTRAL HEATING SYSTEM

53%

DECREASE IN TOTAL ENERGY CONSUMPTION
(HEAVILY BASED ON THE REMOTE EDUCATION)

257,672.009 GJ

121,374.917 GJ

2019   2020

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GOAL 8: PROMOTE SUSTAINED, INCLUSIVE, AND SUSTAINABLE ECONOMIC GROWTH, FULL AND PRODUCTIVE EMPLOYMENT, AND DECENT WORK FOR ALL

Indeed, even before the current emergency, the worldwide economy was developing at a more slow rate than in earlier years despite upgrades in labor efficiency and joblessness. The pandemic has suddenly and significantly disturbed it, driving the world into a downturn. The extraordinary stun to the world's work markets is required to bring about a reduction of around 10.5 percent in total working hours in the second quarter of 2020, equal to 305 million all-day laborers. Little and medium undertakings, laborers in casual business, the independently employed, everyday breadwinners, and laborers in areas at the most noteworthy danger of disturbance have been hit the hardest.

The accompanying examination ventures have been explicitly adjusted to Sustainable Development Goal 8, and the intent is to advance supported, comprehensive and manageable monetary development, full and profitable business and fair work for all. These undertakings and activities are instances of the University's commitment to the SDGs.

ITU recognizes unions and labor's rights (freedom of association and collective bargaining) for all its staff, including women and international staff. The collective agreement of the Istanbul Technical University Rectorate and affiliated workplaces was concluded with the worker representative unions, for 2019-2021 [1]. ITU also undertakes to comply with the consensus decisions and the union rights determined by the government. In this way, permanent and contracted employees of ITU have secure contracts of 2 years or more.

ITU has been working seriously in recent years to end discrimination in the workplace, including discrimination based on religion, sexuality, gender, age. The Women's Studies and Application Center (**KAUM**) has been in operation since 2009 in order to make the best use of the potential of ITU in the field of gender and also to support gender equality in science, engineering, technology, and art. A directive of the ITU Women's Studies Center in Science, Engineering and Technology and a code of practice on the prevention of sexual harassment and gender discrimination focuses on this issue meticulously (**see Goal 5 for 2020 record**).

Students enrolled in any of the undergraduate or graduate programs of ITU can work part-time. While our university offers job opportunities to its students in all academic units, it also provides job opportunities in research and development centers, library and data processing centers. ITU also provides support in the internship activities of students. In 2020, a total of 6091 students were placed in a job for more than a month with ITU facilities.

91,4

PLACED IN A
PART-TIME JOB
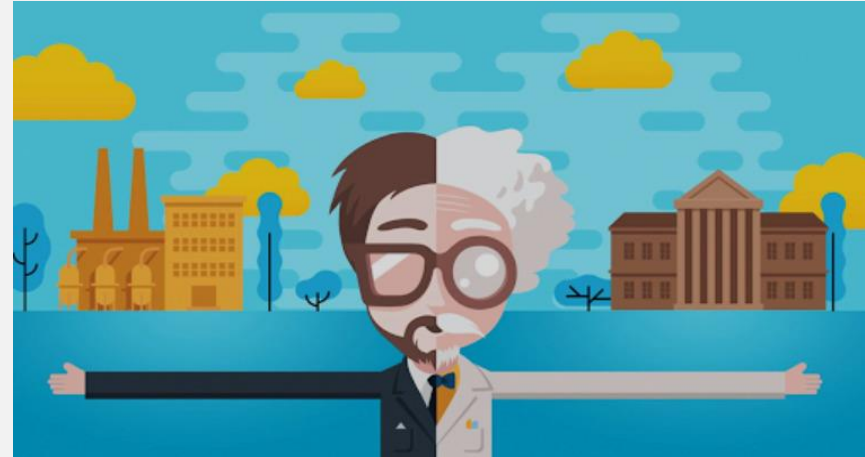IN ITU

STUDENTS/MONTH

4994

SUPPORTED BY
ITU

INTERNSHIPS

GOAL 9: BUILD RESILIENT INFRASTRUCTURE, PROMOTE INCLUSIVE AND SUSTAINABLE INDUSTRIALIZATION AND FOSTER INNOVATION

Overall advancement in the gathering had, starting at now, reliably declined even before the scene. The pandemic is hitting manufacturing organizations hard and causing aggravations in overall worth chains and agile things.

ITU is fully committed to integrating the concept of sustainability into innovation and entrepreneurship fields. On the one hand, the University is focusing on collaboration between academia, industry and public authorities, on the other hand, we are introducing novel undergraduate and postgraduate level interdisciplinary courses that foster innovation design through sustainable development.

The accompanying exploration ventures have been explicitly adjusted to Sustainable Development Goal 9, and intend to assemble a strong framework, advance comprehensive and manageable industrialization and cultivate advancement. These ventures and activities are instances of the University's commitment to the SDGs.

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ITU provides a thriving environment for innovation, technology and university spin-offs. In 2020, 90 registered spin-off companies were active and have been established at least 3 years ago. Out of these, 68 are owned by our academicians. The total research income is a stunning 2,344,502,192.69 TL, which equals around ~334,928,885 US dollars. The research income is distributed among the STEM, Medicine and social sciences fields as 2,330,306,140 TL (~332,900,877 US dollars), 6,770,796.33 TL (~967,257 US dollars), and 7,425,255.2 TL (~1,060,751 US dollars), respectively. In ITU a total of 1486 Academicians and 3470 employees are involved in these research, innovation and technology activities.

2,344,502,192.69 ₺

RESEARCH INCOME

BY,

90	1486	3470
SPIN-OFFS	ACADEMICIANS	EMPLOYEES

GOAL 10: REDUCE INEQUALITY WITHIN AND AMONG COUNTRIES

Despite positive indications of diminishing disparity in certain measurements, for example, a decrease of relative pay imbalance in individual nations and special exchange status profiting lower-pay nations, imbalance endures in all structures. The COVID-19 emergency is hitting the least fortunate and most weak individuals and nations the hardest and takes steps to have a significantly harmful sway on the most unfortunate nations. It is uncovering the significant disparities that exist inside and among nations and is intensifying those imbalances.

The accompanying exploration ventures have been explicitly adjusted to Sustainable Development Goal 10 and expect to lessen disparity inside and among nations. These tasks and activities are instances of the University's commitment to the SDGs.

In 2020, ITU released its annual **activity report** which contains several statistics, financial standing, administrative works and relevant activities regarding distributed scholars and women students as well as measures for disabled and low-income students. ITU commits that there are no limitations based on gender or religion or any other criterion during undergrad students' admissions with Turkish nationality. Besides, international student candidates

with the highest Scholastic Assessment Test (SAT) or alternative exam scores are accepted at the undergraduate level. At the graduate level, applications of the international candidates are accepted, where no predetermined quotas are reserved for any of the countries. Turkish graduate candidates are also accepted where no gender-based limitation is applied.

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ACCESSIBILITY-ENHANCING PRACTICES

In 2020, **ITU Disabled Students Unit** put into practice the "**Academic Adaptation Document**". With this document, prepared jointly by the Student and Disabled Student Unit, in case students have difficulties in courses and exams due to educational conditions that are not suitable for their differences in ability, the necessary suggestions and improvements for accessible solutions are conveyed to the academic units and facilitating studies are planned to provide the necessary arrangements.

ITU SUPPORTS UNDERREPRESENTED GROUPS

In 2020, ITU published its annual activity report which contains several statistics, financial standing, administrative works and relevant activities regarding distributed scholars and women students as well as measures for disabled and low-income students. Disabled Students Unit conducted their activities, to take measures for disabled students and gather data for relevant awards and certifications, to test and prove the university accessibilty. ITU Gender Identity and Sexual Orientation Studies Student Club held a total of **5 events** in 2020.

ITU has also a Women's Studies Center in Science, Engineering and Technology (KAUM in Turkish) to support and enhance gender equality in science, engineering, technology and art. KAUM has its regulation (ITU Directive on

Preventing Sexual Harassment and Gender) and organizes many activities to increase the awareness of gender equality (**See Goal 5 for 2020 records**).

BİLİM MÜHENDİSLİK VE TEKNOLOJİDE
KADIN ARAŞTIRMALARI VE UYGULAMA MERKEZİ
İSTANBUL TEKNİK ÜNİVERSİTESİ

cinsarı

GOAL 11: MAKE CITIES AND HUMAN SETTLEMENTS INCLUSIVE, SAFE, RESILIENT AND SUSTAINABLE

Quick urbanization has brought about many ghetto tenants, lacking and overburdened foundations and administrations and compounding air contamination. The pandemic will hit the hardest more than 1 billion ghetto inhabitants around the world, who experience the ill effects of an absence of sufficient lodging, no running water at home, mutual latrines, few or no waste administration frameworks, packed public vehicles, and restricted admittance to formal medical care offices. Numerous in that populace work in the casual area and are in great danger of losing their business as urban communities shut down. Critical reaction plans are expected to get ready for and react to episodes in casual settlements and ghettos.

The accompanying examination ventures have been explicitly adjusted to Sustainable Development Goal 11 and the expectation to make urban areas and human settlements comprehensive, sheltered, strong and maintainable. These ventures and activities are instances of the University's commitment to the SDGs. Even though the campus tours had been limited because of the COVID-19 pandemic, there had been several online organizations.

Constantinople.   Caserne „Tachkichla", Taxim.

1206   Éditeur: Max Fruehtermann, Constantinople.   Photogr. Andriomenos.

PUBLIC ACCESS: OPEN SPACES, RESOURCES, MUSEUMS

ITU has 5 campuses. Out of these campuses, 3 campuses comprise historical Ottoman empire era buildings. These are the Gümüşsuyu campus, which comprises Ottoman Empire Era military barrack building, Maçka Campus, which has the Ottoman Empire Era police station building, and Taşkışla Campus, which has the Ottoman Empire Era Military Medicine building in it. In 2020, campus tours open to the public are held by the ITU Promotion Office, mainly targeting the high school students and their families, until March 2020 when the schools were closed. In 2019-2020, a total of 21.230 students were guested. Furthermore, Maçka Campus, including the conservatory, hosts many

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concerts open to the public, where all guests can experience this beautiful historical place. In 2020, 17 events were held.

Our library and its resources are completely accessible to our graduates. Furthermore, access to these educational resources is provided to researchers from other institutions by providing daily and yearly guest entrance. Open Days, such as the one held by MIAM annually in the library, were performed online in 2020 due to COVID-19 restrictions.

ITU Geological Engineering Faculty building hosts the **"Ihsan Ketin Natural History Museum"**. The museum includes the "Darwin 200" exhibition and collections of many fossil species. The museum can be visited by anyone upon appointment as indicated in the Museum Webpage. In 2019 a total of 1972 students out of ITU visited the museum. However visits were suspended in 2020, due to pandemic restrictions.

In 2020, our university is ranked among the world's top 100 green campuses. It has an artificial pond inside with rich fauna and flora in and around. Student clubs public events within our campuses, including the green spaces (e.g. Concrete Canoe Competitions and Nature Observation tours in ITU Pond),

could not be conducted in 2020 due to the pandemic restrictions.

CULTURAL SUSTAINABILITY

The Istanbul Technical University Turkish Music State Conservatory has been running an art and science activity program under the title BİSED (Bilimsel ve Sanatsal Etkinlikleri Destekleme) for the past 10 years. These activities are open to the public and are organized in the 120 seat BİSED Hall in Maçka very close to the cultural center of Istanbul. There were 17 events in 2020 despite the pandemic. Additionally, ITU's Center for Advanced Studies in Music (ITU MIAM), organized 2 recitals, 3 concerts, 1 lecture performance in 2020.

ITU MIAM's two house ensembles, ITU MIAM Improvisation Ensemble and Istanbul Modern Music Ensemble, had halted their activities in 2020 due to the

21.230
VISITORS

OF HIGHSCHOOL STUDENTS

IN
2019 – 2020
EDUCATIONAL YEAR

pandemic. The Turkish Music State Conservatory (TMSC) offers 7 undergraduate programs: Music Theory, Musicology, Music Technology, Turkish Folk Dances, Composition, Instrument Performance and Voice Performance. All these programs are designed to prioritize education and the preservation of local music and folklore.

ITU Center for Advanced Studies in Music (ITU MIAM) is an active member and contributor of Medinea (MEDiterranean INcubator of Emerging Artists) Network, which aims to preserve Mediterranean music traditions by helping young musicians' integration into professional life. Within that framework, MIAM has been one of the partners of the Erasmus + Project Medinea, which started in 2018 and was finalized in 2021.

ITU MIAM has been one of the partners in the international project titled Transtraditional Istanbul (TTI) (May 2020 – March 2022). This project, funded by the Newton Fund UK-Turkey Creative Industries Research Networking Awards Programme, with grants awarded by the Arts and Humanities Research Council (AHRC) and İstanbul Kalkınma Ajansı (Istanbul Development Agency), aimed to preserve and develop traditional Turkish musical cultures

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MUSIC EVENTS

INCLUDING
CONCERTS, RECITALS, LECTURES
BY
CONSERVATORY AND MIAM

in danger of disappearing––namely bozlak and women's throat songs (boğaz havaları) from the Teke region––and by bringing this music into a contemporary, urban musical discourse.

ITU MIAM's ongoing project titled "Antalya Yörüklerinde Müzik" [Music among Yörüks in Antalya] is a project funded by ITU BAP (ITU Bilimsel Araştırma Projeleri Koordinasyon Birimi [ITU Coordination Department for Scientific Research Projects]). This project aims to document and preserve the soundscape and the music of the Antalya region Yörük people. Lastly, the recording projects done in ITU MIAM's recording studio function as an important actor in the preservation of local musical traditions along with other musical traditions.

SUSTAINABLE CITIES AND COMMUNITIES

ITU prioritizes sustainable cities and communities practices. Our university provides and extends specifically assigned bicycle and electrical scooter roads throughout the campus. Furthermore, Istanbul Technical University turns roads for motorized vehicles in the campus into pedestrian zones to provide more sustainable commuting inside the campus. Rental electric scooters are provided almost anywhere in the Ayazağa campus and can be charged at 4 locations. Rental bicycles are located at 8 locations. The ITU Ayazağa campus comprises 3 electric car charging stations with 1 rental electric car located at each. Moreover, starting from 2020, ITU applies a hybrid education system combining online education with conventional in-class teaching in all programs, promoting remote working and further contributing to sustainable cities. During the 2020 pandemic restrictions, ring services were suspended

except the faculty housing routes. Parking lot memberships of the students are also suspended to avoid any loss of rights.

ITU provides affordable houses to academicians, employees and students to a large extent. Affordable housing is provided to employees for a cost of 0.6 US dollars per square meter. We offer apartments ranging from 15-121 m², hence rents are ranging between 9-73 US dollars per month based on the apartment size. There is a 5 years upper limit for the apartments so that every employee can benefit from it. There are 657 apartments inside the Ayazağa campus. 372 are for Faculty members,163 are for staff members, and 122 for teaching assistants. Dormitory fees were refunded to the students for the closed period of the university.

GOAL 12: ENSURE SUSTAINABLE CONSUMPTION AND PRODUCTION PATTERNS

Overall utilization and creation, a main impetus of the worldwide economy, depends on utilizing the indigenous habitat and assets in a model that keeps on prompting dangerous effects on the planet. The pandemic offers nations an occasion to manufacture a recuperation plan that will switch current patterns and change utilization and creation designs towards a manageable future. The accompanying exploration ventures have been explicitly adjusted to Sustainable Development Goal 12 and the plan to guarantee feasible utilization and creation designs. These ventures and activities are instances of the University's commitment to the SDGs.

ITU prioritizes responsible consumption and recycling and has introduced related policies to them. ITU Waste Management Directive management guidelines state the policies on how to handle, store and transport hazardous materials, and how to minimize waste in general. In 2020, ITU ranked among the world top 100 univercities by GreenMetric, which evaluates the waste managing practices of the universities in detail. In 2020 ITU also applied for the 2021 evaluations of Zero-Waste Certificate given by the Turkish Ministry of Environment and Urbanization.

For outsourced services and suppliers our university determines bidding specifications that have to be in accord with our university's waste management directive for that services. Through this procedure, Istanbul Technical University makes sure that their policies, such as the minimization of disposable items policy, extend to all received and outsourced services and suppliers.

Waste generation and recycling performance are tracked in two ways: 1) With the data provided by the waste collection company to the Directorate of Administrative Services and 2) by the Istanbul Technical University. Waste comprising plastic, paper and metals, are collected in 62 blue containers, whereas glass is collected in green-white containers located at 5 different locations. Furthermore, used oil is collected in green bins located in 2 different locations. All other waste is collected in grey containers. Using the total numbers of each container, the frequency they fill up, and the related waste density, the university can track the total and recycled waste produced.

"GREENEST CAMPUS"

IN 2020

UI GREENMETRIC

ITU RANKED,

71ST

IN WORLD

37TH

IN EUROPE

GOAL 13: TAKE URGENT ACTION TO COMBAT CLIMATE CHANGE AND ITS IMPACTS

Globally, 2020 was the hottest year on record, effectively tying 2016, the previous record. Overall, Earth's average temperature has risen more than 2 degrees Fahrenheit since the 1880s according to NASA. Furthermore, with a normal worldwide temperature of 1.1°C above assessed pre-mechanical levels, the worldwide network is a distant track to meet either the 1.5 or 2°C targets called for in the Paris Agreement. Albeit ozone-depleting substance discharges are extended to drop by 6 percent in 2020, and air quality has improved because of movement boycotts and the monetary log jam coming about because of the pandemic, the improvement is just transitory. Governments and organizations ought to use the exercises figured out to quicken the advances expected to accomplish the Paris Agreement, rethink the relationship with the climate and make fundamental movements and groundbreaking changes to bring down ozone-depleting substance discharges and atmosphere strong economies and social orders.

In addition, in 2020 ITU academicians conducted background studies in order to prepare the university Climate Action Plan (CAP) .

The accompanying examination ventures have been explicitly adjusted to Sustainable Development Goal 13 and the mean to make a dire move to battle environmental change and its effects. These ventures and activities are instances of the University's commitment to the SDGs. Regarding climate change, which is a global problem, ITU takes more sustainable climate actions.

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STUDIES ON ARCTIC, ANTARCTIC, OCEAN AND MARINE SCIENCES

In 2020, Polar Research Center called **ITU PolRec**, established by ITU continued its studies. The center has a National Antarctic Science Team which has a mission is to conduct intercollegiate and international studies on Arctic, Antarctic, Ocean and Marine Sciences, finding a solution to melting glaciers and raise public awareness about these topics. The team also shares their experience with primary school students in some seminars and workshops.

SUSTAINABLE CAMPUS STUDIES

The ITU Strategic Plan covering the period of 2017-2021 is the key policy document concerning the climate change. Sustainability targets such as constructing new bicycle roads, promoting zero-emission vehicle use and energy as well as water-efficient practices have been provided in this document. Zero-emission vehicles have priority on the campus to reduce carbon dioxide emissions attributed to transportation. Through these efforts, Istanbul Technical University became "the world's 71st greenest campus" in2020, in the UI GreenMetric rankings, which evaluates university campuses in terms of green area ratio and sustainability.

PROTECTION OF SPECIES AND BIODIVERSITY

ITU conducts different works to maintain and extend existing ecosystems. In order to maintain the biodiversity on the campus, many experts and

academicians in different fields are collaborating. Water-efficient irrigation, innovative landscape design and measures to maintain campus animals are the main concerns. ITU has also a veterinary unit to take care of campus animals. The main objective of the unit is to provide well living conditions for campus animals, especially stray dogs. ITU considers the land ecosystem during new constructions and transplants trees as well as valuable vegetable soil if it is feasible technically.

ITU continues its efforts to prevent environmental disasters that affect the world and to take a leading role in reducing the effects of climate change. ITU provides local training programs that cover the climate change risks, impacts, mitigation, adaptation, impact reduction, and development of early warning systems. The courses ITU has prepared resolutely support a sustainable environmental ecosystem. In this way, ITU trains engineers who will shape the future with great environmental consciousness. At the same time, ITU works on climate change disasters and risks by establishing close cooperation with non-governmental organizations (NGOs), local governments, and the government. Tohum NGO has been elected as a member of the Central Advisory Board of "Istanbul Technical University Climate Change Application and Research Center" in 2020. Detailed information can be found on **https://www.tohumdernegi.org/tag/itu-iklimdegisikligi/**

ITU is increasing its investments in order to obtain energy from low-carbon energy sources by making serious strides at the point of being carbon neutral. ITU carries out serious investments and practices in the generation of
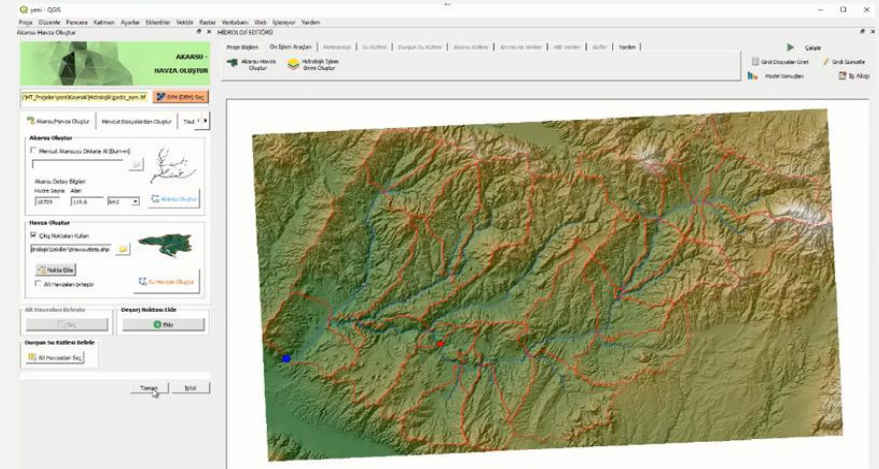
electricity using renewable energy sources (Clean biomass, solar power, and wind power). ITU ARI Teknokent and ITU Incubation Center, supported many companies ın 2020, working for reducing fuel consumption and emissions, increasing range of electric vehicles and lightening of vehicles, developing sustainable and innovative environmental technologies, and lowering the water and plastic usage on water faucets.

GOAL 14: CONSERVE AND SUSTAINABLY USE THE OCEANS, SEAS AND MARINE RESOURCES FOR SUSTAINABLE DEVELOPMENT

Seas and fisheries kept on supporting the worldwide populace's financial, social and natural needs while enduring unreasonable exhaustion, ecological decay, and carbon dioxide immersion and fermentation. Ebb and flow endeavors to ensure key marine conditions and little scope fishers and put resources into sea science are not yet meeting the critical need to secure this tremendous, delicate asset. The accompanying exploration ventures have been explicitly adjusted to Sustainable Development Goal 14 and intend to monitor and economically utilize the seas, oceans and marine assets for the practical turn of events. These ventures and activities are instances of the University's commitment to the SDGs.

A SUSTAINABLE WATER STRATEGY MODEL: HIDROTURK

HIDROTURK is a project that will develop national strategies for the most efficient protection of water resources. It is carried out in cooperation with Istanbul Technical University and the Ministry of Forestry and Water Affairs. HIDROTURK develops a sustainable water strategy model in international standards considering Turkey's geographical and climatic conditions. The model is developed according to water quality and ecology models and consists of modules applicable to basins and sub-basins. This project is integrated into

Turkey's National Water Information System and is considered to have a crucial role in developing future policies on water resources.

UAV-BASED MODELING IN BASIN MANAGEMENT FROM ITU

The study titled "UAV-based Evaluation of Morphological Changes Induced by Extreme Rainfall Events in Meandering Rivers" was carried out as part of the project "New Techniques in Diachronic Monitoring and Modeling of Topography: UAV-based modeling of volumetric change of meandering structures in Büyük Menderes River and the impact of extreme events" supported by ITU Scientific Research Projects (BAP). In the article, rainfall data over many years obtained from satellite data were analyzed and morphological changes in the meandering structures caused by extreme rainfall events were obtained in 3D as a result of UAV-based modeling. In this context, short-term erosional and sedimentary changes between 2018-2019 were determined in

2020 by producing high accuracy and high-resolution digital surface models through UAV photogrammetry.

According to the findings in the article published as part of the project, inferences were drawn to understand the impact of erosion and sedimentation rates due to extreme rainfall on humans and human activities. It was determined that rainfalls, which have assumed an extreme character due to climate change, can cause erosional and sedimentary changes in these river systems within a few days that may otherwise occur in decades. Due to the great intensity of extreme events despite their low frequency, this result is crucial in terms of shaping the planning and management of basins where humans lead their lives and their agricultural activities and large economic investments such as industrial plants, hydroelectric dams are made [1].

ITU has issued a Water Management Directive to ensure that water resources within the responsibility and authority of ITU Rectorate, including alternative water resources such as rainwater and greywater, are used for education, training, research, production, service, and other activities on campuses. With this directive, it is to ensure the disposal of wastewater without any risk to human health and environmental sanitation and to determine the principles for its provision.

"Digitalisation of water industry by innovative graduate water education" project is supported by Erasmus+ Programme Knowledge Alliances. As a result of the Erasmus + Programme Knowledge Alliances Call, which received 216 project applications across Europe, 30 projects are supported by Erasmus + Programme Knowledge Alliances

The goals of the project are to foster digital innovation in the water sector by showcasing in water and parallel sectors (e.g. energy), building IT skillsets to water professionals, mainstreaming technology entrepreneurs into the water sector, connecting the water sector with related industries and resource issues, and shift future water leaders from late to early adopters of new innovations and ideas [2].

THE **MAIN OBJECTIVES**

DIGITALISATION OF WATER INDUSTRY BY INNOVATIVE GRADUATE WATER EDUCATION THROUGH THE FOLLOWING THREE ACTIONS:

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STRENGTHEN THE INNOVATION CAPACITY OF THE WATER INDUSTRY

Enhance digital innovations in curricula during education as a basic method for later implementation and application in business like industry, administration, consultancy

TACKLE THE DIGITAL SKILLS MISMATCH IN THE WATER INDUSTRY

Establish smart specialization for digital water through the upgrade of curricula in partner universities with participation from industry

IMPROVE SOCIAL ENGAGEMENT OF UNIVERSITIES EDUCATING WATER SPECIALISTS

Improve the orientation of academia towards societal and market needs through internationalization of universities, Digital Water Living Lab and Innovation Camps

DIGIWATER

GOAL 15: PROTECT, RESTORE AND PROMOTE SUSTAINABLE USE OF TERRESTRIAL ECOSYSTEMS, SUSTAINABLY MANAGE FORESTS, COMBAT DESERTIFICATION, AND HALT AND REVERSE LAND DEGRADATION AND HALT BIODIVERSITY LOSS

Backwoods regions kept on declining; ensured regions were not gathered in key biodiversity zones and species stayed undermined with elimination. Notwithstanding, efforts were picking up foothold and having beneficial outcomes that could assist with turning around those results, for example, expanded advancement towards maintainable backwoods the board; gains in secured zone inclusion for earthly, freshwater, and mountain zones; and progress in executing projects, enactment and bookkeeping standards to ensure biodiversity and environments.

The accompanying examination ventures have been explicitly adjusted to Sustainable Development Goal 15 and the means to secure, reestablish and advance reasonable utilization of earthbound environments, economically oversee woodlands, battle desertification, and end and converse land corruption and stop biodiversity misfortune. These ventures and activities are instances of the University's commitment to the SDGs.

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PROTECTION OF SPECIES AND BIODIVERSITY

ITU conducts different works to maintain and extend existing ecosystems. In order to maintain the biodiversity on the campus, many experts and academicians in different fields are collaborating. Water-efficient irrigation, innovative landscape design and measures to maintain campus animals are the main concerns. ITU has also a veterinary unit to take care of campus animals. The main objective of the unit is to provide well living conditions for campus animals, especially stray dogs. ITU considers the land ecosystem during new constructions and transplants trees as well as valuable vegetable soil if it is feasible technically.

A Scientific Research Project entitled "Acoustic Anatolia: Integrating Citizen Science into Acoustic Ecology" has been recently carried out which utilized a citizen science approach to collect ultrasonic recordings from all around Turkey, aiming to provide bat diversity and abundance data for establishing effective conservation programs.

SUSTAINABLE FOOD ON CAMPUS

ITU has recently published a Sustainable Food Directive which aims to regulate the principles regarding the safe and sustainable management of food production and sales places and cafeteria services operating in ITU campuses within the responsibility and authority of the ITU Rectorate. ITU's technical specifications used in the purchase of raw materials and materials required by the ITU Catering Branch Office are prepared by food engineers in accordance

with the laws, communiqués, standards and other national and international regulations and are constantly revised.

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GOAL 16: PROMOTE PEACEFUL AND INCLUSIVE SOCIETIES FOR SUSTAINABLE DEVELOPMENT, PROVIDE ACCESS TO JUSTICE FOR ALL AND BUILD EFFECTIVE, ACCOUNTABLE, AND INCLUSIVE INSTITUTIONS AT ALL LEVELS

Strife, frailty, feeble foundations, and restricted admittance to equity stay an incredible danger to events' supportable turn. A huge number of individuals have been denied their security, common freedoms, and admittance to equity. In 2018, the number of individuals escaping war, mistreatment, and strife surpassed 70 million, the most elevated level recorded by the Office of the United Nations High Commissioner for Refugees in almost 70 years. The pandemic is possibly prompting an expansion in social agitation and viciousness, which would extraordinarily sabotage the world's capacity to meet the objectives of Goal 16.

The accompanying examination ventures have been explicitly adjusted to Sustainable Development Goal 16 and the plan to advance serene and comprehensive social orders for a supportable turn of events, give admittance to equity to all and construct viable, responsible and comprehensive establishments at all levels. These tasks and activities are instances of the University's commitment to the SDGs.

A STRONG INSTITUTION, STRONG REPRESENTATION

ITU supports participation in management, which is a key element for effective governance and democratization. In addition to representatives from each unit in the ITU Senate, there is also a representative on behalf of research assistants, a representative on behalf of students, and a representative on behalf of administrative staff. Thus, decisions are taken in consensus with the representation of all units at ITU (**https://www.itu.edu.tr/en/senate**)

ITU Student Council and Clubs Union is an official unit affiliated to the Rectorate, which observes student rights in meeting and developing the educational, health, sports, and cultural needs of students at the university.

ITU is a university that not only offers its students a quality education but also offers its students the opportunity to showcase their capabilities and realize their ideas. With the clubs created by the students on many different subjects, it is ensured that the students socialize, specialize in the fields they are interested in, and exhibit their hobbies. Student clubs are managed transparently with a directive published by ITU.

Moreover, ITU Çekirdek Incubation Center, an entrepreneurship platform created for initiatives that have technological and innovative business ideas and think that their ideas can be turned into innovative and commercial activities, supports its students.

ITU WANTS TO COOPERATE WITH ALL STAKEHOLDERS INSIDE AND OUTSIDE OF ITU, WHICH INTERSECTS WITH THE PRIORITIES STATED IN ITS MISSION AND CORE TERMS OF REFERENCE

ITU supports local stakeholders to produce technological knowledge, to develop innovation in products and production methods, to increase product quality or standard, to increase productivity, to reduce production costs, to commercialize technological information. At the same time, ITU ensures the

specialization of employees and students with the certificate programs organized for the needs of the sector with Continuing Education Application and Research Center

ITU has established an entrepreneurship platform called ITU Çekirdek Incubation Center for startups with technological and innovative business ideas, who think that their ideas can be turned into innovative and commercial activities. ITU Çekirdek is a wide entrepreneurship platform that brings its more than 40 stakeholders together with entrepreneurs, companies, angel investors, and professionals.

GOAL 17: STRENGTHEN THE MEANS OF IMPLEMENTATION AND REVITALIZE THE GLOBAL PARTNERSHIP FOR SUSTAINABLE DEVELOPMENT FINANCE

Reinforcing worldwide organizations and upgrading the methods for executing the Goals have stayed a test attributable to scant money-related assets, exchange pressures, innovative snags, and an absence of pandemic is adding difficulties to the usage of the Goals. As COVID-19 keeps on spreading, worldwide finance and business sectors have encountered extraordinary misfortunes and extreme unpredictability.

The accompanying exploration ventures have been explicitly adjusted to Sustainable Development Goal 17 and expect to fortify the methods for usage and revive the Global Partnership for Sustainable Development Finance. These tasks and activities are instances of the University's commitment to the SDGs.

In 2020, ITU Academicians took part in the preparation of the New European Wind Atlas, in a team of 30 partners from 8 countries, targeting mainly the SDG 4. In Cityair Project, ITU professors have been instrumental in reaching the targets SDG 3.9.1, 7.1.2, and 11.6.2 in collaboration with a broad network of International experts. Our institute's membership to UN SDSN also continued, which provide a resource and collaboration platform for sustainability.

Our university is one of the 9 partners of the international academic alliance **EELISA** (2020 - Ongoing), from 6 European countries. EELISA aims to redefine the "European engineer", considering the challenges based on real-life problems and SDGs. ITU conducted the EELISA studies in 2020, taking part in many workpackages, both as contributer and director.

ITU partnering with the Habitat Foundation in the My Sister Project, provided training programs to the women in Turkey in more than 40 cities, within 2017-2020. In addition, ITU continued its collaboration with Turkish Technology Team Foundation, based on the protocol signed between two, to promote science and technology with a special focus on educating graduate and undergraduate students to take part in projects involving advanced technologies. The cooperation is publicly announced on Teknofest's website.

ITU student clubs collaborating with the social responsibility project Tears of Water (Suyun Gözyaşları in Turkish) continued giving free seminars and workshops open to the public, in order to increase the consciousness of primary school students in water use. Water-saving practices and efficent communication with the target audience of the projects were the main concerns in these seminars.

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THE CONTRIBUTORS ARE GIVEN IN ALPHABETICAL ORDER:

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