

2020–2021

KTU CORPORATE SOCIAL RESPONSIBILITY REPORT

The years 2020-2021 were a time of challenges and trials for Kaunas University of Technology (hereinafter – KTU, the University), as well as for the whole world. Despite the unexpected events in the external environment, the University community has not only successfully mobilised and continued the ongoing activities, but also implemented many new ideas.

KTU is the University operating sustainably and responsibly, consistently integrating the 17 United Nations (UN) Sustainable Development Goals (SDGs) in its activities, educating responsible future leaders and specialists in their field, and striving for the harmony of people, the environment, and the long-term prosperity.

To present the University's achievements and assess its social responsibility activities, we present KTU Corporate Social Responsibility Report 2020-2021, which is presented in accordance with the UN Global Compact Guiding Principles.

The specific achievements of the University over the last two years are presented in a comparative analysis approach, combining three indicators: the UN Global Compact, the UN 17 Global Sustainable Development Goals and the Global Reporting Initiatives.

For the preparation of KTU Corporate Social Responsibility Report 2020-2021, the indicator system is divided into the following main parts: cooperation with stakeholders, economic responsibility, social responsibility, environmental responsibility, and integration of sustainable development principles into KTU study programmes.

The system of indicators developed in KTU Corporate Social Responsibility Report allows assessing the progress and situation of the University's sustainable development monitoring and the application of sustainable development principles.

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One of the main criteria for the sustainable development of the University is continuous cooperation with local and international higher education institutions, various enterprises, organisations and public bodies.

The University's continuous cooperation with various external enterprises reduces the gap between research and other activities. Contracts with businesses, organisations, public and private institutions demonstrate successful integration of science in business and business in science. The mutual benefits of cooperation between the business community and the University are evident: enterprises and organisations receive the most appropriate research-based solution, while the University has the opportunity to apply theoretical knowledge in practice.

In 2020-2021, KTU had 65 cooperation agreements with other Lithuanian and foreign universities in force from previous years: 26 in 2020 and 39 in 2021. KTU signed 18 new cooperation agreements with other Lithuanian and foreign universities in 2020-2021: 5 in 2020 and 13 in 2021.

In 2020-2021, the University had 175 valid cooperation agreements with enterprises, public institutions, associations and organisations in force from previous years: 82 in 2020 and 93 in 2021. In 2020-2021, KTU signed 101 new cooperation agreements with enterprises, public bodies, associations and organisations: 50 in 2020 and 51 in 2021.

During the analysed period, the University's cooperation indicators decreased compared to previous years (in 2018-2019, KTU signed 288 cooperation agree-

ments: 137 in 2018 and 151 in 2019; in 2018-2019, the cooperation continued with organisations with which agreements had been signed earlier: in 2018 there were 277 such agreements, in 2019-327). The pandemic affecting the world and various severe restrictions imposed on institutions and organisations, including educational institutions, may have had the greatest impact on the drop in indicators. It was also unclear how long the quarantine would last, so many activities were slowed down or stopped.

In 2020-2021, KTU had 22 agreements signed with spin-offs and 5 agreements with start-ups.

In 2021, 7 new companies were established in the academic incubator KTU Startup Space in the fields of e-commerce, financial technologies, design, advanced medical technologies, energy and renewable energy sources.

By participating in joint projects, the countries not only solve local and global problems, initiate various joint projects, but also strengthen cooperation between them, which enables them to achieve their goals and even better results.

The University also cooperates with Lithuanian schools. By 1 January 2022, 91 university cooperation agreements had been signed with schools. Compared to previous years, the number of these agreements is increasing (compared to 1 agreement in 2019, 2 in 2020 and 4 in 2021).

KTU is responsibly sorting recyclables and waste and developing a modern, universal waste separation and recycling system. In 2020-2021, KTU signed a cooperation agreement with the waste management company "Kauno Švara" for the disposal of household waste, paper, glass and bulky waste.

01

Cooperation with stakeholders

The University's economic responsibility reflects the relationship between KTU's income, expenditure and created value in the context of sustainable development.

Financing

Each year, the University submits an activity report reflecting the economic dimension. KTU's financing is divided into the following categories: allocations from Kaunas City Municipality and the State, funding from European Union funds, foreign countries and international organisations.

According to the data for 2020, KTU's financing income amounted to 57 588 042 EUR and 60 226 818 EUR in 2021. The largest amount of financing for KTU in the analysed period was received from the state budget: 41 274 520 EUR in 2020 and 42 199 626 EUR in 2021. A significant part of financing was received from European Union funds and international organisations: in 2020 - 16 176 675 EUR, in 2021 - 17 715 168 EUR.

Compared to previous years, there is an increase in the indicators (in comparison, in 2018, KTU's financing income was 53 323 868 EUR, and in 2019 - 54 619 930 EUR. The largest amount of financing is allocated from the state budget: 37 937 490 EUR in 2018 and 40 796 021 EUR in 2019. The share of financing from European Union funds and international organisations was the following: 14 356 468 EUR in 2018 and 13 687 641 EUR in 2019).

One of the key indicators referred to in the UN Global Compact Guidelines (indicators LA.3 b, c, d, e), the UN SDG target 8 ("Decent work and economic growth") and GRI indicator 201-1 ("Created and distributed economic value") is staff salaries. Based on the data provided, the salaries of all KTU employees have increased in both 2020 and 2021 compared to 2019.

KTU encourages the students to be proactive and socially engaged during their studies. Students who have very good and excellent academic achievements and are socially active can apply for scholarships. The procedure for applying for the Talent Scholarship depends on the grade point average of the last semester, and additional points are awarded based on the importance of the activity. Additional activities include participation in scientific conferences, writing scientific papers, promoting the University at social events, etc. The University announces the competitions for Patrons' Scholarships and Alumni Scholarships twice per year.

The established scholarship awarding procedure encourages KTU students to focus not only on academic achievements, but also on more active cooperation with local and international communities.

In 2020-2021, the University had 15 714 full-time students: 8 060 in 2020 (5 158 men and 2 909 women) and 7 654 in 2021 (4 942 men and 2 712 women). Compared to previous years, there has been a decrease in the number of students (compared to 8 442 students in 2019: 5 478 men and 2 964 women).

Scholarships were awarded to 2 498 students in 2020 and 2 650 students in 2021. The total amount



of scholarships awarded to KTU students in 2020-2021 was 7 372 443,87 EUR. In 2020 this sum was 3 563 662,89 EUR and in 2021 – 3 808 780,98 EUR. The figures in the report include students in the first and second cycle and full-time studies who received: the University's Talent, Freshman Talent, GIFTed, one-off (incentive, social, targeted) and mobility scholarships. The number of the students of the third cycle studies who received support for studies (doctoral student's scholarship) is also included.

In 2021, there was an increase in the scholarships which depend on the BSB (basic social benefit). The change between 2020 and 2021 is 2 EUR. In terms of percentage, the one-off social, targeted, incentive scholarships increased by 5%.

When analysing the economic responsibility of KTU, it is important to consider the indirect economic impact at the national and international levels. To reduce economic and social exclusion, the University provides financial support to disadvantaged and disabled students.

According to the data provided, the total number of disadvantaged students at the University in 2020-2021 was 457: 232 in 2020 and 225 in 2021.

The state budget allocations for scholarships amounted to 3 109 thousand EUR in 2020 and 3 146 thousand EUR in 2021.

The total number of students in (first and second cycle) state-funded studies in 2020 was 5 998 (bachelor's studies: 4 348, master's studies: 1 596, integrated studies: 38, professional studies 16). In 2021, the total number of students in state-funded studies was 5 839 (bachelor's studies: 4 118, master's studies: 1 675, integrated studies: 30, professional studies: 16). The number of students in the third cycle state-funded studies was 331 in 2020 and 328 in 2021.

The number of physically disabled students receiving financial support remained stable in both 2020 and 2021: 21 students each year. The financial support for physically disabled students amounted to 16.8 thousand EUR in 2020 and 16.3 thousand EUR in 2021.

In 2020, the monthly support from the DAD (Department for the Affairs of the Disabled) for one disabled student was 90.48 EUR, and in 2021 it was 99.15 EUR. Analysis of data from recent years shows a trend of year-on-year increase (in comparison, in 2018 the monthly support from the DAD for one student was 76.46 EUR and in 2019 it was 82.3 EUR per month).

Compared to the previous years (2018-2019), the number of students with disabilities receiving financial support at the University is decreasing (in 2018, 23 students with disabilities were granted scholarships (15 333.46 EUR in total), while in 2019, 26 students were granted such support (18 302.5 EUR in total)).



In 2020 and 2021, KTU has implemented a number of projects in various fields.

Based on the indicators of the three internal systems, it was identified that it is important to assess the number of new job vacancies created and the number of new job positions established – UN Global Compact MA.7, UN MDG 1 (“Reduce poverty”), GRI 203-2 indicators; infrastructure upgrades – UN Global Compact LA, UN SDG 8 (“Decent work and economic growth”), GRI 203-1 indicators; and green procurement – UN Global Compact, UN SDG 12 (“Responsible consumption and production”), GRI 308-1 indicators.

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Projects



When analysing the integration of sustainable development at KTU, it is important to assess how the University contributes to the issue of poverty reduction.

The University creates jobs through recruitment, co-operation with other institutions and implementation of outsourced projects: in 2020, KTU recruited 608 employees, of whom 52 were foreign citizens, while in 2021 the number of recruited employees decreased to 508, of whom 35 were foreign citizens. In comparison, in 2018, KTU recruited 624 employees, 34 of whom were foreign citizens, and 598 in 2019, 52 of whom were foreign citizens.

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Number of new jobs / newly established job positions



The use of energy and natural resources is an important indicator for the University; therefore, KTU chooses renewable energy through the use of SDGs:

- **7 “Affordable and clean energy”;**
- **9 “Industry, innovation and infrastructure”;**
- **12 “Responsible consumption and production”;**
- **13 “Mitigate the effects of climate change”.**

Systematic improvements to infrastructure not only improve the infrastructure itself, but also provide other added value, such as creating additional job vacancies, attracting investment, and supporting local businesses at the city or national level. In line with the University's objectives to improve the sustainability of its existing infrastructure, it is also improving indicators directly related to the environment.

KTU aims to ensure that its infrastructure projects are focused on reducing environmental impact and making the most efficient and widest use of renewable resources. In 2020-2021, the following projects with a direct impact on energy efficiency have been implemented:

In 2019, a hybrid energy generation system was developed in the buildings located at Studentų St. 48 and Studentų St. 48 A (KTU Faculty of Civil Engineering and Architecture), combining technical equipment generating and storing different types of energy, such as a solar power plant (380 kW), a 500 m³ thermal



energy storage unit, a 170 kW heat pump, and a waste heat energy collection system. The energy generation system allows reducing CO2 emissions by 318 tonnes per year. The data of this system are used in the study programmes of the Faculty of Electrical and Electronics Engineering, and in 2020 this unique project won global recognition at the Energy Globe Awards. Two and a half thousand innovative ideas from more than 180 countries around the world competed for this recognition. The total investment is 1 million EUR.

In 2021, solar photovoltaic power plants were installed on the roofs of four buildings on the KTU student campus: Studentų St. 50 (Building XI of the Faculty of Mathematics and Natural Sciences at Kaunas University of Technology), Studentų St. 67 (KTU Startup Space), Studentų St. 69, and Studentų St. 71 (KTU dormitory). The total capacity of the solar PV power plants for all buildings will be more than 465 kW. It is expected to generate 432 000 kWh of electricity per year. The installation of solar PV power plants on the roofs of the buildings will reduce CO2 emissions by 305 tonnes per year. The total investment is 420 000 EUR.

In 2022, solar photovoltaic power plants are planned to be installed on the roofs of four more buildings on KTU student campus: Radvilėnų Rd. 19 (Faculty of Chemical Technology), Studentų St. 54 (Publishing House "Technologija"), Studentų St. 56 (Faculty of Mechanical Engineering and Design) and K. Baršausko St. 59 (KTU "Santaka" Valley) and one additional solar power plant

will be purchased from the country's existing power plant parks (1.2 thousand kW). The total capacity of the solar PV power plants on all the buildings will be more than 1.5 thousand kW. It is expected to generate 1.46 million kWh of electricity per year.

The installation of solar PV power plants on the roofs of buildings and the purchase of a solar PV power plant from solar farms will result in a reduction of 315 tonnes of CO2 per year. The total investment is 1.7 million EUR.

1	In 2023, the University will self-generate at least 30% of its electricity consumption (2.3 thousand kW).
2	CO2 emissions will be reduced by 938 tonnes per year.
3	Investments in alternative energy sources will amount to 3.12 million EUR ^{2023 m.}

Equally important for the University is the development of sustainable mobility. In 2020-2021, 20 new bicycle stands were installed at KTU, the plans are being developed for the installation of charging stations for electric vehicles, and other perspectives for the development of sustainable mobility on campus are being discussed and planned.

The Environmental Protection Agency (EPA) explains green procurement as “[...] a public procurement where the contracting authority includes at least minimum environmental criteria in the terms and conditions of the public procurement contract, selecting goods, services and works (hereinafter – product) based on their price and quality, as well as the reduction of their environmental impact at one, several or all stages of the product's lifecycle, thus encouraging the development of as many environmentally-friendly products as possible”.

KTU also carries out green procurement based not only on financial advantage (the lowest bidder wins the tender), but also on the environmental aspect – the University contributes to increasing the procurement of sustainable and environmentally-friendly services and/or goods, thus encouraging businesses to search for new, more environmentally-friendly solutions.

In 2020-2021, KTU made green procurements for 1 488 501.22 EUR in total. The purchases included stationery, office paper and solar power generation equipment.

The indicators in the area of social responsibility show the principles used by the University in the recruitment of employees, how it cares for KTU community as a whole and ensures safe working conditions and environment. Social responsibility includes the issues of (non)discrimination, creation of work atmosphere, student employment, academic integrity.

KTU strives to implement the principle of gender equality at the University and employ both men and women in various positions. In 2020, the University had a total of 2 051 employees (1 083 women and 968 men). Women accounted for 53% and men for 47% of the total KTU workforce. In 2021, the University had 1 994 employees (1 062 women and 932 men). Women accounted for 53% and men for 47% of the total number of KTU employees. It can be concluded that there is an almost equal gender distribution of male and female KTU employees. In comparison, in 2018, the University had 2 112 employees (1 152 women and 960 men): women accounted for 54.55% and men

for 45.45% of the total number of KTU employees, compared to 2 072 employees (1 107 women and 965 men) in 2019. Thus, the numbers of KTU employees were also very similar in terms of gender distribution in 2018-2019.

The gender distribution of KTU management positions is more or less even. In 2020-2021, the distribution of men and women in the following positions remained the same: deans (4 women, 5 men), vice-deans (12 women, 6 men), heads of institutes (2 women, 6 men).

A more significant change in gender distribution in 2020-2021 was for the heads of departments, research groups, academic departments, laboratories and other departments: in 2020 (112 women, 116 men), in 2021 (133 women, 90 men). There have also been changes in the positions of the heads of research groups: 2020 (10 women, 11 men), 2021 (9 women, 8 men).

Although the gender distribution in management positions is similar, there are more men working in management positions at KTU, and over the analysed period there is a noticeable trend for the number of women in these positions to decrease slightly.

The University has carried out an analysis of gender distribution in study fields and academic career stages to raise public awareness of prevailing stereotypes and gender imbalances when choosing a study field.



As a member of the Conference of European Schools for Advanced Engineering Education and Research (hereinafter – CESAER), KTU adopted the Declaration on Equality, Diversity and Inclusion at Universities of Science and Technology. In October 2020, CESAER established an Equality, Diversity and Inclusion Working Group, of which KTU is also a member.

According to the data provided, the number of staff has slightly decreased between 2020 and 2021, but the distribution of staff by age group has remained fairly similar. According to the data for 2021, the University employed 1 053 women and 907 men. The average age of women is 43.9 years and that of men is 45.5. The largest number of employees fell into the 35-45 age category, while the smallest number fell into the over-65 category.

The UN Global Compact LA.5 d, SDG 5 (“Gender equality”), GRI 405-1 indicators define that discrimination based on gender, age or any other type of discrimination is not tolerated. These principles are also very important for KTU, which is why since 2018 the University has implemented an Equality and Diversity Policy (gender equality, diversity, discrimination, harassment). The aim is to ensure that all employees, students and applicants to the University are treated equally regardless of their gender, sexual orientation, disability, age, race, ethnicity, nationality, religion, belief, language, origin, social status, beliefs or opinions, citizenship, marital status, intention to have a child (children) and that the principle of equal opportunities and diversity is applied in all areas related to the functions of the University.

Since 2018, KTU Equal Opportunities Commission has been operating at the University, which is guided by the Guidelines for Equal Opportunities and Diversity Policy and its Implementation. KTU creates an open environment where the individual differences, qualities, potential and contributions of all its employees and students are recognised and valued.

The tasks of the Equal Opportunities Commission are: to provide advice to managers, employees and students on the issues of equal opportunities; to prevent violations of equal opportunities; to investigate reports (complaints) from KTU employees and students regarding the violations of equal opportunities or harassment; to coordinate the implementation of the Equal Opportunities and Diversity Policy at the University. The University provides opportunities for all members of the community (students and employees) to immediately report incidents of inappropriate behaviour, discrimination, corruption and academic dishonesty if they encounter or observe them in the University's environment.

To uphold and ensure the enforcement of fundamental human rights enshrined in the Constitution of the Republic of Lithuania and the Charter of Fundamental Rights of the EU, every employee and student at KTU has the right to work and study in an environment that promotes respect for the dignity of each individual.



KTU employees receive annual occupational safety training. Every newly hired employee of KTU is introduced to the basic principles of safe work on the very first day of work.

The University does not keep accident statistics, which are collected by the State Social Insurance Fund Board under the Ministry of Social Security and Labour ("Sodra").

Since 2016, KTU has had a psychology office open to the entire University community. The number of applicants for psychological consultation has been increasing every year.

This increase is due to both the growing trust in specialists and the growing awareness of the public as well as the University community, that psychological help and treatment are as important as the treatment of physical illness. However, the most important reason for the significant increase in the number of persons seeking psychological counselling is the unexpected pandemic, which has lasted for quite a long time and created a lot of uncertainty, thus posing a major challenge to societal well-being around the world.

During the pandemic, the need for psychological services increased for both students and staff at the University, and the University's psychologists provided remote counselling to them. To ensure the

emotional well-being of the entire community, the University adapted to the needs of staff and students and increased the amount of counselling provided by psychologists, with two psychologists providing counselling at the University during the pandemic.

The total number of psychological counselling sessions provided in 2020-2021 is 735, including students and staff. In 2021, 254 students sought initial psychological counselling. The demand for psychologists has almost tripled compared to the previous year (70 initial psychological consultations were provided in 2019, of which 7 for staff and the remaining for students, for a total of 268 consultations, including students and staff).

The most frequent reason for contacting psychologists at KTU was to seek answers on how to manage stress and anxiety in the event of a change in certain life circumstances. Psychologists also received requests for individual training or seminars on topics such as conflict management or suicide prevention.



KTU continues to consistently improve its infrastructure and make it more accessible to the community members with disabilities.

In 2020-2021, elements of the infrastructure for people with disabilities have been upgraded in some buildings (changed signage, tactile paving strips on the stairs, a repaired ramp at KTU Building IV (Radvilėnų Rd. 19) and a repaired lift at KTU Central Building (K. Donelaičio St. 73).

In 2020-2021, a new wheelchair lift was installed (Radvilėnų Rd. 19).

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Improving infrastructure for people with disabilities

KTU encourages its community members to take an interest not only in academic activities; it also offers various extracurricular activities allowing them to develop their creative side, relax, develop academic and social skills and take care of their emotional and physical health. The University offers sports activities, folk art societies, students' association and other activities.

Numerous research and studies have proven that in today's world, the level of stress experienced by students is constantly increasing: the rising quality of studies is leading to higher expectations of student performance, while the highly dynamic changes in the environment are leading to an increase in student busyness and the need to combine studies with work.

One of the SDGs – good health and well-being – describes the need for an organisation to care for the well-being of its community. To achieve this goal, the University has placed particular emphasis on promoting healthy lifestyles in the community. In addition to the many activities organised, including a hiking club, a summer sports festival and others, in 2017 the University opened a sports club where students, staff and their families can find activities based on their favourite sports and attend them free of charge.

KTU has the ACTIVATed Gym where students and staff are welcome to visit and keep fit. The Sports and Wellness Centre offers 7 different classes (Pilates, body design, Callanetics, TRX straps, Tabata, strength training, exercises with balls) for the University community. These sessions can be attended several times a week.

In 2020-2021, 1 877 students (413 women and 1 464 men) and 225 employees (127 women and 98 men) attended KTU sports club. It is observed that among students, men are more likely to use the sports club, while among employees, women are more likely to use it.

In 2020-2021, the Sports and Wellness Centre organised 12 sport events for the University community. There were also 2 mass events: a running event “Come and Conquer” and an open football tournament to celebrate the “German Day in Kaunas”.

Compared to the previous years, the University managed to organise far fewer sport events (50 different sport events were organised in 2018-2019), but the most significant influence on this change was the pandemic and the severe restrictions imposed on events both indoors and outdoors.

KTU aims to ensure transparency of its activities. The academic integrity programme encourages students to perform their work honestly and respect the work of other students.

Academic integrity at the University is regulated by the Code of Academic Ethics, compliance with which is one of the student's obligations specified in his/her learning agreement. At the beginning of their studies, students sign the Academic Integrity Declaration and commit themselves to academic discipline and perform their tasks independently and honestly while preparing written works, taking part in assessments, project activities and implementing research.

The Guidelines for Detecting Plagiarism in Students' Written Works were approved by the order of the University's rector in 2018. These guidelines help to apply uniform standards of plagiarism detection at all KTU faculties.

In 2020-2021, the University had 15 715 students: in 2020 – 8 060 students (5 158 men and 2 902 women), in 2021 – 7 654 students (4 942 men and 2 712 women). Compared to 2019, with 8 442 students (5 478 men and 2 964 women), there is a slight decrease in students.

KTU aims to ensure not only the quality of students' works, but also the transparency of the work preparation process, therefore the University has modernised the process of checking and assessing the students' written works: the Turnitin system for assessing students' written works has been integrated into the virtual learning environment Moodle. The aim is to reduce the number of cases of plagiarism at the University and prevent possible attempts to submit written works that do not comply with the University's principles of academic integrity.

The University has the Board of Academic Misconduct including one student representative. The Board examines the cases of academic dishonesty among

students recorded during intermediate and final assessments.

In 2020-2021, 21 penalties were imposed on students for academic dishonesty (e.g. cheating, plagiarism, fraud, etc.) during the assessments: 19 students were issued a dean's decree on the imposition of a penalty, 2 students were issued a rector's order on the termination of their studies for violation of the University's Regulations.

To ensure the standard of the written works of the University's students and the prevention of plagiarism, the University's students and unclassified students are obligated to prepare their written works in accordance with the formal requirements of the methodological tool "Methodological Guidelines for the Preparation of Written Works" issued by the University in 2019.

Since 2018, the University has had a system "Report", where KTU community (students and lecturers) has the opportunity to report cases of discrimination, misconduct, corruption and academic dishonesty that they encounter or observe in the University's environment. All cases, according to their nature, are analysed by KTU Equal Opportunities Commission (see page 6, section "Social Responsibility"), the Board of Academic Ethics or the Department of Student Affairs. The information provided in the system is considered confidential and cannot be disclosed to persons who are not involved in the alleged violation or its content (unless the person reporting has already made the information public).

In 2020-2021, 42 reports were received through the system "Report", none of which related to possible cases of academic dishonesty.

The University also has the Assessment Monitoring Group, whose function is to monitor final assessments aiming to ensure compliance with the University's assessment conditions. The Assessment Monitoring Groups also visit examinations to prevent academic dishonesty. There are 4-9 Assessment Monitoring Groups at KTU in total (different groups are approved each semester and the total number of groups varies).

The University aims to increasingly reduce the use of natural resources, thereby increasing energy efficiency and the use of renewable energy sources. This reduces the release of substances causing climate change and promotes waste separation.

KTU aims to contribute to the achievement of Sustainable Development Goals, reduce greenhouse gas emissions and water consumption, promote more efficient use of electricity and thermal energy, and establish a culture of waste sorting and reduction. The University encourages its community to join the environmental initiatives of KTU, Kaunas City and the whole Lithuania.

Waste sorting is one of the main activities carried out at KTU aiming to reduce the negative impact of waste generation. Reviewing the data for 2020-2021 and 2018-2019, it is observed that waste is being sorted responsibly at the University, although the amount of waste has slightly increased year by year (except for the pandemic period). The University is also responsible for the sorting of hazardous waste electrical and electronic equipment and batteries.

Both the above-mentioned ones and the projects to ensure sustainable infrastructure development discussed in the previous chapters of the report also underpin the University's focus on the impact of climate change (SDG 13 "Mitigate the effects of climate change") and the importance of the use of natural resources in everyday life (SDG 6 "Clean water and hygiene"). The green energy produced at KTU (related projects are discussed further in the section "Infrastructure/energy-efficiency") contributes significantly to reducing negative environmental impacts.

The quality, efficiency and effectiveness of KTU's activities are inseparable from responsible and environmentally friendly behaviour, therefore, the University integrates the principles of quality and sustainable development (SDG 16 "Peace and justice, strong institutions") and develops a culture promoting quality, social responsibility and ecology (SDG 15 "Life on Earth").

The 2021-2025 Strategy of Kaunas University of Technology, approved and launched in 2021, emphasises the strengthening of the University's responsibility to society and the country by consolidating the University's activities to improve the quality of human life and accelerate the development of statehood (SDT 11 "Sustainable cities and communities").

Every year, the members of the University community are increasingly encouraged to separate their secondary raw material waste.

A successful waste sorting system is in place throughout the University, with bins in buildings for paper, plastic and mixture of wastes. In 2020-2021, there were 8 plastic, 26 paper, 8 glass, 24 batteries and 2 bulky waste sorting bins on the territory of KTU and in the departments of the University. Compared to previous years, the number of almost all containers at the University has increased: (2018-2019: 19 for paper, 7 for glass, 20 for batteries). Only the number of plastic containers has decreased at the University, as there is reduced demand for them. There is also no longer a container for the collection of electrical and electronic equipment. This waste is collected centrally at the University and taken away for recycling. In 2020-2021, KTU has signed a contract with UAB Kauno Švara for the disposal of household waste, paper, glass and bulky waste.

According to the data obtained, KTU community is successfully sorting secondary raw materials waste. The decrease in the amount of waste sorted during the analysed period can be related to the pandemic when work was carried out remotely. In 2020-2021, ~24 t of plastic waste was collected (compared to the same amount in 2019), 39 t of paper (compared to 96 t in 2019), 1.5 t of glass (compared to 7 t in 2019), 0.6 t of electrical and electronic equipment (compared to 3 t in 2019), 0.2 t of batteries (compared to 0.0025 t in 2019), 158 t of bulky waste (compared to 927 cubic metres in 2019).

The above data reflects KTU's consistent contribution to reducing negative environmental impacts. The University also promotes various smaller initiatives encouraging the use of recycled materials in everyday activities, for example, students at the Institute of Environmental Engineering print their final theses on recycled paper, without using plastic and metal staples.



KTU has been successfully implementing projects that aim to reduce the negative environmental impact.

In 2020-2021, the University has been implementing energy-efficiency projects and joining projects implemented by other organisations.

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Climate change. Projects



The University has two charging stations for electric vehicles.

They consumed 10 330 kWh of energy in 2020 and 7 121 kWh in 2021. The amount of electricity consumed each year for charging electric vehicles varies in different charging stations on KTU campus. In comparison, the amount of electricity used to charge electric vehicles in 2018-2019 was 10 MWh of electricity. All the energy used for charging was obtained from Kaunas City grid, which states that all energy is currently generated from biofuels.

Sustainable development topics are included in all first cycle study programmes and are usually covered more extensively in at least 3-4 different study modules.

For example, the study modules of the bachelor's study programme Industrial Biotechnology that cover sustainable development topics are Introduction to Biotechnology, Sustainable Development, Surface and Colloid Chemistry, Engineering Economics, and Bioproducts.

Sustainable development topics are covered in the majority of the master's study programmes (65%) and

are often studied in at least 2 modules. For example, the study modules in the master's study programme Economics that cover sustainable development topics are Macroeconomic Policy, Quality and Sustainability Management.

KTU School of Economics and Business participates in the United Nations-sponsored initiative Principles for Responsible Management Education (PRME).

Graduates of the master's study programme Sustainable Management and Production acquire interdisciplinary competencies relevant for analysing sustainability challenges in business, industry and the region, and designing and integrating economically viable and environmentally and socially beneficial innovations, managing sustainability risks and identifying innovative opportunities for activities.

Integrating sustainable development principles into study programmes provided at KTU

In 2020-2021, 1 918 study modules were taught at KTU: 1 069 bachelor's, 783 master's, 58 doctoral, and 8 professional studies modules. The numbers have decreased compared to previous years (in comparison, in 2018-2019, a total of 2 187 study modules were taught at KTU: 1 304 bachelor's, 795 master's, 59 doctoral and 29 professional studies modules).

In 2020-2021, the University provided the same number of study programmes – 128. It is a slightly lower number compared to previous years (in comparison, in 2019 there were 133 programmes, and in 2018 – 140 study programmes). In 2020, the following number of study programmes were provided: first cycle studies – 53, second cycle studies – 54, third cycle studies – 19 study programmes, and 66 study programmes were taught in the English language. In 2021, the following number of study programmes were provided: first cycle studies – 51 second cycle studies – 56, third cycle studies – 19 study programmes, and 68 study programmes were taught in the English language (in comparison, in 2019 were the 55 study programmes of the first cycle studies, 57 of the second cycle studies, 19 of the third cycle studies and 62 study programmes were taught in the English language).

The University has been experiencing a trend of gradually decreasing student numbers for several consecutive years, with a 29.37% decrease in the last four years (2018 to 2021 inclusive). In 2020, there were 8 060 students, in 2021 there were 7 654 students.

The demographic change in the Lithuanian population, the decline in enrolment in higher education institutions and increased emigration are likely to have an impact on the decline in the number of students. According to data provided by the Lithuanian Association of Higher Education Institutions for General Admission (LAMA BPO), the number of applicants to all higher education institutions in the country decreased proportionally in 2020-2021.

In 2021, 26 442 maturity certificate holders applied to LAMA BPO for general admission to higher education institutions and registered at least one preference (30 282 in 2020). The minimum indicators set by the Minister of Education, Science and Sport and the minimum admission competition score for state-funded places or scholarships were met by 15 934 persons according to their submitted preferences (16 868 in 2020). 18 769 applicants passed the two-stage competitions and signed learning agreements with higher education institutions (20 269 in 2020). The number of applicants and admitted students in 2020 increased compared to 2019.

The number of students at the University is not only relevant for the trend of change, but also for the monitoring of gender equality issues. According to the data from recent years, the number of male students at KTU has remained similar and has been increasing, while the number of female students has been declining proportionally.

In 2020, female students accounted for 35.57% of the total number of students at KTU, while male students accounted for 64.43%. In 2021, female students accounted for 34.89% and male students for 65.11% of the total number of KTU students (in comparison, in 2018, female students accounted for 35.2% and male students for 64.8%, while the trend in 2019 remained



similar, with female students accounting for 35.1% of the total number of students at KTU and male students for 64.9%).

Looking at the data for the last few years, the percentage of men studying at KTU is increasing compared to the number of women. This may be related to the fact that KTU is a technological university, where male students prefer to study engineering.

While continuously improving the quality of studies, KTU not only focuses on the development of technology and natural sciences, thus responding to the needs of the markets that are experiencing very rapid technological development, but also seeks to break down the stereotypes in society that studies in these fields of science are more suitable for men.

The University organises various campaigns to send a clear message that career choice and academic achievements should not be identified with gender. One of the successful examples of such a campaign is an exhibition initiated and prepared by KTU and published in 2021 in one of the central streets of Kaunas, which revealed success stories of women studying and working in the fields of technology, engineering and innovation, and thus encouraged more girls to choose these study fields.

It is noted that the number of permanent international students at KTU has been increasing in recent years: in 2019 there were 534 such students, in 2020 – 535, in 2021 – 574.

KTU students were willing to use the opportunity to study abroad under the Erasmus+ programme and KTU bilateral agreements with foreign higher education institutions. In the last few years, the University has seen a decrease in the number of students going to study under exchange programmes (211 in 2019 (118 men and 93 women), 117 in 2020 (63 men and 54 women) and 75 in 2021 (44 men and 31 women). The reduction in the number of trips was undoubtedly influenced by the travel restrictions applied and the introduction of distance lectures during the pandemic. Compared to previous years, there has been a significant decrease in the number of exchange students (434 in 2018 and 404 in 2019).

The number of exchange students coming to KTU increased in the analysed years: in 2020 there were 233 such students (146 men and 87 women) and in 2021 – 317 (198 men and 119 women). Compared to 2019, the number of international exchange students was not as high: 369 (231 men and 138 women).

The University provides educational activities, initiates projects and integrates sustainable development principles into various activities of the University.

The aim is to ensure that new knowledge and technologies serve the well-being of people as well as the environment. The culture of sustainable development and responsibility in the University community is being purposefully cultivated, contributing to the sustainability of KTU and its responsibility to the environment, society and the region.

Research integrates Sustainable Development Goals; therefore, the results of such research directly contribute to the sustainability of the region and KTU. Each faculty of KTU carries out research related to the SDGs.

- Faculty of Chemical Technology (research on environmental impact reduction and sustainable engineering, etc.): fct.ktu.edu/research.
- Faculty of Civil Engineering and Architecture (research and innovation contributing to the achieve-

ment of national and regional environmental sustainability goals through research and consultancy activities, training of highly qualified architects and civil engineers): fcea.ktu.edu/research.

- Faculty of Electrical and Electronics Engineering (research and successful collaboration with local and international businesses in the development of innovative and universal solutions, relevant research and identification of ideas for improvement): feee.ktu.edu/research.
- Faculty of Informatics (sustainable education of society through the creation and transfer of knowledge and innovative technologies for the sustainable development of the state and the development of innovation, responsible approach to an innovative and technology-rich future): fi.ktu.edu/research.
- Faculty of Social Sciences, Arts and Humanities (civil society, sustainable development, etc.): fssah.ktu.edu/research.
- Faculty of Mathematics and Natural Sciences (sustainable development technologies and energy, sustainable socio-cultural development, etc.): fmns.ktu.edu.
- Faculty of Mechanical Engineering and Design (sustainable mobility transport systems, development



of systems and sports equipment for the disabled, etc.): fmed.ktu.edu/research.

- Panevėžys Faculty of Technologies and Business (sustainable development and energy technologies: traffic safety, transport logistics and environmental protection; sustainable growth and sustainable socio-cultural development: educational empowerment and employability, organisational processes and management solutions in the context of boosting competitiveness, etc.) pftb.ktu.edu/research.
- School of Economics and Business (future production, smart consumer and responsible society, sustainable economy): seb.ktu.edu/research/#research-areas.

The integration of the Sustainable Development Goals into the study process is one of the University's objectives and an element of the quality of studies. The successful integration of the teaching/learning processes reflecting the Sustainable Development Goals provides the University's students with the knowledge, skills and competencies needed to contribute to a sustainable future.

The following study programmes are most relevant to the implementation of the SDGs:

- The integration of the Sustainable Development Goals into the study process is one of the University's objectives and an element of the quality of studies. The successful integration of the teaching/learning processes reflecting the Sustainable Development Goals provides the University's students with the knowledge, skills and competencies needed to contribute to a sustainable future.
- KTU Faculty of Chemical Technology offers study programmes in the field of the SDGs: Environmental Engineering and Technology (bachelor's degree), Environmental Engineering (master's studies), Environmental Engineering (doctoral studies).
- KTU Faculty of Mechanical Engineering and Design offers the study programme Sustainable Management and Production (master's studies).
- The Faculty of Civil Engineering and Architecture offers the study programme Sustainable and Energy-Efficient Buildings (master's studies).
- KTU, in cooperation with the University of Bologna (Italy), provides and coordinates a double-degree programme of doctoral studies Environmental Engineering.

KTU is a member of the European Consortium of Innovative Universities (ECIU) and together with 12 other partner universities has been developing a model of the university of the future since 2019, inviting students, researchers and social partners from different countries to solve real-world challenges.

This interdisciplinary and flexible education model responds to the needs of students and society. By developing a new model of higher education, the ECIU University is responding to the major challenges faced by the world today.

The implementation of the ECIU University model focuses on the implementation of the United Nations Sustainable Development Goals in the life of cities and communities. Students at the ECIU University are solving real and important societal problems and contributing to the creation of a better world.

The idea of the ECIU University has been developed together with business and public sector organisations, members of society and academia, current and future students and social partners from all over Europe.

In the study module Challenge-Based Innovation Development, students from KTU and other universities solve real-life challenges related to the Sustainable Development Goals. The challenges are offered by Kaunas City Municipality, business and non-governmental organisations.

KTU offers approximately 50 interdisciplinary programmes, which develop speciality-specific as well as general competencies.

To respond to the needs of business, industry and science, KTU is constantly reviewing and expanding the number of interdisciplinary study programmes offered to students. For example, during their studies at KTU, students can choose the MA+ programme, the components of which can focus either on the development of knowledge and skills in a specific field (studies of deeper theoretical and practical knowledge) or the development of knowledge and skills in several related fields (studies of broader theoretical and practical knowledge).

Master's study programmes offer the option of MA+ competencies. Students can choose the Field Expert path to develop their knowledge and skills in their main study field or the Interdisciplinary Expert path to develop their knowledge and skills in a different study field or area. Several of the MA+ competencies offered

to students, such as “Circular Economy” or “Circular Design”, are focused on sustainable development goals.

The students of bachelor's study programmes can choose to study a module Sustainable Development (students choose between two options). This study module aims to help the graduate develop global, critical and reflexive awareness, an understanding of the social, economic, cultural and environmental context in which the graduate will operate, and an ethical stance based on the sustainable development principles.

The students of bachelor's study programmes study the module Product Development Project, which brings together researchers, social partners and interdisciplinary teams of students to work together to solve real-world challenges and create a productive environment for the development of new product ideas relevant to society. Real products and services are developed in this study module. Project themes are formulated according to the University's announced initiative of the year, which reflects the global realities of the SDGs in the European Union, the region, the city and the University.



All KTU departments and the community express an organisational commitment to one or more SDGs.

The UN SDG 4 aims to ensure quality education regardless of nationality, race, gender, or age. The University aims to integrate students from developing countries (for example, through additional scholarships, incentives and invitations to study) into globally important, relevant study and research programmes. It also aims to ensure that by 2030 all students acquire the knowledge and skills necessary to promote sustainable development, including education on sustainable development and sustainable lifestyles, human rights, gender equality, the promotion of peace and a non-violent culture, global citizenship, and the appreciation of cultural diversity and the contribution of cultures to sustainable development.

KTU community is encouraged to carry out sustainable development initiatives and projects in line with the objectives of the SDGs, follow the sustainability guidelines and carry out activities contributing to the implementation of KTU sustainable development principles.

In 2020, the following 106 projects of study activities were carried out with the most relevance to the SDGs, including:

38 international projects, of which 36 under the Erasmus+ programme, 1 under the NORDPLUS programme and 1 under the Swedish Institute programme; 68 national projects, of which 66 under the sub-activity "Development of students' capacities in conducting research during semester" of the European Union Structural Funds measure No 09.3.3-LMT-K-7 12 "Development of scientific competence of scientists,

other researchers, students through practical scientific activities".

In 2020, the implementation of the project "Optimization of study programmes and strengthening of pedagogical competencies of lecturers of physical and technological sciences", financed by the European Social Fund under the 2014-2020 Operational Programme of the European Union Funds Investment Programme Measure No 09.3.1-ESFA-V-738 "Improvement of the network of higher education institutions", continued.

The Erasmus+ (KA2) project "Collaborative platform for teaching innovation in higher education (ColLab)" is being implemented to develop a collaborative platform for higher education teachers.

In 2020, KTU participated in 18 higher education and agent exhibitions, virtual exhibitions (Kazakhstan, Azerbaijan, Ukraine, Georgia, Bulgaria, Greece, Ecuador, Colombia, Mexico, Turkey, virtual exhibitions in the Middle East, South America, Southeast Asia) and webinars in 11 countries.

The University community gladly organises or joins events on sustainability.

Joining the global clean-up campaign “Darom” has become an annual tradition. Also, every year the University organises the event “Earth Day with KTU” with the goal of introducing ecological ideas to students and pupils. Thematic events, public lectures and seminars on renewable energy, climate change and related land conservation initiatives, and other topics are organised periodically.

Two art exhibitions promoting the University, “Behind Every Technology – Creativity” and “Artech”, were organised and presented in 2020. A new KTU image

video “Technology for humans” was also created and presented to the public, as well as an accompanying website based on smart solutions www.enterktu.com. The video has been viewed more than 180 000 times in four months and the website has received more than 30 000 visitors.

KTU has become even more open to the public – all those interested can visit the extended KTU virtual tour and even try their hand at a special virtual tour game.

These events have been organised in response to two of the SDGs: MSDG 16 “Peace and justice, strong institutions”, and SDG 17 “Partnership in achievement of goals”.

In 2020, KTU scientists developed and put into practice a modern renewable energy system.

This unique project won a global award at the Energy Globe Awards. Two thousand and a half innovative ideas from more than 180 countries competed for this recognition. The idea from the KTU Faculty of Electrical and Electronics Engineering (EEF), which won the prestigious environmental award, received solid recognition among the 2 500 projects submitted to the competition.

In 2020, the game “Flight Across the Atlantic”, developed by KTU and Vytautas Magnus War Museum, won the global digital innovation competition the World Summit Awards (WSA). This competition aims to dis-

cover and disseminate the world's best digital innovations that contribute to the United Nations Sustainable Development Goals. This digital solution (“Flight across the Atlantic”) introduces the legendary flight of Steponas Darius and Stasys Girėnas in 1933 in an interactive and contemporary form. The project was selected for the final round of the competition from more than 8 000 nominees from all over the world.

In 2021, a team of KTU doctoral students won the international competition “NDT student challenge”. For this competition, NASA created a numerical model of an additively manufactured jet engine turbine impeller. KTU team, using the CIVA software package, developed and demonstrated the testing methods for the numerical model of a jet engine turbine impeller which allowed to find and identify most of the defects. The specific and comprehensive results presented by KTU team secured their 1st place in the competition.



One of the key Sustainable Development Goals (SDGs) to which the University responds is quality education (SDG 4). While providing studies, conducting research and managing the University's infrastructure, we directly contribute to the fostering of the culture of sustainable development and shape the University's responsible approach to the decisions relevant to society, business, the region and the environment.

Purposefully oriented partnerships (SDG 17 "Partnership in achievement of goals") with business, social and other research and non-governmental organisations have a direct impact on and create value for Kaunas and the Lithuanian region, while international

partnerships lead to the implementation of regional or global challenges.

The University is actively involved in the development of sustainable and smart cities (SDG 11 "Sustainable cities and communities"). In cooperation with the public sector and business, it contributes to the development of smart cities and the creation of more sustainable environments to make the daily lives of people living and businesses established in cities as convenient as possible.

KTU develops resilient infrastructure, promotes inclusive and sustainable industrialisation, and contributes to promoting innovation (SDG 9 "Industry, innovation and infrastructure"). The University ensures sustainable consumption and production models (SDG 12 "Responsible consumption and production") and takes urgent action to combat climate change and its consequences (SDG 13 "Mitigate the impacts of climate change").



The University aims to ensure healthy lives and well-being for all age groups (SDG 3 “Good health and well-being”). It promotes sustainable, inclusive and balanced economic growth, productive employment and decent work (SDG 8 “Decent work and economic growth”). The University's activities aim to ensure gender equality (SDG 5 “Gender equality”).

To demonstrate leadership in higher education and offer students only the highest quality studies, KTU considers academic integrity as one of the key principles in its activities. This principle is upheld by the University aiming to ensure that students engage effectively in the study process, prepare high-quality works, various assessments and examinations are organised fairly and the Board of Academic Ethics is available for applications in the event of ethical issues. KTU students are encouraged to actively participate in the academic integrity campaign – not only KTU employees, but also students can be observers during examinations.

Aiming to be competitive in its own country as well as Europe, KTU pays special attention to the quality of its provided study programmes. During their studies, students are encouraged to engage in various co-operation initiatives with business enterprises, thus promoting the integration of science and business and fostering a culture of cooperation. By cooperating with

companies, students gain the necessary practical experience as well as make useful contacts that may be beneficial in the future.

KTU's study programmes apply the principles of sustainability to encourage students and lecturers to look more closely into the world's social, environmental and economic problems, while interdisciplinary teaching helps to develop socially-minded professionals.

The University community is encouraged to be active in academic as well as project activities. KTU students and lecturers participate in various University's, national and international projects aimed at creating a sustainable University. In addition to the awards won in the competitions, the winners are also recognised by the University community through letters of appreciation and incentive scholarships.

Social responsibility is the most widely analysed component of sustainable development. Of the 17 SDGs, 8 address the University's social responsibility. Ensuring gender equality, monitoring and consistently improving the level of employee satisfaction, integrating physically disabled members of KTU community, fostering emotional well-being, quality student employment, and academic integrity are the key indicators on which the University has particularly focused in recent years.

KTU Corporate Social Responsibility Report 2020–2021

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