LUT University

SUSTAINABILITY
Report 2025

CONTENTS

Rector's foreword 3
Introduction to LUT 4
Sustainable Development Goals 5

RESEARCH IMPACT 7
Scientific publications 8
Highlights of research per SDG in 2025 9

SOCIETAL INTERACTION 13
Highlights of societal interaction per SDG in 2025 15

SUSTAINABILITY IN EDUCATION 16
Highlights of education per SDG in 2025 18

SOCIAL RESPONSIBILITY AND GOVERNANCE 19
Highlights of social responsibility per SDG in 2025 23

ENVIRONMENTAL PERFORMANCE 25
Carbon footprint 26
Biodiversity footprint 28
Consumption and waste management 29

Appendix 1 31
Appendix 2 32

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RECTOR'S FOREWORD

Over the past months and years, we've witnessed profound global changes and growing uncertainty. Scientific freedom, along with the pursuit of truth, is one of the most important pillars of a university. It's what makes our work credible, impactful, and internationally competitive. Free research not only produces new knowledge but also questions and explains phenomena in a way that no single entity or actor can control.

At the same time, we must ensure that our commitment to diversity, equity, and inclusion is more than just policy – it must become daily reality. Although we don't have the power to change others, we can lead by example and show others how to do what's right.

Roughly fifty per cent of our funding comes from sources other than the government. This has provided us with freedom in research and education and will continue to do so. We've introduced a new, growth-oriented strategy for the years 2026–2030. Our campuses in both Lahti and Lappeenranta have seen strong growth in the number of students and staff members. We've continued the strategic development of our research in alignment with the revised strategy and made particular investments in doctoral education.

In line with our System Earth strategy, we at LUT University seek solutions to global sustainability crises and other wicked problems by means of science and research.

Juha-Matti Saksa
Rector

INTRODUCTION TO LUT

LUT University seeks solutions to global issues with its expertise in technology, business, and social sciences. LUT revised its strategy in 2025. The new System Earth 2030 strategy has four focus areas: planetary resources, the energy transition, the digital revolution, and business and society.

Taking environmental, economic, and social responsibility into consideration guides LUT's strategic choices, management and operations. Sustainable development and responsibility are integrated into our educational content and our objectives for research impact.

LUT contributes to the sustainable renewal of business and society in its three schools: LUT Business School, the School of Energy Systems, and the School of Engineering Sciences, which also incorporates social sciences.

FACTS AND FIGURES 2025

1969
was the year LUT was founded

1 368
scientific publications

9 126
bachelor's, master's and doctoral students

87
doctoral degrees

1 178
master's degrees

740
bachelor's degrees

920
students in continuing education

568
students in open university instruction

1 688
staff members

147.0
million euros in funding:
Ministry of Education € 72.7 million, supplementary funding € 74.3 million

103
nationalities on 2 campuses

95%
of master's graduates employed one year after graduation

SUSTAINABLE DEVELOPMENT GOALS

Education and research at LUT promote all the 17 Sustainable Development Goals on the United Nations' 2030 Agenda. Through our strategy and research, we particularly pursue the following seven Sustainable Development Goals.

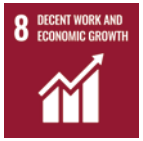
SDG 6 | Ensure availability and sustainable management of water and sanitation for all.

- At LUT, we respect water as a resource to be protected, cleaned, and refined. We recover raw materials from wastewater and create new solutions for water treatment.
- We are a leading community for expert training and research in water treatment and separation technology.
- We monitor our own water consumption and strive to reduce it.

SDG 7 | Ensure access to affordable, reliable, sustainable and modern energy for all.

- We develop clean energy solutions with expertise in technology and economics. We utilise Power-to-X technologies and electrification. We are trailblazers for an economically viable, global, carbon-neutral energy system.
- We consume clean energy and promote the energy efficiency of our facilities with the facility owners. We use certified bio-based district heating on our Lappeenranta campus.
- We produce 4% of the electricity we consume with our own solar panels on the Lappeenranta campus.

SDG 8 | Decent work and economic growth.



- Economically, socially, and ecologically sustainable business is at the core of our scientific expertise. We promote innovative business models and entrepreneurial and network-like solutions.
- We educate future actors and decision-makers who have the capacity to act responsibly in their own field.
- Our community's activities are guided by our code of conduct and our equality and non-discrimination plan.
- Our investment strategy aims for profitable investments, taking responsibility into consideration.

SDG 9 | Build resilient infrastructure, promote inclusive and sustainable industrialisation and foster innovation.

- We promote the sustainability of society through circular economy and sustainable business models, data analytics, digitalisation, electrification, Power-to-X technologies, and the hydrogen economy. We see emissions as raw materials creating new value. Green Campus Open is a unit that supports turning our research into business.

SDG 12 | Ensure sustainable consumption and production patterns.

- We promote the renewal of industrial production through digitalisation, the circular economy, new materials and enhanced processes. Our systemic perspective offers system-level solutions for areas such as waste management, urban planning and production management. We utilise economics and consumer research to develop sustainable business models.
- We consider environmental aspects in our procurements and campus activities.
- We publish an annual sustainability report.

SDG 13 | Take urgent action to combat climate change and its impacts.

- We produce scientific knowledge and sustainable, system-based, technological, and business-related solutions to mitigate climate change.
- In line with worldwide efforts to limit global warming to 1.5°C, we are committed to reducing our greenhouse gas emissions, aiming for net zero by 2050. Our GHG Protocol Scope 1 and 2 emissions are already nearly zero, as 99.8 per cent of our emissions fall under Scope 3. We strive to reduce our emissions according to our Climate Action Plan.
- We calculate and report our carbon footprint annually. In addition, we help other organisations to reduce their carbon footprint, thereby growing our own carbon handprint.

SDG 17 | Strengthen the means of implementation and revitalize the global partnership for sustainable development.

- We are committed to the UN Global Compact initiative. We promote the sustainable development goals through strong cooperation with our partner companies, campus cities, and other stakeholders.
- We operate in several local, national, and international sustainable development networks, including the Greenreality Network, ISCN, and NSCN.
- The services provided by the campus property owners – including building service technology, waste management and maintenance of buildings and outdoor areas – form an essential part of the sustainable development on our campuses.

COMMITMENTS

LUT has been a member of the UN Global Compact since 2021 and reports on related progress in accordance with the requirements for non-business participants. LUT is also committed to the following:

- SDG Accord, universities' collective response to global goals
- Race To Zero, universities' initiative for a zero-carbon world
- UNIFI's theses on sustainable development and responsibility for Finnish universities
- LUT Business School's commitment to the UN's Principles for Responsible Management Education (PRME)

RESEARCH IMPACT

LUT University conducts and publishes high-level research that improves the state of the environment and is relevant to society and industries.

LUT's System Earth 2030 strategy refers to our planet as a complex system of connected parts, each playing a vital role in maintaining balance between humankind and the environment. The strategy also emphasises a collaborative and multidisciplinary approach to research and education.

LUT's environmental handprint refers to the positive impacts that the university's education and research have on society and companies. The new strategy aims for an even greater impact.

In 2025, LUT continued to operate five interdisciplinary research platforms: GREENRENEW, AMBI, INERCOM, MORE SIM, and SCI-MAT. The platforms enable effective interdisciplinary collaboration with partners, companies, and scientific networks.

The number of both doctoral degrees and scientific publications increased notably, and the university was awarded twelve new patents. Collaboration with industries and society deepened – especially in research and development projects with Danfoss, Kempower, and Peab.

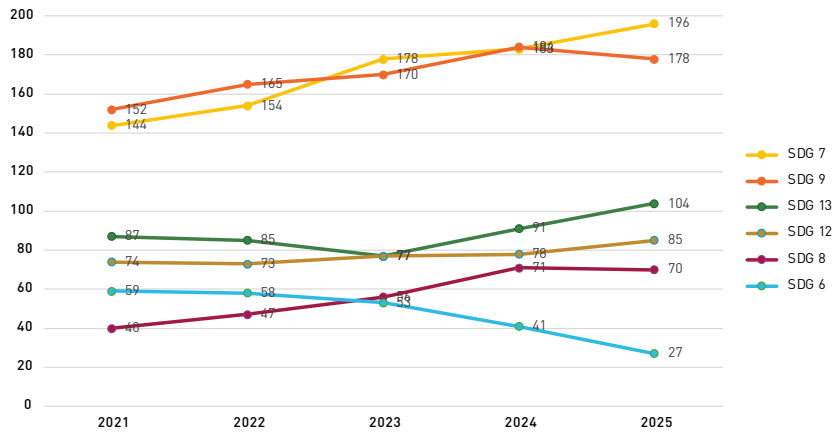
LUT's research supports the transition to a carbon-neutral energy system with pioneering clean energy solutions. We also investigate how to use planetary resources such as water, air, land, and minerals regeneratively amid changing climate conditions. We promote business transformation, develop innovative, sustainable materials, and contribute to policies and governance processes promoting carbon neutrality, biodiversity, and the circular economy. We also explore the use of industrial AI and advanced understanding of data for the benefit of society.

SCIENTIFIC PUBLICATIONS

LUT is committed to promoting open science and research. The goal is that all scientific publications will be either originally published in an open forum or made available through our publication repository, LUTPub.

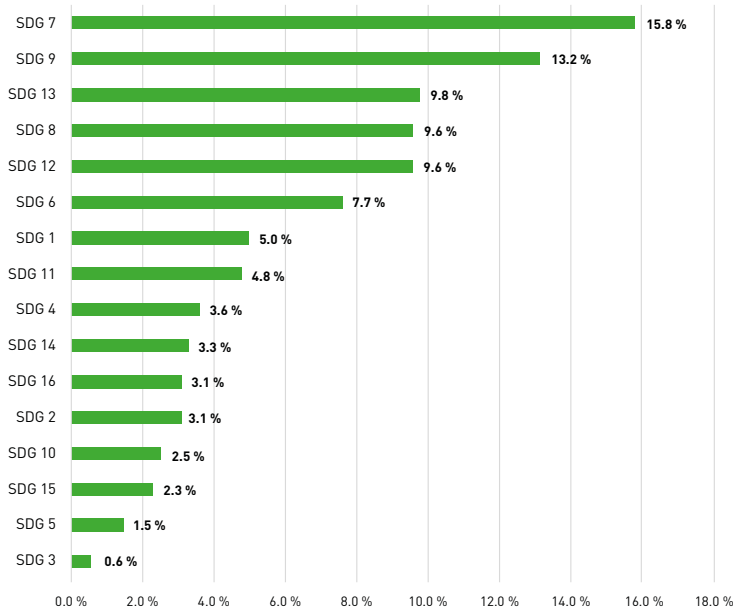
In 2025, LUT released 690 scientific publications in high-quality journals (Publication Forum rating 2–3). A total of 455 of LUT's Scopus publications in 2025 dealt with at least one sustainable development goal. A year earlier, the respective numbers were 512 and 465.

LUT's SDG publications 2021–2025



Source: SciVal 3/2026

LUT's share of SDG-related scientific publications produced by Finnish universities and organisations (2025)



Source: SciVal 3/2026

HIGHLIGHTS OF RESEARCH PER SDG IN 2025

SDG 2:

The world's food production system is plagued by inefficiency and concerns over environmental impacts and resource availability. Researchers at LUT are exploring how to use crops such as hemp and oats to produce key food components, including protein and oils, with minimal environmental impact. Such approaches have the potential not only to improve the sustainability and nutritional value of food but also to help alleviate poverty and empower communities.

A spinoff from VTT and LUT, Solar Foods, produces Solein protein from water and carbon dioxide captured from the air. It can replace other protein sources in food products. One of the company founders and LUT's energy technology alumnus, **Pasi Vainikka**, was appointed Industry Professor at LUT's School of Energy Systems.

SDG 6:

Desalination technologies can be used to produce drinking water from seawater, but the membranes from desalination plants generate a significant waste problem. LUT is developing new solutions to recycle these membranes.

The TransformAr project explored solutions and pathways for rapid and far-reaching transformational adaptation to water-related risks and impacts of climate change in vulnerable regions and communities across Europe.

The Arctic Water Excellence project enhanced Northern Finland's regional expertise and coordination in the water sector.

As part of the Blue Economy Mikkeli (BEM) water cluster, LUT strengthens Finnish water expertise and export in both clean water and wastewater treatment.

SDG 7:

JustH2Transit is a multidisciplinary consortium studying a just and sustainable energy transition driven by hydrogen.

A dissertation at LUT mapped future scenarios for renewable electricity-based fuels and chemicals.

The HYGCEL project shed light on how new electricity and hydrogen infrastructures should be built in Finland. Finland could produce roughly ten per cent of Europe's renewable electricity, thereby helping the EU achieve its emission targets. The study also underlines the safety of hydrogen production and the nature and landscape values to be taken into consideration when planning the infrastructure.

The PHOENIX project focuses on energy justice and resilience from the perspectives of households, firms, different industrial sectors, and regions.

LUT's nuclear engineering laboratory is testing safety systems of small modular reactors that could be used for district heating in the future, reducing carbon dioxide emissions and the need for fossil and wood fuels.

SDG 8:

Artificial intelligence (AI) and neurotechnologies are now influencing what it means to know, to think, and to participate in society. LUT's associate professor Edemilson Paraná received a European Research Council Starting Grant to investigate the subject.

The TAIMI research project looks into the fourth industrial revolution and the rise of AI, which are rapidly transforming work and skill demands, and how they impact the labour market position of migrants in Finland.

Another project examines how the increasing amount of communication work and changing communication technology affect the well-being of employees in Finnish expert organisations.

A dissertation at LUT demonstrated that social enterprises not only address social issues but also act as economic stabilisers, particularly during crises.

SDG 9:

LUT's new strategy emphasises studying the regenerative use of planetary resources, such as the circular economy, and extending the service life of equipment and machinery.

LUT and Peab Asfalt jointly launched a new type of research partnership focusing on the circular economy, process development, and the minimisation of environmental impacts in asphalt production.

A dissertation at LUT presented two novel processing routes for effectively recovering critical metals from used lithium-ion batteries and recycling them into secondary products.

Another dissertation developed strategies and methods to advance the sustainability of the mining sector by efficient management of energy, water, and waste.

SDG 10:

Millions of displaced people in Africa lack access to both clean energy solutions and reliable electricity grids. The SUNNY project investigates the implementation of renewable energy technologies in Africa from technical, environmental, social, and economic perspectives. The introduction of such technologies can improve the livelihoods of remote and underserved communities – especially displaced populations.

SDG 11:

The Electric Mobility Research Centre (EMRC) of Kempower and LUT is transforming Lappeenranta Airport into a research airport for future aviation. The purpose is to develop and test the technologies required for low-emission aviation and electric aircraft and their charging equipment.

A dissertation at LUT introduced more advanced tools for shipping emission calculations and environmental impact assessments. The new model helps assess future emissions in scenarios where ships would be required to use lower-emission fuels.

SDG 12:

LUT's new strategy underlines regenerative practices that aim to renew and improve both the environment and society. Resilience is also emphasised, meaning the speed or ability of a system to return to its normal state after disruptions and changes. Both these aspects are crucial for sustainable consumption and production patterns.

A sustainable society is one that is built justly, listening to the wishes and concerns of different groups of people. Social science research at LUT is exploring ways to understand the dimensions of sustainable development from the perspective of different groups of people and societies.

SDG 13:

LUT University reached the world's top 30 in climate action in the 2025 THE Impact Rankings.

LUT University and Clare Hall of the University of Cambridge introduced the Global Climate Research Prize. Partner universities were invited to submit applications for the prize, and the winner will be announced in summer 2026.

LUT provided internal funding for projects that either reduce the university's own carbon footprint or help other organisations to reduce their carbon footprint. For example, a web application was developed to reduce food waste at campus restaurants.

Aerosols significantly impact both climate and health. A joint research team from LUT and the University of Helsinki is using AI to investigate atmospheric chemistry, offering new ways to analyse chemical compounds and simulate particles in the air.

LUT introduced a new green technology P2X research infrastructure to study Power-to-X technologies, such as carbon dioxide recovery and the production of hydrogen and synthetic fuels on the Lappeenranta campus. The infrastructure includes a gas laboratory, an electrochemical laboratory, and separate container buildings for larger electrolysers.

LUT's experts are urging the Finnish Government, wood processing companies, and forest owners to accelerate efforts to capture and utilise bio-based carbon dioxide.

An ongoing research project studies the green transition and the impact of the Finnish ICT sector on the climate and environment.

SDG 14:

With the project BALTFLOODS, LUT helps public authorities better monitor and respond to floods, mitigate runoff pollution in cities throughout the Baltic Sea region, and encourage community engagement in addressing environmental threats.

SDG 15:

With the help of a donation by the Marjatta and Eino Kolli Foundation, LUT is exploring new biorefinery solutions that utilise biomass more efficiently. Such solutions could reduce the need for felling and thus help preserve forests.

LUT is involved in a major research programme on emission-free pulping, which aims to significantly reduce biomass burning and increase the product yield of wood material used for pulping from approximately 50% to around 70%, saving wood while reducing emissions.

LUT is part of the BIODIFUL consortium, which studies leadership that respects biodiversity at the individual, organisational, and societal levels. In the consortium, LUT develops and tests methods to calculate the biodiversity impacts of products or services.

SDG 16:

LUT contributes to the FinGeo project, which helps Finland navigate its innovation and industrial policy in the era of geoeconomics, where global power dynamics shape economic dependencies. The project also examines new geoeconomic dependencies emerging from the energy transition from fossil to renewable energy.

Regarding AI, LUT's researchers are currently investigating, for example, the fairness and transparency of large language models and making them smaller and less electricity consuming.

SDG 17:

The direction of Lappeenranta and the entire South Karelia has taken a clear upward turn in recent years. Several companies have announced plans to invest in the area. The change is backed by strong cooperation between different regional actors and the region's expertise in the green transition, often with LUT closely involved.

In Lahti, the expansion of the university campus has quickly developed into a broader transformation, influencing migration, economic development, and international visibility. The related research collaboration centres on environmental themes and the green transition.

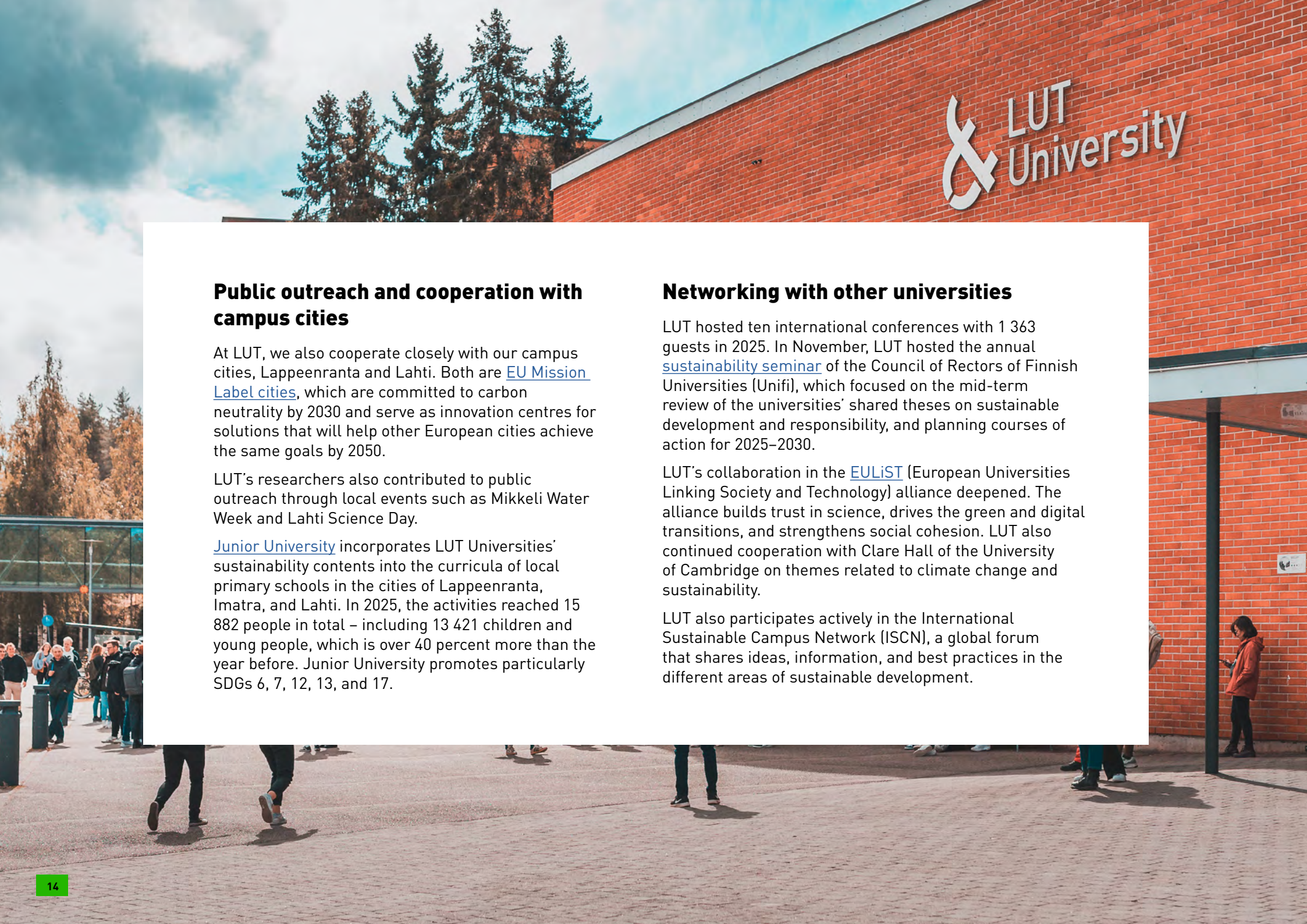
The collaboration between the business community, the region, and the university is deeply integrated. This can be seen, for example, in the Electric Mobility Research Center (EMRC), which was established as a joint project between LUT and Kempower, and in the fibre technology laboratories created in cooperation with ANDRITZ.

SOCIETAL INTERACTION

LUT University is an expert member of several international research, business, and sustainability networks and often consults for parliamentary committees and various regional, national, and international institutions, especially regarding renewable energy and carbon neutrality.

LUT is represented in the Euro-Case Executive Committee of European science academies and participates in the Science Advice Mechanism of the European Commission. LUT has also contributed to the European Sustainable Energy Week (EUSEW) policy dialogue with research-based solutions since 2016.

LUT is registered in the EU's Transparency Register. Our memberships and affiliations include, for example, the EUA, T.I.M.E., EERA, A.SPIRE, WaterEurope, and UniLiON.



Public outreach and cooperation with campus cities

At LUT, we also cooperate closely with our campus cities, Lappeenranta and Lahti. Both are EU Mission Label cities, which are committed to carbon neutrality by 2030 and serve as innovation centres for solutions that will help other European cities achieve the same goals by 2050.

LUT's researchers also contributed to public outreach through local events such as Mikkeli Water Week and Lahti Science Day.

Junior University incorporates LUT Universities' sustainability contents into the curricula of local primary schools in the cities of Lappeenranta, Imatra, and Lahti. In 2025, the activities reached 15 882 people in total – including 13 421 children and young people, which is over 40 percent more than the year before. Junior University promotes particularly SDGs 6, 7, 12, 13, and 17.

Networking with other universities

LUT hosted ten international conferences with 1 363 guests in 2025. In November, LUT hosted the annual sustainability seminar of the Council of Rectors of Finnish Universities (Unifi), which focused on the mid-term review of the universities' shared theses on sustainable development and responsibility, and planning courses of action for 2025–2030.

LUT's collaboration in the EULiST (European Universities Linking Society and Technology) alliance deepened. The alliance builds trust in science, drives the green and digital transitions, and strengthens social cohesion. LUT also continued cooperation with Clare Hall of the University of Cambridge on themes related to climate change and sustainability.

LUT also participates actively in the International Sustainable Campus Network (ISCN), a global forum that shares ideas, information, and best practices in the different areas of sustainable development.

HIGHLIGHTS OF SOCIETAL INTERACTION PER SDG IN 2025

SDG 4:

LUT's Junior University and the City of Lappeenranta have built a concept of collaboration that strengthens students' interest in mathematical and natural sciences and technology (STEAM) and promotes educational equality and access to university education. The model has also been introduced in other cities in Finland.

SDG 7:

LUT hosted an event in Brussels on the European Sustainable Energy Week in June, focusing on energy resilience, green hydrogen, and non-fossil fuel solutions.

LUT's research director **Petteri Laaksonen** received the 2025 Energy Transition Act of the Year award for long-standing, impactful work in advancing Finland's energy transition.

SDG 15:

Jointly organised by LUT and the Marjatta and Eino Kolli Foundation for the sixth time, the Metsä360 Award and the Metsä360 Competition for schools highlighted the value and significance of forests. The 2025 award was given to Woodio for its waterproof wood composite bathroom fixtures.

SDG 16:

LUT's professor **Lassi Linnanen** chairs the Expert Panel for Sustainable Development, and professor **Risto Soukka** is a member in the Climate Change Panel. The panels appointed by the Prime Minister's Office provide independent reports and scientific data to support decision-making regarding sustainable development and climate adaptation.

LUT also plays a role in informing governmental bodies and public administration, such as Business Finland, in matters involving green hydrogen and renewable energy. LUT counsels the Finnish Hydrogen Valley Association and chairs Hydrogen Research Forum Finland.

In 2025, LUT established the System Earth Collegium (SEC), a long-term initiative designed to tackle the world's wicked problems. The collegium fellows contemplate the underlying necessities that a scientific community should embrace to lay the foundations for future radical innovations. They drive the change by networking, spokesmanship, and partnerships with like-minded groups.

SUSTAINABILITY IN EDUCATION

LUT University provides technology, business, and social sciences education. By educating environmentally conscious experts and decision-makers, LUT contributes to global, national, and regional development and helps society and businesses in their sustainable renewal.

All the degree programmes at LUT are built to increase the graduates' competences in sustainability. Based on the national bachelor's graduate survey of 2025, the sustainability skills of graduates from LUT are stronger than those of graduates from other Finnish universities in the survey (LUT has the highest indicator value 4.0 while the average is 3.4). Based on the latest master's graduate surveys, the sustainability skills of LUT graduates in both business administration and technology are stronger than the national average. (Source: TEK Graduate Survey 2025, SE Graduate Survey 2025.)

Technology programmes at LUT respond to the need for sustainable technology solutions in modern industry. They provide expertise in different fields of engineering, energy, and environmental technology.

Introduction to corporate social responsibility and sustainability is a compulsory course for all bachelor's students at LUT Business School. Sustainable development is a cross-cutting theme in the programme portfolio, from bachelor's to doctoral degrees.

LUT's social scientists are solving problems at the interface of people and technology. The social sciences' degree programmes address the challenges and interconnectedness of critical systems such as energy, food production, water, natural resources, transport, and mobility, which are crucial to society and people's well-being.

Degree programmes and open studies promoting sustainable development

Examples of degree programmes promoting sustainability at LUT:

- Software Engineers for the Green Deal
- Sustainable Energy Systems
- Circular Economy
- Sustainability Science and Solutions
- Environmental Technology
- Sustainable International Business
- Technology, Environment and Societal Change
- Global Communications and Clean Air, Water and Energy
- Mechatronics to promote the sustainable development of machines
- Food Processing Technology to develop new, healthier foods sustainably

A new degree programme launched in 2025, Renewable Power-to-X Economy, addresses energy transition. For lifelong learning, LUT's continuing education offered the course Sustainable Strategy and Business Ethics.

LUT also offers several free massive open online courses (MOOCs) that focus on climate action. One of the courses focuses on solutions for carbon neutral transport and another on Power-to-X processes.

LUT is also a part of the Climate University, which offers open courses from 18 universities.

HIGHLIGHTS OF EDUCATION PER SDG IN 2025

SDG 4:

LUT reached the global top 300 in the Times Higher Education World University Rankings and the global top 200 in the THE Impact Rankings, sharing first place in Finland.

LUT University and the National Defence University shared first place as Finland's most reputable universities in the Reputation & Trust survey, which measures how Finns perceive the reputation of Finnish universities.

LUT was granted new educational responsibilities in civil and construction engineering, aiming to make buildings sustainable and to respond to future energy and environmental challenges in the built environment.

LUT is involved in a doctoral education pilot programme, which reshapes and increases doctoral education in Finland in 2024–2027.

LUT is a member of the EULiST alliance (European Universities Linking Society and Technology), which aims for the establishment of a new European university in the long term.

LUT's Nemoni project supports the educational paths of neurodiverse youth by developing forms of science and technology education and workplace exposure that enhance their executive skills and motivation to learn, supporting the completion of their studies and their transition to employment.

SOCIAL RESPONSIBILITY AND GOVERNANCE

LUT University complies with Finnish laws and regulations and internally applies LUT Group regulations and LUT University regulations. ESG compliance is implemented at LUT at the group level.

Policies and operating principles

LUT University's sustainability policy was adopted in 2021 to steer all of the university's activities. In addition, LUT's sustainable development action plan sets annual targets for the work done in accordance with the sustainability policy. Its execution is monitored in the sustainability and quality steering group and regular management reviews, and actions are adjusted if needed. The achievement of targets for 2025 is presented in Appendix 1.

LUT's quality management system includes sustainability management. The quality management system is externally audited by the Finnish Education Evaluation Centre (FINEEC), and it ensures systematic and transparent operations through the continuous evaluation and improvement of our activities. The audit process 2025–26 is currently ongoing.

Our code of conduct describes the ethical and lawful courses of action that guide our activity and expectations and the ways we ensure ethical and responsible conduct in decision-making. In addition, we apply an equality and non-discrimination plan to prevent any discrimination at LUT and to make the university an equal work community where everyone is treated with respect.

LUT has feedback channels where staff and students can submit feedback, initiatives, or reports in accordance with the whistleblower protection act. A whistleblowing channel on LUT's website enables people from outside the university community to safely report breaches. The reports are dealt with in accordance with the act's provisions.

We are committed to observing good scientific practice based on openness and comparability. We also ensure personal data protection and the accessibility of our web services. Accessibility is taken into account also in the design of facilities.

LUT's investments comply with the UN's Principles for Responsible Investment (PRI) and apply conventional profit and risk indicators and environmental, social, and governance (ESG) reporting. Income from investments enables operations and growth in line with our strategy. Responsible financial management enables LUT as an employer to react flexibly to changes in the operating environment.

Sustainable working culture

LUT is a highly international and growing higher education community. We emphasise our community's ability to promote sustainable development.

LUT has implemented a work community development plan, which defines how the employer promotes employee well-being, professional development, and effective leadership.

LUT's HR strategy for 2024–2026 focuses on hiring talented people, creating an environment for growth, and making LUT the best place to belong. Staff development and well-being are key aspects of the related action plans. LUT Universities has also launched a three-year leadership training programme (LEAD – Leadership Excellence and Development) for supervisors, and the first participant groups finished the programme in 2025.

LUT provides a wide range of training and open university courses for staff. The volume and variety of online staff training continued to increase last year – particularly on the use of AI applications. The staff also has access to a diverse range of multilingual online training offered through the Eduhouse e-learning service.

LUT offers courses in Finnish as a second language and a range of instruction delivered in English. The student portal eLUT and the staff intranet are bilingual. Webinars on Finnish culture and the Finnish world of work are part of the onboarding of new international employees. A total of 35 events were organised in 2025 to support the integration of international workers, some in collaboration with the city or parish pastors.

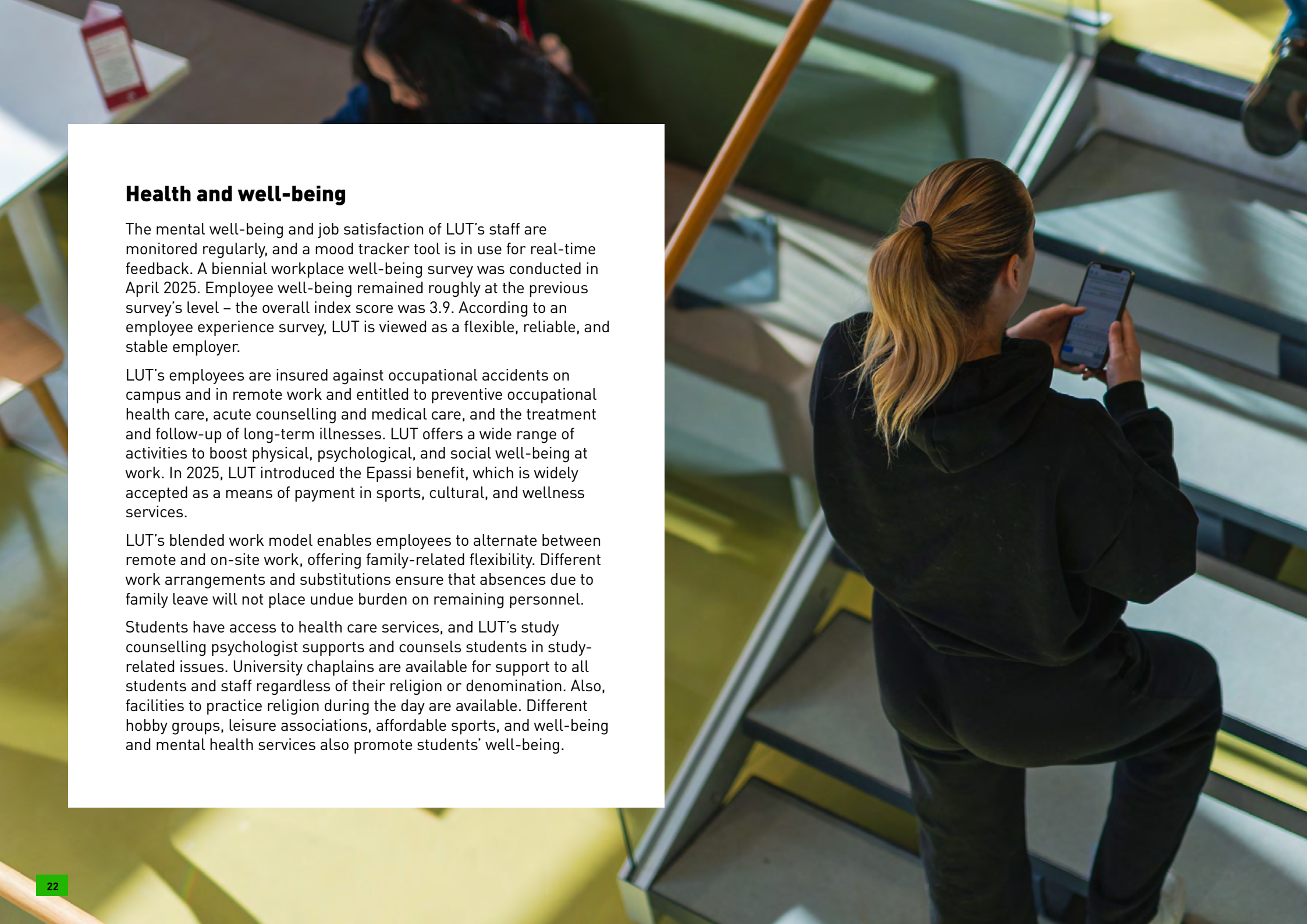
Health and well-being

The mental well-being and job satisfaction of LUT's staff are monitored regularly, and a mood tracker tool is in use for real-time feedback. A biennial workplace well-being survey was conducted in April 2025. Employee well-being remained roughly at the previous survey's level – the overall index score was 3.9. According to an employee experience survey, LUT is viewed as a flexible, reliable, and stable employer.

LUT's employees are insured against occupational accidents on campus and in remote work and entitled to preventive occupational health care, acute counselling and medical care, and the treatment and follow-up of long-term illnesses. LUT offers a wide range of activities to boost physical, psychological, and social well-being at work. In 2025, LUT introduced the Epassi benefit, which is widely accepted as a means of payment in sports, cultural, and wellness services.

LUT's blended work model enables employees to alternate between remote and on-site work, offering family-related flexibility. Different work arrangements and substitutions ensure that absences due to family leave will not place undue burden on remaining personnel.

Students have access to health care services, and LUT's study counselling psychologist supports and counsels students in study-related issues. University chaplains are available for support to all students and staff regardless of their religion or denomination. Also, facilities to practice religion during the day are available. Different hobby groups, leisure associations, affordable sports, and well-being and mental health services also promote students' well-being.



HIGHLIGHTS OF SOCIAL RESPONSIBILITY PER SDG IN 2025

SDG 1:

LUT has been awarded a UNESCO Chair for promoting the digital transformation of society and the economy in Africa. Related projects led by LUT aim to alleviate poverty and advance equal access to digital education and health care services.

LUT researchers study energy poverty, which refers to the inability to afford essential heating and electricity, and propose actions to prevent it.

SDG 3:

A well-being week for LUT staff and students twice a year offers exercise, sports demo classes, and tips to support health and well-being.

LUT made a charitable donation to Doctors Without Borders / Médecins Sans Frontières, which provides medical care to people living in the midst of armed conflicts, epidemics, and natural disasters.

SDG 5:

Women made up 61% of the management group and 44% of the board of LUT. Since 2021, women have constituted 46% of LUT's employees.

LUT was one of the universities organising Shaking up Tech, a yearly event for women and non-binary upper secondary school students who are interested in technology and considering university studies.

LUT is a member of Women in Tech Finland, a network that promotes diversity, equality, and inclusion in the field of technology.

SDG 8:

LUT annually organises the DuuniDay recruitment event to connect students and employers.

LUT makes responsible investments in, for instance, funds that support renewable energy and address global challenges. Up to 76% of LUT's investments have a Sustainalytics ESG rating. At the end of the year 2025, the weighted carbon intensity (86.9) of LUT's investment portfolio was clearly lower than the reference index and the responsibility risk (18.1) was just below the global benchmark index.

SDG 10:

LUT Universities' provide online equality training for new employees to ensure all employees are aware of and committed to maintaining a respectful and diverse community.

In 2025, LUT participated in the nationwide anti-racism campaign 'Action, not only words', aiming to take concrete steps to dismantle racism in society.

Rainbow flags were flying on our campuses to celebrate Pride and to advocate for equality and non-discrimination.

SDG 12:

The course Introduction to Sustainable Development in LUT Universities is a recommended part of the onboarding of new employees.

LUT encourages employees to volunteer one day a year for a good cause.

In addition to the standard recycling and waste management on campus, a pop-up Recycling Corner enabled staff and students to recycle household items.

SDG 16:

LUT's organisational structure – the board of directors, advisory board, and university collegium – is presented transparently. Four out of nine board members are elected from within the university community, including schools and the student body.

Students influence the university's decision-making through the Student Union of LUT University (LTKY).

We publish our financial data: see the 31 December 2025 financial statement.

We comply with all applicable legislation in our financial operations, and our code of conduct includes provisions against corruption.

ENVIRONMENTAL PERFORMANCE

Monitoring and reporting on LUT's environmental performance includes electricity, heat, and water consumption, waste streams, and a carbon footprint. LUT's biodiversity footprint was also calculated for the first time in 2025.

The university's carbon footprint is calculated according to the Greenhouse Gas Protocol's (GHG Protocol) guidelines, and the ways to reduce emissions are outlined in the university's Climate Action Plan.

LUT's campus buildings and the land they are on are owned in Lappeenranta by the University Properties of Finland (SYK) and in Lahti by Isku Center. In addition, LUT has regional units in rented premises in Kouvola and Mikkeli. The services provided by the campus property owners related to building maintenance technology, energy efficiency, waste management, and facility upkeep and development compose an essential part of our sustainability.

The largest share of our carbon footprint consists of indirect emissions generated by service suppliers involved in the university's activities. We require sustainable operations from our partners and cooperate with our staff, students and service providers to measure and reduce these emissions in accordance with our Climate Action Plan.

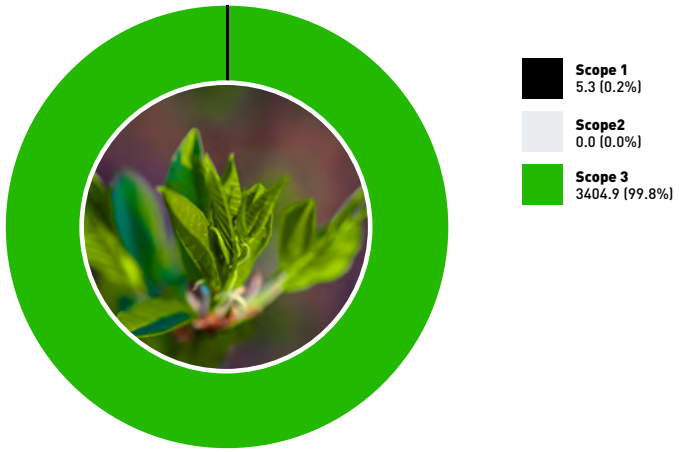
CARBON FOOTPRINT

LUT's carbon footprint for the year 2025 totalled 3 410 tons of carbon dioxide equivalent (CO_2 eq). Of this total, 499 t CO_2eq was offset by SYK, the Lappeenranta campus property owner, through certified carbon offsetting measures. The carbon footprint was calculated according to the GHG Protocol, which classifies emissions into three scopes. LUT's regional units are also included in the calculation of the carbon footprint. For complete details, see Appendix 2.

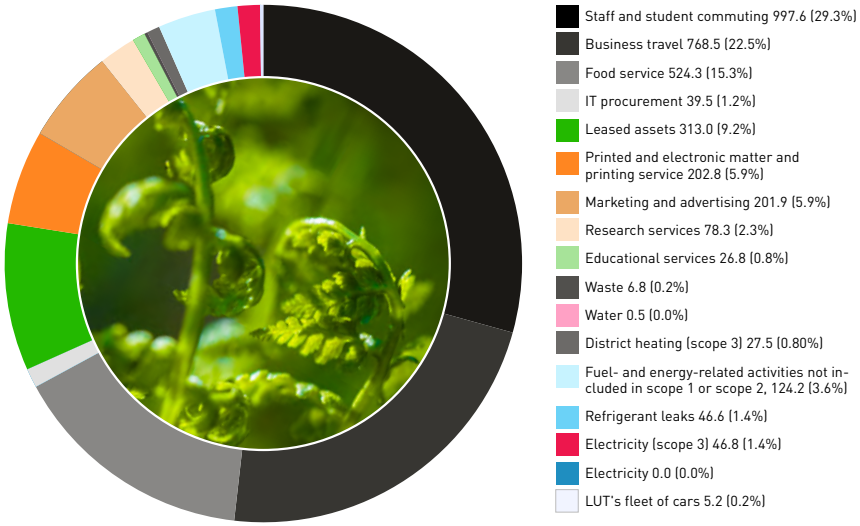
Scope 1 includes direct emissions from sources owned or controlled by the organisation. At LUT, this means a fleet of seven corporate cars, which account for merely 0.2% of the total carbon footprint.

Scope 2 includes purchased electricity, steam, heat or cooling. LUT's Scope 2 emissions totalled zero.

Scope 3 includes indirect emissions related to the university's activities. This scope also includes district heating and electricity included in the property rent. Other major sources of indirect emissions are staff and student commuting, business travel, and campus food services. A total of 99.8% of LUT's carbon footprint belongs to Scope 3.



LUT's emissions in the scopes 1, 2 and 3 [t CO2 eq]



LUT's carbon footprint [t CO2 eq] and emission sources

In 2025, LUT's carbon footprint grew modestly by 6.6% (211 tons) compared to the previous year. This increase was mainly due to the inclusion of SYK's emissions in the calculations for the first time as well as to higher commuting-related emissions. The latter reflects both an increase in the number of students (from 7 968 in 2024 to 9 126 in 2025) and changes in reported commuting patterns.

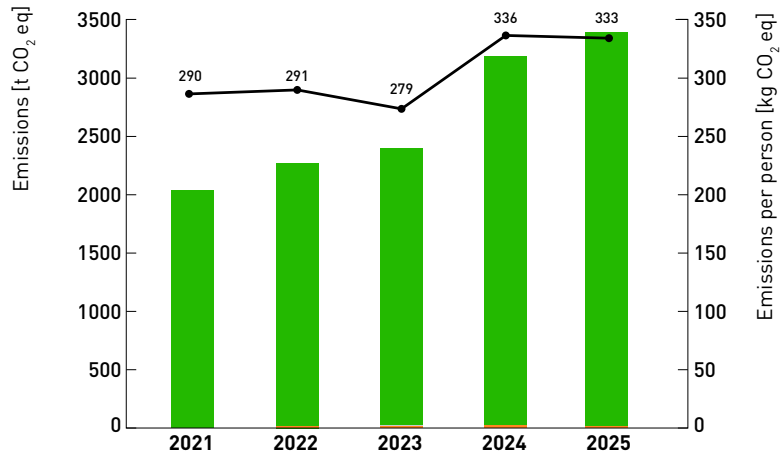
Emissions associated with LUT Buffet and Street Café declined, as did business travel emissions. The decrease in travel emissions stemmed from shorter total distances travelled by rail, lower emission factors for rail travel reported by VR, and a reduction in air travel distance, from approximately 7.5 million passenger km in 2024 to around 5 million passenger km in 2025. Emissions from IT procurement also fell.

Two diesel vehicles in LUT's fleet were replaced with electric vehicles during the second half of the year to reduce Scope 1 emissions. This is consistent with LUT's Climate Action Plan, which was updated in May 2025.

The figures from the past five years are not fully comparable since we are continuously improving the carbon footprint calculation process, including data quality and data collection procedures. The availability and accuracy of data also depend on the location and property owner – an aspect that requires further development.

LUT's Climate Action Plan 2025–2030 outlines actions to achieve zero emissions in Scopes 1 and 2 and to continue working to reduce emissions in Scope 3 in cooperation with partners and service providers, such as campus restaurants, business travel services, and campus property owners.

LUT will continue its climate work in line with existing commitments. LUT aims for net zero in 2050 in accordance with the initiative Race to Zero for Universities. Progress and actions will be reviewed annually in accordance with the Climate Action Plan. In 2030, LUT will hold an interim review to re-evaluate its climate target and actions, also addressing the requirements of the Ministry of Education and Culture.



	2021	2022	2023	2024	2025
Scope 3 I other, indirect emissions	2 040.5	2 279.9	2 397.2	3 190.2	3 404.9
Scope 2 I energy, indirect emissions	0.0	0.0	3.2	0.0	0.0
Scope 1 I direct emissions	5.6	8.1	9.4	8.9	5.2
Total	**2 046**	**2 288**	**2 410**	**3 199**	**3 410**

LUT's carbon footprint in 2021–2025

BIODIVERSITY FOOTPRINT

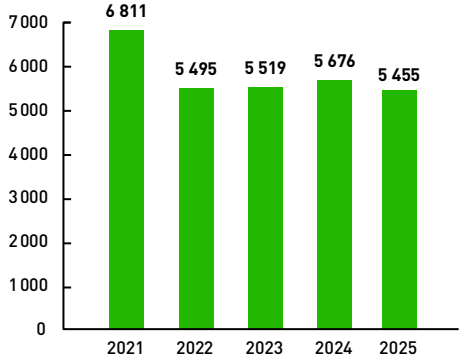
Climate change and biodiversity loss are interlinked challenges that must be addressed simultaneously. LUT is one of the world's pioneering universities in measuring its biodiversity footprint.

LUT's biodiversity footprint in terms of global species loss was first assessed in 2025. The assessment was carried out as a master's thesis based on operational data from 2024. The study partly drew on the same data as LUT's carbon footprint assessment but employed additional sources such as the Ecoinvent and EXIOBASE databases especially for land use. The calculation covered impacts on species in terrestrial and freshwater ecosystems, whereas impacts on marine ecosystems were excluded.

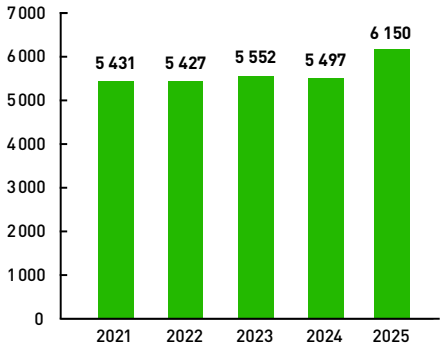
Assessment methods continue to develop, and the assessment will be refined to provide a more robust outcome. In general, it seems that the efforts to reduce LUT's carbon footprint have also largely benefited biodiversity.

CONSUMPTION AND WASTE MANAGEMENT

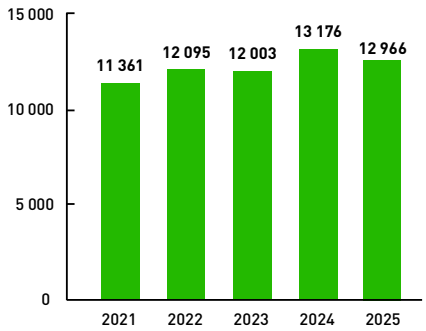
Heat consumption, total [MWh]



Electricity consumption, total [MWh]



Volume of water used [m³]



The waste streams and consumption of water, heat, and electricity are reported from LUT's Lappeenranta campus.

The Lappeenranta campus uses certified bio-based district heating, generated from materials such as wood residues and chips. All purchased electricity on the Lappeenranta campus is renewable, produced by wind or solar power. The university's own solar panels generate three per cent of the electricity consumed on campus.

Finland has abundant freshwater resources. Tap water is drinkable and freely available for all on LUT campuses. Drinking tap water eliminates the need for bottled water, saving a great deal of resources and minimising waste.

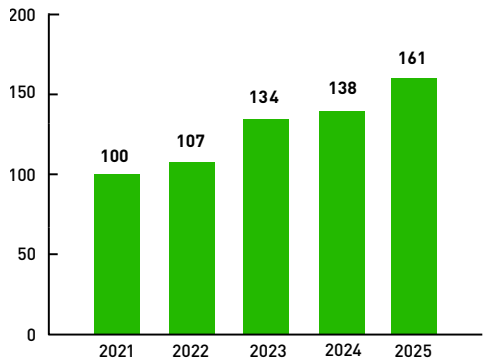
Irrigation is neither used nor needed in campus outdoor areas. The campus grounds around the main entrance were renovated in 2025 and planted with drought-tolerant native species that support the area's biodiversity and adaptability to changing weather conditions. Flowering plants provide food and habitats throughout the growing season.

All collected waste fractions from LUT's Lappeenranta campus are directed to recycling and energy recovery processes. Nothing is landfilled.

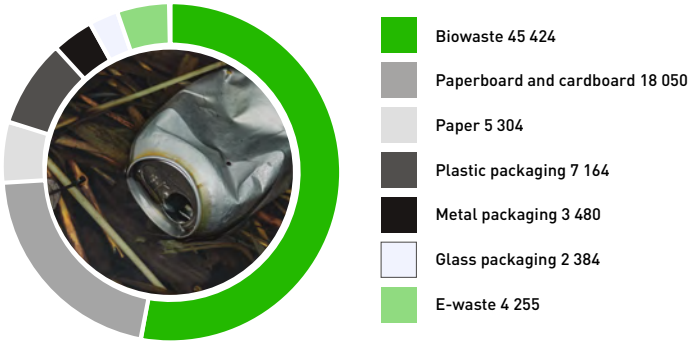
Waste to energy and biowaste are the largest fractions. The campus restaurant promotes sorting and reducing biowaste actively and sells leftover food to take home at reduced prices. Single-use takeaway cups are collected separately for carton recycling.

LUT Universities has a waste disposal guide including a map of recycling points. Cardboard, paper, plastic packaging, metal packaging, glass packaging, and e-waste are sorted for recycling.

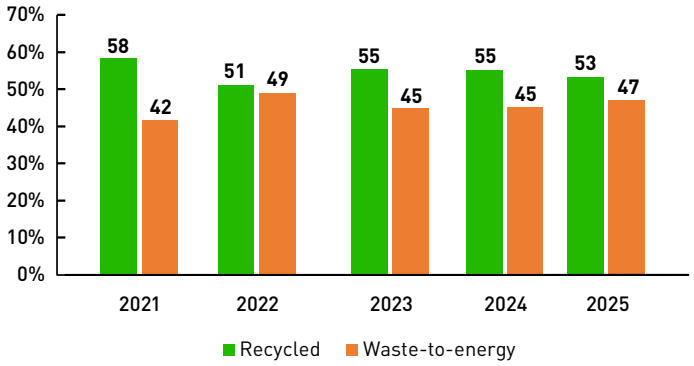
Amount of waste [t]



Proportion of waste recycled [t]



Percentages of waste recycled and waste-to-energy



GOALS AND PERFORMANCE IN 2025

Our sustainability goals are included in our sustainable development action plan. We evaluate our progress and report on the achievement of our goals annually. Our performance in the year 2025 is summarised in the table below.

Activity	Goal	Performance 2025
Scientific research	The number of scientific publications related to LUT's strategic SDGs (6, 7, 8, 9, 12, 13) will increase.	Ongoing
Academic education	100% of LUT's new students will undergo an orientation related to sustainable development.	Ongoing
	All of LUT's degree programmes will develop students' expertise in sustainable development.	Ongoing
	80% of LUT's courses are linked to at least one SDG.	Ongoing
	LUT's bachelor's and master's graduates estimate that their sustainability competencies have developed more strongly than other university graduates in Finland on average.	Achieved
Sustainable campuses	LUT aims for net zero in 2050 in accordance with the initiative Race to Zero for Universities.	Ongoing
	LUT aims to strengthen the engagement and well-being of its diverse student and employee body.	Ongoing
Societal interaction	Junior University strengthens the sustainability competencies of children and youth in the region. Collaboration with schools and municipal education administration will be maintained and further developed.	Ongoing
	LUT increases the impact of its activity and promotes sustainable development in collaboration with its EULiST partner universities.	Ongoing

THE DETAILS OF LUT'S CARBON FOOTPRINT CALCULATION IN 2025

SCOPE 1

Scope 1 emissions are direct GHG emissions from sources that are owned or controlled by an organisation. In 2025, LUT's vehicle fleet consisted of seven cars (two plug in hybrids, two diesel vehicles, and three electric cars). The two diesel cars were sold during the second half of the year. Emissions were calculated based on distance travelled and manufacturer provided emission factors. Scope 1 emissions amounted to a total of 5.2 t CO_2 eq, representing 0.2% of the university's overall carbon footprint.

The emission calculations rely on manufacturer provided emission factors, which may not fully reflect real world fuel consumption. Actual emissions are likely higher due to driving patterns and the operating conditions of LUT's vehicle fleet.

SCOPE 2

Scope 2 emissions refer to indirect GHG emissions resulting from the purchase of electricity, steam, heat or cooling. In 2025, LUT University's Scope 2 emissions were zero, as the university purchased only carbon neutral electricity for both the Lappeenranta campus and the Kouvola regional unit.

Emissions from electricity purchased for the Lahti campus and the Mikkeli regional unit, as well as district heating for the Lappeenranta and Lahti campuses, and the Mikkeli regional unit are not included in Scope 2. Instead, they are reported under Scope 3, Category 8: Upstream Leased Assets, in line with the operational control approach defined by the GHG Protocol. Data on district heating consumption for the Kouvola regional unit is currently unavailable.

SCOPE 3

Scope 3 emissions are the largest contributor to the university's carbon footprint, amounting to 3 405 t CO_2eq, which represents 99.8% of the university's overall carbon footprint.

Category 1: Purchased goods and services

For printed and electronic matter and printing services, educational services, marketing and advertising, and research services, the calculation of purchased goods and services is based on the annual financial statement, using the Environmentally Extended Input-Output (EEIO) method with domestic technology assumptions.

IT equipment category includes emissions from hardware purchases in 2025 (monitors, laptops, workstations, and tablets) and from IT services, including the digital workplace, network and information security services, and server operations. Carbon footprint data for these purchases and services was obtained from ATEA.

Emissions from food services include LUT Buffet and Street Café. The emissions were calculated based on the goods procured, using the emission factors provided by the main supplier, Kespro. For all other suppliers, emission factors were taken from the climate impact dataset for the Finnish food service sector, available at https://etsin.fairdata.fi/dataset/50de6ed6-50ea-44ac-992a-c80e94a1a065.

Before 2024, the emission levels were calculated based on the number of school lunches sold at LUT Buffet multiplied by an average emission factor of 2.225 kg CO_2e per lunch.

Category 5: Waste generated in operations

Waste data are available only for the Lappeenranta campus. LUT University is responsible for managing hazardous waste, e-waste, and a portion of the biowaste generated on the campus. Emissions from these waste streams were calculated based on the total weight of waste generated at the Lappeenranta campus and the corresponding emission factors for each waste category. Emission factors for hazardous waste and e-waste were sourced from the SYKE report, while carbon footprint data for biowaste were obtained from L&T.

Category 6: Business travel

Emissions from business travel include flights, rail travel, and hotel stays booked through the university's business travel providers (CWT and GBT) and the national rail operator (VR), as well as mileage from employee-owned cars used for business purposes.

Some forms of business travel, such as ferry journeys, public transport, taxi travel, and flights, hotel stays, or rail tickets purchased outside the CWT or GBT or corporate VR channels, are currently excluded from LUT's carbon footprint. Their contribution remains unknown at this stage.

Emissions from air travel were sourced directly from the annual reports provided by CWT and GBT. Rail travel emissions were calculated based on total passenger-kilometres travelled and the emission factor for Finnish rail transport (VR). Emissions from hotel stays were calculated using the number of room nights and the relevant country-specific emission factors. These factors were obtained from the online Hotel Footprinting Tool (https://www.hotelfootprints.org/).

Emissions from mileage in employee-owned cars used for business travel were calculated by multiplying the total kilometres driven by the appropriate emission factor for each vehicle type. The distribution of vehicle types was estimated using results from the 2026 commuting survey, which reported the following fleet composition among staff: 47% petrol, 17% diesel, 1% natural gas, 18% electric, 9% hybrid, and 7% plug-in hybrid. Emission factors were sourced from the UK Government GHG Conversion Factors for Company Reporting (2025).

Category 7: Employee and student commuting

Emissions from commuting by LUT students and staff were estimated based on the results of the commuting survey conducted in March–April 2026. The survey captured commuting patterns for both groups and received responses from 2% of students and 34% of staff.

Commuting emissions were calculated using the distance travelled by each mode of transport (single occupancy car, carpool, bus, train, motorcycle, scooter/moped) together with the corresponding emission factors. For the purposes of the calculation, it was assumed that students commute for 32 weeks per year and staff for 45 weeks.

The emission factor for train travel is taken from the VR Group Annual Report 2025. Emission factors for passenger vehicles are based on the UK Government GHG Conversion Factors for Company Reporting (2025). For bus travel, emissions were calculated using actual fuel and electricity consumption data from the Lappeenranta bus fleet.

Category 8: Upstream leased assets

Under this category, LUT reports emissions from electricity use at the Lahti campus and the Mikkeli regional unit, as well as from district heating at the Lappeenranta and Lahti campuses and the Mikkeli regional unit. As LUT does not hold the electricity or district heating contracts for these locations, it does not have operational control, and the associated emissions are therefore reported under Scope 3. Emissions were calculated using electricity and district heating consumption data together with market-based emission factors, which reflect the contractual arrangements of the respective service providers. Electricity purchased in Lahti and district heating in Lappeenranta are carbon-neutral.

There are no separate district heating meters for spaces rented by LUT at the Lahti campus or in the Mikkeli regional unit and no electricity meter for spaces rented by LUT in the Mikkeli regional unit (Lönnrotinkatu 7). In both cases, consumption was estimated based on LUT's share of rented floor area in the building relative to the total consumption in the building.

In addition, this category includes emissions reported by SYK for the Lappeenranta campus, covering refrigerant leaks, waste fractions under SYK's responsibility, and purchased goods and services and capital goods. SYK fully offset these emissions for 2025 using high-quality carbon credits certified under Verra/VCS, Gold Standard, and Puro.earth. For 2025, SYK created a diversified offset portfolio combining afforestation and reforestation, renewable energy, and biochar projects. The portfolio included projects in Colombia, Paraguay, Mexico, India, Sweden, Norway, and Germany. Of the total credits, 80% were removal-based and 20% avoidance-based. Within the removal category, 95.8% originated from afforestation and reforestation projects, 3.5% from EU-based biochar projects, and 0.7% from projects within the EEA.

Summary of LUT University's carbon footprint

Scope	Scope 3 category	Emission category name	Carbon footprint [t CO2eq]	Offset by SYK [t CO2eq]
Scope 1		University vehicle fleet	5.2	
Scope 3	cat. 1	Purchased goods and services	1074.1	
	cat. 3	Fuel- and energy-related activities not included in Scope 1 or Scope 2	124.2	124.2
	cat. 5	Waste generated in operations	6.8	
	cat. 6	Business travel	768.5	
	cat. 7	Employee and student commuting	997.6	
	cat. 8	Upstream leased assets	433.8	374.7
			3 410	**499**

LUT University

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