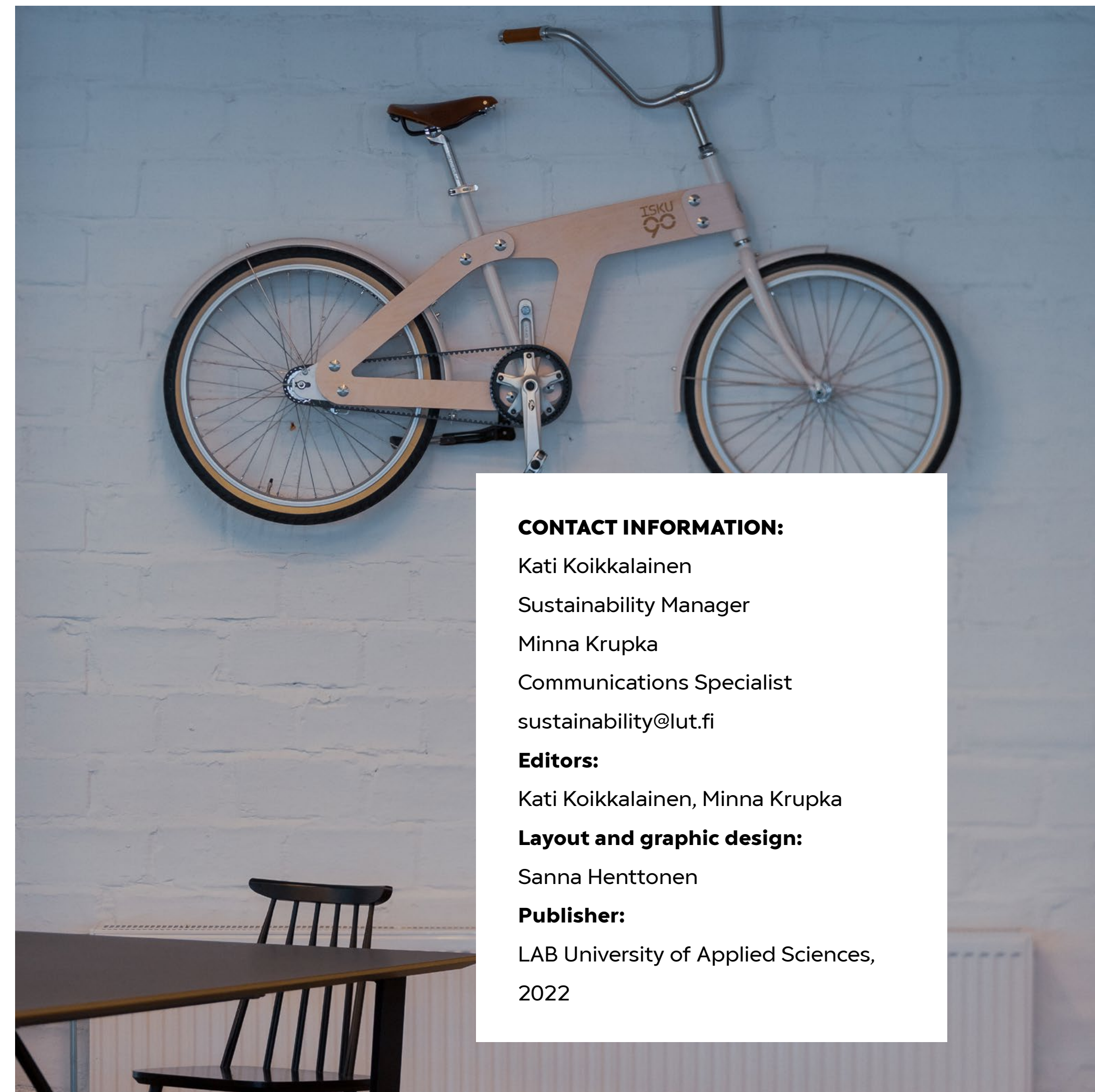


Report on Sustainability 2021



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2022

LAB in figures 2021

498

staff members

1698

publications

87

nationalities on
2 campuses

76%

graduate on time

37

bachelor's-level
degree-awarding
programmes

28

master's-level
degree-awarding
programmes

1493

completed
bachelor's
degrees

338

completed
master's
degrees

67.6

million euros in
funding: Ministry
of Education
€ 52.4 million,
supplementary
funding € 15.2
million

89%

of graduates
are employed
within 5 years of
graduating

**Read more about
studies in LAB:**

lab.fi/en/studies

Rector's foreword

Promoting sustainability is a cross-cutting mission that belongs to all of us

LAB is an innovation institution that promotes sustainability and responsibility in education, RDI activities, stakeholder cooperation and its operating methods in everyday life on the campuses. Climate change mitigation and carbon-negativity in 2030 are our strategic choices.

We are committed to the Ten Principles of the United Nations Global Compact in the areas of human rights, labour, environment and anti-corruption. Our own strategic targets aim for a better world of work and the promotion of sustainable economic growth and employment. It is great to be involved in the corporate responsibility initiative, and it is an important tool for us in developing our activity.

LAB is now a 2-year-old organisation, and we are still improving the integration of sustainable development goals for our action and organisational culture. As a part of Arene, the Rectors' Conference of Finnish Universities of Applied Sciences, we have prepared the common Programme for the sustainable development and responsibility of universities of applied sciences. Our target is to prepare a carbon road map for Finnish Universities.

We are going to reduce our harmful carbon footprint and increase our positive carbon handprint together with universities of applied sciences, our stakeholders and campus cities, and as an LUT Group. There is a

strong demand for the work we do to promote sustainability.

This report presents LAB's main progress in sustainability in the year 2021. It is also an annual Communication on Progress report about the Ten principles of the Global Compact initiative.

The matter of sustainability is extremely important. We can make a big difference together.

Turo Kilpeläinen

President and CEO of LAB University of Applied Sciences
Chair of Arene's working group on sustainability and responsibility
Member of the board of Arene

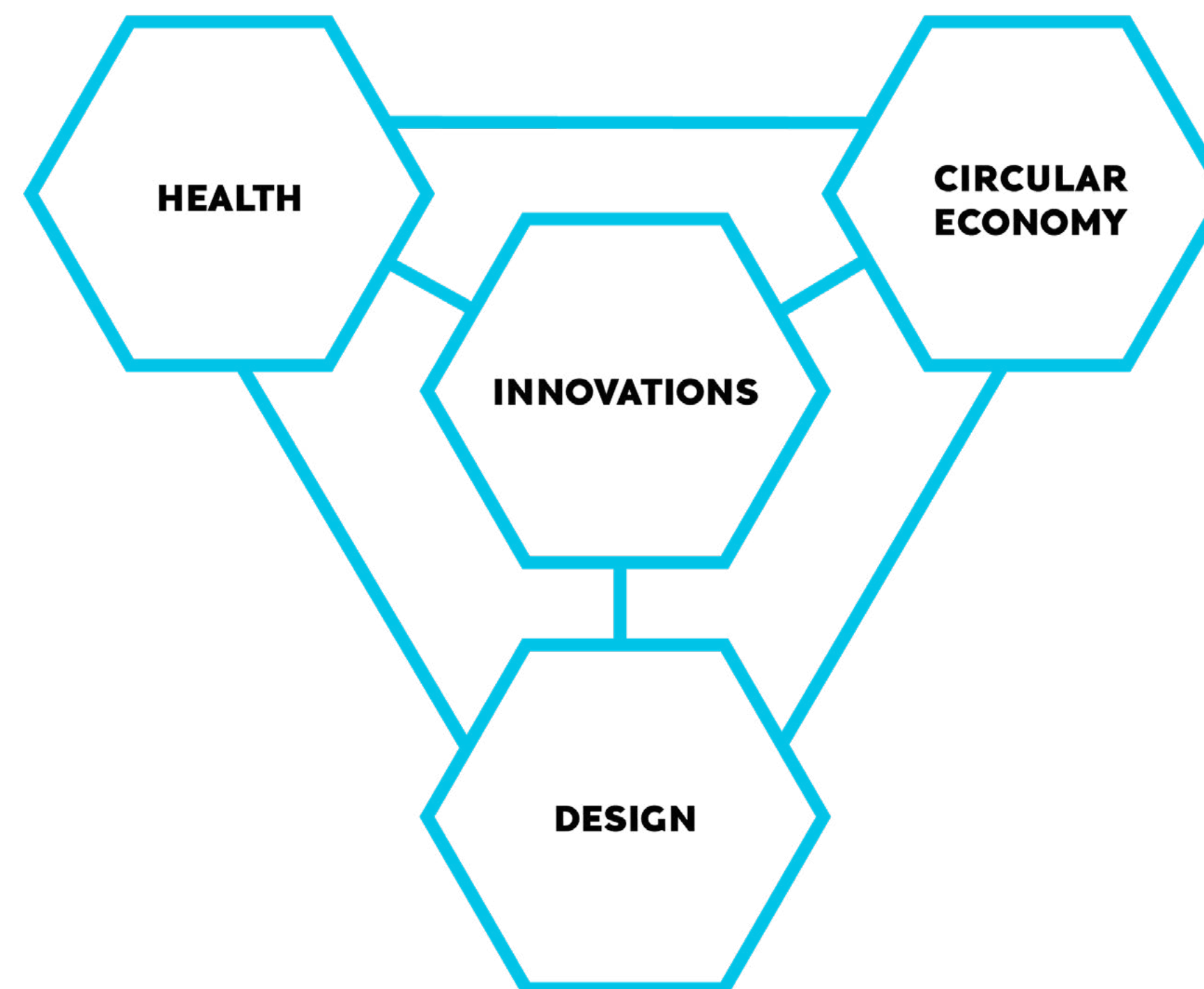


LAB strategy 2030

The Best of Both Worlds

The best of both worlds: studies and work. LAB University of Applied Sciences is a higher education institution, specialising in innovation, business and industry. It operates in Lahti and Lappeenranta, Finland, and also online. We offer education in five fields: health care and social services, technology, business, hospitality and design, fine arts and visual communication.

Our strengths include the circular economy, design, innovations and health. We have 8,900 students and 500 teachers and RDI experts, which makes us the sixth largest university of applied sciences in Finland.



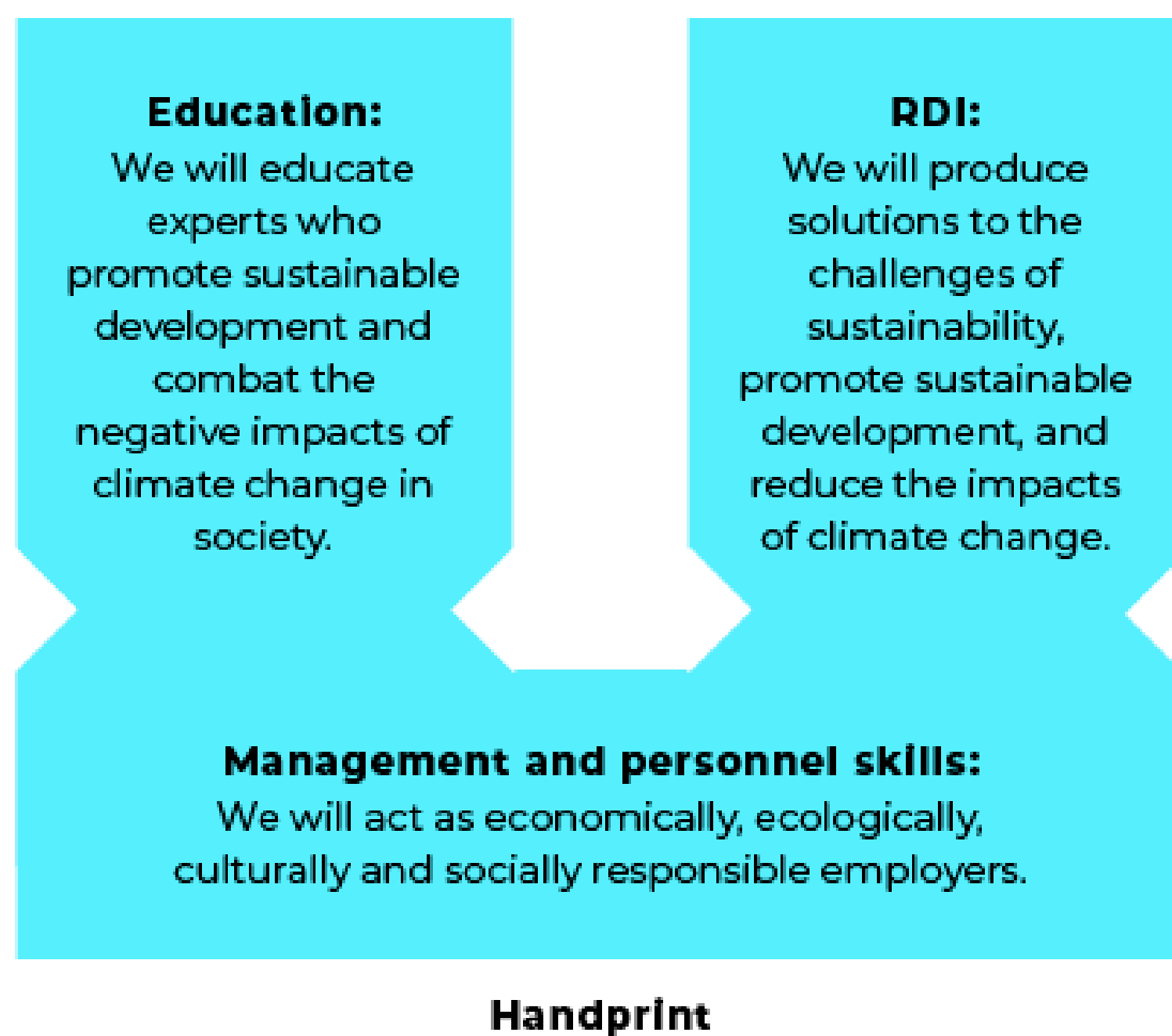


Sustainability in LAB

LAB promotes sustainability and responsibility in education, RDI activities, stakeholder cooperation and its operating methods in everyday life on the campuses. LAB enacts positive reforms in business and industry by educating experts who think in a responsible way and promote sustainable development.

- [Strategy 2030](#) aims to build a better world of work through key competencies: circular economy, innovations, design and health.
- Climate change mitigation, carbon neutrality in 2025 and a carbon-negative higher education institution in 2030 are LAB's strategic choices.
- LAB is committed to all 17 goals of the UN's 2030 Agenda for Sustainable Development.
- LAB is committed to Arene ry's Programme for the sustainable development and responsibility of universities of applied sciences.
- We improve business and industry by educating experts who promote sustainability and by producing solutions that are necessary for society. Innovations promoting ecological, economic, social and cultural sustainability are created in RDI activities in cooperation between students and companies.
- We develop our impact of our prioritised sustainability targets.
- LAB will educate its students and personnel to the concepts of responsibility and sustainability related to their work.
- In 2021, LAB chose the 7 most central SDGs.
- Together with 377 members of our community we gathered a long list of examples how LAB promotes sustainable development.
- New employees are orientated to LAB's Sustainability work in the very beginning. The content is included in the principal's orientation materials and in the intranet.
- In 2020, LAB appointed a sustainability manager.
- At LAB, supervisors are familiarised with the themes of sustainability and how to discuss them with their subordinates in goal-oriented discussions.
- LAB D is a programme to improve the academic career of our staff.
- [Career services and counsellors](#) support the students' transition into the world of work.
- The Happiness through Health project allows the members to try different sports, move during breaks and participate in measurements both remotely and on campuses. They also provide social welfare, e.g., a literature circle, a knitting circle, stress management and mindfulness.

Sustainability in education and RDI activities



Source: [Arene](#). Aspects of increasing the handprint and reducing the footprint of universities of applied sciences.

Commitments

- The [UN Global Compact](#) and [the 10 principles](#), human rights, work, environment, anti-corruption
- [The Commitment 2050](#) in the education of registered nurses, public health nurses and paramedics
- The Rectors' Conference of Finnish Universities of Applied Sciences Arene, [Programme for sustainable development and responsibility of universities of applied sciences](#)
- Our activities are also guided by the Ministry of Education and Culture's sustainable development policies that encourage strengthening sustainability targets in all education and stakeholder activities.

LAB and the 10 principles of the Global Compact

LAB is involved in the UN Global Compact, which is the world's largest corporate responsibility initiative.

In the initiative, organisations commit to promoting human rights, environmental protection and a global economy that advocate sustainability and engagement through [the ten principles](#).

The 10 principles, Businesses should:

- 1** support and respect the protection of internationally proclaimed human rights
- 2** make sure that they are not complicit in human rights abuses
- 3** uphold the freedom of association and the effective recognition of the right to collective bargaining
- 4** the elimination of all forms of forced and compulsory labour
- 5** the effective abolition of child labour
- 6** the elimination of discrimination in respect of employment and occupation
- 7** support a precautionary approach to environmental challenges
- 8** undertake initiatives to promote greater environmental responsibility
- 9** encourage the development and diffusion of environmentally friendly technologies
- 10** work against all forms of corruption, including extortion and bribery

LAB's actions against the 10 principles

Human Rights

1)

- The UN's Universal Declaration of Human Rights serves as the basic principle for the operation of the LAB campuses.
- At LAB, everyone will be treated equally and respectfully. Everyone has the right to their own gender identity and to express their gender in the manner they wish.
- Also, The student union KOE ensures that studies are accessible, equal and safe for everyone.
- In 2021, LAB organised the project Everyday tools for gender-sensitive guidance and teaching-training for staff.

2)

- LAB has recently renewed its [equality plan](#) and aims to make the community more equal and inclusive. Key areas in the Equality and Non-discrimination Plan are as follows: identification of and intervention in discrimination, assessment of the equality impacts of activities and practices, implementation of measures to promote equality and increase inclusion.
- The guidelines for investigating harassment have also been updated.
- Occupational health and safety are a part of our daily activities

Labour

3)

- LAB's organisational structure, board of directors and advisory board are transparent; and LAB consults its student union in decision making.
- The LUT group established an Advisory Board for the Universities. [The LAB & LUT Advisory Board](#) gives opinions on different issues to support the management of the university group.
- Occupational safety cooperation promotes interaction between the employer and the employee, and enables the employees to participate and influence matters related to a safe and healthy workplace.
- LAB has implemented staff training with the aim of promoting diversity and equality, such as the following: Everyday tools for gender-conscious guidance and teaching; Observing cultural diversity in my work.
- An independent online course on equality, diversity and non-discrimination is under way.

4)

- LAB makes use of Hansel Oy's framework arrangements in a large part of its procurements. Notably, they take the exercise of work rights and human rights, as well as the promotion of decent work, into consideration.

5)

- LAB is involved in the Afstor startup. Instead of collecting and burning wood, Zambians use solar electricity to make food and plant new trees. Especially children and women become free of wood collecting.
- LAB enacts sustainable reform in business and industry by educating experts who think in a responsible way and promote sustainable development.
- The students' eLAB portal and the staffs' intranet are bilingual (FI + EN).

6)

- LAB's Code of conduct guides that we treat all employees equally and fairly and accept no discrimination, bullying or harassment in our community. We value our employees and uphold respectful and equal treatment.
- Our employment criteria are non-discriminatory and based on the collective agreement.
- The Group's procurements must follow the principles of openness, equality, non-discrimination and relativity.

Environment**7)**

- According to our procurement plan, we implement our procurements as economically and in the most organised manner possible, and as appropriate packages that consider the viewpoints of both lifecycles and the environment. The precondition for all procurements is that the item or service to be procured is necessary.
- Our travel instructions outline that in work-related travel, environmental responsibility must be taken into account and gives some guidelines for staff members on how to reduce the negative impacts of travelling.

8)

- The electricity purchased by the LAB is guaranteed by origin and is 100% renewable (VENI Energia).
- We are considering the possibility to start purchasing green district heating on the Lappeenranta campus. This would further reduce our energy-related emissions and, thus, our carbon footprint.
- We are preparing a Climate Action Plan that aims to reduce our emissions and get us closer to our goals of carbon neutrality and carbon negativity.

9)

- LAB established a “Tekstiilien ja muovien materiaalikierrät” (Material circulations of textiles and plastics) research team to research and develop sustainable technologies and processes that would keep the raw materials circulating and reduce the carbon footprint.
- LAB is developing eco-friendly packaging solutions.

Anti-Corruption**10)**

- LAB’s internal inspection is conducted by an external inspector community, and the Board decides upon the annual inspection targets.
- The risks are reported to the LAB Board twice per year.
- The code of conduct guides the prevention of corruption. LAB is to neither directly nor indirectly offer to make illegal payments or to provide benefits exceeding reasonable courtesy to any stakeholder groups. LAB will not accept any illegal payments from our business partners, anything beyond reasonable courtesy and hospitality.

LAB's Sustainable Development Goals

In line with our strategy, we focus on influencing the following UN's sustainable development goals in particular:

- SDG 3:** Good health and Well-being
- SDG 8:** Decent work and economic growth
- SDG 9:** Industry, Innovation and Infrastructure
- SDG 11:** Sustainable Cities and Communities
- SDG 12:** Responsible Consumption and Production
- SDG 13:** Climate Action
- SDG 17:** Partnerships for the Goals



“LAB University of Applied Sciences and LUT University compose the high-level, curious and dynamic university group LUT Universities. Through common projects, our impact is strong.”

Strategic SDG's promoting sustainability

LAB is building a more sustainable future together with its partners. We create new technological solutions, promote the business of circular economy, develop the low-carbon economic structure of regions and promote the well-being of people and the environment.

- Through our [recruitment services](#), businesses can reach over 8,000 students from LAB UAS.
- Through close cooperation with business and industry, LAB links the needs of society to educational content and to the research, development and innovations (RDI) actions.
- LAB is piloting the most potential new operating methods for further processing.

- Sustainability and responsibility are cross-cutting themes in all areas of strength in our RDI activities:

[Circular economy](#) – We will enable a national transition towards a carbon-neutral circular economy

[Design](#) – Our solutions will support new value creation for business

[Innovations](#) – We will make new openings worth discussing

[Health](#) – We will develop innovative and impressive solutions to promote overall well-being



Examples of SDGs in LAB's RDI and education:

Good health and well-being

Examples of SDG 3 in RDI and education:

- The LAB WellTech produces new ideas, develops and tests product templates and innovations for the health and social services, using technology and machine vision.
- The BIOPROT project develops bio-based protective equipment, ecological products and the safety and welfare of facemask users.
- ODF2030 Sustainable sanitation for Ho Municipality is a development product that decreases environmental and health risks by promoting awareness of the importance of sanitation.
- Understanding of aseptic and infection prevention is important for all students of health care.
- The international degree and programmes aimed at immigrants help import effective procedures in health care into immigrant communities in Finland and globally.



Decent work and economic growth

Examples of SDG 8 in RDI and education:

- The SafeInLog project enhances the work safety and well-being at work for intralogistics actors of SMEs.
- The STEPS project seeks solutions to help young people aged 18–29 to find their career or study path.
- The [Bounce Forward](#) project reinforces the proactiveness and operating capabilities in expert sectors.
- The Get Employed! Työllisty! module supports the employment of international degree students in Finland.
- The cooperative studies in marketing promote negotiation and networking skills, the creation of jobs and entrepreneurship and internationality.



Industry, innovation and infrastructure

Examples of SDG 9 in RDI and education:

- The laboratory of energy and circular economy helps develop processes of material cycles.
- The ECOtronics – Sustainable Electronics and Optics project studies biobased and biodegradable materials that are suitable to use in electronics and the manufacture of electronics with printing methods.
- The “Tekstiliien ja muovien materiaalikierröt” (Material circulations of textiles and plastics) research team studies and develops sustainable technologies and processes that would keep the raw materials circulating and reduce the carbon footprint.
- The MekaDigi project develops high-quality tools that are suitable for teaching mechanics remotely. It also aims to reduce the risk of exclusion and the interruption of studies.
- The viewpoints of a circular economy are considered when teaching mechanical engineering.



Sustainable cities and communities

Examples of SDG 11 in RDI and education:

- The aim of the Sustainable Service Housing Ecosystem project is to build a long-lasting cooperative and regional ecosystem to develop sustainable living.
- Our development project, commissioning wooden apartment blocks, promotes carbon-neutral construction.
- The [Luontokohtaiden kulttuuriperintö eläväksi](#) nature and culture project collects cultural heritage related to natural sites and develops the related productisation.
- The master's-level programme Urban Sustainability focuses on the challenges created by urbanisation and climate change.
- At LAB, teaching draws attention to responsible solutions in urban planning. Design based on data models decreases the amount of waste materials; we aim to consider recycling and reuse when it comes to materials.



Sustainable consumption and production

Examples of SDG 12 in RDI and education:

- The CECI – Citizen Involvement in Circular Economy Implementation project promotes the inclusion of citizens in circular economy, with a special focus on solutions of sharing economy.
- The Textiles into Circulation in Päijät-Häme project develops the separate collection of textiles that are no longer used.
- LAB, as a part of the Finixrevolution consortium, is accelerating societal change towards a resource-wise textile system by interdisciplinary co-creation, new technologies and circular business models.
- In the Crea – RE-Creating Aligned Studies in Resource Efficiency project, we produced learning material on resource efficiency and circular economy with Swedes, Latvians and Russians.
- A thesis sought to see if the prerequisites for a circular economy shopping centre are present in the economic region of Lahti.



Climate actions

Examples of SDG 13 in RDI and education:

- The HITU project maps risks related to global warming in the countryside of the Kanta-Häme and Päijät-Häme area. It also prepares programmes of measures to prepare for climate risks.
- The SaMaRa project pilots the reclamation of carbon dioxide in biogas processes.
- [A personal carbon trading scheme made people question their mobility choices – and reduce their emissions.](#)
- The students of energy and environmental engineering help companies in their work related to the environment and climate responsibility in the Päijät-Häme climate partnership operating model.
- The main areas of the Erasmus Mundus joint master's degree, Master in Urban Climate and Sustainability, are climate change in cities and its effects, as well as controlling the change and adapting to it.



Partnership for the goals

Examples of SDG 17 in RDI and education:

■ International level:

- The BIOREGIO project promotes bio-based circular economy in six EU countries. The project shares knowledge on good regional implementation models, cooperation models and technologies.
- As part of the Global Citizenship and Diversity Management Skills in Higher Education project, LAB produces a module and trainer materials, for example, on the following topics: managing a diverse workplace, consuming and travelling responsibly and global citizenship.

■ National level:

- The national Reduce and Refuse, Recycle and Replace – the [Plastics Roadmap for Finland project](#) studies the opportunities of exploiting mixed plastic waste in recycled plastic products.
- LAB, as a part of the [Climate University](#), offers open courses in themes of climate change and sustainability.

■ Regional level:

- The NICCoLLa project produces courses that strengthen the usage and development skills of technology and ICT solutions in health care and social services.
- The [MINT project](#) aims to create an operating model for an innovation and trial ecosystem between municipalities, businesses and higher education institutions.



Sustainability in stakeholder cooperation

Together with our partners, we will create new technological solutions, promote the business of circular economy, develop the low-carbon economic structure of regions and promote the well-being of people and the environment.

- Together with the campus cities Lappeenranta (European Green Leaf 2021) and Lahti (European Green Capital 2021), we promote a clean environment and sustainable society.
- LAB participates in the activities of the [JunnuYliopisto](#) youth university in Lahti. Their activities include water research, solutions of circular economy, robotics and carbon footprints.
- LAB and LUT's [Junior University](#) activities include cooperation with school during school hours, club activities during leisure time, science camps and different science and technology events.
- We have built a [study selection with an environmental theme](#) (link in Finnish) in cooperation with the environmental sector in Lahti and higher education institutions focusing on sustainable development.
- We organised the Sustainability Week on the Lappeenranta campus and online in November in cooperation with student organisations, campus cities and our partners present on our campuses.
- Solutions.now is a [co-organised course](#) where students can take their expertise in sustainability and climate change into action by offering solutions for real-life challenges presented by companies.
- The environment-themed [Lahti Science Day](#) (link in Finnish) was organised in November 2021.
- An internship project of our nursing students guides elementary students of Imatra in matters related to health and welfare, taking the global situation and the goals of sustainable development into consideration.
- The [Työelämän matematiikkaa course](#) (Mathematics in the workplace, link in Finnish) motivates girls to learn maths and aims to dismantle the gendered structure of different fields. During the course, young people will be shown where maths are needed in different fields.
- We are an active member of the ARENEs sustainability working groups “Management and competent personnel” and “Carbon footprint”. The target of the Carbon workgroup is to prepare a carbon road map for Finnish Universities of Applied Sciences and help UASes to take actions to decrease their emissions.

Networks

- [Ellen MacArthur Foundation's](#) profiled universities in circular economy
- [Greenreality Network Lappeenranta](#)
- [Climate partnership](#) concept in Päijät-Häme
- The EU working group, JRC – Growth and Innovation, promotes harmonised waste management in Europe
- The Netfas network speeds up the transition of the textile and fashion industry towards a circular economy
- The DESIS Design for Social Innovation and Sustainability network
- The LIMOWA logistics network promotes the competitiveness of its members
- The Service Design Network promotes cooperation and competence in service design extensively across all sectors
- The Telaketju network promotes sustainable manufacturing, use and recycling of textiles
- UArcticCircular Economy Thematic Network
- The EMAF Finland network
- Climate University



Sustainable campuses

LAB is committed to making its campuses carbon neutral in 2025 and carbon negative in 2030. The route to that will be defined by a Climate Action Plan.

- LAB is committed to carrying out a carbon footprint calculation annually with a jointly developed [ARENE's calculation model](#) and monitor the development of LAB's carbon footprint.
- The Climate Action Plan, that is currently under way, aims to reduce emissions caused by our own actions as much as possible. The biggest solutions have already been found, partly by the owners of the buildings, partly by LAB.
- Support services units, teaching and RDI staff and students will all participate in the Climate Action Plan. Our goal is to have our Climate Action Plan approved by the management in early autumn 2022.
- The Lahti campus at ISKU Center is heated with geothermal power, and its electricity is produced with solar panels on the building.
- On the Lappeenranta campus, all purchased electricity is carbon neutral.
- We utilise the working and learning spaces on our campuses efficiently with LUT university, which is part of the same Group. Our Group shares a common space reservation system.
- The catering service providers on our campuses take the themes of responsibility into consideration. For example, the Compass Group operating on the Lahti campus aims to be carbon neutral in 2030.
- The [Kampusravintolat Oy](#) operating on the Lappeenranta campus aims to minimise the amount of bio waste produced and to guide their clients to eat vegetarian. They also primarily use Finnish meat. [Research carried out by the LAB student](#) has shown that measuring and communicating the results decreases biowaste by 25% per customer.
- Food left over from lunch is sold to campuses at cheap rates.
- On the Lappeenranta campus, we have bioscales to measure customer-specific food waste, encouraging people to reduce the amount of food going to waste.
- The lights in the learning and meeting facilities on the Lahti campus are controlled by motion sensors, which ensures that our electricity consumption is minimised.
- On the Lappeenranta campus, the Group shares the costs of city bikes annually.

Carbon footprint

Carbon footprint calculation includes emission from the following:

- Travelling, including flights, car traffic, journeys in the UASs' own cars, public transport, rental buses, maritime travel, hotel nights.
- Buildings, including heating, electricity consumption, cooling, water, waste management, new construction, renovation and space alteration projects, maintenance repairs, use and maintenance, upkeep of outdoor areas, cleaning.
- Procurements, including IT equipment, IT expert services, telecommunications services, laboratory equipment and supplies, laboratory chemicals, furniture, food and coffee catering and all other procurements.
- The calculations do not include any categories based on individual choices, such as meals on campus and commuting.



Carbon footprint

- LAB's total carbon footprint in 2021 was 974 tons of carbon dioxide equivalents (tCO₂eq).
- Emissions from procurement account for 601 tCO₂eq (62%), emissions from buildings for 245 tCO₂eq (25%), and emissions from travel for 127 tCO₂eq (13%).
- The results of the 2020 and 2021 carbon footprint calculations are not comparable, as more categories are included in the 2021 calculation than in the previous year. This is particularly reflected in the size of the carbon footprint stemming from procurement.

Travel:

Total 127 tCO₂eq

- In 2021, there was a 43% increase in the total distance of air flights from 2020. The amount of mileage/kilometre adjustments paid also increased significantly, by around 60%.
- In 2020, emissions from travel were 87 tCO₂e, an increase of +46%
- One area for improvement is the replacement of existing vehicles with more fuel-efficient alternatives. This measure is included in the Climate Action Plan currently under preparation. This would allow emissions to be reduced by up to 4 t.

Real estate:

Total 245 tCO₂eq

- In 2020, emissions from real estate amounted to 438 tCO₂eq. The single most significant contributor to the reduction of the carbon footprint in this regard is the installation of a geothermal heating system on the Mukkulankatu campus by the Lahti campus estate owner. The new geothermal system reduced the amount of district heating purchased by up to 65%.
- This calculation includes the Lappeenranta campus (9,000 m², independently owned) and, for Lahti, the Mukkula campus (24,000 m², rented) and the Niemenkatu premises (3,000 m², rented).

- The emissions factors for district heating are those reported by local energy companies (Lappeenranta Energia Oy and Lahti Energia Oy).
- District heating production in our campus cities:
 - Most of Lappeenranta Energia's district heating is produced as combined heat and electricity in a biopower plant. In 2021, the share of biofuels as district heating energy sources was 72%. The specific emissions of carbon dioxide from district heating produced by Lappeenranta Energia in 2021 were 66 gCO₂/kWh. Lappeenranta's energy target is to be carbon neutral by 2026.

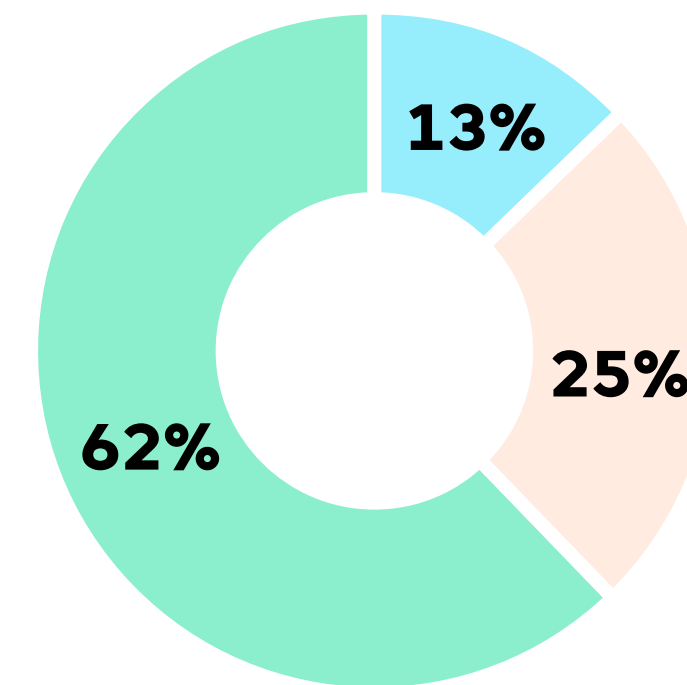
- In Lahti, district heating is mainly produced in a new bioenergy plant and a gas-fired power plant using recycled fuels. In 2021, the share of renewable energy sources in district heating production was 83%, with specific emissions of 61 gCO₂/kWh. Lahti’s energy target is to be carbon neutral in 2025.
- In terms of electricity consumption, only the Lappeenranta campus is included in the calculation. The electricity purchased by LAB is of guaranteed origin and comprises 100% renewable energy (VENI Energia).
- For the Lahti campus, electricity is included in the rent, and the ISKU Center uses 100% renewable Greene energy in all its locations.

- In addition to the electricity consumption data, the calculation lacks data on water consumption and waste for the Lahti campus.

Procurements:

Total 601 tCO₂eq

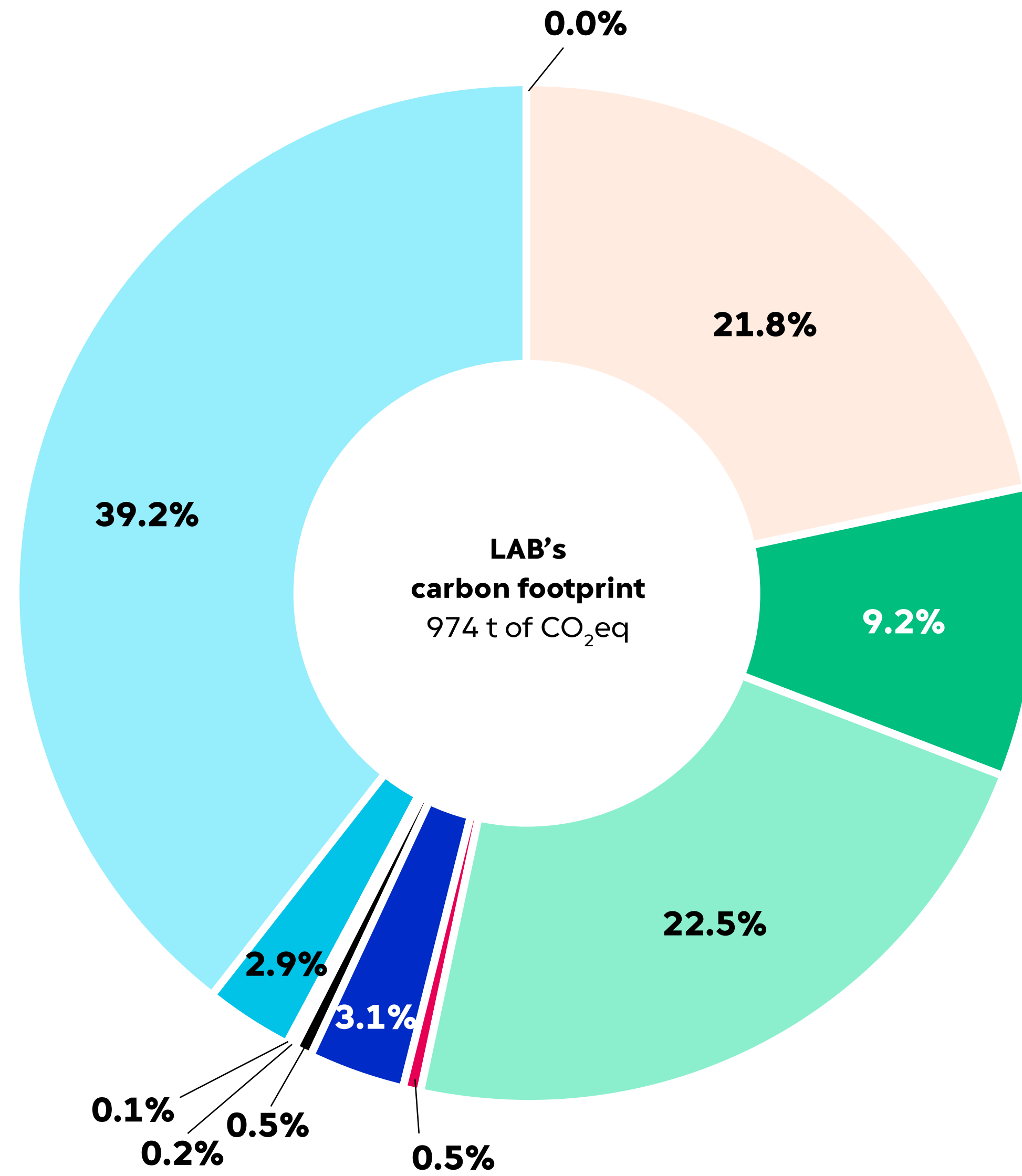
- The calculation of the carbon footprint associated with purchases is based on euros spent.
- Purchases of laboratory equipment, supplies, chemicals, written materials and documentation, occupational healthcare, and other uncategorised purchases are included in the category ‘Other purchases’.



LAB’s emission distribution

Emissions

- travel 13%
- real estate 25%
- procurement 62%



LAB's carbon footprint in 2021:

974 t of CO₂eq

A more detailed breakdown of emissions:

Emission distribution	of CO ₂ eq	
Electricity	0.0	0.0%
Heating	212.2	21.8%
Flights	89.5	9.2%
Procurements	219.5	22.5%
Hotel accommodation	4.9	0.5%
Construction and other buildings maintenance	30.2	3.1%
Fleet vehicles	5.2	0.5%
Waste management	2.1	0.2%
Water use	0.8	0.1%
Passenger cars (mileage/kilometre-adjusted business trips)	27.8	2.9%
Other procurement	381.4	39.2%
Total	974	

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