

Aalto University Sustainability Report 2022



Aalto University

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Working group: Margareta Björkstrand,
Filip Hintze, Jussi Impiö,
Jasmin Järvinen, Elina Kähkönen,
Sirkku Linna, Iivo Paukkeri,
Aapo Pihkala, Tiina Pylkkönen,
Elina Ruoho, Katja Rönkkö, Ida Salin,
Paula Schönach, Tuomo Uusitalo

Cover art: Alusta Pavilion, which
promotes urban biodiversity, featured
in Aalto University's Cooler Planet
exhibition in 2022. © Aalto University/
Anne Kinnunen

Foreword

Year 2022 was exceptional in many ways, also at Aalto University. At the beginning of the year, Aalto University was on its way to adapting to the new normal after the pandemic, when the Russian war of aggression against Ukraine suddenly changed the situation. The war shocked the entire university community and necessitated rapid support for Ukrainian students and researchers. The role of the university as a social resilience actor in an acute crisis situation emerged for the second time in a short period. The university will keep defining and going deeper into this role and advancing the measures associated with it in the future.

In addition to acute challenges, slow systemic crises require a more detailed definition of roles and more determined efforts together with other actors in society.

Aalto University's strategy defines the university's goal of building a sustainable future. The teaching and innovation activities built on strong research expertise and a multi-disciplinary approach produce the building blocks, solutions and problem-solvers required for a sustainable future.

We use our development projects to create structures, capabilities and practices that enable strong basic research, multidisciplinary and solution-oriented research and innovation, start-ups specialised in sustainability, integration of sustainability into all learning paths at Aalto, and continuous improvement of sustainability in Aalto's operative activities.



Rather than taking individual measures, our goal in 2023 is to increasingly enable student-led sustainability measures and projects as well as to make sustainability a cultural characteristic of our community. All this must happen in a fair and encouraging community and an environment that enables bold and pioneering experiments.

This report discusses our achievements in 2022 in key areas of sustainable development. It also highlights identified development areas and the challenges we face. We are continuously developing all areas of our responsibility work and the way we measure and report on them, as well as approaches to measuring and enhancing our sustainability impact in society.

Research

Strong research is a prerequisite for a rapid and controlled transition towards a sustainable future. Aalto has numerous research areas that contribute to developing sustainability solutions. The research is focused on such fields as sustainable fashion, biomaterials, new materials, sustainable use and recycling of mineral resources, circular economy business models, energy technologies, energy efficiency in different sectors, water resource management and carbon sink modelling. Not only the fields of research focused on sustainability challenges and solutions but also others have potential for facilitating the development of sustainability solutions. Strong basic research lays the foundation for applied research and innovations. Developing ways of measuring the actual impact of research on sustainability is important for identifying and strengthening the means of making an impact.

Cooperation between different fields of research is needed to enable innovations to emerge from the research. Aalto has excellent prerequisites and strong traditions for this. As societies are making a rapid transition to sustainable production and operating methods, there is a need for strengthening multidisciplinary research and innovation efforts and engaging in new forms of research cooperation with key actors in the private and public sectors.

Last year, we organised the Sustainability Science Days (SSD) conference for the fifth time together with the University of Helsinki. This two-day conference consisted of 22 sessions and attracted more than 1,300 registered participants from

54 countries. Towards the end of the year, we will conclude an agreement between Aalto and the University of Helsinki on the long-term development of the SSD into a solution-oriented and international sustainability conference with a high impact. A joint SSD event coordinator started their work in late 2022.

The UN has defined 17 global sustainable development goals (SDGs) related to such themes as protecting the environment and climate, eradicating poverty, equality, peace and a sustainable economy. More than a quarter of the 3,418 theses completed at Aalto dealt with the SDGs. A quarter of the 3,073 peer-reviewed scientific publications were also relevant to the UN SDGs. However, the current method of identifying and labelling SGD publications using an AI algorithm based on keywords may fail to identify some research related to sustainable development that is highly specialised, concerned with a specific technology or close to basic sciences.



Unlike in 2021, the figures for 2022 include for the first time all procurements of Aalto University.

Education

The goal of Aalto University’s education is that graduates will be able to promote sustainable development in society after completing their studies. We aim to include sustainable development in all study plans and support systems thinking in the studies. It is also important that students learn to solve sustainability problems from the perspective of their fields and that they have the motivation and courage to act:

- Aalto co-educators team is committed to promoting the integration of sustainable development into programmes and courses and to developing competence in teaching and among staff. The current focus is on supporting the development of programmes and courses for the next curriculum valid in 2024–2026. Important milestones included facilitating the process of updating school-wide learning objectives of the School of Business, such as sustainable development, and launching the process of master’s programmes at the School of Chemical Engineering and School of Electrical Engineering. These processes helped create strong support mechanisms for the schools for their efforts to develop their programmes.
- In 2022, a proposal for a joint Aalto-wide “resource-wise future” minor subject was developed together with all Aalto schools and the Aalto co-educators team. The minor subject deals with global

material and energy flows and their impacts on resource-wise product and service development. It benefits from Aalto University’s resources and high-quality research in the circular economy. As a project that brings the Aalto community together, the minor subject has the long-term potential to strengthen the coordination of education in sustainable development, improve teaching skills and support the creation of a sense of community.

- The promotion of education in sustainable development has involved strong international cooperation and networking. More than 30 colleagues from 14 European universities gathered to share their experiences and discuss the challenges of education in sustainable development in the “Sustainability Integration, Current Experiences – Future Perspectives” seminar and workshop.
- We have marked courses with a UN sustainable development goal (SDGs) label if they deal with topics relevant to sustainability. A new comprehensive sustainability label (“SDG wheel”) was introduced in 2022. The studies offered as a part of the 2022–2024 curriculum cover the following sustainable development topics:



Figure 3. Number of courses relevant to sustainable development
 *A label indicating a comprehensive approach to sustainability

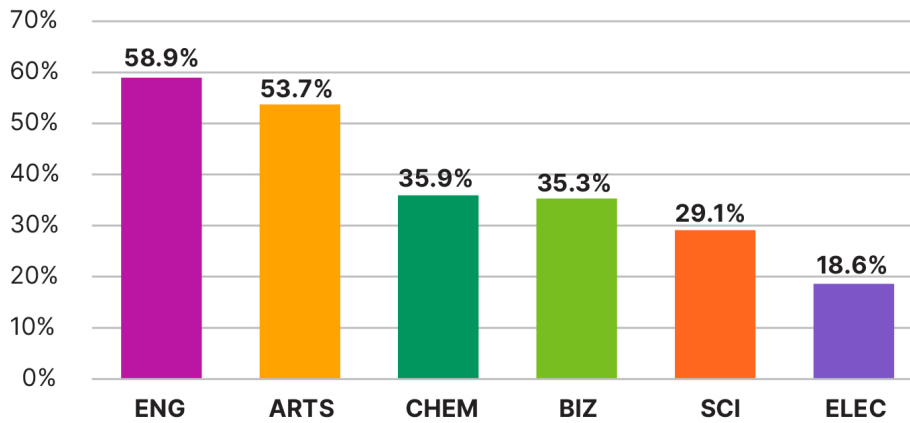


Figure 4. Share of courses relevant to sustainability out of all courses by school

Student community

In autumn 2021, Aalto University, Aalto University Student Union AYY and Teknologföreningen started regular collaboration with the aim of promoting sustainability on the campus. This cooperation originated from an initiative made by students after realising that all three actors were either already preparing or intending to prepare a carbon neutrality plan. This cooperation was considered useful in drawing up the plans. However, it was soon noted that the preconditions for and the implementation and challenges of sustainability work on the campus also necessitated a wider joint survey.

The three actors organised various workshops on different sustainability themes, such as carbon neutrality, biodiversity, teaching and sustainability competence. The goal of the workshops was to identify cooperation and development needs, in particular. Based on this work, six goals were determined for the collaboration:

1. The students get to participate in the planning and decision-making concerning sustainability issues and feel that the campus is their own.
2. The cooperation in sustainability issues has a clear structure and its activities are continuous.
3. Aalto has a carbon neutrality roadmap that includes milestones, a timeline and indicators.
4. Sustainability themes are included in basic studies, enabling students to recognise the role they play in systemic change.
5. There is a communication channel or forum related to sustainability that reaches all Aalto students.
6. The operating methods of students and organisations stem from the joint, interactive vision of Aalto University.

These goals were set at different levels, and the time needed to achieve them varies. Collaboration will be required to attain all goals, and some may also have clear owners who will be identified and named as the collaboration continues. Work on some of the goals already began in 2022.

During the year, AYY collected dozens of sustainability-related questions under the theme “What have you always wanted to know about sustainability but not dared to ask?”. These questions were used in developing the new ResourceWise Future minor subject. The plan is to also use the questions more extensively in teaching development.

At the end of the year, we received a university funding decision on a development project aimed at students. The goal of the new Sustainability Action Booster project is to use a grant model for expenses to support students' sustainability activities and solutions, creating a culture of sustainability owned by students on the campus that inspires learners of all ages as well as curious minds from outside the Aalto community. With the help of the grant model for expenses, we hope to strengthen students' ownership of sustainability solutions and the campus as an inspirational environment and platform for different types of collaboration, ideas and innovations. The Sustainability Action Booster project received funding for 2023 and 2024.

All theses with sustainability topics	Share of theses with sustainability topics of all theses	All theses
876	25.6%	3 418

All theses								
Higher education institution	Bachelor		Master		Doctoral dissertation		Total	
	Number	%	Number	%	Number	%	Number	%
ARTS	35	22.3%	70	19.8%	4	25.0%	109	20.7%
BIZ	64	17.1%	81	17.5%	7	43.8%	152	17.8%
CHEM	56	46.7%	80	58.0%	9	34.6%	145	51.1%
ELEC	47	19.7%	58	28.6%	7	18.4%	112	23.3%
ENG	64	36.6%	89	29.8%	20	48.8%	173	33.6%
SCI	51	19.6%	124	28.4%	10	16.4%	185	24.4%
Total	317	23.9%	502	26.5%	57	28.8%	876	25.6%

Figure 1. Theses relevant to sustainability

All peer reviewed scientific publications	SDG labelled peer-reviewed scientific publications	SDG labelled peer-reviewed scientific publications %
3 073	788	25,50 %

SDG labelled peer reviewed scientific publications						
Higher education institution	Articles		Proceedings papers		Total	
	Number	%	Number	%	Number	%
ARTS	41	32.0%	8	12.5%	49	25.5%
BIZ	40	24.8%	3	20.0%	43	24.4%
CHEM	231	51.8%	3	16.7%	234	50.4%
ELEC	76	14.9%	23	9.4%	99	13.1%
ENG	203	41.1%	40	33.3%	243	39.6%
SCI	172	19.1%	6	3.4%	178	16.5%
Total	708	28.4%	79	13.3%	787	25.5%

All peer reviewed scientific publications				
Higher education institution	Articles		Proceedings papers	
	Number	%	Number	%
ARTS	128		64	
BIZ	161		15	
CHEM	446		18	
ELEC	510		245	
ENG	494		120	
SCI	901		178	
Total	2,489		596	

Figure 2. Peer-reviewed scientific publications

Campus

Climate

The Carbon Neutral Aalto 2030 development project was launched in 2022. The project aims to understand the university's climate and environmental impacts in detail, identify ways to reduce these impacts and create objectives and a concrete roadmap for measures in each area of environmental impacts.

A detailed situational picture of Aalto's climate emissions and emission sources was created in 2022. Stakeholders in Aalto worked together to identify different methods of reducing emissions. Some of these methods involve changes in practices

and their guidelines, while others require careful life cycle analyses and significant investments in equipment and structures. In some emission categories, it is highly challenging to cut emissions by the university's actions without direct impacts on the quality of research, teaching or internationalisation. For example, when it comes to air travel, emissions can only be partly cut by taking fewer flights without compromising the university's international cooperation. In the longer term, we will have to wait until carbon neutrality solutions for aviation are available to us. Synthetic fuels based on green hydrogen are expected to be widely available by the end of the decade.

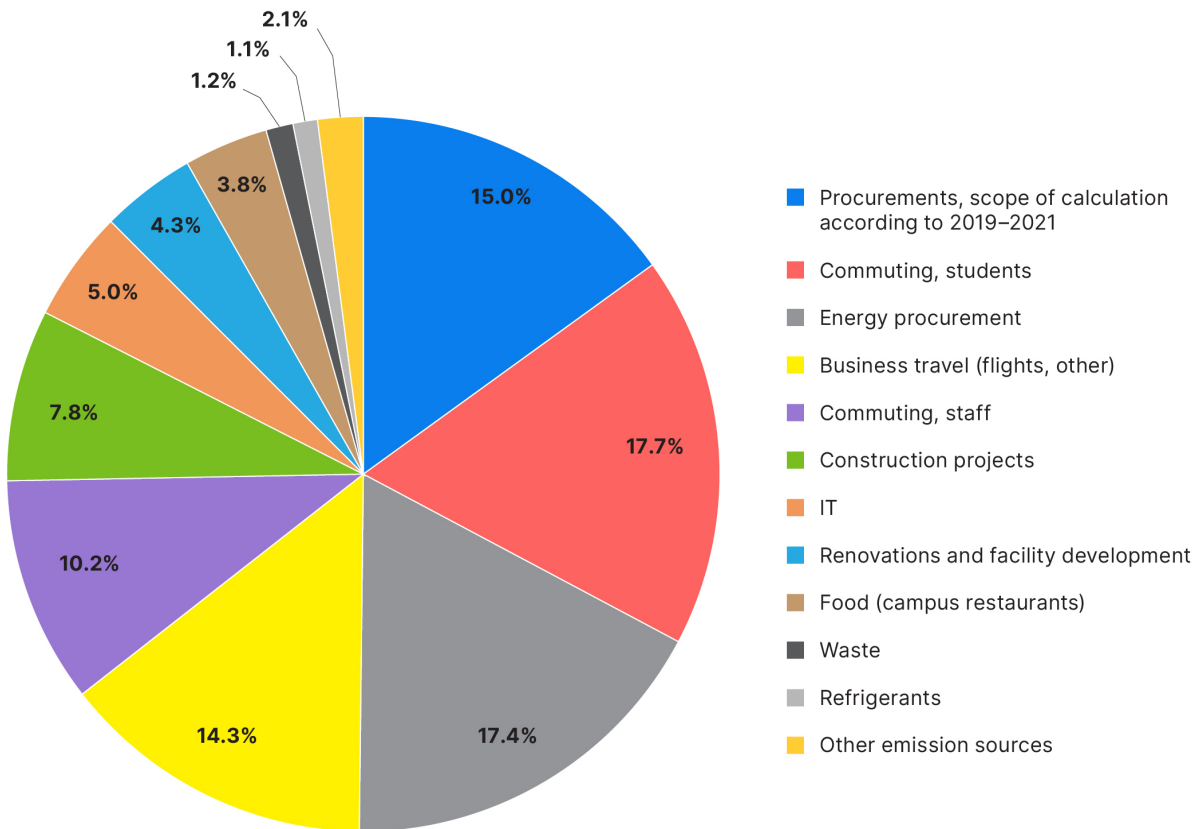


Figure 5. Aalto's carbon footprint in 2022 according to previous years' calculation scope (2019–2021) was 24,746 tCO₂e. This scope includes investments according to teaching and research infrastructure depreciations and purchases of furniture.

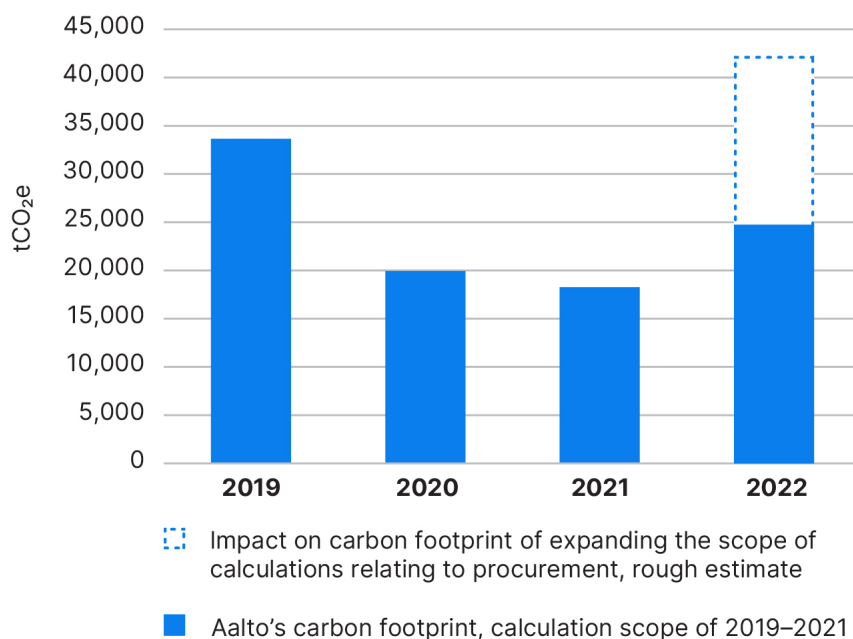


Figure 6. Impact of expanded procurement calculations on Aalto’s carbon footprint. When a rough estimate of procurements of materials with a short life cycle, service procurements, various licence and data fees and emissions from investments were factored in more extensively than before, the procurements as a whole account for a significant share of the carbon footprint. The calculation of total emissions relating to procurements produced in 2022 is a rough estimate. The accuracy of the calculation method and the magnitude of procurements as a whole will be improved in 2023.

Category	tCO ₂ e				Change 2019/2022	Change in % 2019/2022 compared to 2019 %
	2022	2021	2020	2019		
Procured energy	4,311	8,698	9,168.4	12,896.1	-8,585.1	-66.6%
Procurement	3,724	3,422	3,018	3,206.8	517.2	16.1%
Indirect life cycle emissions of energy	248	1,037	1,005.2	1,062.6	-814.6	-76.7%
IT	1,241	1,033.7	1,163.7	669.3	571.7	85.4%
Commuting, students	4,383	808.6	584.6	2,761.5	1,621.5	58.7%
Commuting, staff	2,536	599.5	697.5	2,036.3	499.7	24.5%
Renovations and facility modification projects	1,064	596	1,192	1,488	-424	-28.5%
Food (campus restaurants)	945	545	646.7	1,277.6	-332.6	-26.0%
Construction	1,921	363	77	968	953	98.5%
Travel	3,532	360.1	1,931.7	6,393.4	-2,861.4	-44.8%
Waste	305	359.4	84.1	442.5	-137.5	-31.1%
Maintenance projects	160	185	185	160	0	0.0%
Refrigerants	275	178.9	102.5	112.5	162.5	144.4%
Water	86	44.8	43.2	82.8	3.2	3.9%
Energy production	6	23.3	29.7	49.3	-43.3	-87.8%
Vehicles owned	9	13.8	14.3	20.7	-11.7	-56.5%
	24,746	18,267.7	19,943.6	33,653.4	-8,881.4	

Figure 7. Comparison of Aalto University’s climate emissions in 2019–2022. The increased carbon footprint in 2022 compared to years 2020 and 2021 is due to the fact that emissions were again generated from commuting, meals and travel, compared to the low figures of the pandemic years. A preliminary estimate of total emissions from procurements is not included in the table as it is not comparable to the previous years’ calculations.

The four largest categories of climate emissions in 2022 were students' and staff's commutes, energy and travel (flights and other business travel emissions) as well as procurement. To ensure financial sustainability and due to the exceptional situation in the domestic electricity market, we shifted the focus in green energy procurements from certified wind power to zero-carbon eco-district heating.

For the part of Aalto's procurement, the carbon footprint calculations for 2019–2021 include the university's investments in research and teaching infrastructure as well as furniture. The first rough estimate of total emissions generated by Aalto's procurements was produced in 2022 with the aim of understanding their magnitude. The initial estimate included not only the categories already factored in but also material procurements with a short life cycle, service procurements, different types of fees for licences and data, and investments more extensively than before. Procurement as a whole will emerge as the largest single category in Aalto's carbon footprint, and depending on the calculation method used, it accounts for up to one half of Aalto's total carbon footprint.

The extended calculation regarding procurement as a whole contains many uncertainties associated with the use

of euro based emission factors as well as the analysis and classification of procurement data, among other things. The calculation method for procurements as a whole and the estimate of their total emissions will be developed further and more accurate figures will be obtained in 2023.

In 2023, a development project titled Carbon neutral Aalto 2030 will plan and carry out the first phases of Aalto's fifty-item roadmap for measures. We will also engage in discussions on the definition for a climate claim. Together with other Finnish universities, Aalto is committed to pursuing the Ministry of Education and Culture's goal of carbon neutrality by 2030. The current plans indicate that we will manage to cut our emissions by roughly one half of their current volume by 2030. A great deal of carbon offsetting would be needed to fulfil the carbon neutrality pledge. However, spending the university's funds intended for research and teaching on offsetting emissions is, however, challenging in many ways. Neither is using discretionary government transfers to purchase voluntary emission off-sets currently legally possible under the Act on Discretionary Government Grants. The university will reformulate the verbal definition of its climate goal, or the climate claim, in 2023.

Biodiversity

The natural environment of the campus is one of Aalto University's key pull factors, and a roadmap has been prepared for developing its outdoor areas. In addition to smooth everyday use, the focus is on increasing biodiversity and natural capital. In practice, this means securing the current campus nature and planting new species suitable for the area.

The campus survey of 2022 included a question about areas that could use more campus nature. The survey data will be used to develop the campus, ensuring that its natural environment will meet users' needs better. The responses highlighted the impact of nature on improving users' well-being. On the other hand, concerns were raised about the impact of in-fill construction on green areas. In particular, respondents called for more green zones for the urban core of the campus, in the areas of the metro block and Maarintie. The preservation of green networks and existing nature is a key factor to consider when preparing construction projects.

The landscaping project of the Amphitheatre Square was completed in summer 2022. This was the first comprehensive project on improving the outdoor environment on the campus. It involved developing pathways, accessibility, opportunities for spending time outdoors and the green environment in the area. Worn-out lawn areas were replaced with multi-species vegetation; the 35 species planted in the area included shrubs, perennials, ferns, grasses and bulbs. Pollinator-friendly species were favoured in the plant selection.

Raide-Jokerin viereiselle viheralueelle, korkeakouluaukiolle, rakennettiin luonnon monimuotoisuutta palveleva saareke. A patch that serves biodiversity was built in the green area at Korkeakoulu square next to the Jokeri light rail service. European lime saplings were planted in the area to replace trees in poor condition and damaged by rot. The selection of ground cover vegetation in this area is similar to the one used in the amphitheatre project. Two old lime trees in poor condition were given a new life at their original site as their decaying trunks were used to create a work of art. The artwork illustrates the end of an old lime tree's life cycle, not only as decaying wood but also as a reminder of a layer of history and homage to the valuable and central role of trees in the new and old campus areas. Decaying wood was also placed in front of the Learning Centre. It is particularly important for fungi and insects. Many species need decaying wood for such purposes as food and a substrate and breeding ground.

A Bioblitz citizens' science event was organised at Otaniemi campus in September to raise awareness of the importance of biodiversity and the impacts of biodiversity loss. More than 305 species were identified and 56 participants gathered at the event. The observations will be ultimately stored at the Finnish Biodiversity Information Facility where they can be accessed by researchers, authorities and amateurs.

Campus nature was also emphasised in a participatory budgeting project for students. In a vote organised among the students, the installation of garden benches received the most votes, and pollinator-friendly species were selected for planting based on the students' wishes. Aalto students and staff took care of the planting together at a workshop.

Energy saving

At Aalto, energy is consumed in property heating and building maintenance technology as well as by campus users. In 2022, approximately 43.41 GWh of electricity and 39.8 GWh of heat were consumed in buildings owned by Aalto University. The largest areas of Aalto's electricity use are ventilation, research and lighting. Savings have been achieved through energy-efficient new construction and energy-smart maintenance. Concrete measures are guided by the national Energy Efficiency Agreement for Property Sector, under which we, as the Aalto community, are committed to a 10.5 per cent energy-saving effect by 2025 from the 2014 level.

As a consequence of the war in Ukraine, imports of fossil fuels started to decline and energy prices soared. This meant that electricity consumption in Finland approached the maximum production capacity, and efforts were made to save electricity, particularly to avoid any power cuts. In October, Aalto University launched an intensified energy-saving campaign used to survey and implement ways of reducing energy consumption permanently. Saving 15 per cent of electricity and heat compared to the previous year was set as the goal. In the early stages of the campaign, the main emphasis has been on measures that can be implemented quickly, such as adjusting ventilation and lighting to be more energy efficient. In addition, advice on saving energy has been provided for the Aalto community. The campaign also includes means to be implemented in the longer term, such as increasing solar power and updating technical systems to be more energy efficient.

As part of our energy-saving campaign, we also registered for the national Down a Degree campaign. The goal of this joint campaign by the central government is to reach all areas of society and to provide companies, communities and consumers with information to save energy.

By February 2023, about five months after the start of the energy-saving campaign, Aalto had achieved significant year-on-year energy savings amounting to around 45% of the total target. In addition to technical measures, the campaign has also been successful thanks to the community; more attention has been paid to consumption patterns and we have received dozens of proposals for energy-saving measures. Aalto's long-term efforts to improve energy efficiency have been recognised in the Energy Genius of the Year awards of Motiva, the Finnish Energy Authority and the Ministry of Employment and the Economy, where the Aalto Works energy solution was selected as one of the three winners.

The energy-saving campaign will continue in 2023, and measures will be taken to reduce energy consumption permanently. The growing number of students at the university also creates pressure related to growing consumption. The efforts to improve energy efficiency include renovating facilities to become more energy efficient. Attention will also be paid to energy consumption in Aalto's work to promote carbon neutrality, which acknowledges both emissions as well as issues of mineral availability, among others.

Other environmental issues

In 2022, a Utilization Rate Data Pilot project was launched to automatically calculate the utilisation rates of campus facilities. This project is part of the process of strategic collection and analysis of campus data. The purpose of the pilot is to test the collection and analysis of data and evaluate the value of utilisation rate data in campus management. The more extensive scaling of the data collection to cover all Aalto University facilities will be assessed at the end of the pilot. Understanding facility use based on comprehensive and accurate data will make it possible to develop a suitable selection of facilities as well as practices for resource-efficient space use, which lie at the core of developing a sustainable campus.

The use of space on the campus was also investigated through observations as a part of the Campus Development Plan (CDP2030) by selecting a comprehensive sample of facilities in different schools of the Aalto community and various types of spaces. According to observations made in two separate weeks, the average utilisation rate was 15 per cent in November 2022. This indicative result will be used in the roadmap work of

the CDP2030 project and the facility use development plan together with the Aalto community. The CDP2030 project goals are focused on promoting social, economic and environmental sustainability and the coherence of the goals.

In 2022, the collection of consumer plastic packaging was expanded to serve all campus buildings. As a result, the collection of plastic and cardboard packaging was made available to all campus users. The sorting bins in the break rooms were also replaced. New sorting labels were introduced to improve and clarify the recycling of different types of recyclable waste for users.

Urbaser, Aalto's new waste service provider since the beginning of the year, combined most of the campus waste collection under a single umbrella and has also promoted climate work, for example by developing its carbon calculations and purchasing a biogas-powered collection truck for managing Aalto's waste. During the year, the campus also received solar-powered packing waste bins for Amfi and Ossinlampi skate park in addition to those previously procured for the Korkeakoulunaukio square.

Endowment

Aalto University Endowment provides stable and predictable funding for the university’s academic work in shaping a sustainable future. The long-term capital of the endowment is invested in the financial markets via externally managed investment funds. At the end of 2022 the size of the endowment is ca. 1,3bn euros, consisting of ca. 40 separate investment funds.

Successful long-term investing needs to be sustainable as unsustainable investments will ultimately fail. We evaluate whether our ways of investing and the sources of expected returns are on a sustainable basis, i.e. whether they can be maintained long term. Information on sustainability is thus fundamental information that complement traditional financial information, providing more holistic picture on the risk, opportunities and broad impact of any given investment.

The main objectives of our Sustainable Investing Policy are:

- Reducing carbon intensity, a measure of risk related to GHG emissions, of at least 30–50% by end of 2022 compared to a global market index. Thereafter targeting a declining trend of carbon intensity.
- All external managers have integrated sustainability considerations into their investment process and act as active owners (as applicable).
- Continuously develop ways to add active investment strategies with positive contribution to both sustainability targets and return profile.

The carbon footprint of the endowment is managed due to financial risks related

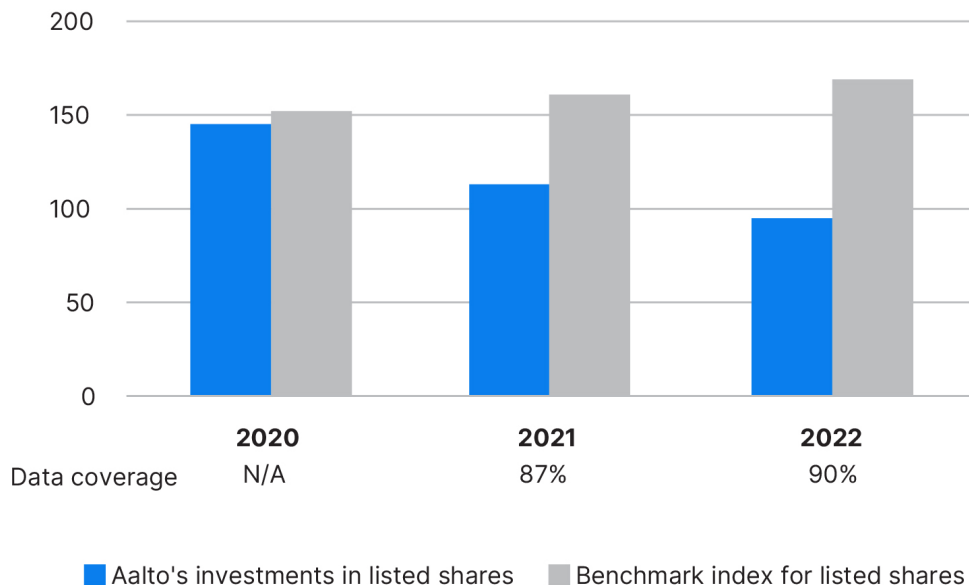


Figure 8. Carbon footprint of listed shares

to carbon emissions. The aim is to align the portfolio with the expected transition to a carbon neutral world. The pricing of these financial risks is unclear, but we believe that the increase of net-zero commitments by institutional investors will affect the pricing of investment instruments in the future. We acknowledge that actions taken to reduce the carbon footprint of the endowment have no direct impact on the actual global GHG emissions. Our long-term goal is a carbon neutral investment portfolio.

The carbon intensity of endowment's public equity investments at the end of 2022 was 44% below global market index and has declined since 2020. In 2022, the endowment converted one of its existing global equity funds into a zero-carbon intensity fund. This is achieved by selling short the highest emitting companies within industries while controlling for other risk exposures. We aim to expand the carbon risk analysis and reporting to other asset class as emission data becomes available.

Our external managers are broadly employing sustainability information and have integrated sustainability considerations into their investment decisions, as applicable.

Investments with no credible transition path to a carbon neutral world or investments that are incompatible with our values have been excluded from passive investments. These are:

- Global norm violators measured by UN Global Compact (UNGC).
- Controversial weapons manufacturers
- Thermal Coal and Oil Sands (at a 25% revenue threshold)

Active managers may include such investments when in line with a credible sustainability policy. An increasing emphasis is also on utilizing opportunities born out of the transition. This includes investments with positive sustainability profiles and trends and positive contribution to the real economy transition on a forward-looking basis.

In addition, we also look to promote sustainable practices in the investment industry by engaging in discussions, industry networks and comply with reporting standards. Aalto University is a PRI signatory and a member of FINSIF.

The main future challenge relates to the huge uncertainty around the carbon neutral transition. We also need to acknowledge the risk of the transition not happening or evolving in a fundamentally different way or pace to what is expected. Balancing climate related risk management with other investment management considerations is therefore challenging. Despite the challenges, our goal is to continue to make timely, evidence-based and forward-looking investment decisions.

Well-being of the community

The values of Aalto University – responsibility, courage and cooperation – guide our ways of promoting well-being and a better world sustainably. One of our strengths is the diversity of our community. Combining well-being as well as equality, diversity and inclusion (EDI) with university practices and structures is essential when creating a culture that values and supports all students and the entire staff. Active measures are necessary to ensure that our guidelines, programmes and practices are inclusive and balanced for all members of the university community.

Well-being of the community

Aalto University's three priorities for 2022 were 1) well-being for us all, 2) joy of learning and 3) quality together. Based on the results of a staff well-being survey and the AllWell? student well-being survey, we identified a need to improve our employees' and students' well-being. New dimensions to working life and studying emerged as a result of the coronavirus pandemic and the transition to remote work and studies. This made communality, flexibility and self-management more visible in our everyday lives.

In addition to permanent support structures, such as study psychologists and occupational health care, the Oasis of Radical Wellbeing strategy project focuses on holistic well-being. Its goal is to turn well-being measures from proactive measures to proactive and preventive activities, and to foster

interaction between the community and individuals. Oasis has also revealed a need for further development: in communication, for example, an acute need for more permanent ways to share information related to well-being has emerged. The goal of the project is to improve the well-being and flexibility of the community and individuals and to promote diversity and inclusion.

The AllWell? student well-being survey is sent annually to all second-year bachelor's degree and first-year master's degree students at Aalto University. The purpose of the survey is to collect data on students' ability to study and motivation as well as on teaching and peer support available at Aalto. The survey includes the evidence-based Study Burnout Inventory (SBI-9) (Salmela-Aro, 2009) used to assess students' burnout risk. The inventory consists of nine items, of which four measure exhaustion, three cynicism, and two inadequacy.

According to the 2023 results, 23 per cent of the respondents were at risk of study burnout. In 2022, the corresponding figure was 24 per cent. The results of the AllWell? survey specific to individual degree programmes will be submitted to the heads of each school and degree programme. The survey findings have highlighted a need to consistently monitor the development of student well-being at Aalto University. The results are used to develop the degree programmes and teaching at the university as well as services that support students' study ability and well-being. Measures taken at the university level based on the results include increasing the availability

of guidance and support services for students and creating a low-threshold service. At Aalto, the general goal of all measures supporting student well-being is that Aalto graduates feel well and have confidence in themselves as future employees. In addition to covering established practices and measures of the schools and programmes, the survey should also point out development targets for the entire university in the future.

In 2022, a new question was added to the course feedback survey: “Which factors in the course promoted the accessibility of teaching, encouraged participation and reduced discrimination?” Feedback was obtained from 7,500 respondents, and the development of teaching practices continues.

The well-being survey for the university staff has been reformulated to lend better support for charting work ability risks at universities. The previous survey on well-being at work was conducted in autumn 2021. The results at the level of the university as a whole were good: Aalto University’s overall index in the survey was 3.95 (2019: 3.76), compared to 3.81 for all universities.

Based on department, school and university level discussions, Aalto Management Team defined the university’s development goals and measures in early 2022:

1) Coping and success in a changing work environment

- Wellbeing Desk, a low-threshold service desk which all members of the Aalto community can contact for advice and guidance related to well-being at work and work ability
- Support for new working practices, such as 45-minute meetings instead of one-hour meetings. This makes it possible to take short breaks between meetings and promotes recovery from work.
- Strengthening the connection between the MyDialogue discussion between the supervisor and the employee on the one hand and the work plan on the other
- Piloting better workload management at the school level

2) Inclusive university community

- Ways to assess the promotion of participation and inclusion, such as the new Ethical Principles online course, monthly EDI discussions and various training events
- Promoting the participation of international staff, for example by organising more opportunities for learning Finnish, and providing support for spouses

Diversity of the community

The diversity of Aalto students is gradually increasing at all degree levels. The proportion of presumed female employees in academic positions and as heads of departments (2020:18.2%; 2022: 29.2%) is on the rise. Aalto is the world's 40th most international university (THE Most International Universities 2022) with a highly diverse international academic staff; however, the share of international employees among the service and management staff continues to be a clear area for development (2020: 4.5%; 2022: 12.5 % of heads of department). Each year, we use salary analyses to achieve an equal pay level. The current pay median is relatively equal between Finnish and non-Finnish and presumed female and male employees.

Aalto University's Development agenda for Equality, Diversity and Inclusion (EDI plan) sets out the principles and goals of development efforts.

Aalto University was the first Finnish university to commit to the UN 2030 Agenda. Identifying social sustainability as an essential element of Aalto's sustainability work is important for achieving the sustainable development goals together. A university that

prioritises well-being and inclusion promotes strong social connections, trust, cohesion and collaboration which, in turn, supports the community's ability to withstand crises and challenges and recover from them.

Assessing the impacts of measures related to well-being, equality, diversity and inclusion can be challenging as they often involve complex concepts, which are difficult to measure with traditional metrics. In addition, the impacts of the EDI plan and well-being projects may not be instantly visible, and the results may vary according to each person's unique experience and perspective. Data-driven development of well-being must be integrated into management at all levels.

Aalto University must recognise that social, economic, cultural and environmental sustainability depend on one another and are equally important. Defining and building a joint understanding of social sustainability strengthens the university's multilateral collaboration towards a more sustainable and fairer future. Integrating the social aspects of responsibility into Aalto University's processes and practices strengthens the university's role as a key player in promoting comprehensive sustainability both at the local and global levels.

Communication and impact

The geopolitical uncertainties and war in 2022 were also strongly reflected in our communications. Energy emerged as the most important theme in our communications in the field of sustainable development and was the topic of a great deal of the communication content we produced.

As a university, we wished to help decision-makers in this uncertain geopolitical situation, which is why in spring 2022, we began at a very short notice to produce data to support decision-makers in a scenario deemed plausible at that time, in which Finland would completely run out of energy imported from Russia. Together with our researchers, we produced an energy scenario that presented different alternative models to demonstrate the energy shortage facing Finland. The scenario report was very well received by decision-makers, and our researchers were consulted in a wide variety of contexts.

The scenario report also gained extremely high visibility in the media, and it was definitely the single most extensively noted topic at Aalto University in 2022 with more than 60 media hits, including all the largest Finnish media outlets. Rather than being limited to a specific day, this attention in the news continued steadily throughout the summer and autumn. As a result of the scenario report, researcher Iivo Vehviläinen from Aalto University also became one of the energy experts most frequently interviewed by the Finnish media.

In the autumn, we launched enhanced energy-saving communications at the university. The goal was to provide information about the university's 15% annual energy-saving target to the Aalto community members and to encourage them to take energy-saving measures (see campus). Thanks to our communication efforts, the community provided us with many valuable insights and ideas for electricity and heat saving measures, among other things.

In addition to topics related to energy, our communications themes in the field of sustainable development included the COP climate negotiations, the Cooler Planet exhibition and new innovations, including Fluffstuff, which develops an environmentally friendly alternative for down filling, and Alusta Pavilion, a giant insect hotel that promotes urban biodiversity.

While Aalto University's sustainability themes gained visibility in Finnish media through themes related to energy, in particular (source: Meltwater and STT), some individual topics also gained major media visibility, such as Fluffstuff mentioned above. In international media, Aalto University gained the most visibility through innovations and entrepreneurship related to sustainable development as well as topics related to sustainable fashion, but also more widely through articles that describe Finnish society and themes related to it, such as happiness (source: Meltwater, EurekAlert, Newswise).