## **Metropolia**



© Metropolia University of Applied Sciences & authors 2024

Publisher: Metropolia University of Applied Sciences

Authors: Laura Pekkarinen and Marianne Vainikka

Layout design: Tanja Kallio, Muotografia

**Layout:** Riikka Helakisa, Nettienkelit

#### Photographs:

Cover, Metropolia University of Applied Sciences Metropolia University of Applied Sciences, 4, 27, 30, 31, 32, 39, 40, 41, 43, 52, 55 Marjaana Malkamäki/KEKSI, 13, 15, 16, 17, 18, 19, 20, 23,

26, 36, 42, 50, 53, 54 Meeri Lehto, 11, 58, 59 HeliFoto Oy, 37, 45 Tuomas Uusheimo, 48, 49 Jani Lappalainen, 25 Jarkko Mikkonen, 47 Publications of Metropolia UAS TAITO-series 140 Helsinki 2024

ISBN 978-952-328-433-3 (pdf) ISSN 2669-8021 (pdf)

metropolia.fi/publications metropolia.fi/kestavakehitys/en/







This work is licensed under a <u>Creative Commons Attribution</u>-<u>ShareAlike International 4.0 license</u> excluding its photographs, figures, and graphics.

This publication is Metropolia's third sustainability report. It compiles the most significant measures taken by Metropolia over the calendar year towards progress on its sustainability roadmap. The sustainability report is published annually in Finnish and English.



#### **CONTENTS**

- 5 About Metropolia
- 6 Sustainable Development in 2023
- 7 Sustainable Development in Metropolia
- 10 Sustainability Management and Roadmap 2030

#### 12 SOCIAL SUSTAINABILITY:

We operate responsibly and by putting people first

- 13 Responsible Management
- **15** Development of Supervisory Work
- 16 Personnel Well-Being
- 17 Student Well-Being
- 19 Safety, Security, and Risk Management
- **20** Diversity, Equality, and Non-Discrimination
- 25 Inclusion, Interaction, and Transparent Communication

#### 28 ECOLOGICAL SUSTAINABILITY:

We will become a carbon neutral higher education institution by 2030

- **30** Metropolia's Carbon Footprint
- 32 Reduction of Emissions
- 33 Carbon Footprint 2023

#### 44 ECONOMIC SUSTAINABILITY:

We will grow in a sustainable manner and invest in the future

- 45 Financial Situation 2023
- **47** Sustainable Growth and Responsible Business Operations

#### 51 SUSTAINABILITY KNOW-HOW:

Everyone at Metropolia is able to promote sustainable development in working life and the society

52 Sustainable Development in Education

#### 56 SUSTAINABLE DEVELOPMENT SOLUTIONS:

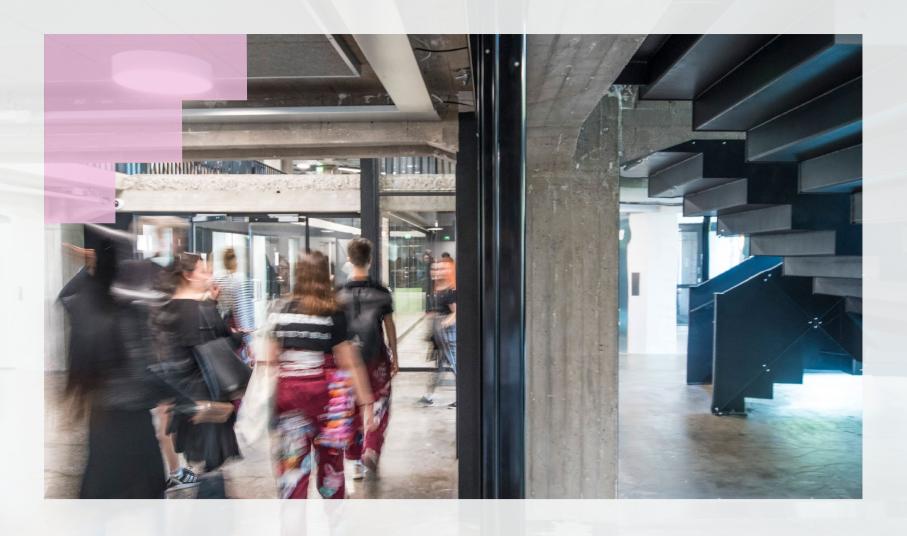
We create innovative solutions to sustainability challenges

- 57 Five Innovation Hubs Solving Challenges
- 58 Open Research and Innovation Activities
- 59 Sustainable Entrepreneurship, Business Activities, and Employment

#### **60** APPENDIXES:

Appendix 1. Objectives, Indicators, and Results for the Sustainable Development Roadmap 2022–2023

Appendix 2. Carbon Footprint Calculation Updates and Results

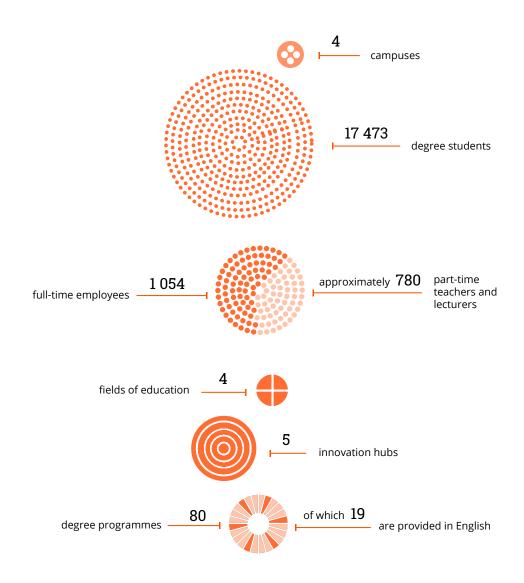


## About Metropolia

Based in the Helsinki Metropolitan Area, Metropolia University of Applied Sciences is the largest university of applied sciences in Finland. Metropolia offers various educational opportunities in the fields culture, business, health care and social services, and technology. Metropolia's phenomenon-based innovation hubs engage in multidisciplinary RDI activities, which also provide Metropolia students with opportunities to learn and create new things.

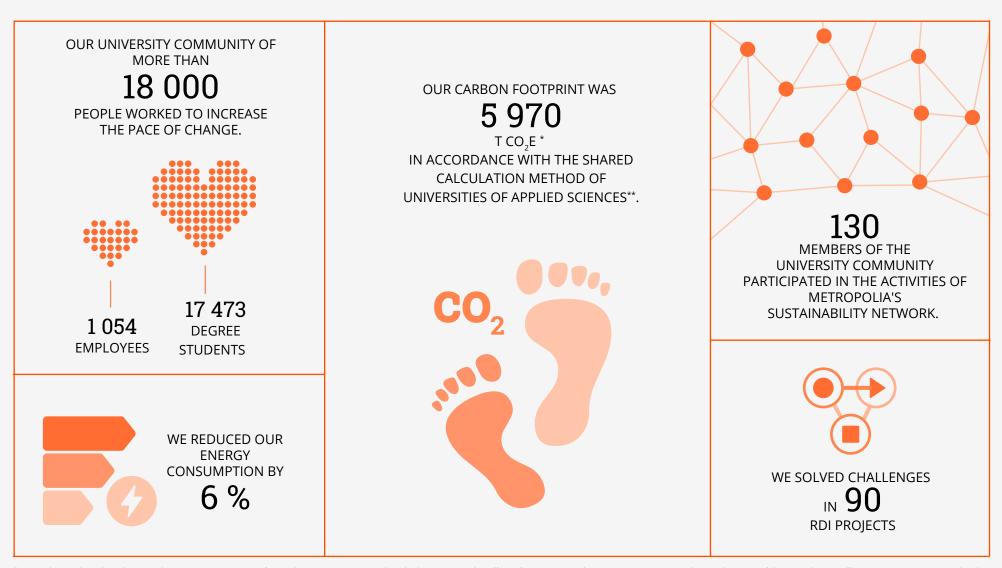
Metropolia has four modern and accessible campuses: In Myllypuro and Arabia in Helsinki, Myyrmäki in Vantaa, and Karamalmi in Espoo.

Our strategy (2021–2030) aims at making a stronger impact for the benefit of society, by putting people first. Our strategic intent is to be a bold reformer of expertise and an active builder of a sustainable future. Sustainable development is an overarching theme in our strategy. Our goal is that the principles of sustainable development and responsibility guide all our operations and that Metropolia is carbon-neutral by 2030. We strive for sustainable growth in Finland as well as internationally.



METROPOLIA UNIVERSITY OF APPLIED SCIENCES 2023

## Sustainability Highlights in 2023



<sup>\*</sup> CO<sub>2</sub>e elior carbon dioxide equivalent is a joint measure of greenhouse gas emissions by which to sum up the effect of various greenhouse gas emissions on the acceleration of the greenhouse effect. (Source: Statistics Finland.)

SUSTAINABILITY REPORT 2023

<sup>\*\*</sup> Metropolia's carbon footprint was 11,670 t CO<sup>2</sup>e according to the expanded method of calculation.



Know-how

1 Sustainable University Community

SUSTAINABILITY AT METROPOLIA – THREE LEVELS OF SOCIETAL IMPACT

## Sustainable Development in Metropolia

Higher education institutions have a central role in building a sustainable future. Metropolia creates impact on three levels:

- 1. **Our university community operates sustainably,** i.e., in a manner that is ecologically, socially and economically sustainable.
- 2. On the second level we ensure that there will be **sustainability know-how** in the future.

  Our goal is that every Metropolian, whether a member of staff or a graduating student, will get sustainability know-how that can be implemented in working life and society.
- **3.** On the third and most significant level of impact we create **solutions to sustainability challenges** with our partners in our innovation hubs.

### UN Sustainable Development Goals

The United Nations Sustainable Development Goals (the SDGs) guide our work. As a multidisciplinary university, Metropolia's operations have an impact on all of the SDGs. In 2021 we identified eight of the most material SDGs based on our strategy and built our sustainability roadmap 2030 based on those goals.



#### The most relevant UN Sustainable Development Goals for Metropolia



#### SDG 4: QUALITY EDUCATION

We ensure that every graduate and staff member of Metropolia is able to promote sustainable development in both working life and society at large. We build individual and flexible learning solutions for various life situations and ensure that our education is accessible and flexible through digitalisation, for example.



## SDG 12: RESPONSIBLE CONSUMPTION AND PRODUCTION

We educate people to become experts in sustainable development and encourage individuals to make responsible choices. We promote the sustainable use of natural resources and resource efficiency in all of our operations by reducing waste and water consumption at our facilities, among other means. We will draft sustainability principles that will steer all of our future investments and acquisitions. We report on the progress of our sustainability work on an annual basis.



## SDG 8: DECENT WORK AND ECONOMIC GROWTH

We aim to grow sustainably within ecological and social confines both in Finland and internationally. We take care of the health, well-being and safety of our entire university community. We strive for resource effectiveness and utilize the business models of circular economy, such as the practices of a sharing economy.



#### SDG 13: CLIMATE ACTION

In the year 2030 we will be a carbon-neutral university. We increase people's awareness of the climate crisis as part of the education we provide and solve problems related to it. We will lower and reduce our climate emissions regarding energy, transportation, waste, procurement, and offset the emissions we cannot eliminate.



## SDG 9: INDUSTRY, INNOVATION AND INFRASTRUCTURE

We expedite the solving of challenges related to sustainable development with a phenomenon-based approach and innovation and research efforts. We reinforce the vitality of our region through sustainable entrepreneurship, business and employment.



### SDG 16: PEACE, JUSTICE AND STRONG INSTITUTIONS

We lead sustainably and ensure good governance. We place the human being in the centre. Values and Code of Conduct guide all our operations and culture. We are open and transparent in our communication both in-house and externally.



#### SDG 10: REDUCED INEQUALITIES

People come first in our operations and we promote equality, non-discrimination and diversity in our university community. We invest in dialogue and an operational culture that values diversity.



#### SDG 17: PARTNERSHIPS FOR THE GOALS

We reinforce the vitality of the capital region through sustainable entrepreneurship, business operation and employment. Our operations adhere to the ecosystem principle and we cooperate with our partners across borders. We are members of several cooperative commitments and networks, both global and local, through which we aim to promote a more sustainable future.

## Sustainability Management and Roadmap 2030

Our sustainability work is steered by the UN Sustainable Development Goals, the Metropolia strategy 2021–2030, the expectations of our stakeholders and our sustainability roadmap. The roadmap depicts our sustainability goals and the measures and indicators needed to reach them. It also functions as the framework for our development efforts. The main goals of our roadmap are:

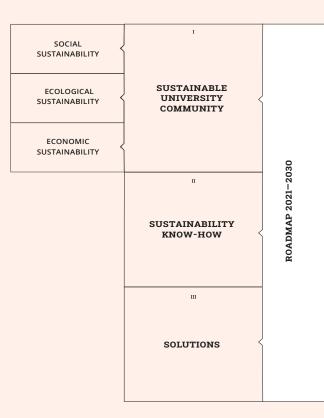
- Social sustainability: We operate responsibly and by putting people first.
- **2. Ecological sustainability:** We will be a carbonneutral university by 2030.
- **3. Economic sustainability:** We will grow sustainably and invest into the future.
- **4. Sustainability Know-How:** Everyone at Metropolia is capable of promoting sustainable development in society and working life.
- **5. Sustainable solutions:** Together we create innovative solutions to sustainable development challenges.

The Sustainable Development Manager is responsible for overall coordination and leading the sustainability teams. The manager develops Metropolia's

environmental sustainability together with the Environment Specialist. On the management group -level, the Development Director is responsible for sustainable development, while the Deputy CEO is responsible for sustainable growth. Furthermore, each goal on the roadmap has a manager assigned to it. The measures on the sustainability roadmap are promoted throughout the organisation and in the everyday lives of all Metropolians also through rewards and development discussions.

We will be reporting on our progress on sustainability to our stakeholder groups and the board in Metropolia's quarterly impact reports, as well as annually in the sustainability report.

For a summary of the progress we have made on our sustainability roadmap in 2022 and 2023, see *Appendix 1*.





SOCIAL SUSTAINABILITY

#### SOCIAL SUSTAINABILITY:

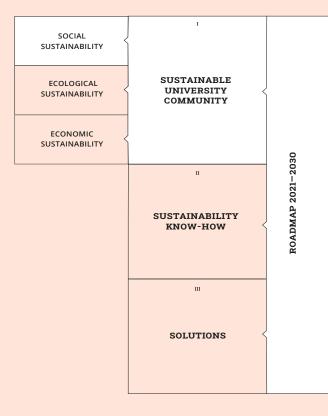
# We operate responsibly and by putting people first

For us, social sustainability means taking responsibility for people. Leading responsibly and with good governance is one of the focal points of our sustainability work. We take care of the health and well-being of our university community and foster equality, non-discrimination and diversity as well as an

operating culture based on dialogue throughout the community.

At the same time, we promote the following UN Sustainable Development Goals: 8: Decent work and economic growth, 10: Reduced inequalities, and 16: Peace, justice, and strong institutions.

MEASURES	INDICATOR	RELATED SDG
We lead responsibly and by putting people first with the help of a management system, supervisors and new thinking.	General index for the personnel survey	16 PEACE, JUSTICE AND STRONG INSTITUTIONS
2. We look after the health, well-being, and safety of our university community.	Personnel survey: own assessment of working capacity & AVOP: students' assessment of their own well-being	8 DECENT WORK AND ECONOMIC GROWTH
3. We promote equality and diversity in our university community.	Age and gender distributions of personnel and students. Percentage of leading positions held by women.	<b>√</b> ‡≻
4. We promote opportunities for inclusion and open dialogue in our university community. We communicate in a transparent manner.	Personnel survey: communication and participation	4€>



SOCIAL SUSTAINABILITY

## Responsible Management

At Metropolia, responsible management refers to both day to day activities and providing support for management through various structures and systems. Key parts of responsible management include, for example, our management system, supervisory work, and new thinking.

Metropolia's Code of Conduct was published at the end of 2022, and we continued the implementation of these ethical principles in 2023. The Code of Conduct provides a set of rules that govern our activities, and which each person at Metropolia must comply with. The Code of Conduct has, for example, been made part of the orientation provided to new employees and student tutors.

SUSTAINABILITY REPORT 2023

During the operating year, we also began preparing the principles for a safer space. The purpose of the principles for a safer space is to provide a sense of physical and mental safety to people when attending Metropolia's events or using our facilities. In August, we organised training that was open to the entire university community and formed a project team to prepare a set of principles and an intervention process in 2024.

An extensive development programme for management and supervisory work was organised in 2023, which resulted in the creation of a framework for good governance at Metropolia with the participants. The



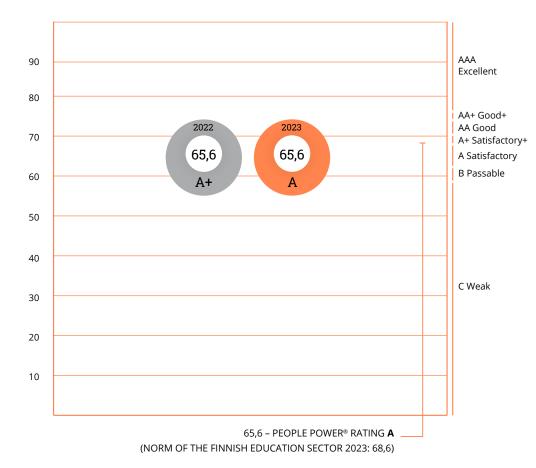
purpose of this framework is to create a foundation for management that is sufficiently uniform and of consistent quality. The framework will help us perceive expectations for supervisory work at Metropolia and support supervisors in identifying their own strengths and areas of improvement.

The experiences of our personnel on social sustainability and responsible management were assessed through an annual personnel survey (PeoplePower 2023). The survey comprises an extensive review of our employees' experience of their own work and well-being at work, the functionality of their team or unit, and the working environment, supervisory work, opportunities for participation and influence, and the culture of management and operation at Metropolia. The survey provides a PeoplePower general index based on key questions that is comparable both inside and outside of the organisation and which comprises various areas of social sustainability.

Metropolia's PeoplePower general index was 65.6/100 in 2023. The index remained on par with the previous year. Metropolia is slightly behind the external standard for the educational sector in 2023 (Metropolia rating A = "satisfactory" whereas the standard for the educational sector is A+ = "satisfactory plus").

Results of the personnel survey are reviewed on the level of individual teams and units as well as the entire Metropolia organisation. The results are used to determine areas of development and how development is implemented over the following period. On the Metropolia level, reinforcement of the management chain and the skills and competence of supervisors were chosen as development areas in 2023.

>

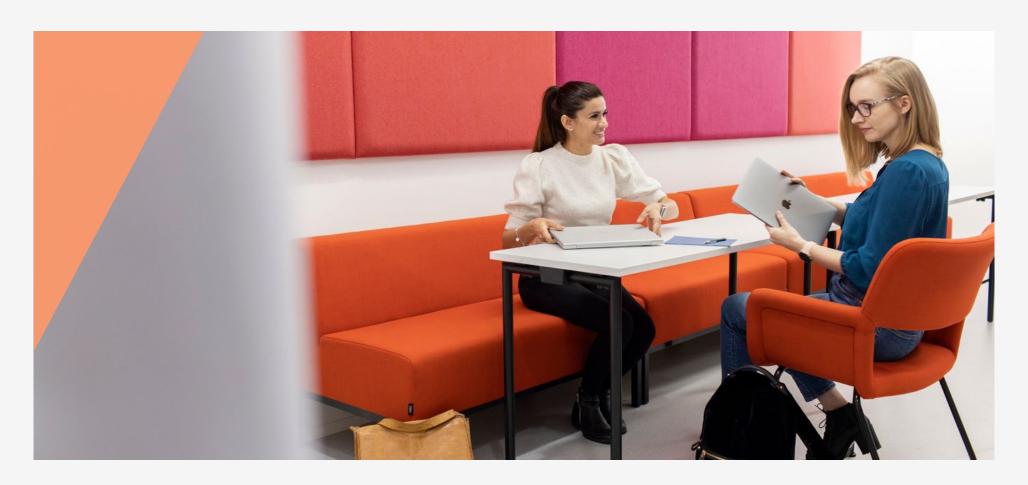


SOCIAL SUSTAINABILITY

PeoplePower® is a personnel survey concept developed by Eezy Flow. The PeoplePower index reflects the overall results. The index is calculated on the basis of 22 index questions. The result would be 0 if all responses to the index questions were highly critical and 100 if all responses were extremely positive.

The result of Metropolia's personnel survey in 2023 was 65.6, which is the same as the previous year. However, the classification has decreased slightly, because the Finnish norm for the field of education is increased slightly from the previous year.

METROPOLIA'S STAFF SURVEY 2023



## **Development of Supervisory Work**

Training and discussion events related to the development of supervisory work were organised for all Metropolia supervisors throughout the year. The aim was to reinforce the management chain, increase the uniformity of governance, and promote the implementation of a fair and high-quality management culture. In addition to detailed information and practical management tools, training offered an excellent opportunity to network with other supervisors in different units and strengthened peer support.

Dedicated discussion events were held with the management teams of each unit as part of the development programme. During the discussions, the strengths and development areas of the management team's activities were examined in terms of Metropolia's jointly determined framework for good governance. Training sessions were also arranged for supervisors during the year, which focused on clarifying the role and duties of supervisors and ensuring continuous renewal, among other things. A

management profile survey was carried out for all supervisors, which examined their natural tendencies in various management and communication situations.

The decision to implement aptitude assessment for all supervisor recruitment was taken towards the end of the operational year.

Structural investments were also made in the development of employee-oriented supervisory work by creating sub-teams and increasing supervisory resources. The development of high-quality supervisory work also continued in the form of informal discussions with supervisors in order to reinforce a joint dialogue and peer mentoring. These discussions touched upon performance reviews, reinforcement of mental well-being, development of management culture, autonomy at work, and the role of supervisors in situations of change, among other things.

SUSTAINABILITY REPORT 2023

## Personnel Well-Being

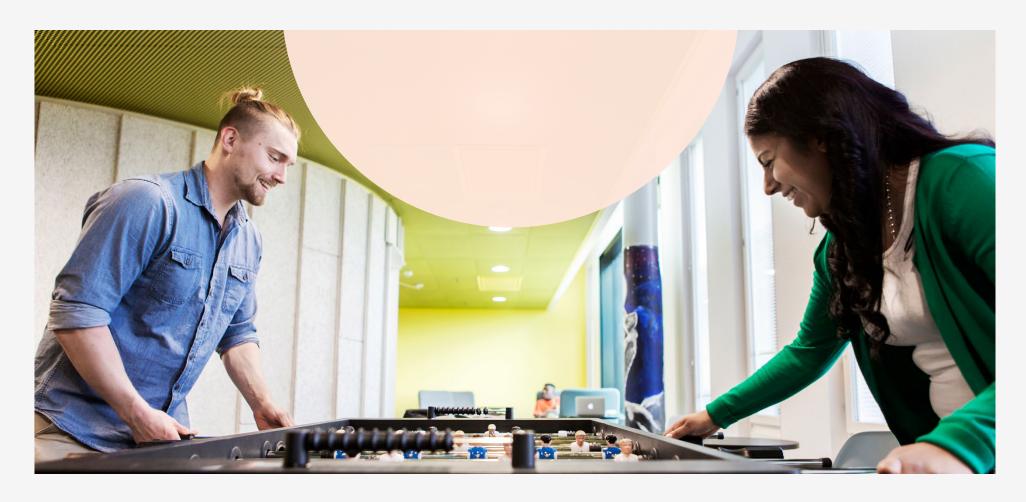
Metropolia is creating a sustainable way of working where the requirements of work are in balance with the resources of our personnel.

The personnel's experience of their working capacity remained at an excellent level in 2023. In the 2023 PeoplePower personnel survey, 92% of respondents rated their working capacity as excellent (45%) or good (47%). The most common area of development identified in PeoplePower by teams and units was the improvement of community cohesion, and the experience of communality in hybrid work conditions has now been strengthened from the previous year.

In 2023, there was a slight increase in absence due to sickness. The average number of days of absence due to sickness was 5.6 days/person (2022: 4.9). Almost one half of our personnel (47%) took no sick days (2022: 51%) The most common reasons for absence included mental health

> reasons, infections, and musculoskeletal diseases. The low-threshold Auntie service and the Mielen chat and Mielen sparri services provided by occupational health care remained available for mental health early intervention support. In the event of prolonged mental health challenges,

our personnel also have access to brief therapy services through occupational health care.



## Student Well-Being

The students' well-being and ability to study is promoted though continuous cooperation between the students and personnel. Securing the availability of services that support well-being is a shared interest, as healthy students are more likely to progress in their studies and move on to working life after their studies in good health.

New peer support services and low-threshold student well-being services were developed and

implemented in 2023 to promote the students' well-being and ability to study. Integration with the student and university community was supported through various events intended to promote inclusion and community cohesion in all campuses. The support student activities, which began as a pilot project, have been increased to reinforce the students' experience of social support through their peers. A low-threshold path to access social support has also been created. The mentoring programme for

bachelor's and master's degree students that was piloted in 2022 has also been expanded. We have also engaged in student well-being cooperation with the universities of applied sciences that form the 3AMK alliance by maintaining a shared calendar of events, for example.

A dedicated site has been set up in the OMA intranet, which can be used by students to access various guidance and support services

intended to promote their ability to study. The site also includes study circles and clubs as well as courses and self-study materials that support well-being. We have also launched a multidisciplinary pilot project intended to provide timely support and develop guidance and support services, where students are contacted by the Annie support bot at critical stages of their studies. Students can also utilise the discussion support offered by student well-being services at campuses and online.



SUSTAINABILITY REPORT 2023

Small-group activities to support studies after the coronavirus pandemic were also launched in 2023.

An online survey (N = 941) that examined students' experiences of physical well-being and exercise as well as their psychological and social well-being was carried out in cooperation with METKA's soon to be completed MMKK project (Metkasti Metropoliassa Kohti Kukoistusta) and the Metropolia on the Move project. Differences in the exercise opportunities offered by learning environments were highlighted as a perceived shortcoming in the responses. The need for personal low-threshold mental health services, academic advice, and career and working life guidance was similarly emphasised. The students who took part in the survey have recognised that peer-supported activities improve the experience of communality and inclusion and hope to see more events that focus on exercise as well as alcohol-free events. Almost three guarters of respondents consider their campus a pleasant and safe place. The feedback will be used to develop activities further.

Metropolia's operating culture and environment were developed in the Metropolia on the Move and MMKK projects to ensure improved support for physical activity among students and thus their well-being. During the projects, lounge spaces were students from different degree programmes have the opportunity to meet each other were created in Metropolia campuses. The lounge spaces were opened in 2023.

The activities of Student Union METKA are open to all students regardless of whether they are members of the union. The tutoring offered by Student Union METKA had a significant role in the overall student well-being in 2023 as well. Different forms of tutoring promote community cohesion and the students' engagement with the university community.

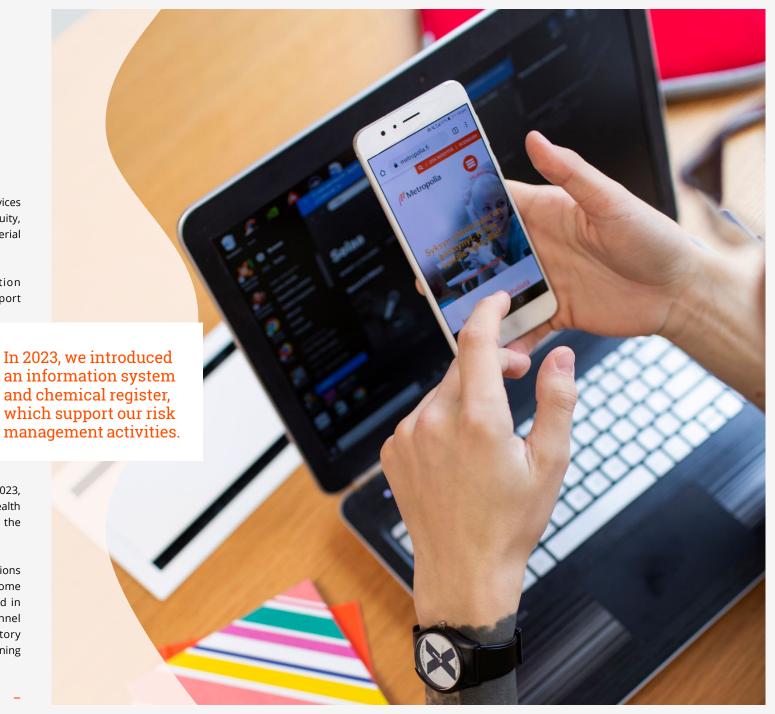
Metropolia's safety and risk management services are tasked with ensuring operational continuity, safety, and compliance, which includes material safety data sheets, for example.

In 2023, we introduced an information system and chemical register, which support

our risk management activities. Information has been added to the chemical register for all areas of our operation where various chemicals are used. Integration of the risk management system with Metropolia's management system has begun with a review that has been supported by an external consulting firm. Furthermore, a listing of risks on the organisational level has been

prepared for Metropolia's management. In 2023, we began the preparation of occupational health care workplace surveys to be carried out in the Myyrmäki and Arabia campuses in 2024.

Various information security related disruptions and incidents of attempted fraud have become increasingly common throughout the world in recent years. As a result, the entire personnel of Metropolia have completed a mandatory information security and data protection training course in 2023.



SOCIAL SUSTAINABILITY

# Diversity, Equality, and Non-Discrimination

Metropolia aims to promote equality, non-discrimination, and diversity in the university community. The achievement of this objective is supported by our equality and non-discrimination plan, which specifies goals and measures for recruitment, career development and remuneration, studying and teaching, and management, operational culture, and communication. Metropolia's diversity and non-discrimination working group monitors and promotes the implementation of the plan and addresses current matters that pertain to equality and non-discrimination.

Principles for a safer space were piloted in Metropolia's events in 2023. In 2024, we will draw up a set of principles for a safer space through a process that includes the entire organisation. The principles for a safer space promote diversity and inclusion in day to day activities. Their purpose is to ensure optimal mental and physical safety for everyone at Metropolia. The principles also comprise a description of measures to be taken if the principles of a safer space are breached.



Cultural sensitivity and anti-racism were fostered through a discussion event and a panel discussion under the theme of Diverse and equal Metropolia. Going forward, relevant themes will be highlighted on an annual basis as part of the national anti-racism week.

Metropolia is rapidly becoming more international and diverse. Metropolia's

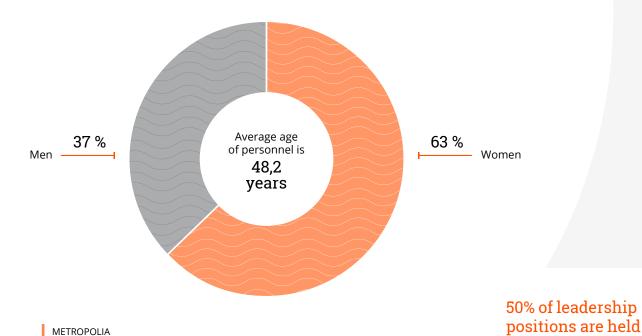
language policies have been prepared in 2023 in a participatory manner. The purpose of our language policies is to support and help our personnel and students in their work or studies, improve the well-being of our personnel and students, and increase appreciation of diversity, multilingualism,

and variety throughout the university community. The language policies will be introduced gradually. Materials and training will be provided to support our units. The language policies are aimed at reinforcing well-being at work and the experience of inclusion.

>



PERSONNEL 2023



#### Equality, Non-Discrimination, and **Diversity Among** Personnel

In our personnel survey for 2022, we examined experiences of equality and non-discrimination at Metropolia. At Metropolia, all employees are treated equally in terms of gender, gender identity, and gender expression (3.40/4). All employees are treated in a non-discriminatory manner regardless of diversity (3.27/4). When respondents were asked about their experience of equality and nondiscrimination in general, the score as slightly lower than in the previous sections (3.02/4).

According to the survey, 87% of personnel had not experienced harassment, bullying, or inappropriate treatment at the workplace. Correspondingly, 8% had experienced inappropriate treatment but the situation had already been solved, while for 5% of the respondents the situation was still ongoing. The results show a drop of one percentage point from 2022. Metropolia has adopted a zero tolerance approach to inappropriate behaviour and harassment.

and 37% of men. Metropolia's HR management system also allows for the gender option "other" but the option has not yet been widely utilised and thus cannot be seen in the graph. 62% of supervisors were women. 50% of leading positions were held by women. The average age of our personnel has lowered slightly in recent years, and the average age of our entire personnel was 48.2 years at the end of 2023.

63% of Metropolia personnel consisted of women

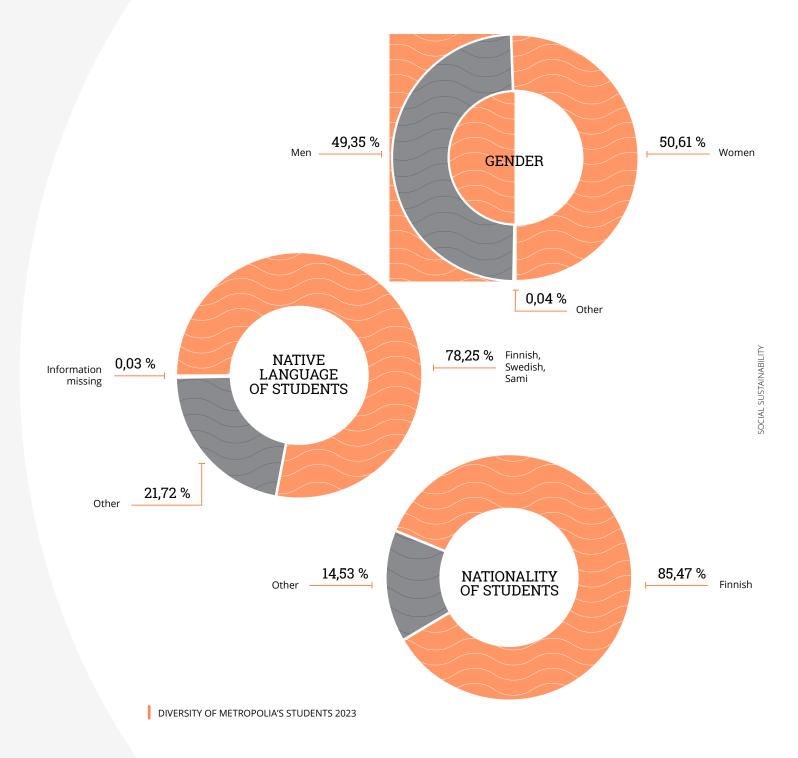
by women.

## Student Equality and Diversity

The gender distribution of Metropolia students is guite even. 50.61% of students were women and 49.35% men. 0.04% of students had specified their gender as "other". Uneven gender distribution is still present in the different educational fields in Metropolia. The proportion of women in male-dominated fields has increase slightly, but there is little movement in the other direction. Due to the long-term nature of gender-based distribution in education and working life, there is still work to be done to eradicate gender segregation. Uneven gender distribution is particularly visible in the health and welfare sector, where 84.4% of students were women in 2023. 65.6% percent of students in cultural studies and 58.3% of student in business studies were women.

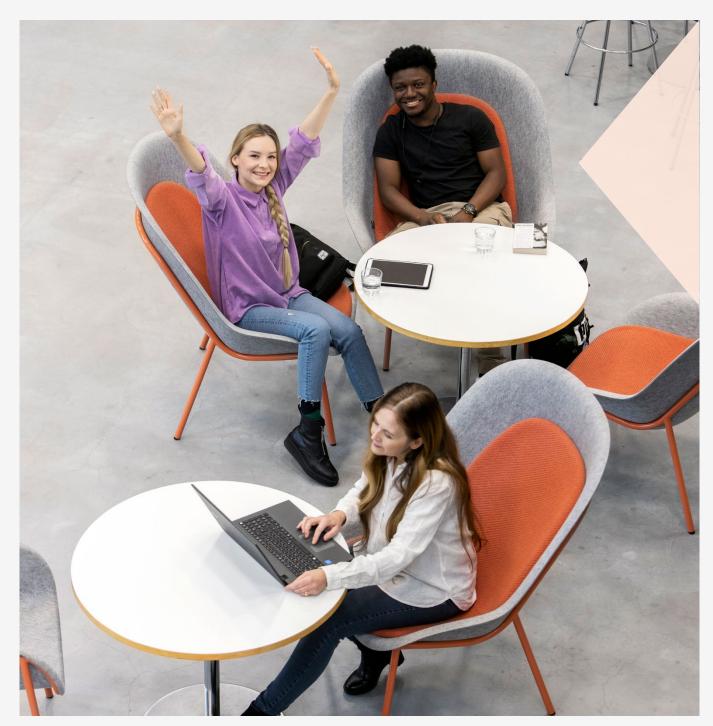
A slight turn to a more positive trend can be seen in technical studies in which the proportion of female students has increased. Whereas 79% of students in technical studies were men in 2022, their proportion had decreased to 56.6% in 2023. The change has been affected in part by an increase in the number of study places and in the proportion of female students who choose the advanced mathematics syllabus in the Finnish Matriculation Examination. Similarly, the media and representatives of employers have increasingly highlighted the growing need for specialists in ICT and technology sectors and the diversification of working life prospects. The reinforcement of cooperation between workplaces, schools, and educational institutes has supported the elimination of this

>

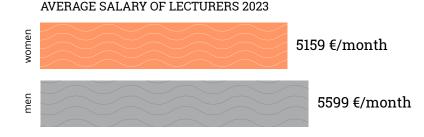


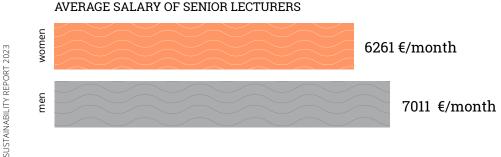
In 2023, the number of Metropolia students (22%) whose native language is other than Finnish, Swedish, or Sami had increased slightly from the previous year (2022: 20%) Both Metropolia and Student Union METKA use English and Finnish to communicate with students. Bilingualism and accessibility have also been accounted for in guidance and support services and events. Among other things, Student Union METKA provides training for tutoring and club activities and organises various events in English. Students also have the option to utilise guidance and support services in both Finnish and English, either face to face on campus or online. Students have the opportunity to seek individual support for their studies where a support need has been or is identified during studies. The process implemented for this purpose is described in the guide for students.

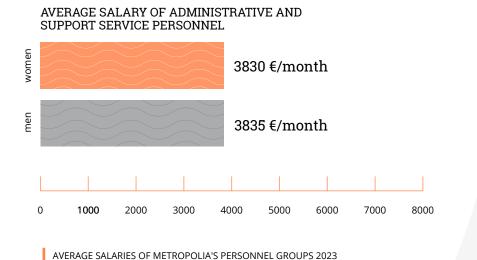
It is important to ensure that higher education institutions invest actively in combating racism and increasing cultural awareness in order to promote working and learning environments that are free from discrimination. In 2023, Metropolia updated both its equality and non-discrimination plan and guidelines for incidents of inappropriate treatment and harassment. To facilitate equal treatment and learning among students, we have also prepared guidelines on the use of assistants in teaching settings. Furthermore, a vocational special education teacher has been assigned to each campus to support students in their studies despite possible injuries, illnesses, or learning challenges.



SOCIAL SUSTAINABILITY







#### Salary survey

Salary surveys are used to ensure that the are no unjustified salary differences between men and women doing the same or equally valuable work. A fair salary system is built on having acceptable justifications for salary differences and applying these justifications equally to all employees. Despite these shared justifications, salary considerations always have a subjective element, which is why we are constantly evaluating whether the shared line of interpretation holds.

Metropolia's 2023 salary survey demonstrates that substantial differences between the salaries of men and women in administration and support staff do not exist, which is a change from the previous year, where a small difference in salaries did exist for the benefit of women.

As regards teaching staff, the salary difference between men and women is divided by profession, which is particularly explained by the availability bonus paid to teachers in the field of technology. The availability bonus has been agreed upon in the collective agreement based on the assumption that teaching staff can be difficult to find for certain assignments

due to a labour shortage. Metropolia takes the view that sector-specific availability bonuses should not be included in collective agreements and should instead be paid on market terms.

We continue to improve the transparency of our salary system. All information concerning salaries and hiring is available to our personnel on the intranet. Our HR department also consults with the employees on salary-

Salary surveys are used to ensure that the are no unjustified salary differences between men and women doing the same or equally valuable work.

related matters. A constant dialogue is also maintained between shop stewards and the employer.



Inclusion, Interaction, and Transparent Communication

Metropolia is determined to increase opportunities for inclusion and open dialogue for all members of the university community. A participatory approach to work and inclusion are visible in pedagogical learning solutions and various development projects. Metropolia aims to increase awareness of responsibility and encourage and inspire students, personnel, and partners towards more responsible activity through communication. Students and personnel are offered various

opportunities to influence and participate in communal discussion events.

Monthly forum-like meetings for managers and supervisors made active use of inclusive working methods and reinforced cooperation between the participants. Furthermore, two two-day development events were organised during the year, both of which included plenty of opportunities for dialogue and participatory work. Metropolia and Student Union METKA continued their close cooperation and monthly meetings. Senior management meets regularly with METKA representatives, Metropolia units, such as Communications Services, hold regular meetings with METKA. In these meetings, METKA has provided the student perspective on topical issues.

Yearly goal-setting discussions and performance reviews were held as two personal discussions in line with the change employees continued their activities.

annual basis in the future.

The sustainable development network for Metropolia's personnel and students aims to bring together those who are inspired by sustainable development and function as an active forum for change. The network is open to all members of the university community. At the end of 2023, the network had approximately 130 members, most of whom were members of our personnel. The network has an active Teams group, and three meetings were arranged during the year. During the meetings, information was provided on current sustainable development themes, and the themes were discussed.



SOCIAL SUSTAINABILITY



**ECOLOGICAL SUSTAINABILITY** 

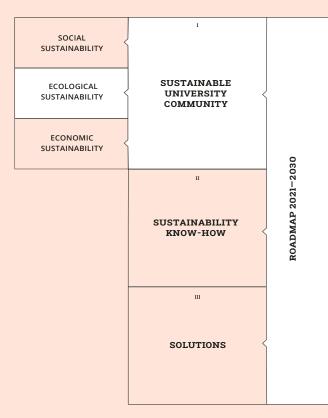
#### ECOLOGICAL SUSTAINABILITY:

# We will become a carbon neutral higher education institution by 2030

We aim to become a carbon neutral higher education institution by the year 2030. We promote the sustainable use of natural resources and resource efficiency in our activities.

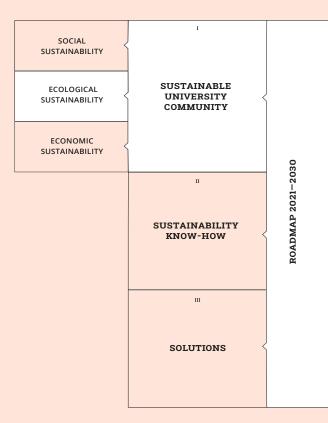
Through our work on carbon neutrality, we promote the following UN Sustainable Development Goals: 12: Responsible consumption and production, and 13: Climate action.

MEASURES	INDICATOR	RELATED SDG
We will continue to expand our emissions calculations and set 2022 as the baseline year for comparison.	Done / not done.	13 CLIMATE ACTION
2. We will increase the use of renewable energy and energy efficiency.	Emissions from energy consumption (tonnes of CO <sub>2</sub> e) and the proportion of renewable energy from the total consumption of energy.	13 CLIMATE ACTION
<b>3</b> . We promote low-emission mobility and reduce the emissions caused by mobility.	Mobility emissions (CO <sub>2</sub> e).	13 CLIMATE ACTION



>

MEASURES	INDICATOR	RELATED SDG
4. We promote the sustainable use of natural resources and resource efficiency.	Emission from waste management and water consumption (CO <sub>2</sub> e).	12 RESPONSIBLE CONSUMPTION AND PRODUCTION TO ACTION
<b>5.</b> We reduce the emissions caused by our procurement.	Emissions from procurement $({ m CO}_2{ m e}).$	12 RESPONSIBLE CONSUMPTION AND PRODUCTION TO ACTION ACTION
<b>6.</b> We prioritise climate-friendly food and reduce food waste.	Amount of food waste (tonnes).	12 RESPONSIBLE CONSUMPTION AND PRODUCTION AND PRODUCTION
7. We will offset the remaining emissions.	Funds required for emission offsetting (€).	13 SEMATE ACTION



## Metropolia's Carbon Footprint

Metropolia has made an ambitious commitment to reducing emissions and intends to become carbon neutral by 2030. Our journey towards carbon neutrality requires us to calculate our carbon footprint in a sufficiently comprehensive manner, and to reduce it as much as possible. The actions available to a higher education institution do not allow us to reach zero emissions, which means that we have to offset remaining emissions where possible in order to achieve carbon neutrality. The open questions concerning the implementation of offsetting and the extent of our carbon footprint subject to offsetting are being actively resolved in higher education institution networks and internally at Metropolia.

SUSTAINABILITY REPORT 2023

The calculation of Metropolia's carbon footprint excludes some activities that affect the climate. For example, emissions related to investments, dining at campuses, and travel related to student exchange programs are caused by the activities of a higher education institution but so far it has not been possible to measure their carbon footprint. Metropolia aims to develop new methods for monitoring and affecting the emissions that are excluded from carbon footprint calculation at present. Metropolia takes an active role in cooperation groups of higher education institutions working on sustainability and responsibility, where boundaries of carbon footprint calculations and emission reductions are addressed.





## Carbon Footprint Calculation Methods

Metropolia's carbon footprint is calculated using two different methods of calculation: the calculation method shared by universities of applied sciences and Metropolia's own expanded calculation method.

The calculation method developed jointly by universities of applied sciences allows for more consistent reporting of emissions. Metropolia's goal of carbon neutrality is related to the calculation of carbon footprints using the calculation method developed in cooperation by higher education institutions. For this reason, Metropolia prioritises emission reduction measures that affect the emissions included in this calculation method.

As part of its ambitious emission reduction targets, Metropolia also calculates its carbon

footprint using a separate, expanded calculation method. Metropolia's expanded calculation method utilises Greenhouse Gas Protocol (GHG Protocol) as a standardised framework for calculation. The key difference between the two calculation methods is that the expanded method includes the commuting to campuses by students and personnel, which is not taken into account by the calculation method used commonly by universities of applied sciences.

This Sustainability Report presents the results from both calculation methods. More detailed descriptions of the methods and their results can be found in *appendix 2*.

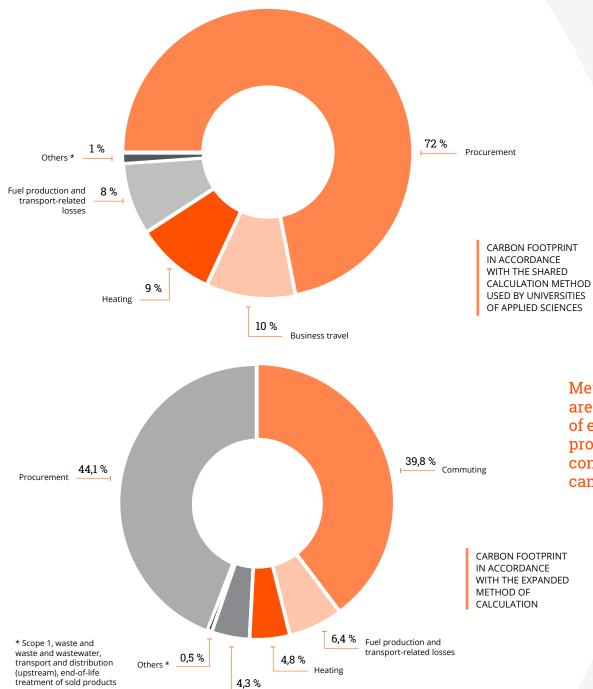


SUSTAINABILITY REPORT 2023

## Reduction of Emissions

Comprehensive preparations for clarifying our existing climate objectives began in 2023. The aim is to draw up a programme that defines existing climate objectives and measures as part of Metropolia's sustainable development roadmap. During the preparatory work for this programme, the emission reduction potential of each measure will be assessed in terms of both carbon footprints. Our aim is to complete the programme by the end of 2024.

In 2023, the methods used for carbon footprint calculation and its quality were developed further and work to determine more precise emission reduction targets and measures was launched. Metropolia also carried out several projects aimed at reducing emissions, cooperated closely with other higher education institutions on climate-related matters, and signed the *City of Espoo's Climate City Contract*.



Business travel

## Carbon Footprint 2023

In 2023, Metropolia's carbon footprint was  $5\,970\,t\,CO_2$ e in accordance with the shared calculation method of universities of applied sciences and 11  $670\,t\,CO_2$ e according to the expanded method of calculation. Metropolia's emissions are generally comprised of emissions generated by procurement, mobility, and consumption of energy at campuses. Procurement accounts for a substantial part of our carbon footprint.

Based on the shared calculation method of universities of applied sciences, our carbon footprint increased by 14% from the previous year and decreased by 11% based on the expanded calculation method.

Metropolia's emissions are generally comprised of emissions generated by procurement, mobility, and consumption of energy at campuses.

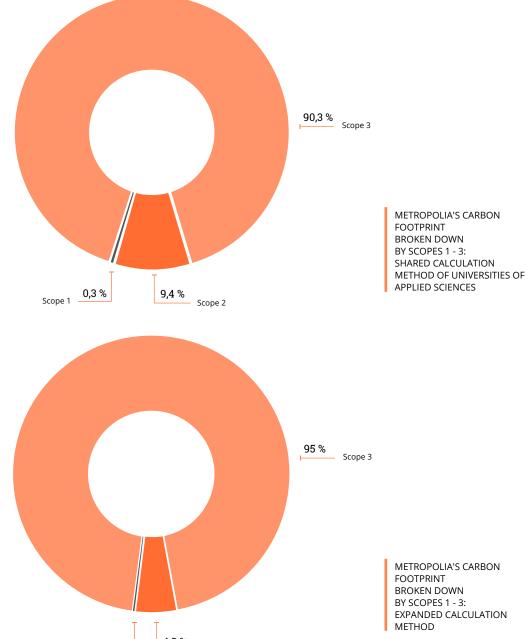
This difference can be explained by the different boundaries of the calculations and the increase in emissions resulting from procurement, which has a particularly significant impact on the result of the calculation of carbon footprint used for universities of applied sciences. In turn, the emissions from travel

to and between campuses and the consumption of energy, which are included in the expanded calculation method, decreased more than emissions from procurement increased. Metropolia's carbon footprint was 49 t  $\rm CO_2e$  per MEUR of revenue based on the shared calculation method of universities of applied sciences and 96 t  $\rm CO_2e$  per MEUR based on the expanded calculation method.

## Majority of Emissions Generated in the Value Chain

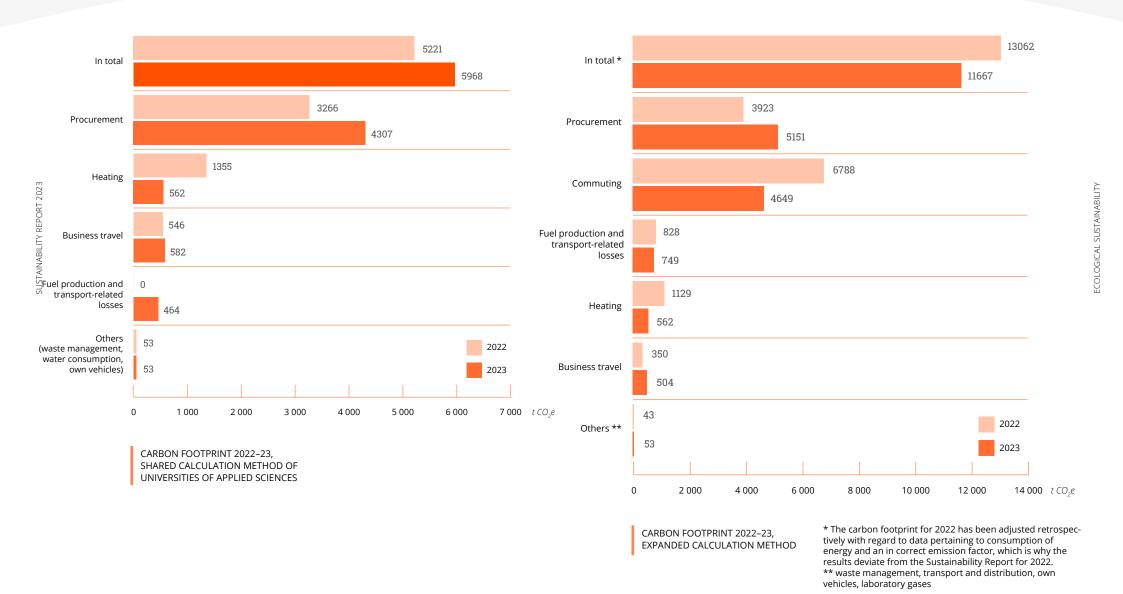
Regardless of the calculation method used, the majority of Metropolia's emissions is comprised by indirect emissions from the value chain, which are referred to as Scope 3 emissions. The direct Scope 1 emissions from our activities largely consist of the consumption of fuels by Metropolia's vehicles. Indirect emissions, which include heating emissions from campuses, also comprise Scope 2 emissions, as all the electricity we purchase is renewable (market-based calculation). More detailed figures and, for example, location-based Scope 2 emissions calculations are presented in appendix 2.

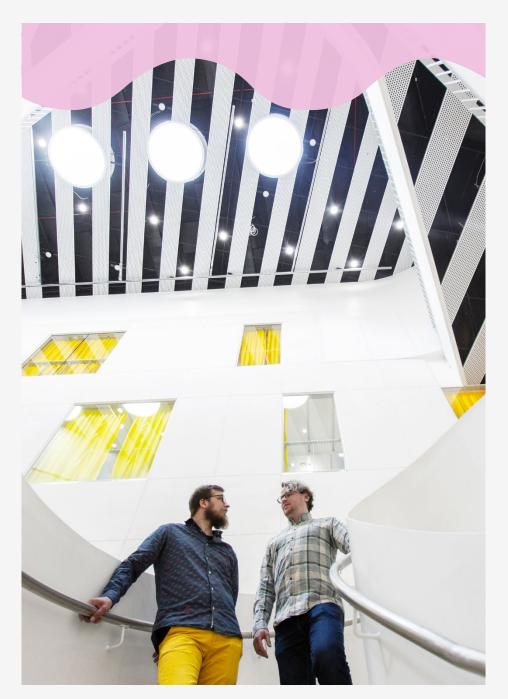
>



METROPOLIA'S CARBON FOOTPRINT BROKEN DOWN BY SCOPES 1 - 3: **EXPANDED CALCULATION** METHOD

### Metropolia's Greenhouse Gas Emissions per Emission Category in 2022 and 2023





### **Energy Consumption**

Emissions from energy consumption comprise emissions generated by district heating at campuses and the emissions from fuel production and transport-related losses. Emissions from consumption of energy at campuses decreased in 2023 from the previous years based on either calculation method. This was the result of decreased consumption of electricity and heat, increased use of renewable energy, and the decrease in emission factors reflecting the distribution of production forms used by energy companies.

In 2023, energy consumption at campuses generated 560 t CO<sub>2</sub>e of Scope 2 emissions, which corresponds to approximately 9% of emissions based on the shared calculation method of universities of applied sciences and 5% based on Metropolia's expanded calculation method. Emissions from energy consumption also comprise emissions from the production of fuels and purchased energy and transport-related losses, which were included in the shared calculation method of universities of applied sciences as a dedicated category for the first time. Life-cycle emissions of energy consumption in 2023 accounted for approximately 8% of the carbon footprint based on the shared calculation method and 6% based on Metropolia's own calculation method.

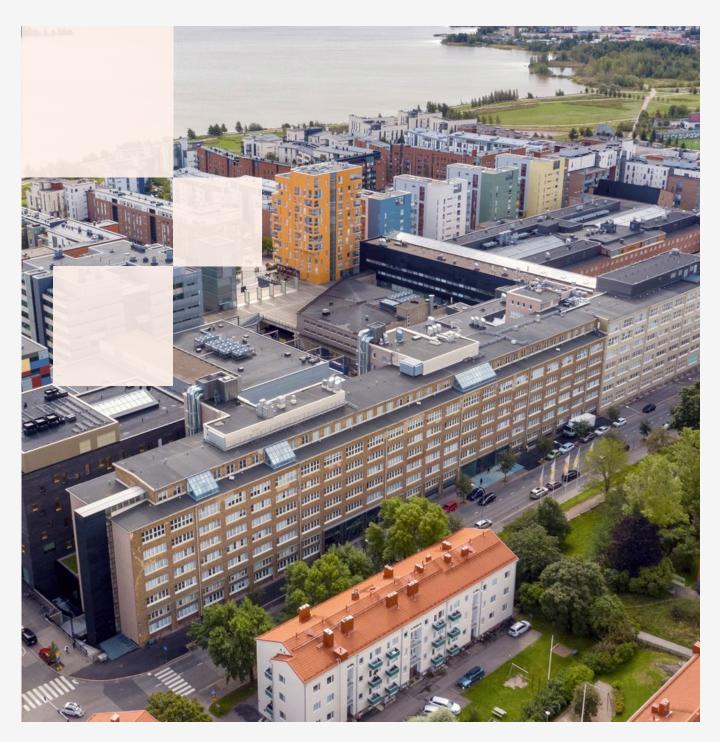
In 2023, Metropolia continued the measures included in the national energy saving campaign Down a degree and maintained the temperature at campuses at 21 degrees

In 2023, emissions caused by the consumption of energy at campuses were reduced from the previous year.

Celsius. We also focused on optimising the indoor air conditions at campuses to ensure that we could minimise the consumption of heat without sacrificing comfort. During the year, the functionality of ventilation and automation systems at the Myllypuro campus was assessed to optimise energy consumption, and the mandatory energy audit for large enterprises was carried out. The results of the audit will be used to guide future energy saving measures. Furthermore, Metropolia once again took part in the Energy Saving Week campaign, during which Metropolia personnel and students were encouraged to make energy smart choices.

Towards the end of 2022, Myyrmäki campus switched to renewable district heat, which increased the proportion of renewable energy of total energy consumption to 79% in 2023. Metropolia will aim to maximise the share of emission-free, renewable energy of our total consumption of energy and consume both electricity and heat in a considered and responsible manner.

>



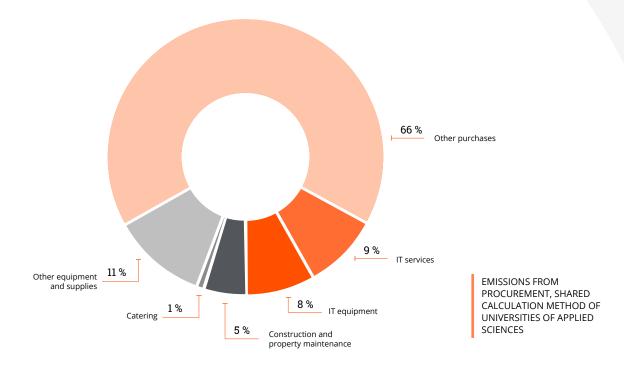
#### Procurement

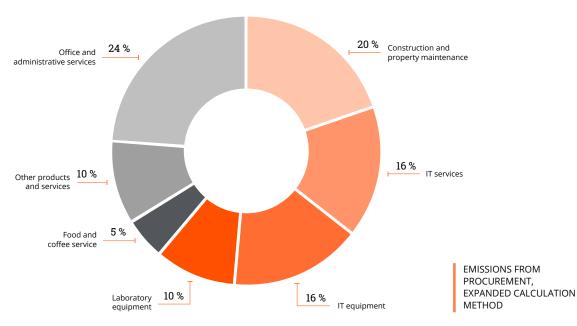
Procurement accounts for the majority of our carbon footprint, 72%, calculated using the method developed for universities of applied sciences. With the expanded calculation method, procurement comprises 44% of the carbon footprint. In 2023, emissions from procurement grew by approximately one third under both calculation methods. The increase in emissions can be explained by the more accurate emission factors that have increased in some cases, the increase in prices due to inflation, and the fact that our procurement in 2023 was focused on more emission-intensive products and services, such as IT equipment and catering.

Metropolia purchases significant amounts of products and services that are essential to its activities, such as IT equipment and services, equipment and devices used for teaching and laboratory work, services pertaining to campus maintenance, and various expert, office, and administrative service, which comprise the emissions from procurement. All other products and services that do not fall into the specified categories are considered as other purchases in the shared calculation method of universities of applied sciences. This includes various expert services and some property maintenance services, for example.

Almost all emissions from procurement were calculated on a spend-based method. For Metropolia's own carbon footprint







calculations, procurement emissions were assessed using Hansel's Procurement Pulse service, which utilises the Envimat calculation model developed by the Finnish Environment Institute. The estimated emissions for different product and service categories are based on the average emissions generated by products on the Finnish market and do not correspond to the actual carbon footprint of individual purchases. The emission factors used in Procurement Pulse were updated before the calculations for 2023 to correspond to the market situation in 2019, and the emission factors are estimated to be more accurate after the update.

In 2023, a more accurate calculation method based on emission data from suppliers was piloted with certain IT equipment purchases as part of the expanded carbon footprint calculation for Metropolia. The results from the pilot project represent just 0.3% of the overall emissions from procurement. Nevertheless, increasing the accuracy of the calculation method is a requirement for successful and measurable work to reduce emissions, which is why Metropolia will continue to invest increasingly in market dialogues and the further development of the calculation of procurement emissions.

In 2023, we began a more systematic implementation of low-carbon and circular economy criteria in order to reduce emissions and launched a development project aimed at ensuring more comprehensive accounting of sustainability aspects during the preparation of purchasing capital goods.





#### **Business Travel**

Emissions caused by business travel increased in 2023 when measured under either calculation method. The majority of the emissions was generated by air travel, which is estimated to have returned to the pre-pandemic level. Business travel comprised 10% of emissions based on the shared calculation method of universities of applied sciences and 4% based on the expanded calculation method.

Travel guidelines intended for personnel were clarified in 2023 in terms of the climate aspect: in the future, sustainable means of travel will be prioritised in domestic travel and air travel will only be used in exceptional situations. Correspondingly, the detrimental impact of international travel will be minimised through prioritising travel by train or bus where possible and by assessing the need for travel and flying. The rising trend in emissions from business travel demonstrates that there is a need to monitor the impact of the updated travel guidelines and develop them further where necessary.

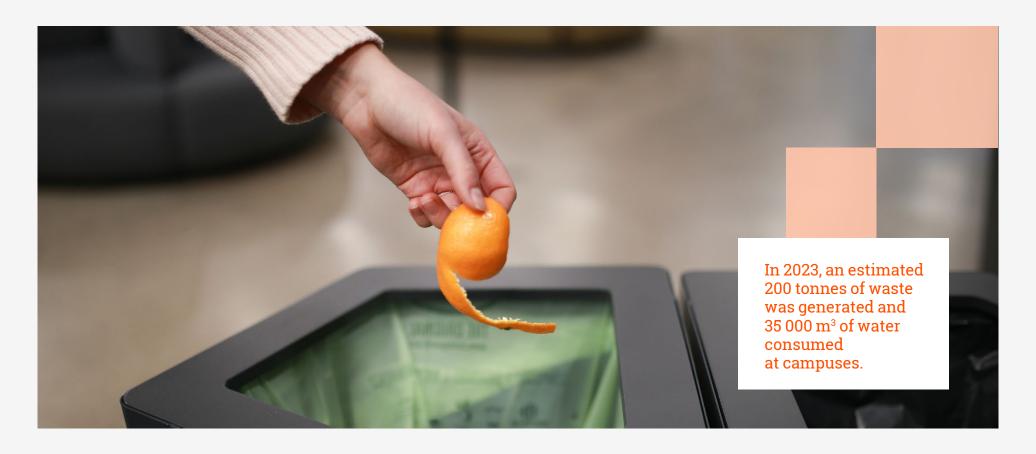
#### Commuting

Emissions from commuting to campuses are assessed as part of Metropolia's expanded calculation method for emissions. The calculation included travel by both students and personnel. In 2023, Metropolia invested in a mobility survey, which provided more accurate data for assessing emissions. With the increased accuracy of data gathering,

emissions caused by travel to campuses were assessed to be much lower than in the previous year. Nevertheless, such emissions still formed one of the largest categories of emissions under the expanded calculation method, accounting for 40% of emissions.

In 2023, we organised an open discussion event for Metropolia personnel and students on sustainable mobility, improved the conditions for cycling by, for example, increasing the number of secure bicycle storage areas and drying opportunities in locker rooms, and surveyed the suitability of various sustainable mobility measures for Metropolia. The decision to invest in charging opportunities for electric vehicles and the promotion of cycling during the next year was also taken.





### Waste and Water Consumption

The emissions generated by waste and wastewater processing are minor in terms of the overall carbon footprint, and such emissions are included under the category Others in the graphs representing both carbon footprints.

In 2023, an estimated 200 tonnes of waste was generated and 35 000 m3 of water consumed at Metropolia campuses. Approximately 2% of the total waste generated was comprised of hazardous waste. In the future, the aim is to specify

the monitoring and organisation of waste management such that the recycling rate can be assessed in a reliable manner and improved, for example.

In 2023, waste generated through different processes was surveyed more precisely than previously, and monitoring of water consumption as developed at the Myllypuro campus. The emissions resulting from the procurement of domestic water and the processing of waste and wastewater comprise a very modest proportion of Metropolia's carbon footprint, but the sorting and recycling of waste are in particular important areas

of development in terms of sustainable use of natural resources and Metropolia's role as a trendsetter. A project intended to develop the management of waste services and sorting opportunities at campuses was launched in the autumn of 2023.

#### Other Emission Sources

In addition to the emissions specified above, Metropolia's remaining emissions included direct emissions from our activities, which are referred to as Scope 1 emissions, and transport and distribution emissions under the expanded calculation method. These emissions comprise a marginal share of our carbon footprint (approximately 0.2–0.3% depending on the calculation method). Direct emissions from own activities include emissions related to the fuel consumption of own vehicles and, in the expanded calculation method, emissions from gases used at laboratories. Transport and distribution emissions include emissions generated by postal and courier services purchased by Metropolia, which are calculated based on emission data received from suppliers.

>

### Climate-Friendly Dining at Campuses

Food, food production, and dining at campuses have significant effects on the environment, which have been recognised at Metropolia, although the emissions related to dining at campuses is not at present included in Metropolia's carbon footprint. With regard to catering for Metropolia's meetings, plant-based foods are prioritised in line with the existing administrative guidance.

Metropolia cooperates closely with the operators of campus restaurants to promote climate-friendly food and reduction of food waste. For example, we have cooperated actively with the Sodexo restaurants in Myllypuro and Myyrmäki to increase responsibility, and the availability of vegetarian and vegan options at the restaurants was increased in 2023, The amount of food waste was reduced through optimised preparation, campaigns, sale of rescue food, and monitoring the number of customers, which was carried out in cooperation. In the future, we aim to further specify the monitoring of food waste and its climate effects with all restaurant operators at our campuses.





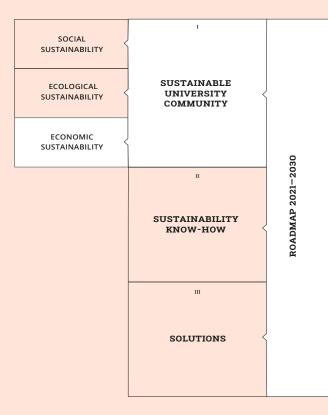
ECONOMIC SUSTAINABILITY:

# We will grow in a sustainable manner and invest in the future

We aim to grow sustainably within environmental and social framework conditions both domestically and internationally. We want to contribute to creating the conditions for sustainable growth throughout society. At the same time, sustainable growth is important to us in order to secure the financial capacity of Metropolia.

Within this framework, we particularly promote the following UN Sustainable Development Goals: 8: Decent work and economic growth; and 12: Responsible consumption and production.

MEASURES	INDICATOR	RELATED SDG
We will conduct our business activities in accordance with the principles of responsibility.	Continuous improvement.	12 RESPONSIBLE CONSUMPTION AND PRODUCTION
<b>2</b> . We will determine and implement principles for responsible investment.	Investment in accordance with the responsibility criteria (%).	12 RESPONSIBLE CONSUMPTION AND PRODUCTION
All our procurement will be carried out in accordance with the principles of sustainable development.	Procurement in accordance with the responsibility criteria (%).	8 DECENTWORK AND ECONOMIC GROWTH AND PRODUCTION AND PRODUCTION
<b>4.</b> We promote circular economy related thinking, competence, and business models.	To be determined in 2024.	8 DECENT WORK AND ESONOMIC GROWTH



## Financial Situation 2023

For Metropolia, economic sustainability means operating in a profitable manner and with a healthy capital structure, while ensuring our financial capacity in the future as well. In our pursuit of economic sustainability, we operate in an environmentally and socially sustainable way. Procurement activities are carried out in accordance with the principles of sustainable development and in line with the specified criteria of sustainability and responsibility. Metropolia's activities also have a wide range of indirect and far-reaching economic impacts. By educating talent for the future, Metropolia promotes the economic sustainability of society. Metropolia's RDI activities produce initiatives and innovations that promote sustainable development while also contributing to the economic sustainability of our partner organisations.

SUSTAINABILITY REPORT 2023

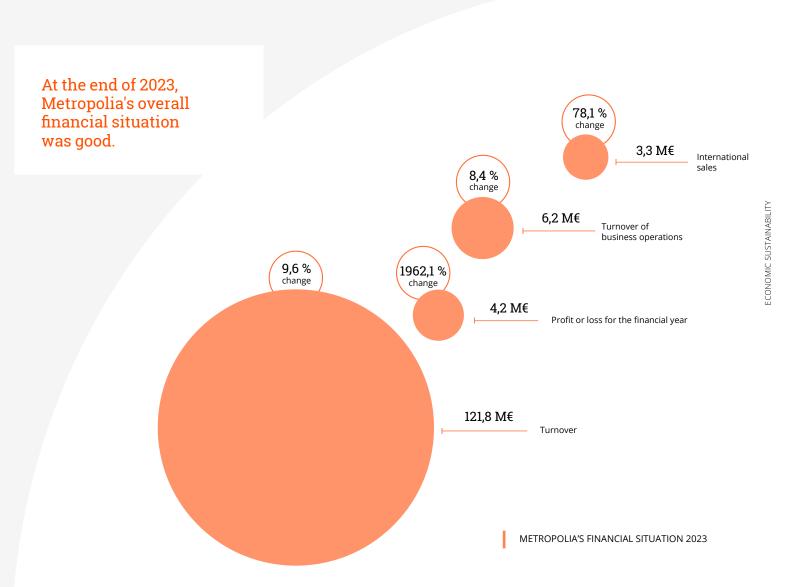
At the end of the year, Metropolia's overall financial situation was good. Metropolia's turnover was 121.8 million euros, with an increase of 9.6% from the previous year. We received 94.1 million euros in government funding, which was 4.4 million euros more than in the previous year. Other external income amounted to 27.7 million euros. having increased 6.3 million euros from the previous year. Operating income increased to 6.2 million euros (2022: 5.7 million euros). Metropolia's profit for the financial period was 4.2 million euros (2022: 0.2 million euros). The result was a significant improvement from the previous year due to investment activities, for example. Adjusted profit for the



financial period came to 4.2 million (2022: 0.8 million euros). The adjusted profit accounts for the revenue funding for 2023 overpaid by the Ministry of Education and Culture in 2021. Personnel expenses amounted to 76.6 million euros, with an increase of 7.9% from the previous year. Personnel expenses accounted for 62.9% of turnover (2022: 63.9%) Metropolia's financial standing was good with a debt-to-equity ratio of 74.0% (2022: 74.4%).

Reinforcement of economic capacity provides a solid basis for other aspects of sustainable development. At Metropolia, sustainable growth is created through the production of sustainable solutions in cooperation with our partners, for example. During the year, there was an increase of 10% in domestic business activities, in addition to which commercial RDI activities increased by 104% from the previous year. Cooperation with a number of companies was strengthened with the conclusion of working life cooperation agreements during the year. By the end of the year, such agreements had been concluded with more than 30 companies. Cooperation agreements are used to promote the economic sustainability of both Metropolia and its partners.

Metropolia also attracts international students: in 2023, there was a significant increase in the number of students paying tuition fees. There were approximately 120 more new degree students subject to tuition fees than in the previous year, and international sales increased by 78% from 2022. Furthermore, the number of applications received from outside the EU and EEA doubled from the previous year.



## Sustainable Growth and Responsible Business Operations

Metropolia's business operations are based on the principles of sustainable growth, which will ensure Metropolia's financial capacity in the future as well.

At Metropolia, business operations comprise training courses and various services and products sold to both individuals and organisations. Potential operating losses are never financed using public funds. Any profit from business activities is subject to the statutory taxes. Metropolia engages in business activities in such areas as:

- supplementary education
- corporate services (customised training packages and research, testing, and analysis services)
- international sales

SUSTAINABILITY REPORT 2023

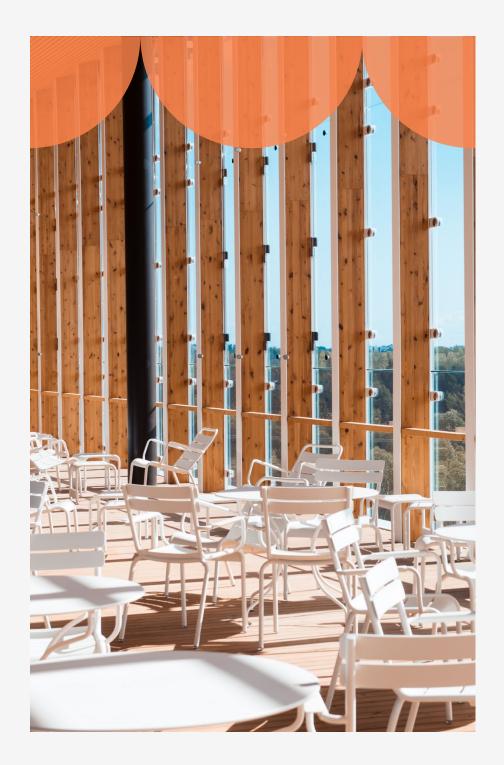
· facility rental services.

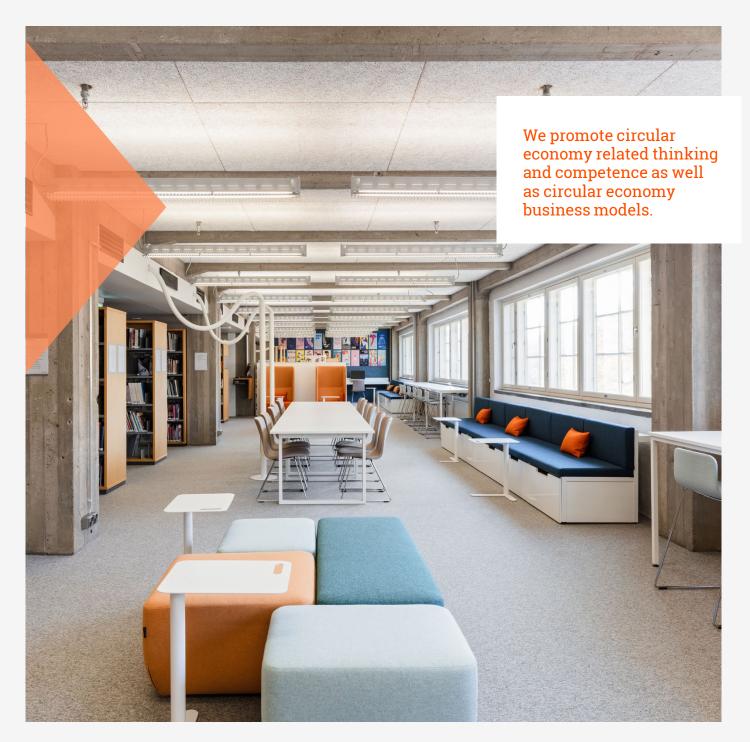
In 2023, Metropolia's supplementary education and corporate services as well as the range of training courses offered had a stronger focus on themes of sustainability. Paid training courses were organised on such topics as responsible procurement, responsibility in the real estate and construction sector, optimising the carbon footprint of buildings, and energy-related matters pertaining to properties.

### Sustainable Investment and Procurement

Metropolia's Board adopted the updated investment strategy in August 2023. The new strategy accounts for the principles of sustainable investment. Sustainability is integrated systematically in the selection of investment objects, monitoring, and reporting in all asset classes. Sustainable investment utilises exclusionary strategies. Exclusion is based on ethical reviews and the mitigation of climate change. Companies that have made a commitment to the UN Global Compact initiative are prioritised in investment activities.

Results of the carbon footprint calculation for the reference year 2022 demonstrated that procurement has a substantial climate impact. Based on these results, measures that will both reinforce sustainable procurement skills and provide tools for monitoring significant sources of emissions in procurement and help to gradually reduce emissions were systematically implemented in 2023. Sustainability and responsibility criteria have been introduced to the procurement of equipment and furniture as well as expert





SUSTAINABILITY REPORT 2023

services pertaining to software, alteration of facilities, and repair construction. The facility services and procurement services teams took part in the Circular Economy Academy of the Competence Centre for Sustainable and Innovative Public Procurement (KEINO) with a facility conversion project, where a lecture theatre was converted into a health care reception area. The experience of the Circular Economy Academy will be used to design more comprehensive sustainable procurement training for personnel.

A list of questions pertaining to sustainable development has been prepared for the personnel in charge of drawing up capital goods proposals for the assessment of sustainability and responsibility.

The list supplements the existing sustainability assessment procedure for capital goods proposals. Furthermore, the procurement brief maintained for contracts below the national tender threshold has been supplemented with questions on sustainability and responsibility. The Code of Conduct comprising the minimum requirements for sustainability recommended by Hankinta-Suomi, the joint procurement strategy of the Ministry of Finance and other national operators, was first introduced to procurement in the Autumn of 2023.



### Promotion of Circular Economy

Metropolia aims to promote circular economy thinking and competence as well as circular economy business models. In 2023, themes of circular economy were addressed on various courses and in several research, development, and innovation projects. For example, challenges related to the circulation of plastics and the development of the sustainability of our food system and the related materials have been examined in projects carried out at the Clean and Sustainable Solutions innovation hub. The possibilities for growing

mushrooms on plastic waste were studied in the Urban & Local project.

Metropolia's most recent cooperation platform Carbon Garage, which focuses on projects related to the mitigation of climate change, was launched in the autumn. Carbon Garage is intended to provide an open learning environment for various operators. During its first months of operation, joint Minno innovation projects involving businesses and students were carried out at Carbon Garage. The aim of these projects is to allow businesses to transition towards more sustainable activities based on circular economy solutions more effectively.

During the year, facilities used by the UrbanFarmLab cooperation platform were renovated, and a whole new research environment was built within the facilities. UrbanFarmLab is an energy, water, and space efficient facility for urban agriculture at the Myyrmäki campus. The renovated facilities can be used to build devices and systems that utilise biowaste, for example, as a growing medium. Challenges of circular economy were also addressed through robotics and artificial intelligence in various collaborative projects with businesses.

Circular economy is also promoted by increasing the shared use of premises

and by repurposing underused facilities. An agreement was concluded between Metropolia and Zone, which provides exercise-related services to other universities of applied sciences, that will clarify the use of exercise facilities and improve personnel's opportunities to use the facilities. This has led to a much more efficient use of exercise facilities at campuses and reduced underuse even further. Utilisation of facilities has also been improved by converting under-utilised spaces into a bicycle parking facility and a lobby service area, for example.



SUSTAINABILITY KNOW-HOW

#### SUSTAINABILITY KNOW-HOW:

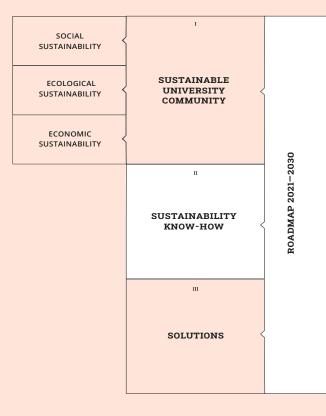
# Everyone at Metropolia is able to promote sustainable development in working life and the society

A sustainable future requires substantial investments in sustainable development skills. Our aim

is to ensure that all members of our university community, both students and personnel alike, become sustainable development specialists. For us all to be able to promote sustainable development in the working life and in society, it is important to make sustainability an integral part of all our education and training and to invest in developing the sustainability skills of our personnel.

At the same time, we particularly promote the following UN Sustainable Development Goals: 4: Quality education and 12: Responsible consumption and production.

MEASURES	INDICATOR	RELATED SDG
We will integrate the contents of sustainable development into all education by the end of 2023.	Survey questionnaire for graduates (AVOP) on sustainable development competence	4 QUALITY EDUCATION 12 RESPONSIBLE CONSUMPTION AND PRODUCTION
2. We will increase the sustainability competence of Metropolia's staff.	Completed studies	4 QUALITY EDUCATION 12 RESPONSIBLE CONSUMPTION AND PRODUCTION
3. We create individual and flexible learning solutions for different stages of life.	Credits completed outside degree programs	4 OMALITY EDUCATION
<b>4.</b> We will ensure the accessibility and flexibility of education, through digitalisation, for example.	Proportion of online and multiform studies (%)	4 QUALITY EDUCATION

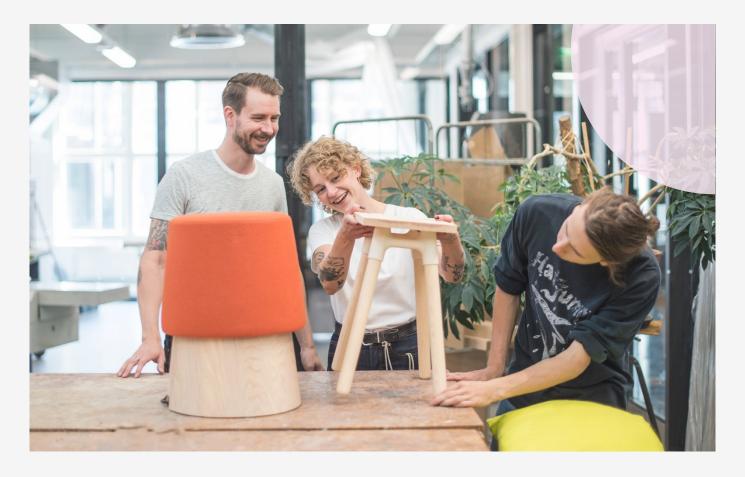


#### Sustainable Development in Education

At Metropolia, sustainable development education is provided as part of our degree programmes and as optional courses. In 2023, the integration of sustainable development education with the practical implementation and curricula of degree programmes continued. Various implementation models for integrating sustainable development contents with curricula and course were presented at a sustainable development workshop organised for personnel in September. The workshop was attended by nearly 70 teachers and programme coordinators from all four fields of education. You can read more about the workshop in a blog post: Sustainability in Education - Hiiltä ja timanttia (metropolia.fi).

Educational contents produced during the SDG4BIZ (Sustainable development goals for Business) project have been integrated with courses in various degree programmes. The package was comprised of five five-credit modules, the first of which addressed sustainable development thinking in business. The other four focused on specific sectors: food and agriculture, energy and materials, health and well-being, and sustainable cities.

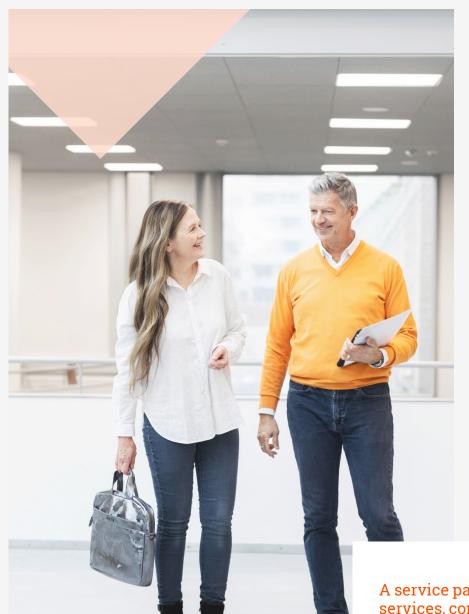
Monitoring how sustainable development is taught at Metropolia is essential. One of the available monitoring methods is the AVOP feedback survey for graduating students, to which a few questions that are specific to Metropolia students have been added. Each statement is rated on a scale where a 1 corresponds to complete disagreement,



4 to neither agreement or disagreement, and 7 to complete agreement. Metropolia pays particular attention to the percentage of respondents who answer statements with a 6 or 7. The results represent the current situation and development needs of sustainable development education.

The chart on the right includes responses from students who graduated in the spring of 2023. As sustainable development was added to Metropolia's strategy in 2021, it is understandable that it cannot yet be seen clearly in the responses from students who graduated in 2023.

QUESTION	AVERAGE	PROPORTION OF ANSWERS 6 AND 7
Sustainable development is integrated well in my studies.	4.48	28 %
My knowledge of sustainable development has grown during my studies.	4.48	31 %
I can apply my knowledge of sustainable development in working life.	4.73	36 %



#### Sustainable Development **Competence Among** Personnel

One of Metropolia's main objectives for sustainable development is ensuring that each person at Metropolia, whether a student or employee, becomes a sustainable development specialist. A training course for sustainable development was created in 2022 to reinforce the sustainability competence of Metropolia's personnel. The purpose of the course was to create a common understanding of what sustainable development means and make its primary goals clearer so that everyone at Metropolia is better equipped to promote sustainable development in their work.

The training course was received enthusiastically by the personnel, and more than 700 Metropolia employees, which accounts for approximately 70% of our permanent personnel, had completed it by

A service package consisting of guidance services, complementary skills solutions, and networking and event cooperation was developed for highly skilled migrants. August 2023. The course is still available as part of the training provided to personnel and it is included in the orientation provided to new employees. Metropolia's ambitious goal is to ensure that 90% of personnel have completed the course. You can read more about the course in an online news article (in Finnish) Metropolia launches a sustainable development training course for personnel more than 700 employees have completed the course (metropolia.fi).

#### Individual and Flexible **Learning Solutions**

Different life situations call for individual and flexible learning opportunities. In 2023, Metropolia continued to build flexible and individual learning solutions based on anticipation.

During the year, the provision of guidance and counselling services and personalised learning solutions was reinforced for external client groups in particular. Metropolia's general counselling services have been centralised in Student and Applicant Services, and external client groups have been provided the option of booking an appointment with a career coach. A service package consisting of guidance services, complementary skills solutions, and networking and event cooperation was developed for highly skilled migrants. The availability of additional study programmes has also been increased and expanded.

We monitor the development of individual and flexible learning solutions through the programmes, for example. In 2023, the number of credits was 164 357, which was 40% more than the previous year. The increase was primarily caused by credits earned through higher education partnerships.

number of credits completed outside degree

### Accessibility of Education

SUSTAINABILITY REPORT 2023

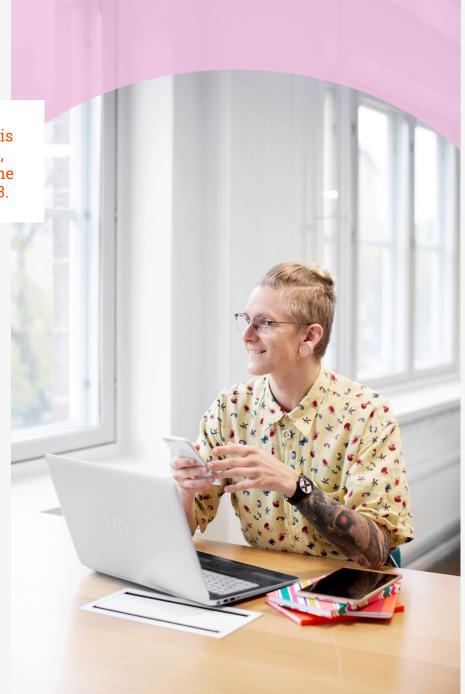
Flexible learning solution can be used to support learners in different life situations. Accessibility and flexibility of education is taken into account in the ongoing curriculum reform, which aims to increase the availability of courses that are more flexible in terms of time and place and the optionality of studies. Common electives on the Metropolia level, which can be completed flexibly by the students according to their own schedules and interests, will be included in the new curricula. The revised curricula will also make it possible to break five-credit courses down into smaller units to better serve the needs of continuous learning and working life as well.

Students' transition to degree studies will be supported through a range of pathway study solutions. The term, scope, and operating methods of pathway studies were clarified and harmonised in 2023. Pathway studies are available to different client groups and for different life situations. The objective of pathway studies for secondary education is to inspire the students to continue their studies at a higher education institution and smooth the transition from secondary

The accessibility of education is measured, among other things, through the proportion of online studies, which was 42% in 2023.

to higher education. Vocational pathway studies provide a path from a vocational upper secondary qualification to studying at a higher education institution. A pilot for pathway studies for general upper secondary schools has also been planned. Applicants without a study place or those interested in moving to a different career can begin their studies by completing pathway studies. A new pathway programme for skilled professionals was launched in 2023, which is aimed at working professionals in various sectors. The pedagogical solutions designed for working professionals account for working life, and the studies can be completed while working through accreditation, for example.

The accessibility of education is measured, among other things, through the proportion of online studies, which was 42% in 2023. The number of students who accepted a study place outside of the joint application procedure was 1 225 in 2023. The corresponding figure in 2022 was 917.





SUSTAINABLE DEVELOPMENT SOLUTIONS

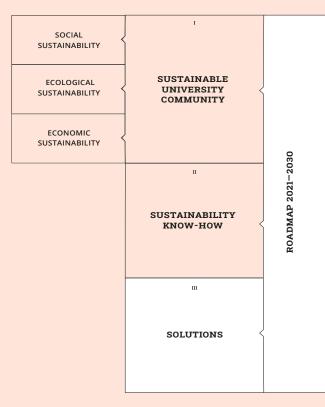
#### SUSTAINABLE DEVELOPMENT SOLUTIONS:

# We create innovative solutions to sustainability challenges

Climate change, transport, health services, urbanisation and construction are topical challenges to which we develop sustainable solutions in our five innovation hubs. We take a phenomenon-based approach to solving these challenges through open innovation and research.

We tackle a wide variety of challenges in the innovation hubs, but we particularly promote the following UN Sustainable Development Goals: 4: Quality education, 8: Decent work and economic growth, 9: Industry, innovations, and infrastructures, and 17: Partnerships for the goals.

MEASURES	INDICATOR	RELATED SDG
We will increase the impact of innovation hubs in solving sustainability challenges.	RDI projects that promote sustainable development (%)	9 ADDISTRY INFORMATION AND INFRASTRUCTURE
2. We solve sustainability challenges with open innovation, research and a phenomenon-based approach	Number of open access publications, number of RDI partnership agreements	9 DOUSTRY, INNOVATION AND INFRASTRUCTURE 17 PARTICESHIPS FOR THE COALS
<b>3.</b> We will strengthen the vitality of the Helsinki Metropolitan Area through sustainable entrepreneurship, business, and employment.	Number of people involved in business incubator activities and the number of new businesses established	4 QUALITY EDUCATION 8 DECENT WORK AND ECONOMIC GROWTH



## Five Innovation Hubs Solving Challenges

Metropolia's phenomenon-oriented innovation hubs enable a new way to learn, produce solutions, and cooperate in a multidisciplinary manner on significant phenomena or challenges for the benefit of society as a whole. Partners, students, and personnel work together five innovation hubs on various RDI projects or cooperation platforms and deliver client projects and services. In 2023, approximately 90 RDI projects were in progress in the innovation hubs.



The UN Sustainable Development Goals of Good health and well-being; Quality education; Decent work and economic growth; Industry, innovation, and infrastructure; and Reducing inequalities are particularly emphasised in the project portfolio of the Customer-Oriented Well-Being and Health Services innovation hub. Health Proof Helsinki is an RDI and test environment ecosystem for the innovation hub, where Metropolia's partners include HUS and the City of Helsinki. Health Proof Helsinki allows ecosystem organisations to share resources and competence and promotes a needs-driven approach to product development. HyMy Village (Wellbeing from Myllypuro) offers public and private health care services and pilots new approaches.



Supporting and enabling sustainable development is at the heart of the Clean and Sustainable Solutions innovation hub. Five new projects that aim to solve challenges related to the food system, carbon sequestration, and the recycling of plastics were launched at the hub in 2023. The innovation hub started as the leader of a consortium of higher education institutions operating in Southern Finland. The consortium aims to provide training on sustainability and digitalisation to businesses in the region. During the year, the innovation hub's premises were renovated to enable closer cooperation between companies solving challenges and Metropolia's personnel and students. The new cooperation platform Carbon Garage was also brough online.



Activities of the **Data-Driven Construction** innovation hub are based on digital solutions of the built-up environment that are economically, environmentally, and humanely sustainable. In 2023, the innovation hub's RDI activities focused on three core themes: Smart Buildings, Digitalisation of Construction, and Energy Transition. During the year, a novel form of cooperation with five other universities of applied sciences was launched to promote circular economy in construction. The cooperation led to the KIRA CIRCULARIS project, which kicks off in early 2024. Metropolia acts as the coordinator of the project.

In 2023, approximately 90 RDI projects were in progress in the phenomenon-oriented innovation hubs.



The Functional City for People innovation hub is particularly supportive of the UN Sustainable Development Goal of Sustainable cities and communities. In the summer of 2023, the U!REKA alliance coordinated by Metropolia received funding through the high-calibre Erasmus+ programme, which also granted it the European Universities status. The aim is to work with U!REKA alliance partners to create a shared virtual campus and develop educational and RDI activities in support of the EU Mission on Climate-Neutral and Smart Cities. The Cultural Wellbeing Research and Education Centre CuWeRE, which develops future-proof solutions to promoting well-being in society, was also established in cooperation with the University of Jyväskylä.



In 2023, the Smart Mobility innovation hub focused on researching, developing, and supporting technologies and services for resource-intelligent, resilient, safe, healthy, and accessible mobility. Working with international and domestic partners, solutions and new knowledge were produced for the challenges of more sustainable workplace travel in the GEMINI project and for the safe and effective training of mobility sector workforce through AR technologies in the XR-SPACE project.



#### Open Research and Innovation Activities

Development of Metropolia's cooperation platforms for ecosystem collaboration continued in cooperation with RDI and learning activities and partners. These platforms bring students, researchers, businesses, and other stakeholders together for concrete development projects and measures.

At Metropolia, a working group has been appointed to systematically take forward the different aspects of partnership development. In 2023, the focus was on developing and piloting a bilateral partnership approach

with partners of strategic importance to Metropolia.

The Steps Toward Transparency (Avoimuuden askeleet) steering group was established to direct Metropolia's open RDI activities. Transparency is promoted by making the results and infrastructures of Metropolia's research, development, and innovation activities readily visible in a national research repository by publishing open access publications and by increasing the transparency of publications. Metropolia has also invested in an open operating culture

by becoming a member of the Coalition for Advancing Research Assessment (CoARA). CoARA promotes the evaluation of responsible research.

In late 2023, an access policy document was drawn up for Metropolia's research infrastructures, and guidelines were defined for the conditions of access to Metropolia's research infrastructures and the related services. The document will be published in 2024.

In 2023, the focus was on developing and piloting a bilateral partnership approach with partners of strategic importance to Metropolia.



SUSTAINABILITY REPORT 2023

#### Sustainable Entrepreneurship, Business Activities, and Employment

Activities of Metropolia's Turbiini campus incubator has been developed since 2022 in cooperation with the higher education institutions operating in the Helsinki Metropolitan Area and as part of the Campus Incubators programme of the City of Helsinki. Metropolia aims to facilitate the promotion of innovation and entrepreneurship skills and business ideas of all members of the university community as part of their studies or otherwise supported by the community. Each year, Turbiini coordinates a number of

know-how in different fields. Communications focused on impact-driven highlights based on planned content delivery. The aim of these activities is to increase visibility particularly in higher education institutions in the metropolitan area and the start-up ecosystem.

2023 also saw the launch of Turbiini Broadcast, which is live streamed on

Twitch.tv. The streams focus on Turbiini's pre-incubation programmes and topical entrepreneurship-related issues. This allows Turbiini to distribute entrepreneurship methods, skills, and competencies more effectively and independently of time or place and build its community online. As a result, the total number of social media followers of Metropolia's campus incubator activities has almost tripled in 2023.

Turbiini has also invested in Metropolia's internal communications, and events and meetings have been held with both student organisations and educational representatives. The priorities and decisions of Turbiini are guided by sustainable development perspectives and Metropolia's ethical guidelines. Utilization of the Sustainable Business Model Canvas guidelines is a practical example of this. The guidelines instruct each person drawing up a business plan to also consider the sustainable development aspects and the opportunities they provide. Turbiini also cooperates with the Centre of Excellence for Social Enterprise

pre-incubation programmes designed for different sectors on its campuses, which are aimed at developing entrepreneurship skills and business ideas.

In 2023, investments were made to networking and communication of social media platforms in particular. The business specialists of Turbiini operate extensively in entrepreneurship networks in the metropolitan area. Networking enhances the operation of higher education institutions' campus incubators by sharing specialist

#### Appendix 1. Objectives, Indicators, and Results for the Sustainable Development Roadmap 2022–2023

UN SUSTAINABLE DEVELOPMENT GOAL (SDG) RELATED TO THE OBJECTIVE	MEASURE	INDICATOR	OBJECTIVE 2030	INDICATOR RESULT 2022	INDICATOR RESULT 2023	SDG SUBGOALS RELATED TO THE MEASURE	SDG INDICATORS RELATED TO THE MEASURE
SOCIAL SUSTAINA OBJECTIVE: OUR RESPONSIBLE AN		KPI: General index for the personnel survey (PeoplePower)	Above the standard for the education sector, 2022 standard: 67.1	65,6 / 67,1	65,6 / 68,6	16.6, 16.7, 8.5, 10.2	
8 DECENT WORK AND ECONOMIC GROWTH	We lead responsibly and by putting people first with the help of a management system, supervisors and new thinking.	General index for the personnel survey (PeoplePower)	Above the standard for the education sector, 2022 standard: 67.1	65,6 / 67,1	65,6 / 68,6	16.6, 16.7	
10 REQUALITIES    PAGE, JUSTICE   AND STRONG   INSTITUTIONS	2. We look after the health, well-being, and safety of our higher education community.	Personnel survey and feedback questionnaire for students	Target level available for the 2024 report	Personnel survey: own assessment of working capacity 8.14/10.  AVOP: students' assessment of their own well-being: 4.65/7	Personnel survey: own assessment of working capacity <b>8,14/10</b> AVOP: students' assessment of their own well-being: 4.62/7	8.5, 8.8	8.8.2 Level of national compliance with labour rights (freedom of association and collective bargaining) based on International Labour Organization (ILO) textual sources and national legislation, by sex and migrant status.
	3. We promote equality and diversity in our higher education community.	Age and gender distributions of personnel and students, percentage of leading positions held by women	Target level available for the 2024 report	Personnel: Women 62% and men 38%. Students: Women 49%, men 51%, other/not specified 0.04%. 50% of leading positions are held by women.	Personnel: Women 63% and men 37%. Students: Women 50.61%, men 49.65%, other/not specified 0.04%. 50% of leading positions are held by women.	10.2, 10.3, 10.4	5.5.2 Percentage of leading positions held by women.
	4. We promote opportunities for inclusion and open dialogue in our higher education community. We communicate in a transparent manner.	Personnel survey (People Power): communication and participation	Target level available for the 2024 report	Results for communication and participation: 2.94/4	2.95	10.2	

UN SUSTAINABLE DEVELOPMENT GOAL (SDG) RELATED TO THE OBJECTIVE	MEASURE	INDICATOR	OBJECTIVE 2030	INDICATOR RESULT 2022	INDICATOR RESULT 2023	SDG SUBGOALS RELATED TO THE MEASURE	SDG INDICATORS RELATED TO THE MEASURE
ENVIRONMENTAL	L SUSTAINABILITY						
OBJECTIVE: WE W CARBON NEUTRA INSTITUTION BY	AL HIGHER EDUCATION	KPI: Carbon footprint tCO <sub>2</sub> e	Net emissions 0 t CO2e	13 060 t CO <sub>2</sub> e (expanded calculation method, result adjusted retrospectively) / 5 220 t CO <sub>2</sub> e (shared calculation method of universities of applied sciences)	11 630 t CO <sub>2</sub> e (expanded calculation method) / 5 970 t CO <sub>2</sub> e (shared calculation method of universities of applied sciences)	13.2	13.2.2 Total annual greenhouse gas emissions
12 RESPONSIBLE CONSUMPTION AND PRODUCTION CONSUMPTION AND PRODUCTION CONSUMPTION ACTION CONSUMPTION CO	We will continue to expand our emissions calculations toward a more ambitious direction and set 2022 as the baseline year for comparison.	Done / not done	Completed in 2023	Done. Expanded calculation method is now compliant with the GHG Protocol. Commuting to campuses is included in the calculations.	Done. The further development of both methods of calculation will continue.	13.2	
	2. We will increase the use of renewable energy and energy efficiency.	Emissions from energy consumption (tonnes of CO <sub>2</sub> e) and the proportion of renewable energy from the total consumption of energy.	Emission reduction targets will be determined in 2024.	Emissions from energy consumption (Scope 2) 1 129 t CO <sub>2</sub> e (expanded calculation method) / 1 360 t CO <sub>2</sub> e (shared calculation method of universities of applied sciences). Proportion of renewable energy: 58%	Emissions from energy consumption $560 \text{ t CO}_2\text{e}$ (Scope 2), $750 \text{ t CO}_2\text{e}$ (Scope 3, expanded) / $460 \text{ t CO}_2\text{e}$ (Scope 3, shared calculation method of universities of applied sciences). Proportion of renewable energy of total consumption $79\%$	13.2	7.2.1 Proportion of renewable energy from total final energy consumption
	3. We promote low-emission mobility and reduce the emissions caused by mobility.	Mobility-related emissions (tonnes of CO <sub>2</sub> e)	Emission reduction targets will be determined in 2024.	Business travel: 350 t CO <sub>2</sub> e (expanded calculation method) / 550 t CO <sub>2</sub> e (shared calculation method of universities of applied sciences) Commuting 6 790 t CO <sub>2</sub> e (recalculated retrospectively)	Business travel: 500 t CO <sub>2</sub> e / 580 t CO <sub>2</sub> e COmmuting: 4 650 t CO <sub>2</sub> e	13.2	
	4. We promote the sustainable use of natural resources and resource efficiency.	Emissions from waste management and water consumption (tonnes of ${\rm CO_2e}$ )	Emission reduction targets will be determined in 2024.	Waste and wastewater: 28 t CO <sub>2</sub> e (expanded calculation method) / Waste management 11 t CO <sub>2</sub> e (shared calculation method of universities of applied sciences) / Domestic water: 0.45 t CO <sub>2</sub> e (expanded calculation method, included in procurement) / Water consumption 24 t CO <sub>2</sub> e (shared calculation method of universities of applied sciences)	Waste and wastewater (expanded calculation method): 30 t CO <sub>2</sub> e Domestic water (expanded calculation method): 0.3 t CO <sub>2</sub> e Waste management (shared calculation method of universities of applied sciences): 15 t CO <sub>2</sub> e Water consumption (shared calculation method of universities of applied sciences): 19 t CO <sub>2</sub> e	13.2, 12.2, 12.4, 12.5	

<u></u>
$\times$
$\overline{}$
$\Box$
$\mathbf{z}$
Ш
Ω.
ā
~

UN SUSTAINABLE DEVELOPMENT GOAL (SDG) RELATED TO THE OBJECTIVE	MEASURE	INDICATOR	OBJECTIVE 2030	INDICATOR RESULT 2022	INDICATOR RESULT 2023	SDG SUBGOALS RELATED TO THE MEASURE	SDG INDICATORS RELATED TO THE MEASURE
12 RESPONSIBLE CONSUMPTION AND PRODUCTION	5. We reduce the emissions caused by our procurement.	Emissions from procurement (tonnes of $CO_2$ e)	Emission reduction targets will be determined in 2024.	3 923 t CO <sub>2</sub> e (expanded calculation method) / 3 270 t CO <sub>2</sub> e (shared calculation method of universities of applied sciences)	5 150 t CO <sub>2</sub> e (expanded calculation method) / 4 310 t CO <sub>2</sub> e (shared calculation method of universities of applied sciences)	13.2, 12.7	
13 ACTION	6. We prioritise climate- friendly food and reduce food waste.	Amount of food waste (tonnes)	Target will be determined in 2024.	Indicator data will be available for the 2024 report	-	13.2, 12.3	12.3.1 (a) Food loss index and (b) food waste index
	7. We will offset the remaining emissions.	Funds required for emission offsetting (€)	Offsetting assessment has been carried out and the required funding secured	An initial assessment of offsetting methods has been carried out	The remaining questions concerning the implementation of the offsetting and its extent will be reviewed internally as well as through cooperation within the higher education sector on an ongoing basis	13.2	

UN SUSTAINABLE DEVELOPMENT GOAL (SDG) RELATED TO THE OBJECTIVE	MEASURE	INDICATOR	OBJECTIVE 2030	INDICATOR RESULT 2022	INDICATOR RESULT 2023	SDG SUBGOALS RELATED TO THE MEASURE	SDG INDICATORS RELATED TO THE MEASURE
ECONOMIC SUSTA	AINABILITY						
OBJECTIVE: WE V SUSTAINABLE MA THE FUTURE	VILL GROW IN A ANNER AND INVEST IN	KPI: Procurement in accordance with the sustainability criteria (%)	Target level available for the 2024 report	Commenced	A set of specific questions pertaining to sustainable development has been prepared to supplement the investment suggestion form. Environmental criteria has been implemented for public procurement	8.3	
8 DECINIT WORK AND ECONOMIC GROWTH  12 RESPONSIBLE CONSUMPTION AND PRODUCTION	We will conduct our business activities in accordance with the principles of responsibility.	Continuous improvement	Target level available for the 2024 report	A Code of Conduct has been drafted for Metropolia	We will only conduct business with partners that act in a responsible and ethical manner.	12.6	12.6 Encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle
	2. We will determine and implement principles for responsible investment.	Investment in accordance with the principles of responsibility (%)	Target level available for the 2024 report	Responsibility aspects have been reviewed for Metropolia's investment policy.	Metropolia's investment strategy has been updated. The new strategy accounts for the principles of responsible investment.	12.6	
	3. All our procurement will be carried out in accordance with the principles of sustainable development.	Procurement in accordance with the sustainability criteria (%)	Target level available for the 2024 report	The investment suggestion template now comprises the sustainable development perspective; provisional environmental criteria will be piloted in tendering	A set of specific questions pertaining to sustainable development has been prepared to supplement the investment suggestion form. Environmental criteria has been implemented for public procurement	8.3, 12.7	12.7.1 Number of countries implementing sustainable public procurement policies and action plans
	4. We promote circular economy related thinking, competence, and business models.	To be determined for the 2024 report.	Target level available for the 2024 report	Review and development of facilities with low utilization rates, incl. communication Sharing of devices and equipment has been increased.	Sharing of facilities has been increased, and the intended uses of facilities with low utilization rates have been changed. Circular economy related themes as part of educational and RDI activities.	8.4	

UN SUSTAINABLE DEVELOPMENT GOAL (SDG) RELATED TO THE OBJECTIVE	MEASURE	INDICATOR	OBJECTIVE 2030	INDICATOR RESULT 2022	INDICATOR RESULT 2023	SDG SUBGOALS RELATED TO THE MEASURE	SDG INDICATORS RELATED TO THE MEASURE
SUSTAINABILITY	KNOW-HOW						
	E ABLE TO PROMOTE ELOPMENT IN WORKING LIFE	KPI: Survey questionnaire for graduates (AVOP) & studies completed by personnel	Target level will be determined for the 2024 report	Commenced		4.7	
4 COLUMN TO COLU	We will integrate the contents of sustainable development into all education by the end of 2023.	Survey questionnaire for graduates (AVOP) on sustainable development competence	Target level will be determined for the 2024 report	AVOP assessment of sustainable development competence: 4.44/7. Proportion of those in agreement, i.e., answers 6 and 7 29.1%	AVOP assessment of sustainable development competence: 4.48/7. Proportion of those in agreement, i.e., answers 6 and 7 31%	4.7, 12.8	4.7.1 Extent to which (i) global citizenship education and (ii) education for sustainable development are mainstreamed in (a) national education policies; (b) curricula; (c) teacher education; and (d) student assessment
	2. We will increase the sustainability competence of Metropolia's staff.	Completed studies	Target level will be de- termined for the 2024 report	The number of people who completed the introduction to sustainable development in 2022: approx. 650 people, which corresponds to approx. 64% of personnel.	By the end of 2023, introduction to sustainable development had been completed by 724 people, i.e., approx. 69% of personnel.	4.7, 12.8	
	3. We create individual and flexible learning solutions for different stages of life.	Credits completed outside degree programs	Target level will be determined for the 2024 report	117 047 credits (increase of 39% from the previous year)	164 342 credits (increase of 40.4% from the previous year)	4.3	
	4. We will ensure the accessibility and flexibility of education, through digitalisation, for example.	Proportion of online and multiform studies (%)	Objective 2022: 20%, objective 2024: 40%	Proportion of online studies 48%	Proportion of online studies 42%	4.3, 4.5	

	I	I					
UN SUSTAINABLE DEVELOPMENT GOAL (SDG) RELATED TO THE OBJECTIVE	MEASURE	INDICATOR	OBJECTIVE 2030	INDICATOR RESULT 2022	INDICATOR RESULT 2023	SDG SUBGOALS RELATED TO THE MEASURE	SDG INDICATORS RELATED TO THE MEASURE
SUSTAINABLE DE	EVELOPMENT SOLUTIONS						
	EATE INNOVATIVE SOLU- IGES OF SUSTAINABLE DE-	RDI projects that promote sustainable development (%)	100% of projects have an SDG target by the end of 2023	Commenced	56% of RDI projects promote sustainable development	9.5	
4 QUALITY EDUCATION  8 DIESTI WORK AND ECONOMIC GROWTH	We will increase the impact of innovation hubs in solving sustainability challenges	RDI projects that promote sustainable development (%)	100% of projects have an SDG target by the end of 2023	SDG targets that can be assigned for each project have been added to the Project Management System. First indicator results will be available for 2023.	56% RDI projects promote sustainable development	9.5	
9 NOUSTRY, BROUVATION AND INFRASTRUCTURE	2. We solve sustainability challenges with open innovation, research and a phenomenon-based approach	Number of open access publications, number of RDI partnership agree- ments	Open access publications: 2022: 50 pcs, 2024: 200 pcs, partnership agreements 2022: 15 pcs, 2024: 25 pcs	97 open access publications licensed under CC, 16 pcs valid partnership agreements.	135 open access publications licensed under CC, 23 pcs valid partnership agreements.	9.5, 17.17	
17 PARTNERSHIPS FOR THE GOALS	3. We will strengthen the vitality of the region through sustainable entrepreneurship, business, and employment.	Number of people involved in business incubator activities and the number of new businesses established	Number of established businesses 2024: 30 new business per year	94 people took part in business incubator activities, 13 businesses were established	175 people took part in business incubator activities, 14 businesses were established	8.3, 4.4	

#### Appendix 2. Carbon Footprint Calculation Updates and Results

The calculation of carbon footprint was developed further for 2023 in terms of both the shared calculation method of universities of applied sciences and Metropolia's own, expanded method. Inclusion of emissions for fuel production and transport-related losses as a dedicated category was the most significant change made to the shared model. At the same time, the emission factors for business travel were adjusted to no longer include the WTT values (fuel production and transport).

The calculation of Scope 3 emissions used for Metropolia's expanded calculation method is based on a materiality assessment carried out in the spring of 2023. Changes made to the most recent calculations are minor. Emissions related to the disposal of branded products sold have been excluded from the calculation, as this category is immaterial when compared

with other sources of emissions (the activities do not form part of the core operation of the higher education institution, and the emissions account for approximately 0.00001% of the overall carbon footprint) and it is not expected to increase to a significant extent. The emissions generated by travel from home to campuses do not include an assessment of the emissions generated by travel between campuses, which comprised a minor proportion of these emissions in 2022. The data pertaining to business travel is slightly more extensive than in the previous year. Emission factors were specified further as regards fuel production and transportrelated losses, for example, which has reduced the amount of emissions attributed to consumption of electricity.

The main factors of uncertainty in terms of the calculations and the data used relate to

the euro-based model used in the calculation of emissions from procurement as well as business travel and, as regards the expanded calculation method, travel between home and campuses, which are calculated on the basis of generalisations produced from a sample of a survey designed for the university community (N = 11%). There is also an element of uncertainty as regards the energy consumption data for some campuses, which were estimated from total consumption of the property based on the floor area used by Metropolia. Furthermore, part of the data for business travel is based on cost information instead of travel performance or fuel consumption, although such emissions only represent a few percent of the emissions generated by business travel.

After the Sustainability Report for 2022 was published, two adjustments that affect the

carbon footprint (Metropolia's expanded calculation method) for that year have been made. The carbon footprint information provided in this report for 2022 is based on the revised result. A decimal point error in the emission factor used for plug-in hybrid vehicles has been corrected in the calculations. The change reduced the emissions generated by travel from home to campuses significantly  $(7.850 \text{ t CO}_{2}\text{e} \rightarrow 6.790 \text{ t CO}_{2}\text{e})$ . Furthermore, the heat consumption data for the Arabia campus was found to be incomplete during the calculations for 2023. The correction of heat consumption data caused an increase in the emissions for fuel production and transportrelated losses (760 t CO<sub>2</sub>e -> 830 t CO<sub>2</sub>e).

## RESULTS OF CARBON FOOTPRINT CALCULATIONS 2023 (EXPANDED CALCULATION METHOD)

	EMISSION CATEGORY	EMISSIONS 2023 (T CO <sub>2</sub> e)	SHARE OF EMISSIONS	DESCRIPTION OF CALCULATION DATA AND METHODS
SCOPE 1: OWN EMISSION SOURCES C	OF THE ORGANISATION			
	Consumption of fuel by own vehicles	22	0.1%	1
	Gases used in teaching laboratories	6	0.05%	DEFRA 2023
SCOPE 2: INDIRECT EMISSIONS FROM	M PURCHASED ENERGY			
Emissions from the consumption of en-	Heating	562	5 %	
ergy at premises (market-based calcu- lation)	Electricity	0	0 %	owner depending on campus, emissions factors provided by energy companies.
Emissions from the consumption of en-	Heating	1391	-	Consumption information provided by the energy company or property owner depending on campus, emissions factors provided by Fingrid /
ergy at premises (location-based calcu- lation)	Electricity	286	-	Statistics Finland
SCOPE 3: UPSTREAM				
Category 1: Purchased goods and services	Emissions from the production of purchased products and services	3618	31 %	service; purchase invoice information and Envimat emission factors
Category 2: Capital goods	Emissions from the production of purchased capital goods	1533	13 %	from the Finnish Environment Institute used as the data. 0.3% calculated on the basis of emission data from suppliers
Category 3: Fuel- and energy-related activities not included in Scope 1 or Scope 2	Emissions related to the production and transport of fuels (scope 1) and emissions related to the production of purchased energy (scope 2) and transport-related losses	749	6 %	Consumption information provided by energy companies or property owners; emission factors DEFRA 2021–22, Statistics Finland, Finnish Energy
Category 4: Upstream transportation and distribution	Purchased mail and courier services	0,2	0,0%	Supplier's emission report
Category 5: Waste generated in operations	Waste and wastewater	31	0,3%	Calculation method based on waste category: volumes of waste components and their processing methods used as data; emission factors SYKE 2011
Category 6: Business travel	Business travel by personnel: flights, travel by boat, use of passenger car eligible for kilometre allowance, taxi fares, overnight stays at hotels	504	4 %	Calculation method based on distance: travel agency reports on flights and hotel stays, reports on kilometre allowances and other trips from the travel invoice system used as data; emission factors DEFRA 2022–23 and Cornell Hotel Sustainability Ranking Index 2021–22. Radiative Forcing Index 1.7 taken into account with regard to air travel
Category 7: Employee commuting	Commuting of staff members	714	6 %	
	Commuting of students	3934	34 %	and frequency data were gathered through a travel survey (n = 11.3%); emission factors DEFRA 2022–23, HSL 2024, literature
SCOPE 3: DOWNSTREAM				
Category 15: Investments	A category that may be included in the calculations in the future. For now, this category is analysed as a separate entity and the quality of available data is improved with portfolio managers.			

## RESULTS OF CARBON FOOTPRINT CALCULATIONS 2023 (CALCULATION METHOD USED FOR UNIVERSITIES OF APPLIED SCIENCES)

EMISSION CATEGORY		EMISSIONS 2023 (T CO <sub>2</sub> e)	PROPORTION
SCOPE 1: OWN EMISSION SOURCES OF THE ORGANISATION			
Consumption of fuel by own vehicles		19	0,1 %
SCOPE 2: INDIRECT EMISSIONS FROM PURCHASED ENERGY			
Emissions from the consumption of energy at premises (market-based calculation)	Heating	562	9 %
	Electricity	0	0 %
SCOPE 3: INDIRECT EMISSIONS FROM THE VALUE CHAIN			
Procurement		4307	72 %
Emissions from the production of energy and fuels and transport-related losses		464	8 %
Business travel		582	10 %
Waste management		15	0,2%
Water consumption (purchase of domestic water and processing of wastewater)			0,3%

# **Metropolia**

