



UMEÅ UNIVERSITY

# SUSTAINABILITY REPORT 2023



# Content

Foreword.....	4
The University and the SDGs in brief .....	5
Umeå University's share of the research produced in Sweden.....	6
Content of the report.....	7
SDG 1 No Poverty .....	8
SDG 2 Zero hunger .....	9
SDG 3 Good health and well-being.....	10
SDG 4 Quality education.....	12
SDG 5 Gender equality.....	14
SDG 6 Clean water and sanitation.....	16
SDG 7 Affordable and clean energy.....	17
SDG 8 Decent work and economic growth .....	19
SDG 9 Industry, innovation and infrastructure .....	20
SDG 10 Reduced inequalities .....	22
SDG 11 Sustainable cities and communities.....	24
SDG 12 Responsible consumption and production .....	26
SDG 13 Climate action.....	27
SDG 14 Life below water.....	29
SDG 15 Life on land .....	31
SDG 16 Peace, justice and strong institutions.....	32
SDG 17 Partnerships for the goals .....	34

# Foreword

One of Umeå University's tasks is to contribute to societal transformation and work towards achieving the 2030 Agenda and its 17 sustainable development goals (SDGs). The University can contribute through its Education, Research and Collaboration, but also through adjustments within its own activities to become more sustainable.

In 2023, sustainable development has pervaded all of the University's activities. In Education, *Sustainable development* was identified as a pervasive perspective in the University's quality system for education as was *Gender equality*, which is fundamental to achieving all of the SDGs. Perspectives such as *Internationalisation and Student influence and student-centred learning* are also important

*“When the 2030 Agenda and the 17 SDGs were adopted by all the countries of the world in 2015, it was accompanied by a sense of optimism. We want to be part of revitalising that optimism.”*

so that after their studies, our students take with them knowledge and skills for the transition to a sustainable society into the wider world. Within Collaboration, but even within Research and Education, the University has focused on the social transformations that are happening in northern Sweden, where the seminar series *Perspectives*, and conferences such as the *Agenda 2030 forum and Social Innovation i norr* (Social innovation in the north) have functioned as forums where researchers, social actors, decision-makers, politicians and industry can meet, learn from each other and share new knowledge, and discuss various aspects of these social transformations.

This is the University's second sustainability report, in which we present a selection of what the University has done in 2023 to contribute to achieving the SDGs. When the 2030 Agenda and the 17 SDGs were adopted by all the countries of the world in 2015, it was accompanied by a sense of optimism. We want to be part of revitalising that optimism. We are now in the *Decade of action*, and we only have a few years left to achieve these SDGs.

This report is intended for anyone who is interested in our activities. The content of this report has been compiled by Louise Eriksson, research fellow at the Department of Geography, and Lisa Redin, a climate and sustainability strategist. The University Management was asked for its endorsement of the report before it was established by the Vice-Chancellor.

**We hope you enjoy reading our report.**

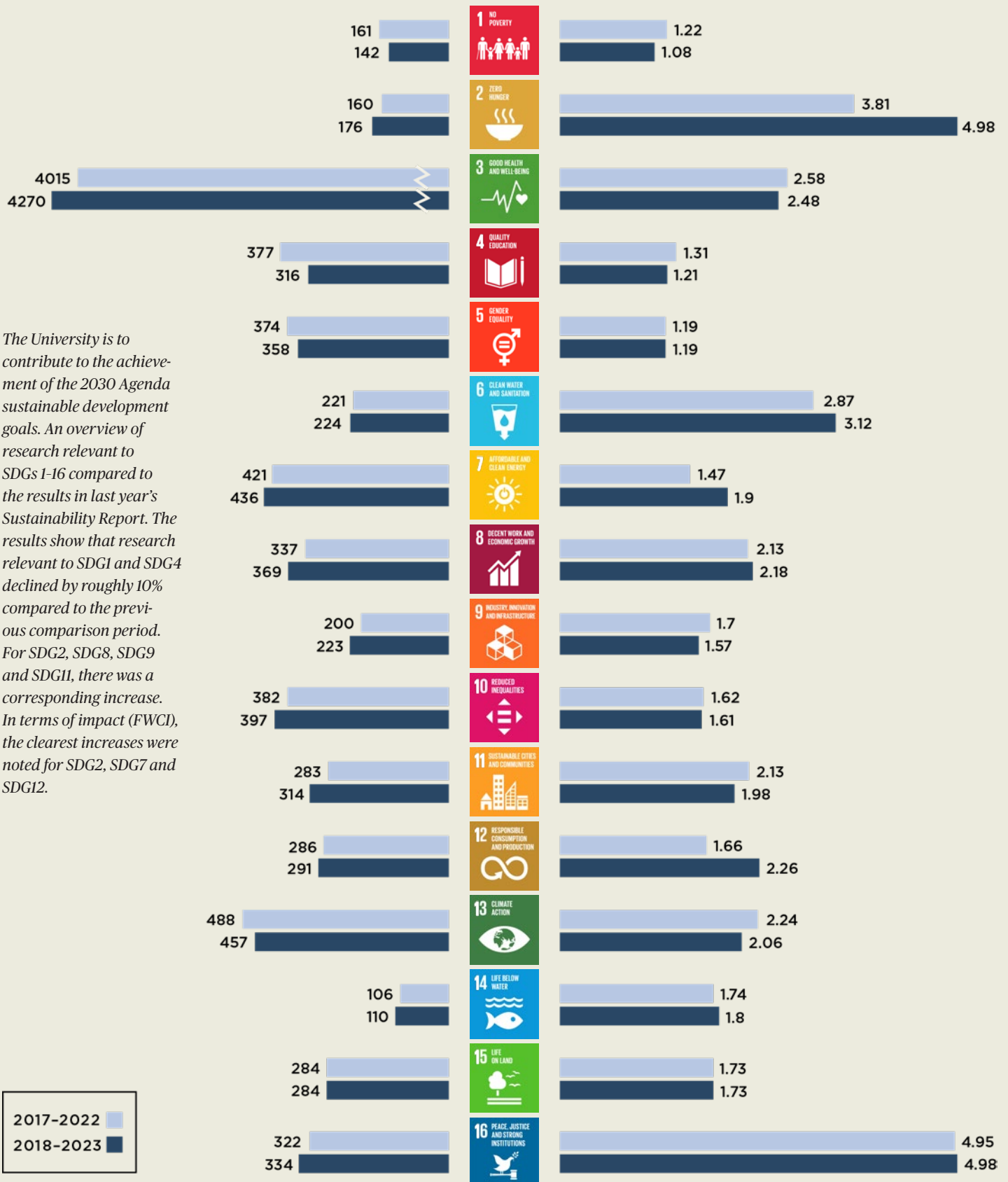
# The University and the SDGs in brief

## NUMBER OF PUBLICATIONS

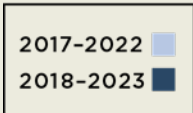
Number of publications in SciVal relevant to each SDG in 2018-2023 compared to 2017-2022.

## FIELD-WEIGHTED CITATION IMPACT, FWCI

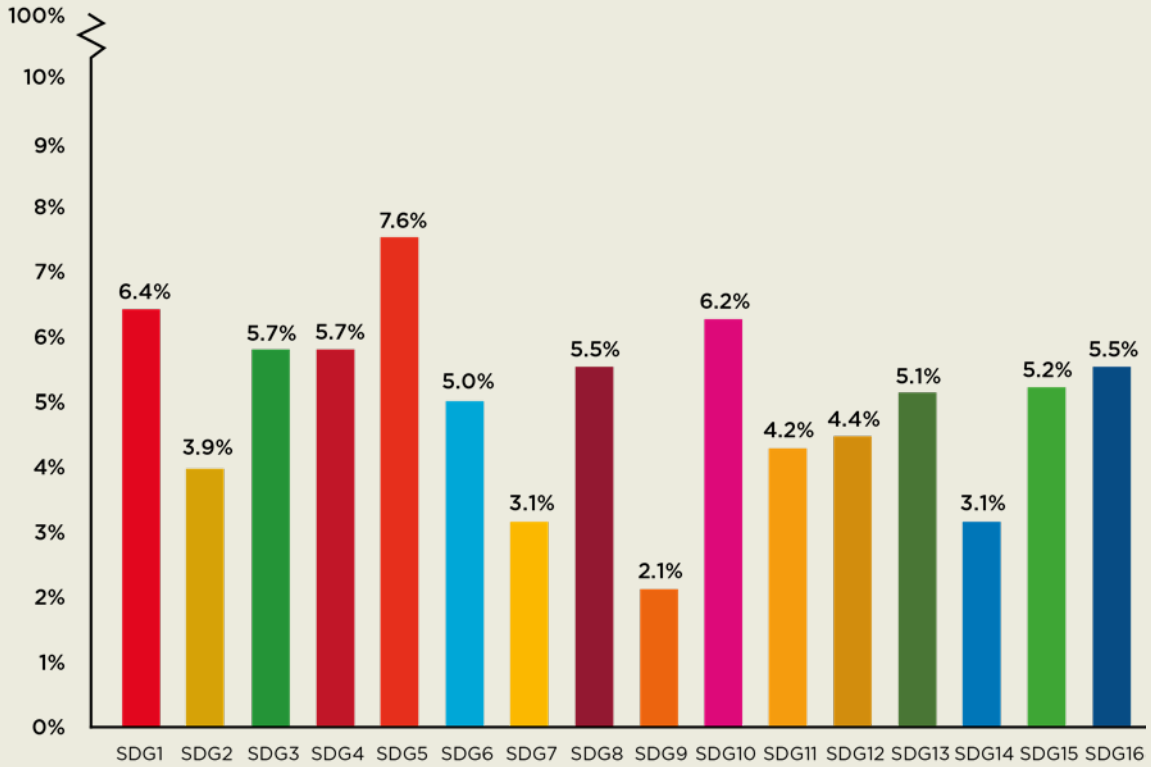
The Field Weighted Citation Impact in SciVal in 2018-2023 compared to 2017-2022.



The University is to contribute to the achievement of the 2030 Agenda sustainable development goals. An overview of research relevant to SDGs 1-16 compared to the results in last year's Sustainability Report. The results show that research relevant to SDG1 and SDG4 declined by roughly 10% compared to the previous comparison period. For SDG2, SDG8, SDG9 and SDG11, there was a corresponding increase. In terms of impact (FWCI), the clearest increases were noted for SDG2, SDG7 and SDG12.



# Umeå University's share of the research produced in Sweden



Vertical bar graph showing Umeå University's share of the research produced in Sweden.

## AGENDA 2030 AND THE GLOBAL GOALS



# Content of the report

This **Sustainability Report 2023** comprises an overview of how Umeå University is contributing to achieving the SDGs of the 2030 Agenda. By illuminating the University's Education, Research and Collaboration, as well as its Other activities, and with our sights set on improving our sustainability, this report provides a picture of how the University is contributing or could contribute to these efforts, and what challenges there are in doing so.

**Education, Research and Collaboration** at Umeå University can contribute to achieving the SDGs by developing knowledge and strengthening skills as well as developing solutions and changed ways of working linked to them. We show how Education at the University is contributing by means of a sample of courses or study programmes that give students knowledge which can contribute to a sustainable transition and to achieving the SDG to which they relate. For some SDGs, quantitative measures of the number of graduates at undergraduate and postgraduate levels are also presented. For SDG1 to SDG16, research relevant to each SDG is presented by means of the research areas defined in SciVal, a bibliometric analysis tool based on the Scopus database. The search was limited to publications between 2018 and 2023, and was carried out on 3 January 2024. The results have been compared with the results from last year's Sustainability Report, when the search was made for the years 2017–2022. The number of publications and the Field-Weighted Citation Impact (FWCI), which reports citations received compared to the average or expected number of citations received by other similar publications from the same research field, are the quantitative measures used to show how the University's research is contributing to achieving each of the SDGs. Key phrases in SciVal have been used for the content analysis of the research for each SDG. The analysis in SciVal does not always identify research from humanities disciplines, but this standardised

approach does make it possible to follow sustainability research at the University over time. To make up for this, examples of humanities research have been included under each of the SDGs where relevant. The focus of the research for each SDG is also illustrated by a description of research environments at the University that have strong links to sustainability. For SDG 17, where implementation and global partnership are key, a description of networks and collaborations is provided. Collaboration is an integral part of Research and Education at Umeå University, and is pursued where it strengthens the University's knowledge development while also adding value, knowledge and skills for our collaboration partners. Collaboration that has a bearing on the SDGs is described based on its impact in the University's activities and collaboration projects – from local to global activities.

How the University is working to improve sustainability through its **Other activities** is also described under each of the SDGs. Here, both the activity's direct and indirect work with sustainability are described. The report also sets out the extent to which we have achieved our own sustainability goals and the activities aimed at reducing the University's environmental footprint or promoting opportunities for sustainable student life, and a sustainable workplace for staff.

There are many ways to evaluate sustainability efforts. In this report, the authors have reflected on the University's work towards, and contributions to achieving, each of the SDGs from a sustainability perspective. Under each SDG, a Reflection on developments compared to the previous year is also included.



# SDG 1 No Poverty

All people have the same right to a dignified and secure life with freedom, influence, health, physical safety and access to education. For Umeå University, this SDG means that all students, regardless of background, should be given the same opportunities to study here.

## EDUCATION

Education with links to this SDG concerns developing knowledge and skills about different perspectives on social vulnerabilities and about relationships and interactions between people and the wider community. Students enrolled in the *Study Programme for Social Work* develop knowledge and skills to help people who find themselves in various kinds of problematic life situations. In the *Peace and Conflict Studies* programme the causes of war and conflict and the conditions necessary for peace are analysed, where human rights and poverty reduction are important factors. In 2023, approximately 400 students graduated with a Degree of Bachelor of Science in Social Work or in Sociology, and more than 40 students successfully completed studies in Peace and Conflict Studies.

## RESEARCH

Within Research, inequalities in a number of areas are being studied from medical and social science perspectives. These are primarily inequalities in health and access to healthcare. In addition, the University conducts research that concerns inequalities in socio-economic factors and social policy as these relate to the labour market. This research is conducted in Sweden and globally, but some of it focuses specifically on northern Sweden, such as studies of health among the Sámi people.

## COLLABORATION

International partnerships can also contribute to achieving this SDG. Within the South Africa - Sweden University Forum (SASUF) 2030, the University partners with other higher education institutions in Sweden and South Africa with the goal of strengthening the ties between these countries in research, education and innovation, with the SDGs in focus. In 2023, a conference was held in Cape Town with satellite events held around South Africa to discuss how Swedish and South African researchers can

jointly contribute to meeting the global challenges that the world is facing. So far, 70 international projects have been launched and the partnership has brought together more than 3,000 researchers, teachers and representatives of university managements in seminars and workshops.

## OTHER ACTIVITIES

To be accessible to everyone, the Umeå University Library and *Bildmuseet* (museum of contemporary art and visual culture) are free of charge, as are the outdoor gyms and running tracks on campus. There is also art to view and large green spaces to enjoy outdoors. In winter, a ski trail is ploughed up on the campus fields, and the pond is ploughed for ice skating.

## REFLECTION

Contributions to this SDG can be found in our education offering but to only a limited extent. The number of publications is small and there has been a decline compared to the previous period. Research relevant to this SDG conducted at the University has less impact than the research globally and studies focusing on northern Sweden have decreased in number. In June 2023, the Swedish Government decided that the Swedish Research Council should no longer be allocated targeted funding for new calls for proposals in development research. This has depleted the conditions for conducting research on poverty reduction in low-income countries, for example. Work towards this SDG is virtually non-existent in the University's Other activities. There are some relevant free activities open to all as well as discounted activities for students. There is no internal governance related to this SDG.

PUBLICATIONS

142

FWCI

1.08





# SDG 2 Zero hunger

End hunger, achieve food security and improved nutrition. This can be promoted through sustainable agriculture using modern technologies and fair and equitable distribution systems. At Umeå University, we teach about the importance of food for health, for optimising performance, and nutrition during illness.

## EDUCATION

Examples in Education related to this SDG are courses in nutrition, the role of nutrients in health and in illness, and to optimise performance. The *Degree of Bachelor in Dietetics* programme deals with how diet and nutrients can play a role for health and in illness. In 2023, almost 30 students graduated from the Dietetics programme. Diet is also an important factor in sports, and in the course *Nutrition and Physical Activity* for example, sports students learn about the links between diet and physical performance and about the importance of good nutrition for optimal performance.

## RESEARCH

The focus of research in the natural sciences related to this SDG is on food security and sustainable food systems. Other research in this area includes studies of reindeer husbandry against the background of climate change. Social sciences research deals with the transition towards more sustainable agriculture and Sámi perspectives. In addition, research in medicine related to this SDG focuses on diet for health and in relation to our diet's climate impact.

## COLLABORATION

At the Department of Food, Nutrition and Culinary Science, food and meals are always centre-stage. During the year, the department invited external actors and students and staff to breakfast under the banner of "Breakfast - a food and meal summit" to strengthen networks around food and mealtimes.

## OTHER ACTIVITIES

Examples of Other activities include free dietary advice for students from dietetics students under the supervision of registered dietitians. The Student Health Service also contributes website information about how diet affects brain function and thus, in the long run, a person's studies.

## REFLECTION

Although there are some courses and study programmes with a focus on nutrition, there are none offered in other areas relevant to the SDG, such as agriculture and food security. Research concerning this SDG is limited, but the number of publications has increased over time. Research on malnutrition and agriculture has increased and in addition there is an increased focus on northern Sweden. However, research on food security has declined. In terms of all the research at the University relevant to the SDGs, the impact of research related to Zero hunger is increasing and its impact is now equal to the research related to Peace, justice and strong institutions.

Concerning Other activities, there is a need to expand cooperation with cafés and restaurants on campus to promote a nutritious offering of meals and snacks for staff and students.

PUBLICATIONS

176

FWCI

4.89



# SDG 3 Good health and well-being

Good health is fundamental to people's opportunities to achieve their full potential. At Umeå University, we strive for all staff and students to have a sustainable working and student life, respectively. A large part of our Education and Research also concerns human health.

## EDUCATION

A large proportion of the students who graduate from the University have specialised in a medical subject area and, by extension, a health-promoting profession. In 2023, about 1,400 students graduated with a clear specialisation in a health-promoting profession. At the Faculty of Medicine and under the University's quality system for education, a project has been running for several years to integrate sustainable development where the link to this SDG is particularly relevant.

*“Umeå University is the first university in Sweden and the Nordic region to be certified as a Healthy Campus.”*

## RESEARCH

Medical research related to this SDG is extensive. It includes cancer research focusing on the brain and the prostate, colorectal cancers, bladder and breast cancers. There is also extensive research on asthma, COVID-19, and cardiovascular diseases. The University is also involved in strategic research initiatives in the areas of cancer within the Uppsala Umeå Comprehensive Cancer Consortium (U-CAN), diabetes in the Strategic Research Programme in

Diabetes (SRP Diabetes), and neuroscience (Strat-Neuro). As part of the strategic initiative PREDICT, biomarkers are being identified in biobank samples in order to study the risk of disease and for early detection. For example, this research database will be used to study cancer, but also diabetes, cardiovascular diseases and neurological diseases.

## COLLABORATION

Collaboration linked to this SDG is at the local, regional, national and international levels. An example is the Horizon 2020 project Enhancing Belmont Research Action to support EU policy making on climate change and health (ENBEL). This project aims to increase knowledge about the relationship between climate change and health for developing policies and legislation. The conference on *Connecting Health and Climate Change*, which was held in 2023, gathered representatives from all over the world. The conclusion was clear: “It is obvious that we need to prepare for how to deal with enormous global challenges related to climate change, excessive exploitation and biodiversity issues.”

## OTHER ACTIVITIES

Umeå University is the first university in Sweden and the Nordic region to be certified as a *Healthy Campus*. This certification, developed by the International University Sports Federation (FISU), focuses on the well-being of students and staff at universities around the world. Umeå University's vision is to be: A university where health has a given place – for a sustainable workplace for students and staff.

## REFLECTION

Education in medical fields is extensive at Umeå University. Taking all the SDGs together, the most publications are generated in relation to this SDG and the extent of research in this area has remained largely unchanged in recent years. There has been an increased focus on research on colorectal cancer over time. Regarding Other activities, the University has made extensive investments in the health of its staff and students. Furthermore, the University has a broad range of Collaboration projects related to this SDG. However in all these areas, both new and known risks to health require continued efforts. For example, it may be important to study risks

to health and treatments not only from a medical perspective but also to a greater extent from the perspectives of the humanities and social sciences as well as interdisciplinary perspectives.



*Health on Campus is conducted twice a year with activities that students and staff can try out for free, and health-related lectures. Photo: Ulrika Bergfors.*



# SDG 4 Quality education

Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all. This is an overarching goal for a university, and here we focus on our role of providing students with knowledge and skills for sustainable development.

## EDUCATION

By integrating sustainability aspects into our courses and study programmes, students can practise key skills for sustainable development, i.e. skills that are crucial to a successful transition to a sustainable society. Because the teaching utilises democratic and transformative pedagogical approaches and is in a form where they are allowed to be active, our students are given opportunities to develop the knowledge and skills needed to respond to society's challenges.

Providing northern Sweden with relevant skills in connection with the societal transformation in this region is important. In 2023, for example, the University started a vocational teacher education programme in Skellefteå to train teachers who will be able to provide Skellefteå Municipality as well as the whole region with a labour force with relevant skills for the transformation. During the year, external evaluations of the *Teacher Education Programme for Primary School Years* and the *Career Counselling Programme* were also carried out. These evaluations showed that there is a need to strengthen the link to sustainable development and the 2030 Agenda. In 2023, almost 400 students graduated with some type of teaching qualification.

To enable lifelong learning, freestanding courses are offered through distance education at varying rates of study. In 2023, the University was the second largest higher education institution in Sweden in terms of the number of admitted distance education students, and in third place among higher education institutions chosen when individuals apply for studies with student finance for transition and retraining – the initiative aiming to strengthen the individual's position in the labour market through further training.

## RESEARCH

Research on a *Good Education* with primarily a social science focus is conducted at Umeå University. This includes studies of learning and the role of the teacher in the education system, as well as digital tools. How sustainable development is integrated into education at all levels, from preschool through to higher education, is also being studied. There is also humanities research that focuses on instruction in minority languages, for example the Sámi languages, but also on reading difficulties.

## COLLABORATION

Language itself is essential for achieving a sustainable world. To date, however, language and linguistics have largely been lacking in education for sustainable development. In light of this fact, a symposium titled *Applying linguistics for sustainability in Nordic contexts* was held in January, where language researchers and practitioners in minority languages and representatives from the cultural sector met to discuss applying linguistics for sustainability in Nordic contexts.

*“To facilitate lifelong learning, freestanding courses are offered via distance education at varying rates of study.”*



*Through Lifelong learning, the University educates people already employed to be able to meet the needs of a changing workplace. Photo: Mattias Pettersson.*

#### OTHER ACTIVITIES

In 2023, sustainable development was assessed as being a pervasive perspective within 84% of the University's study programmes (134 out of 160). In order to provide further training in sustainability for teachers, so that they are able to position their subjects in a sustainability context, a theme day was organised where teachers from different disciplines could share good examples and inspire each other. "Everyone can teach for sustainable development," said one of the participants.

#### REFLECTION

This SDG is central to a large part of what the University does. An intensive project is currently under way to integrate sustainability aspects into different courses and study programmes. However, research concerning this SDG decreased in the period 2018–2023 compared to the previous period, even though there is no clear downward trend over the individual years. Over time, an increased focus on research

on sustainable development has developed, while studies in vocational education and training have decreased somewhat. Since education and lifelong learning are essential to developing sustainability efforts in various contexts, ongoing initiatives are needed to help address global challenges in local contexts, especially in the context of the far north.

PUBLICATIONS

316

FWCI

1.21



# SDG 5 Gender equality

Gender equality in society is fundamental to sustainable and peaceful development. Everyone should live a life free from violence and discrimination and have equal access to power and influence. Gender equality is a common thread in all of Umeå University's activities.

## EDUCATION

Gender equality is one of the pervasive perspectives that is monitored as part of the University's quality system for education which covers all courses and study programme. An example in Education related to this SDG is the interdisciplinary course *Critical Perspectives on Nordic Gender Equalities*, which looks at gender equality as a political ideal in the Nordic countries from a historical perspective, as well as how and when gender equality became established on the political agenda and whether the Nordic countries are in fact gender-equal. The Umeå Centre for Gender Studies brings together courses and study programmes in the area of gender studies.

## RESEARCH

Medical research with a bearing on this SDG includes studies of reproductive health and domestic violence. Studies of sexual behaviour and HIV are also conducted. How gender affects health is also a recurring theme. These studies are conducted primarily in Sweden, but there are also many studies

conducted in South Africa. Research in the social sciences related to this SDG is roughly equivalent to the medical research conducted. The social sciences studies largely focus on gender and (in)equality in the labour market, in the education system, and in the home. The humanities research relevant to this SDG deals with gender equality in literature, and changes from prehistoric/historical times to modern times.

## COLLABORATION

In 2023, the University joined the regional strategy for *A gender-equal Västerbotten*. Its goals are: Redistributing power between men and women, preventing and combating men's and boys' violence against women and girls, and changing gender stereotypes.

## OTHER ACTIVITIES

The University has continued its efforts towards achieving Sweden's national gender equality policy targets based on previously identified problem areas. The share of women among staff is more than that of men at 55% and 45%, respectively.

*“Close to 4,400 people were employed at the University in 2023, and the gender distribution was 55 per cent women and 45 per cent men.”*



For professors however, it is the opposite, with 65% men and 35% women, which is a slight increase in the share of women compared to the previous year. For students, the share of men continues to decline, and in 2023 it was 35%. There is also gender-biased recruitment in many study programmes.

#### REFLECTION

The University offers courses and study programmes in gender studies at all levels, including third-cycle level. Research in the area of this SDG has not changed to any great extent, nor has its impact. There is less focus on domestic violence but an increased focus on sexual and reproductive health. However, this is the only SDG where research at Umeå University ranks among the top 99 universities in Europe, as the bibliometric analysis shows.

For other SDGs, the University's ranking is lower. Concerning Other activities, gender equality is an integral part of the University's work, but challenges remain in achieving a gender balance and with regard to the incidence of sexual harassment (despite a policy of zero tolerance), which is why strategic and operational work in these areas needs to continue.



Gender equality is a common thread in all of Umeå University's activities. Photo: MostPhotos/Hans Christiansson.



# SDG 6 Clean water and sanitation

Ensure availability and sustainable management of water and sanitation for all. Pollution in water must be reduced and wastewater treatment increased globally. At Umeå University, we conduct research and provide education about the status of aquatic environments and changes over time.

## EDUCATION

One course that links to this SDG is *Earth Science*. The course addresses the occurrence and dynamics of water in soil, watercourses, lakes, seas and oceans, with a particular focus on the Baltic Sea. In 2023, around 30 students graduated in the subject areas Environmental science and Chemistry, where this SDG is covered. Water quality and sanitation are also covered in archaeology courses and study programmes, where the conditions that existed in different eras can be construed using environmental archaeology methods, and in 2023 just over 10 students graduated with some kind of degree in archaeology.

*“The University’s own steering towards this SDG is deficient.”*

## RESEARCH

Research related to this SDG mainly has a natural science focus. There are studies of environmental toxins and drugs in wastewater. A large proportion of the studies focus on water and wastewater treatment through biological methods such as biochar, ozonisation and microalgae. In addition, the importance of microalgae for bioenergy is studied. Eco Change is a strategic research area at the University in which the impact of climate change on marine systems is studied, with the Baltic Sea as an important area being studied.

## COLLABORATION

Since mercury is a worldwide health hazard, researchers have been studying how mercury ends up in fish. They have shown that the amount of thiols (organic compounds) in the water determines the rate at which methylmercury is absorbed by phytoplankton and, as there are lower concentrations of thiols in marine environments, bioaccumulation happens faster there.

## OTHER ACTIVITIES

The University’s own steering towards this SDG is deficient. The University’s new *Action plan – climate and sustainability 2024–2026* therefore proposes an activity to integrate aquatic aspects into its systematic environmental and sustainability management.

## REFLECTION

There are few courses that focus on *Clean water and sanitation*. Research related to this SDG remains at the same relatively limited level as before but has a relatively good impact internationally. The focus on water treatment remains strong, while research in areas such as ozonisation and water catchments has declined. In terms of Other activities, there is no governance at the University towards achieving this SDG, and in the future, water issues ought to be integrated into the University’s systematic environmental and sustainability management.

PUBLICATIONS

224

FWCI

3.12





# SDG 7 Affordable and clean energy

Access to affordable, reliable, sustainable and modern energy for all is fundamental to being able to meet many of our global challenges. Umeå University conducts research and provides education on renewable energy solutions. We also strive to reduce and optimise our energy use.

## EDUCATION

The climate crisis, rising energy prices and major industry initiatives in Sweden have made environmental and energy issues increasingly important. The *Bachelor and Master of Science Programmes in Energy Engineering* teach students how they can contribute to the green transition of the energy system in their future careers. In 2023, around 30 students specialising in energy engineering graduated from the University.

## RESEARCH

Research on sustainable fuels is conducted mainly from natural sciences perspectives. There is a focus on biofuels based on agricultural, forestry and algal residues. There are also studies of hydrogen and how nanomaterials can be used to produce renewable energy. As green hydrogen has no carbon emissions and a high energy density, it is suitable for applications such as heavy transport. Nanomaterials are implemented in fuel cells, electrolyzers and solar cells. The University is the lead institution in the strategic research area *Bio4Energy*. Together with Luleå University of Technology and the Swedish University of Agricultural Sciences, Umeå University is working on developing methods and tools for the efficient use of bio-based resources.

## COLLABORATION

The University is active in Umeå's local network for sustainable construction and management of buildings in cold climates. The network brings together the entire chain in the building sector, including architects, education, property managers, construction companies and banks. When the network started in 2008, the focus was on energy efficiency, but today the focus has broadened and the network addresses most sustainability issues related to the built environment.

## OTHER ACTIVITIES

In 2023, 35 GWh of energy was used in the University's premises on Campus Umeå, the Umeå Arts Campus and in the Knowledge Building. This is equivalent to the energy use of roughly 1,400 detached houses. Several rooftops in Campus Umeå have solar panels and these produced almost 600 MWh of electricity in 2023. By optimising the utilisation of the University's premises, energy use can also be optimised. In 2023, offices were used for an average of 2.5 hours of a normal working day, excluding the summer months. The corresponding use of classrooms is approximately 3.5 hours and group rooms half the day.

*“The University is the lead institution in the strategic research area Bio4Energy. Together with Luleå University of Technology and the Swedish University of Agricultural Sciences, in this research area the University is working on developing methods and tools for the efficient use of bio-based resources.”*



#### REFLECTION

Some courses and study programmes related to this SDG are provided by the University. The research is at the same level as before but is relatively extensive in relation to the total sustainability research at the University, and the impact of this research has increased slightly. While the focus on saccharification processes and oxygen evolution has increased, research on gasification and organic solar cells has decreased slightly. With research mainly in the natural sciences, more interdisciplinary research could facilitate a more comprehensive understanding of how to achieve this SDG. Although the University

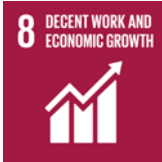
works with partnerships and monitors its energy use, there is still much to be done to reduce energy use, not least to ensure that the University achieves Sweden's climate targets.

PUBLICATIONS

**436**

FWCI

**1.90**



# SDG 8 Decent work and economic growth

Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all. For Umeå University, work with this SDG includes providing education and conducting research that can promote sustainable economic growth, and that maintains cooperation with union organisations.

## EDUCATION

Promoting decent working conditions requires knowledge about occupational health and safety in the work environment, and employees' working conditions. The course *Socially Sustainable Working Life*, offered as a freestanding course, provides an introduction to sustainability in the workplace. It includes both theory and current research on sustainability and equal opportunities in workplace organisations.

## RESEARCH

Research on the labour market is conducted from a social science perspective. The studies deal with tourism, such as in the sparsely populated areas of northern Sweden, focusing on entrepreneurs more specifically or from a systems perspective. Employment is studied in part using regional approaches, for example with a focus on the green industry initiatives in northern Sweden. Research on unemployment and well-being is also relevant to this SDG.

## COLLABORATION

In the autumn of 2023, the discussion concept *Together with the School of Business, Economics and Statistics* was launched with the aim of bringing academia and practice together in value-generating dialogue on socially relevant issues, and research results on contemporary social challenges.

## OTHER ACTIVITIES

Decent working conditions are important and the University works with the support of Human Resources Strategy for Researchers (HRS4R) to meet the requirements of the European Charter for Researchers. The aim is to make the Univer-

sity a better place to work for researchers and to provide a good work environment that facilitates high-quality research. A sustainable work environment requires cooperation between the employer and staff. The local collective agreement between the University and union organisations sets out the nature of the cooperation between the parties and in which areas this cooperation should occur.

## REFLECTION

Most social science programmes address issues related to sustainable working conditions and economic growth. In Research, the number of publications relevant to this SDG has increased slightly but not the impact. Similar areas continue to be researched but with a slight decrease in tourism studies. As questions relating to working conditions and the labour market should be examined from different perspectives, interdisciplinary approaches are able to contribute better to the knowledge base. Concerning Other activities, as an employer the University is required to provide sustainable working conditions, but continued efforts are needed, even in support activities.

PUBLICATIONS

369

FWCI

2.18



# SDG 9 Industry, innovation and infrastructure

Meeting future challenges requires building resilient infrastructure, promoting inclusive and sustainable industrialization and fostering innovation. The University contributes by being a driver for growth, providing the community with well-educated labour, and generating knowledge that will benefit the community.

## EDUCATION

An example in Education related to this SDG is when students in *Digital Media Production* and representatives of a technology company developed design concepts and prototypes in the form of *Hållbarhets PTs* (Sustainability Personal Trainers). These consisted of digital solutions that functioned as personal trainers – not to lose weight but to become more sustainable based on one or more of the SDGs. In 2023, around 20 people graduated in *Digital Media Production*.

## RESEARCH

Studies in the natural sciences dominate research relevant to *Sustainable industry, innovation and infrastructure*. Life cycle analyses are used to study the total environmental impact of material and biofuel production. In addition, the Internet of Things is being studied, where various products used in everyday life and in production chains are connected to the Internet. There is also research on green innovations from a systems perspective.

## COLLABORATION

The Industrial Doctoral School for Research and Innovation at the University creates the conditions for collaborations between researchers, the business sector and the public sector through jointly funded research projects. Together with an external party (business or public sector), doctoral students and their supervising researchers work for four years on a common problem. For example, a doctoral student working with the *Norwegian*

*Institute for Water Research (NIVA)* has shown that microalgae grown in wastewater can be used to produce biodegradable bioplastics, i.e. they can be broken down completely just like any other material in a garden compost heap. Another advantage is that the wastewater is treated at the same time.

## OTHER ACTIVITIES

The University's Innovation Office works to increase knowledge about and create the conditions for the effective utilisation of research results and increased entrepreneurship among the University's researchers, other staff and students. In 2023, 184 idea proposals were submitted to the Innovation Office, 47 of which were selected for verification resulting in 11 limited companies being formed. The *Innovation Boot Camp* is a multi-day event where students work with profession innovation actors to develop their ideas. The 2023 event was attended by 45 students.

*“Life cycle analyses are used to study the total environmental impact of material and biofuel production.”*



*The University campuses can serve as test beds for new solutions for sustainable transformation.  
Photo: Mattias Pettersson.*

#### REFLECTION

In terms of Education, the University contributes to building engineering skills that are important for achieving this SDG. The number of publications relevant to this SDG has increased slightly but the impact of the research has not increased. Research involving life cycle analyses is growing and remains significant. In Other activities, work with innovations is an important part of Umeå University's activities, to enable students to develop their ideas as well as to develop ideas for research into useful solutions that benefit society.





# SDG 10 Reduced inequalities

The basis for a sustainable society is fair distribution of resources and economic, social and political influence. Inequality must be reduced both within and between countries and no one should be left behind. Umeå University applies a policy of equal opportunities for students and staff.

## EDUCATION

Students of the *Bachelor programme in Ethnology* develop knowledge about the cultural aspects of various social phenomena and societal challenges such as gender equality, equal opportunities, climate change, mobility, social and cultural sustainability, identity and positions of power. In 2023, 10 students graduated in Ethnology and in the subject area of museums and heritage.

The University works actively to widen participation. For example, the foundation year offers bridging courses to complete upper secondary education in science and technology. Distance education is offered in all disciplines and makes it easier for people who are unable to change their place of residence to study, who often tend to be older. A number of new distance education programmes started in 2023. Examples include the *Master of Science in Engineering Chemistry programme*, which focuses on sustainability, and the *Occupational Therapy programme*, which saw a 469% increase in applications.

## RESEARCH

Social science research on *Reducing inequalities* focuses on social inequalities based on socio-economic factors and gender and among immi-

grants, for example. There is research focusing on migrants in green industries, for example in the berry industry. There is also medical research studying the effects of social inequalities on health and access to health care. From a humanities perspective, there is research focusing on conflicts within indigenous communities and between indigenous peoples (for example the Sámi) and industry.

## COLLABORATION

The aim of Várdduo, the University's centre for Sámi research, is to strengthen and develop research on the Sámi and other indigenous peoples. In this endeavour, collaboration between the research community and civil society is key. Várdduo therefore collaborates continuously with many different actors who are active in some way in the Sámi community, both nationally and internationally.

## OTHER ACTIVITIES

The University is working to reduce inequality. To clarify roles, responsibilities and support, and to strengthen the student perspective, the University's work with equal opportunities and the work environment was reorganised in 2023. A university-wide five-year project on our values in practice was also

*“The University is working actively to widen participation. For example, the foundation year offers bridging courses to complete upper secondary education in science and technology. Distance education is offered in all disciplines making it easier for people who are unable to change their place of residence to study.”*

launched. Furthermore, to ensure professional handling of cases of harassment, sexual harassment and victimisation, a Safe Work and Study Environment Support Team (STAR team) was formed. The team consists of HR strategists from the Human Resources Office, legal officers and security officers. All departments and units have equal opportunities representatives who monitor the workplace regularly to detect inequalities.

#### REFLECTION

The University works with widening participation in its courses and study programmes to reduce inequalities linked to access to education. Of all the SDGs where the University's social science and humanities research is strong, research relevant to the *Reduced inequalities* SDG is the most extensive. It remains at

the same level as before, but with an increased focus on research on migrants and migration and with some reduction in the research conducted in northern Sweden. Otherwise, a large strategic project is under way to reduce inequalities at the University, but continued efforts are needed to ensure that it has an effect throughout the entire university.

PUBLICATIONS

397

FWCI

1.61



*Umeå University works to provide equal opportunities for students and staff, and at all departments and units there are equal opportunities representatives who monitor the workplace regularly to detect inequalities.*

*Photo: Malin Grönborg.*



# SDG 11 Sustainable cities and communities

Make cities and human settlements inclusive, safe, resilient and sustainable. They need to be developed in an environmentally, economically and socially sustainable way. Umeå University contributes to more sustainable cities and neighbourhoods through various partnerships.

## EDUCATION

The *Planning for sustainable communities* course highlights planning for sustainability a fair and equitable transition, and critical perspectives on urban development, as well as the conflicting objectives these may entail. In 2023, around 40 students graduated in urban planning or social analysis. In addition, some 30 students took out Bachelor of Science in Engineering degrees in Structural Engineering and just over 110 students graduated in Architecture. In May, design students showcased their concepts for changing the world at the *UID23 Design Talks & Degree Show*. For example, they carried out projects on the green digitisation of small-scale agriculture, rebuilding social contact networks through public transport, and digital experiences for a fossil-free Internet. In 2023, more than 80 students graduated from a programme specialising in design.

Artificial intelligence (AI) is a revolutionary force in society and it is crucial that we ensure that AI is applied ethically and in the best interests of society. In 2023, the Bachelor's Programme in Philosophy and Artificial Intelligence was established. It is an interdisciplinary programme, focusing on scientific, ethical and political perspectives on artificial intelligence.

## RESEARCH

The University conducts natural sciences research with a focus on *Sustainable cities*. These studies focus on air quality, various pollutants and noise in cities. A number of these studies also have a medical focus, looking at how these factors affect the risk of cancer, asthma, cardiovascular disease and diabetes. Social science studies address urban policy and planning with a focus on factors such as social sustainability.

## COLLABORATION

*Societal transformation of the north of Sweden* was a recurring theme of the University's collaborations in 2023. For example, the Perspectives seminar series included nine events addressing researchers, decision-makers, interested members of the public, the media and social actors to discuss and highlight different perspectives on this societal transformation. The year's *Agenda 2030 forum*, which kicked off *SEE Västerbotten's Sustainability Week and the Forum for Social Innovation in the north of Sweden*, had the same theme but with a special focus on the social sustainability dimension.

## OTHER ACTIVITIES

Sustainable travel is one of the pillars of a sustainable society. To promote sustainable commuting and provide secure, sheltered bicycle parking, a bicycle parking garage was constructed at Campus Umeå. To promote sustainable business travel, the University contracted a travel agency service that can offer rail travel in Europe, a service that was not previously available.

*“Business travel by air still accounts for a large proportion of the University’s climate emissions, and it is essential that we continue to work towards holding more digital meetings and to transition towards more environment-friendly travel.”*



### REFLECTION

The University contributes social science, humanities and natural science expertise to achieving this SDG. There has been a slight increase in the number of publications but no increase in the impact of the research. Over time, the research has become increasingly focused on Nordic perspectives, while studies of environmental exposure are decreasing. Much of the University's collaboration is linked to this SDG and, in terms of support activities, work is under way to improve opportunities for staff and students to travel in an environment-friendly way. However, major challenges remain. Business travel

by air still accounts for a large proportion of the University's climate-impacting emissions, and it is necessary to continue to work towards a greater number of digital meetings and a transition towards more environment-friendly travel.

PUBLICATIONS

314

FWCI

1.98





# SDG 12 Responsible consumption and production

The transition to sustainable consumption and production patterns for goods is essential to reducing our negative impact on climate, the environment and human health. Umeå University provides education and conducts research on resource management and sustainable consumption patterns.

## EDUCATION

Examples of education linked to this SDG include the course *Food and meals for a sustainable future*. It teaches students to analyse and evaluate consumer issues related to food choices and factors that play a role in a more sustainable and equitable food system.

## RESEARCH

With relevance to *Responsible consumption and production*, forests and forest management are studied at the University from both the natural and social sciences perspectives. For example, there are studies on the impact of forest management on various ecosystem services and climate adaptation. The social sciences research also concerns tourism in northern Sweden, with some studies focusing on climate impacts. In addition, life cycle analyses are used to study environmental impacts.

## COLLABORATION

In collaboration with the Swedish University of Agricultural Sciences (SLU) and the Forestry Research Institute of Sweden (Skogforsk), Umeå University is involved in *Future Forests*, a platform for collaboration, interdisciplinary forest research and research communication. In 2023, workshops and excursions were carried out with invitees from academia and the broader community to discuss forestry in relation to reindeer husbandry and the forestry labour force for example.

## OTHER ACTIVITIES

To increase the number of procurements and purchases with environmental requirements, work was carried out in 2023 to develop a set of simple environmental and sustainability requirements that can be applied to most procurements. The work

was successful and the proportion of procurements and call-offs that included environmental requirements increased to 62%, compared with 48% in the previous year. To reduce the volume of combustible waste, a project was launched to introduce waste sorting in kitchenettes. To promote reuse, a service was launched to collect worn out IT equipment. In order to reduce the amount of printed paper, administrative processes are being digitalised. However, the University still consumes a considerable volume of paper, as it printed paper equivalent to 350 trees in 2023, more than double the volume in the previous year.

## REFLECTION

This SDG requires a wide range of expertise, which the University provides in a number of study programmes and courses. The number of publications has not increased over time, but the impact of the research related to this SDG has increased over time. In terms of Other activities, intensive work is under way to contribute to the achievement of the SDG in the University's activities through procurement and improved procedures for recycling and reuse, but there is still much to be done to ensure that both environmental and social considerations are included at all stages.

PUBLICATIONS

291

FWCI

2.26



# SDG 13 Climate action

Urgent action is needed to combat climate change and its impacts. At the University, education and research related to climate change is pursued in all faculties. The University works to achieve society's climate targets through Collaboration.

## EDUCATION

In the course *Climate change studies in the humanities*, students discuss the social and cultural aspects of the climate and climate change. For example, how people perceive, understand and position themselves and others in relation to climate change. But also how these factors play a role in people's identities and everyday lives, and are part of people's memories, popular culture, folklore and social media.

## RESEARCH

Research relevant to this SDG is mainly in the natural sciences. This includes studies of climate effects in lakes and watercourses, but also on land in forests and peatlands in both Arctic and boreal areas. This research deals with carbon cycles and carbon storage, and nutrient cycles. The *Climate Impacts Research Center (CIRC)* in Abisko coordinates research on how climate change is affecting Arctic

ecosystems. For example, CIRC is studying how the climate is affecting lakes, rivers and streams as well as emissions from these in the form of carbon dioxide and methane in order to make predictions about what will happen if the temperature rises.

## COLLABORATION

The University collaborates with many different actors to mitigate climate change. A number of activities have been carried out as part of the *Climate Neutral Umeå* project. These include a seminar that was organised for higher education institutions and municipalities on how the introduction of climate councils was experienced in Swedish municipalities, and a theme day was held for researchers and municipal officials on the green transition.

In connection with the work being done in Abisko, an artist duo has created a work of art, *Sensing the Arctic*, to "broaden artistic, scientific and emotional perspectives on how the Arctic and our climate will change over the coming decades". In collaboration with Uppsala University, the Umeå Transformation Research Initiative (UTRI) held an evening seminar on science denialism within the framework of *Turné för vetenskap och klimat* (Science and climate roadshow). The seminar was very well received with lively discussion among the roughly one hundred attendees.

In 2023, the Finnish, Swedish and Norwegian embassies in London organised an event in collaboration with the international cooperation body *University of the Arctic (UArctic)* entitled "*The Arctic Urgency*" at which Umeå University was well represented. During the handover of the Swedish Climate Policy Council's annual report to the Swedish Government, an open lunch event was held on the *Role of the university in the climate transition*. One of Umeå University's researchers was on the Council,

*"In connection with the work being done in Abisko, an artist duo has created a work of art, Sensing the Arctic, to "broaden artistic, scientific and emotional perspectives on how the Arctic and our climate will change over the coming decades."*



*The Climate Impacts Research Centre (CIRC) coordinates research on the effects of climate change in Arctic ecosystems. The Centre, which is located in Abisko, offers both opportunities for field work and access to laboratories. Photo: Ive van Krunkelsven.*

which in its annual report stated that Sweden's climate change mitigation efforts are moving backwards and have deteriorated significantly compared to previous years.

**OTHER ACTIVITIES**

To ensure that the University's climate work has a real impact, a carbon budget has been prepared that will be followed up with annual climate accounts. The carbon budget shows that the University's emissions will need to decrease by 19% per year compared to the previous year from 2022 to 2045.

**REFLECTION**

In both Education and Collaboration, climate change is no longer being highlighted solely from the natural and social sciences perspectives, but increasingly also from the humanities perspective. There is extensive research relevant to the SDG

*Climate action* at the University, but mainly in the natural sciences domain. The extent of this research has not changed much over time, but there is now less focus on lakes and tundra. Concerning Other activities, the University is working to reduce its climate footprint. However, targets that set emissions levels would help to further clarify the University's own responsibility. In order to achieve the long-term sustainability target of 1 tonne of carbon dioxide emissions per person per year, much remains to be done.





# SDG 14 Life below water

Oceans, seas and marine resources must be conserved and sustainably used for sustainable development. Umeå University can contribute to the achievement of this SDG through knowledge, research and technology leading to healthier seas and oceans.

## EDUCATION

Education related to this SDG is in the fields of biology and earth sciences. Students who choose a specialisation in biology in the *Bachelor of Science in Biology and Earth Sciences* programme study how the ecosystems in mountains, forests, lakes, rivers, seas and oceans function.

## RESEARCH

Research related to this SDG is dominated by studies in the natural sciences. Studies of the Baltic Sea are investigating nutrient webs and algal blooms. Studies of environmental toxins are also being conducted where bioaccumulation (the accumulation of environmental toxins in cells and tissue) is being studied in fish and plankton. The Umeå Marine Sciences Centre (UMF) conducts marine research and environmental monitoring. The UMF spreads knowledge about the status of the marine environment, including through its participation on the website [havet.nu](http://havet.nu), which is a knowledge platform for politicians, schools and officials. On assignment from the Swedish Agency for Marine and Water Management, the water authorities and the Swedish Meteorological and Hydrological Institute (SMHI), UMF takes samples and performs environmental analyses in order to detect changes in the marine environment at an early stage with the aim of being able to implement effective improvement measures.

## COLLABORATION

In 2023, the University hosted the Marine Research Days, an annual conference for all those interested in marine sciences, management and environmental monitoring. The conference focuses on current aspects of research, management and environmental monitoring in marine systems, and the theme for the year was *Grand Challenges in Marine Sciences for Sustainable Development in the UN Decade of the Oceans*.

Blue carbon, that is, the ability of marine organisms to store carbon and thereby contribute to reducing the concentration of carbon dioxide in the atmosphere, is becoming a popular tool in environmental policy. Blue carbon can also be crucial to maintaining a balanced carbon cycle in the Earth's oceans and seas. With a vision of creating a foundation for sustainable development in South-East Asia, researchers at Umeå University collaborate with researchers and social actors in Cambodia in this area.

## OTHER ACTIVITIES

The University's steering towards this SDG is deficient. The one activity that has been carried out during the year was updating the procedures governing which chemicals may or may not be poured down drains.

## REFLECTION

The University has few activities relevant to this SDG. This applies to both Education and Collaboration. Research in the area of the SDG *Life below water* continues to be limited and has neither increased nor decreased over time. However, there has been an increase in research on bioaccumulation and organic pollutants, while research on, for example, algal blooms and dissolved organic matter has decreased. Concerning Other activities, plastic particles in the form of micro- and nanoplastics are a major problem for our oceans. Therefore, the University could contribute to this SDG by reducing its purchases and use of plastics.

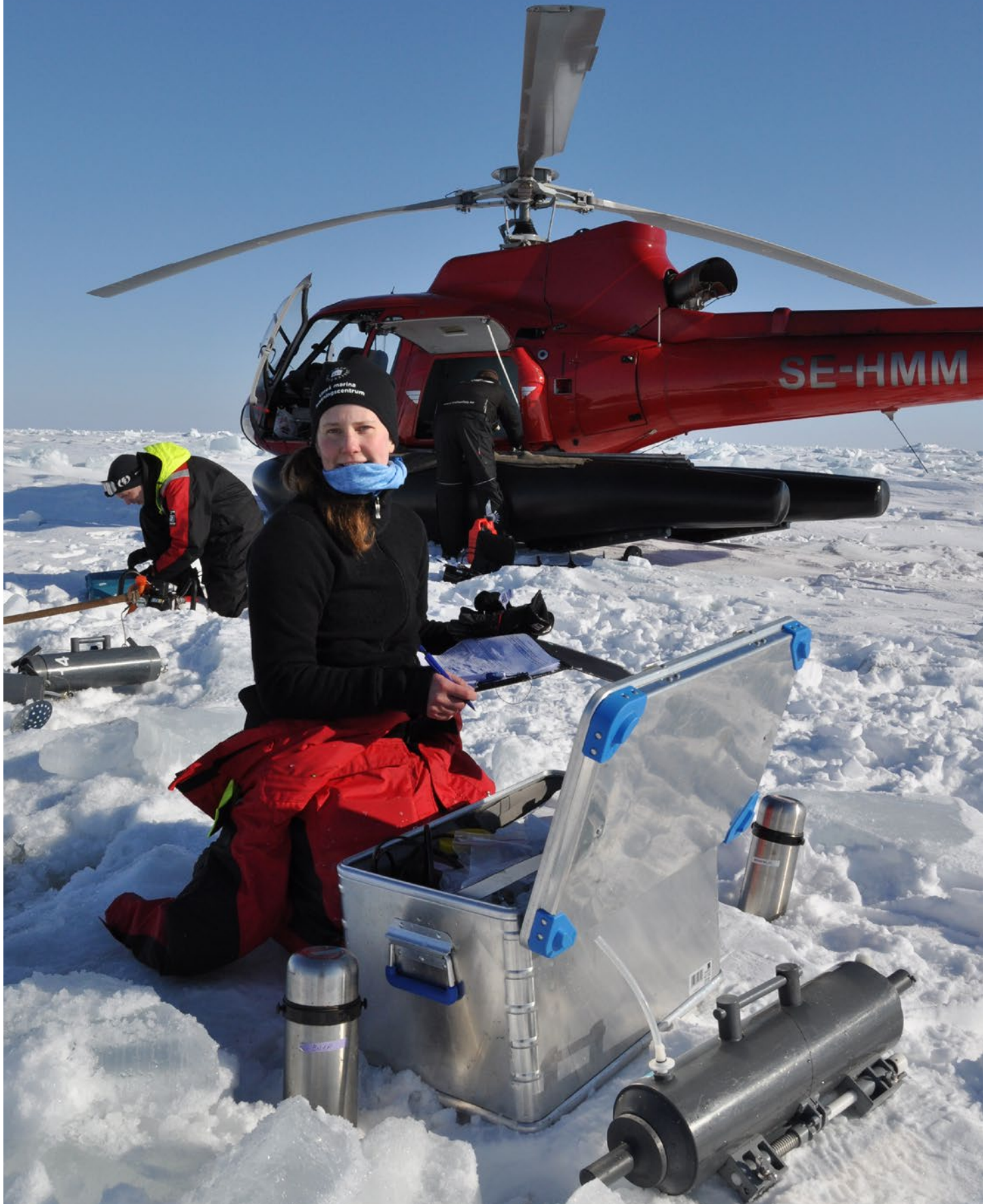
PUBLICATIONS

110

FWCI

1.80

*The Umeå Marine Sciences Centre (UMF) carries out sampling for the Pelagic Marine Monitoring programme.  
Photo: Joakim Ahlgren.*





# SDG 15 Life on land

Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss. At the University, work towards this SDG is manifest in research and education on forest ecosystems for example.

## EDUCATION

Students of the course *Diversity of nature* discuss the consequences of the anthropogenic impact on earth science processes, which ultimately affect local ecosystems. The course *Arctic ecosystems* studies changes in the vegetation in Arctic and Subarctic terrestrial ecosystems related to climate change. In 2023, about 50 students graduated in the fields of biology and ecology.

## RESEARCH

Boreal forests and forest management in particular are studied in these fields with a natural sciences focus. The studies deal with how forest management affects many different ecosystem services such as biodiversity but also timber production. Social science research relevant to this SDG includes studies of the control and management of primarily forests, with a particular interest in studying private forest owners. Some of this research concerns the role of forests in combating climate change and in climate adaptation.

## COLLABORATION

New for 2023 were the guided excursions offered under the umbrella of the *Nature on campus* concept. The target group is the general public, who are given the opportunity to learn more about the animal and plant life around the University with knowledgeable researchers as their guides. A total of six excursions on different themes were carried out.

## OTHER ACTIVITIES

In cooperation with property owners and the Swedish University of Agricultural Sciences, the University has worked to promote biodiversity at Campus Umeå. Some activities carried out in

2023 were the removal of invasive species and the expansion of the green area that has been protected to become a natural meadow. At Campus Umeå, more bird and bat nesting boxes were also set up through student collaboration.

## REFLECTION

Courses and study programmes with a bearing on this SDG are mainly in natural sciences subject areas, but there are also courses with a social science focus. The extent of the research has remained unchanged over time. Although there is less interest in forests in general in the research, the focus on boreal forests, i.e. the northern coniferous forests, has increased. However, the challenges associated with this SDG are great and require continued efforts to build skills and answer research questions. In terms of Other activities, there is broad collaboration at Campus Umeå around its outdoor environments. However, work on the campus aquatic ecosystems also needs to be included.





# SDG 16 Peace, justice and strong institutions

Promote peaceful and inclusive societies for sustainable development, provide access to justice for all, and build effective, inclusive institutions with accountability at all levels. At the University, work towards this SDG means that academic freedom, autonomy and student influence are central for example.

## EDUCATION

In autumn 2023, *Criminology* was established as a main field of study, which means that students can study criminology for a total of one and a half years and then take out a Bachelor's degree, something that was previously not possible. An example of a course related to this SDG is the course in IT security where students learn how to locate vulnerabilities in software. This can prevent social manipulation or the use of malicious software.

## RESEARCH

Activities in relation to this SDG are dominated by social science and medical research. The social science research conducted deals with human rights, focusing on marginalised groups such as indigenous peoples and people with disabilities. The medical research concerns domestic violence and gender-based violence. Some of this research is international, but there are also Swedish studies, for example studies with a focus on the role of social services and children's experiences of domestic violence. There is also research on participation in planning, public administration, and the labour market. Humanities research relevant to this SDG

focuses on justice, rights and agency in education, but also society at large and how digitalisation is affecting society.

## COLLABORATION

The Demographic Database (DBB) uses parish registers to build population registers that can be used for research. The information in the parish registers that has been digitalised constitutes an international resource for research in multiple research areas. In 2023, the DBB celebrated its 50th birthday.

## OTHER ACTIVITIES

Student influence that functions well is central to ensuring that the student perspective is taken into account in the development of the University's activities. The student unions wrote in their comments on the 2023 Annual Report that their cooperation with the University had worked very well during the year, that the communication had worked well, and that they felt that their voices had been heard.

Academic freedom is the principle that advocates the freedom of university teaching staff, researchers and students to investigate, discuss and publish

*“The social sciences research being conducted deals with human rights, focusing on marginalised groups such as indigenous peoples and people with disabilities. The medical research being done concerns domestic violence and gender-based violence.”*



their results without the influence or censorship of government agencies, institutions or other external forces. It is also fundamental to the development of knowledge and to scientific dialogue. In November, a theme day on academic freedom was held at one of the University's faculties.

#### REFLECTION

Skills related to this SDG are developed in various social science study programmes in particular. The research at the University related to this SDG has continued to have a high impact internationally and has as high a citation index as the research on the *SDG Zero hunger*. Although there is still a strong focus on domestic violence in the research, its importance has decreased somewhat over time, while research on human rights has increased.

Concerning Other activities, the work to include the student perspective at the University is functioning well. However, challenges in the wider world and the current climate for debate have led to a strong need to work with issues such as academic freedom and researchers' vulnerability.



*Student influence that functions well is central to ensuring that the student perspective is taken into account in the development of the University's activities. Photo: Malin Grönberg.*



# SDG 17 Partnerships for the goals

The SDGs can only be achieved through global partnership and cooperation. The implementation of the SDGs requires global solidarity, capacity development and the mobilisation of financial resources to ensure that no country or group is left behind. Umeå University contributes by providing education, doing research and spreading knowledge about sustainable development and through collaboration with actors in other countries.

## NEED FOR INTERDISCIPLINARY RESEARCH AND FORUMS - IMPLEMENTATION

Sustainable development requires an understanding of the complex relationships that exist between people, the environment and the economy. Interdisciplinary approaches can help identify these links and to design more sustainable strategies and measures. Interdisciplinary research and cooperation can also lead to innovative solutions and strategies that take account of humanity's needs as well as the planet's finite resources. But interdisciplinary research takes time and is not always rewarded in academia. The Umeå Transformation Research Initiative (UTRI), in which participants from all faculties at the University are involved, works to support interdisciplinary research cooperation with a focus on sustainable societal transformation.

Examples of interdisciplinary forums are the University's centres. Researchers from several different subject areas collaborate in these on solving common problems. The purpose of a centre is to stimulate research on topics that lie at the intersections of traditional disciplines and centres are where a large part of the University's interdisciplinary research is conducted. One of the University's 24 interdisciplinary centres is the Arctic Centre (Arcum). Since 2012, Arcum operates an Arctic graduate school where sustainable development is an important component. Collaboration between researchers from different disciplines and in interaction with the wider community are also important parts of Arcum's activities.

A biosphere area is an area where researchers can test things and work together to understand change and socio-ecological systems. In other words, it functions as a kind of social laboratory for inclusive societal transformation. Since 2023, the University has a UNESCO (United Nations Educational, Scientific and Cultural Organization) professorship linked to the Vindel River-Juhttátahkka biosphere area. In addition to the contribution made by the professor's research, a UNESCO professorship is intended to act as a bridge-builder between their research area, the wider community, civil society organisations and decision-makers.

A current development is the Urban Transition Lab, where the University's researchers have opportunities to meet with representatives of Umeå municipality so that the knowledge they develop through their research can be rapidly deployed in practice. The intention is that this platform will be used for regular meetings highlighting current challenges, and where researchers can contribute results from their current research.

*Industrial symbiosis* is a model for sustainable transformation where different industries work together to share resources, reduce waste and improve efficiency through the exchange of materials, energy and skills. The model promotes a circular economy and reduces environmental impact by optimising resource utilisation and reducing emissions. Researchers from Umeå University are participating in the development of the Dåva industrial area outside Umeå into a world-leading centre for green innovation (Umeå Eco Industrial Park).



*The SDGs can only be achieved through global partnership and cooperation. Photo: Mattias Pettersson.*

#### **PARTNERSHIPS FOR THE GOALS**

Internationalisation and global partnerships are essential to achieving the SDGs in the 2030 Agenda. Internationalisation is also a priority area for the University and all faculties and the Umeå School of Education work continuously with it. For example, the Faculty of Medicine continues to improve the conditions for both international students and foreign-born staff at the faculty. During the year, representatives from the Faculty of Social Sciences took part in a delegation that travelled to Namibia to discuss cooperation, including the possibility of conducting joint digital activities for courses and study programmes at undergraduate and post-graduate levels.

The Arctic region, to which Umeå University belongs, has attracted particular interest in these times when change and increased globalisation are high on the world's agenda. The Arctic Five alliance brings together Umeå University, Luleå University of Technology, the Arctic University of Norway in Tromsø, the University of Lapland in Rovaniemi, and the University of Oulu to join forces in strengthening and developing the Arctic and promoting a

sustainable Arctic region. The alliance has partnerships in areas such as energy, mining, and health and regional development, learning, and questions related to the Sámi/indigenous peoples.

The AcrossEU Alliance brings together nine European universities from different countries that collaborate to promote education, research, innovation, and collaboration with the wider community, with the common goal of strengthening their global competitiveness. Within this Alliance, students and staff of the University are given the opportunity to engage in cross-border collaborations and exchange programmes which aim to create a connected, innovative, inclusive and sustainable Europe.

Bilateral partnerships are also part of the University's internationalisation work. In addition to the SASUF, mentioned under SDG1, the University participates in MIRAI 2.0 and SKERIC. MIRAI is a Swedish-Japanese bilateral partnership. In 2023, the project's research and innovation week was held at Umeå University. The theme – *Creating Resilient and Sustainable Societies* – brought together over 230 researchers and students. The focus areas of the project are all related to sustainability: Ageing,

Materials science, Sustainability (water resources and new energy technologies), AI, and Innovation and Entrepreneurship. The Sweden Korea Education, Research, and Innovation Collaboration (SKERIC) is a collaboration between universities in Sweden and South Korea. SKERIC spans many areas and involves creating a cooperation platform for researchers from both countries to meet. Sweden and South Korea have a number of common denominators that make the project interesting. Both are driving forces when it comes to investment in research and innovation, where research and research partnerships are an important means of taking on our global challenges.

#### **IMPACT RANKING**

The Times Higher Education Impact Ranking and the QS Sustainability Ranking are two of the most influential sustainability rankings in the world. In 2023, the University participated in the Times Higher Education Impact Ranking, which means that the University is ranked based on its overall work, as well as its research, education and collaboration, in pursuing the SDGs. In April 2023, the results of the 2022 ranking were announced. Umeå University was ranked 301 – 400 out of about 1,800 higher education institutions, which was a slight improvement compared to the previous year. For some of the SDGs, the University was ranked higher, at 101 – 200. These include SDG3 Good health and well-being, SDG4 Quality education, SDG5 Gender equality, SDG11 Sustainable cities and communities, SDG15 Life on land, and SDG16 Peace, justice and strong institutions.

#### **HALF-TIME**

2023 marks the half way point in the implementation of the 2030 Agenda and it is clear that an upshift in this work is needed if the SDGs are to be achieved on time. The mid-term evaluation showed that, for the approximately 140 targets for which data are available, progress is only going in the right direction for around 15% of them. There is some progress on half of the targets and for 30%, progress has stagnated or gone backwards. Initial successes have suffered setbacks as a result of the pandemic, the war in Ukraine, and other conflicts as well as climate change.

#### **PROGRESS TOWARD THE SUSTAINABLE DEVELOPMENT GOALS**

Umeå University is contributing to the achievement of the SDGs in a number of ways, such as by building knowledge and skills and establishing platforms for research and collaboration with the wider community, locally and regionally. The University is far from reaching top rankings in this work but contributes important Nordic perspectives on a number of global challenges linked to northern habitats and waters, employment in the north, and indigenous peoples.

A comparison with last year's Sustainability Report shows a decline in research relevant to SDG 1 Zero poverty and SDG 4 Quality education. An increase (around 10%) can be noted in the research relevant to SDG 2 Zero hunger, SDG 8 Decent work and economic growth, SDG 9 Industry, innovation and infrastructure, and SDG 11 Sustainable cities and communities. In addition, the impact of the University's research (based on the FCWI) has been strengthened, especially in relation to SDG 2 Zero hunger, SDG 7 Affordable and clean energy, and SDG 12 Responsible consumption and production.

Even if humanities perspectives on sustainability issues are becoming more visible, there is still a great need to illuminate more of the SDGs from different angles. For example, because many of the challenges facing our oceans are due to human behaviours, social sciences studies are needed to contribute to SDG 14 Life below water; and with the rapid development of AI, both technical and interdisciplinary studies linked to SDG 16 Peace, justice and strong institutions are needed. It is therefore crucial to continue to focus on creating openings to study these challenges. Intensive work is under way to develop the University to meet the SDGs, but a strategic and operational focus on water issues remains. Energy issues also require further efforts with better use of premises and a reduced climate impact from travel.



Cover photo: Hilla Aspmann, Johnér Bildbyrå AB.  
Layout: Communications Office, Umeå University.  
Print: Cityprint i Norr AB, Umeå 2024.



UMEÅ UNIVERSITY