



**Sustainability**

**Report**

**2023**



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This report was prepared on behalf of UI's  
Sustainability Committee.

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# Sustainability and Diversity Goals of UI26:

## KNOWLEDGE CONTRIBUTING TO A SUSTAINABLE SOCIETY

The University will lead the way in sustainability through teaching, research, and knowledge creation.

## SUSTAINABLE DEVELOPMENT

The University will lead the way in sustainable development by setting measurable targets for carbon neutrality during the strategic period, based on national targets.

## A DIVERSE UNIVERSITY COMMUNITY

The University will be an even better workplace, ensuring equality and attracting students and staff from diverse backgrounds. Students with immigrant backgrounds will receive special support, and an emphasis will be placed on diversity in the student body.

## WORKING TOGETHER WITH SOCIETY

The University's impact on society will be increased with an action plan for improved support and direct dialogue between researchers and stakeholders, in order to combat fake news, reinforce trust in science, and lay the groundwork for public policy.

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## Note From the Rector

The University of Iceland is pleased to present its third sustainability report, available in English and Icelandic. Since our previous report, we have made notable progress in advancing our sustainability goals, aligning closely with the UI26 strategic objectives for 2021–2026. This journey reflects our ongoing commitment to embedding sustainability across teaching, research, and institutional practices, with a focus on sustainable operations and achieving carbon neutrality.

Our commitment to sustainability remains central to our mission during the UI26 period, as we strive to lead by example in promoting responsible practices within and beyond the university.

This year, the University of Iceland is ranked among the top 201–300 universities globally for societal and economic impact, as measured by the UN Sustainable Development Goals (SDGs) and published by Times Higher Education. For the third consecutive year, we have improved our position, which highlights our dedication to creating a positive societal impact beyond traditional academic metrics.

As with last year's report, we feature interviews with professionals dedicated to each Sustainable Development Goal, showcasing the integral role of sustainable practices across our disciplines.

Beyond our campus, the University of Iceland is the leading partner in Aurora, a European university alliance entering its second phase in 2023. In this role, we coordinate nine member universities and four partners, emphasising collaborative education, research for societal impact, and sustainable operations across institutions.

Together, we continue our journey toward a brighter, more sustainable future, driven by a shared vision of responsibility and innovation. While we are proud of our progress, we recognise there is always room to do better. Join us in supporting this commitment to create a lasting, positive impact.

*Jón Áthi Benediktsson*



## Note from the President of the Student Council

For ages, leaders have weighed the pros and cons of decisions, asking themselves: What am I doing, why, and what are the benefits? While these questions remain unchanged, their significance has evolved. Today, it is no longer sufficient for leaders to focus solely on short-term benefits; they must also consider the broader social impact of their actions and the ways in which they approach their goals.

This is important because no issue concerns the world's inhabitants as much as the sustainable utilisation of the planet's natural resources. No one is excluded, and the responsibility falls on each of us. However, a different level of responsibility lies with those who manage institutions, associations, and companies. Their responsibility is no less significant, but these leaders must make more complex and far-reaching decisions compared to those made in a typical Icelandic household. Naturally, this also applies to the University of Iceland, including all its employees and students.

The Student Council has long been at the forefront of this progress, and sustainability considerations have also been integral to UI's policymaking and operations. In the university's policy, UI26, numerous goals were established a few years ago. Many of these goals emphasise sustainability, and several have already been achieved. However, we now find ourselves at a crossroads. UI has embarked on its sustainability journey, but society – and particularly the

authorities – has not fully kept pace. According to UI26, the goal is to create an ecological and sustainable university community, where the use of private cars will be minimised and, ideally, eliminated. Most would agree that this is an admirable objective. Unfortunately, the current reality is far from ideal. While the university has taken significant steps, such as developing a university park where eco-friendly transport is prioritised, public transport has not evolved to a meaningful extent in tandem. This is a serious concern. Young families, working students, and others who balance multiple roles beyond being students simply cannot afford to rely on public transport as it currently operates. I don't mean financially but in terms of time. They cannot afford to spend as much time on public transport as it would require now. How are students supposed to drop their children off at school, attend their classes, and then go to work to earn a living? The simple answer is that they can't, not with the current system.

It should be clear to everyone that this is an issue of great importance to students. The Student Council takes this matter seriously, placing special emphasis on sustainability issues in the current working year. In recent years, the Student Council has organised various campaigns, and we are proud that this year's campaign is dedicated to sustainability. This issue affects everyone, and we must continue to push for reforms with sustainability as a guiding principle – whether within the university community, in Iceland, or globally.

*Arent Orri Jónsson Claessen,  
President of the Student Council*

# Executive Summary

This third annual sustainability report of the University of Iceland (UI) highlights the University's commitment to the Sustainable Development Goals (SDGs). The report provides valuable insights into the wide range of initiatives at UI aligned with the 17 SDGs. The overarching goal is to continuously enhance UI's sustainability efforts, striving to elevate the institution's performance in addressing global challenges and contributing to a more sustainable future. The report was commissioned by UI's Sustainability Committee and executed by the Sustainability Institute at UI.

UI approaches sustainability not as a trend but as a foundational commitment—a call to act thoughtfully, lead with purpose, and inspire positive change. Sustainability is about meeting the needs of the present without compromising future generations. This vision rests on three essential pillars: the environment, society, and economy. A sustainable society cannot thrive unless all three pillars are strengthened and balanced. At its core, sustainability is about creating a balanced, inclusive, and equitable future. Achieving this goal requires collaboration, a commitment to long-term resilience, and the courage to prioritise sustainable practices over short-term gains. This commitment is a shared mission that connects universities, communities, businesses, and individuals worldwide.

UI strives to be a leader in this field, recognising the pivotal role academic institutions play in advancing sustainability. As centres of knowledge and innovation, universities are uniquely positioned to nurture future leaders who can think critically and act with compassion. UI is committed to integrating the SDGs into every area of its work—from teaching and research to community partnerships and campus operations. UI joins other universities and organisations around the world in this journey to confront climate change, advance social justice, and promote inclusive growth. Fostering a sustainable mindset enables collective progress toward a more resilient world for all. As an institution of higher learning, UI is committed to this journey as an active participant in the global community, making meaningful strides toward a sustainable, resilient future for generations to come.

## Approach

The work of UI was mapped in relation to the SDGs and categorised into five main areas: research, teaching and learning, community outreach and partnerships, operations, and student initiatives. Various channels were utilised to gather this information. For example, a call for suggestions was sent to all UI staff and doctoral students, inviting them to provide details on projects, courses, and topics related to sustainability and the SDGs in 2023.



Interviews with individuals involved in sustainability related research or projects are featured under each SDG. These interviewees were selected based on their work. Additionally, data on peer-reviewed articles related to the SDGs was collected from Scopus, the largest database of abstracts and citations for peer-reviewed literature.

Information about the environmental performance of UI's operations—such as waste management, energy consumption, water use, and carbon emissions—was sourced from UI's Division of Resources and Operations. This data is compiled annually through the Green Accounting initiative and submitted to the Environmental Agency of Iceland on behalf of UI.

This report presents a comprehensive mapping of UI's activities in relation to the 17 SDGs. Within each SDG, a diverse range of UI initiatives is highlighted and categorised. For each goal, the number of related peer-reviewed articles is provided, along with their citation counts and field-weighted citation impact. Additionally, UI's performance in the Times Higher Education Impact Ranking for each SDG is included, offering a thorough overview of the university's contributions to global sustainability.

## Opportunities for Improvement

The following recommendations are based on the goals outlined in the University of Iceland's strategy for 2021–2026 (UI26) and its Work Programme on *Sustainability in Teaching, Research and University Management*. These recommendations were initially presented in UI's first Sustainability Report for the year 2021, and were divided into critical, very important and important. The status of each recommendation is indicated on pages 50–51, accompanied by a brief summary of developments in each focus area. The critical recommendations are listed below, and the current status is indicated:

- A vice rector and/or a manager in central administration are made responsible for sustainability (and SDGs) related issues. This role can be supported by the Sustainability Committee and the Sustainability Institute
- In 2023, a presentation about sustainability and the SDGs are held for staff in each school and central administration.
- Symposium about the findings of the UI's Sustainability report held in early 2023.
- UI's Sustainability report is produced annually, and the editorial team are given greater time and support when making the report.
- A course about sustainability and the SDGs is developed and made available for students from all disciplines in the school year of 2023.
- UI develops a deeper understanding of the scope of UI's emission from its operations from current status, for example with respect to commuting of staff and students, procurement, new construction, etc.
- UI sets a climate action plan and policy regarding operation and measurable goals and countermeasures. To achieve carbon neutrality, UI needs to weigh costs and benefits of different options for carbon offsetting for remaining emissions and decide which option to use.

- 
- Objective achieved
  - In good progress
  - In progress
  - Little progress

# Sustainability as a Collective Commitment



**Sustainability has become one of the most critical discussions of our time, embedded in every sector—from education and policy to private industry and beyond. But what does it truly mean, and why has it become so urgent?**

The University of Iceland (UI) approaches sustainability not as a trend but as a foundational commitment—a call to act thoughtfully, lead with purpose, and inspire positive change. As defined in the Brundtland Report (Our Common Future, 1987), sustainability is about meeting the needs of the present without compromising future generations. This vision rests on three essential pillars: the environment, society, and economy. A sustainable society cannot thrive unless all three pillars are strengthened and balanced; if one weakens, the entire framework of sustainable development risks collapse.

The concept of sustainability entered global dialogue in 1972 at the UN Conference on Human Development in Stockholm, further emphasised by the Limits to Growth report. Since then, sustainability has evolved into a comprehensive approach, integrating care for the environment, fairness in society, and a stable economy. Today, these principles are central to addressing global issues like the climate crisis, biodiversity, resource management, and social justice. Sustainability provides a framework to tackle these complex, interconnected challenges in a balanced way.

Historically, economic growth was prioritised, often sidelining social and environmental concerns. However, we now recognise that economies must operate within the planet's ecological boundaries. The costs of exceeding these limits, seen in escalating climate crises, biodiversity loss, and increasing social disparities, underscore the need for balanced and resilient systems. Sustainability is not solely about environmental protection; it is about fostering systems that support well-being, inclusivity, and stable economies.

At its core, sustainability is about creating a balanced, inclusive, and equitable future. Achieving this goal requires collaboration, a commitment to long-term resilience, and the courage to prioritise sustainable practices over short-term gains. This commitment is a shared mission that connects universities, communities, businesses, and individuals worldwide. The University of Iceland strives to be a leader in this field, recognising the pivotal role academic institutions play in advancing sustainability. Universities, as centres of knowledge and innovation, are uniquely positioned to cultivate future leaders who can think critically and act with compassion.





## Assessment tools are essential for teachers

UI's policy states that sustainability should be emphasised in teaching, research, and in the operations of the school. These priorities should, among other things, be reflected in support for teachers. Therefore, Auður Pálsdóttir, associate professor at the Faculty of Subject Teacher Education, developed an idea for workshops aimed at helping teachers create assessment tools in line with the LOUIS competency framework. "Well-made and concise assessment tools are valuable for teachers to provide students with quality feedback on their work and projects," Auður notes.

### Key competencies needed to achieve the UN SDGs

Auður explains that LOUIS is an acronym for Learning Outcomes in University for Impact on Society, which encompasses the skills prioritised by AURORA universi-

ties that students should be able to acquire during their studies. The LOUIS framework is based on 16 categories of competences, each consisting of 5 to 6 dimensions, and each dimension containing 4 learning outcomes, for a total of 81 learning outcomes. "The purpose is to provide teachers with examples of skills that students' learning should focus on, which they can then elaborate on in the context of their own courses. This initiative is rooted in the vision that sustainability education in higher education is based both on the content of academic subjects and on the pedagogical framework of the program, which together contribute to students acquiring these essential skills. Following the introduction of the 17 Sustainable Development Goals (SDGs), the United Nations also established the key competencies necessary for achieving the goals. The LOUIS competence framework aligns well with these key competencies."

### Targeted feedback to enhance competence

When asked about the benefits of the workshops, Auður has an answer at the ready. "On one hand, the benefit will be a shared collection of assessment tools that provide feedback on various types of student projects, which all UI teachers can access and integrate into their courses in Canvas. On the other hand, students will receive targeted feedback on their work and projects, helping them develop the skills necessary to achieve the United Nations' Sustainable Development Goals."

At UI, we are committed to integrating the United Nations Sustainable Development Goals (SDGs) into every area of our work—from teaching and research to community partnerships and campus operations.

Through the 2021–2026 Strategy (UI26), sustainability and diversity are upheld as guiding principles, empowering students and staff to engage in forward-thinking, solutions-driven efforts to tackle today's pressing global challenges. This strategy aligns UI's operations, academic goals, and partnerships with the SDGs, fostering a culture of sustainability on campus and beyond. By prioritising sustainable practices, UI aims to serve as a model of sustainable development locally and internationally.

The sustainability report, now published for the third time, documents UI's ongoing commitment to the SDGs, highlighting achievements in research, teaching, governance, and community outreach under each goal. Through this report, we share our progress and dedication to continuous improvement in sustainability practices. The aim is not only to improve continu-

ally but to set an example in sustainability, contributing to a future where sustainable practices are embedded in everyday life and positive change is inspired and sustained.

Creating a sustainable future requires a shared vision, resilience, and dedication from all of us. Every person and institution has a role to play. UI joins other universities and organisations around the world in this journey to confront climate change, advance social justice, and promote inclusive growth. Fostering a sustainable mindset enables collective progress toward a more resilient world for all. As an institution of higher learning, UI is committed to this journey as an active participant in the global community, making meaningful strides toward a sustainable, resilient future for generations to come.

# Aurora Universities Increase Sustainable Campus Actions



Aurora started its second phase as a European University alliance in 2023 with co-funding from the Erasmus+ programme of the European Union. The University of Iceland holds the role of a coordinating university for the nine member universities and four associated partner universities in the period 2023–2027.

The emphasis within Aurora continues to be on enhancing joint education and research collaboration for societal impact. Additionally, there is an emphasis on sustainable operations of the universities.

## Common Footprint Reduction Plan

In 2023, a joint plan of the Aurora universities for a lower carbon footprint in their operations was developed. The presidents of the Aurora universities signed the *Aurora Common Footprint Reduction Plan* at the Aurora annual conference in spring 2024. The plan serves as a subsequent step to the *Aurora Sustainable Campus Action Plan*, which commits the universities to being sustainable and responsible, thereby increasing positive change in their societies. The current plan builds on the first, but adds that each university sets specific actions focused on several sustainability measures. UI's actions are defined in the university's *Environmental Policy for Operations*.

Additionally, the universities must determine a baseline for their CO<sub>2</sub> emissions, which is the year 2018 for the University of Iceland, and commit to achieving net carbon neutrality by the year 2040. This includes a 50% reduction in CO<sub>2</sub> equivalent emissions by 2030. The universities also commit to join the campaign *Race to Zero* by the United Nations Framework Convention on Climate Change (UNFCCC).

The Aurora working group *Sustainable Campus* will monitor the implementation of the Common Footprint Reduction Plan. That group is also preparing the first Sustainability Summit of Aurora, which will take place in spring 2025.

## Sustainability Focus in Teaching

University of Iceland staff members actively participate in Aurora's working groups that organise joint studies and courses across Aurora institutions based on five focus areas, all of which have a clear connection to sustainability. The focus areas are: Sustainability and climate change; health and well-being; digital society and global citizenship; culture: diversity and identities; social innovation



The presidents of the Aurora universities signing the Aurora Carbon Footprint Reduction Plan.



Representatives of staff and students from the Aurora universities at the kick-off meeting for the new grant period of 2023–2027, held at UI in November 2023.

and entrepreneurship. Examples of two courses at UI that were offered across Aurora universities in 2023 are *Spark Social* and *Sustainability and Leadership*. Students and staff at UI also took part in various opportunities for learning and teaching development at the other eight Aurora universities in 2023.

## Sustainability Focus in Research

In the new grant period of Aurora as a European University alliance, there is an increased focus on research and innovation. This is a continued activity from the Aurora RI research and innovation project, funded by H2020 of the EU. The Aurora universities' research support services act as catalysts for fostering cooperation, talent development, and facilitating knowledge exchange. Special seed funding is awarded to stimulate increased research collaboration between scientists within the universities, emphasising early-career researchers. The purpose of the grants is to build a strong scientific community within our member institutions that supports Aurora's goals of societal impact and sustainability. UI's representatives who participate in leading Aurora's working group on research and innovation, prepared the first allocation of research collaboration grants in 2023, which was implemented in the first half of 2024.

# APPROACH

This is the third sustainability report published by the University of Iceland (UI). The Sustainability Institute at the University of Iceland created the report upon request from UI's Sustainability Committee. This work was undertaken from August to November 2024, with the reference year for the report being 2023, with few exceptions (otherwise stated). Research projects mentioned in the report were either in progress or completed in 2023. Doctoral projects mentioned in the report all culminated with a doctoral defence in 2023.

The report maps UI's work according to UN Sustainable Development Goals (SDGs) through five main areas: research, teaching and learning, community outreach and partnerships, operations, and student initiatives. Under each SDG chapter, activities are identified as relating to biosphere, society, or economy, as shown in the SDG "wedding cake" (Fig. 1), where the biosphere is the basis of the SDGs and the foundation of economies and societies.

## Call for Information

Gathering information about the comprehensive work that is conducted within UI was a challenging task, and the authors used several channels to collect information. The main source of information gathering was a call for suggestions which was sent out to all UI staff members and doctoral students in both Icelandic and English. In the call, participants were asked to provide information on diverse topics, projects and courses related to sustainability and the SDGs in the year 2023. These topics include, for example, research, teaching and learning, community engagement, and collaboration. The call for suggestions was sent out two times, and in addition, the Rector sent a reminder about the call to all UI staff.

In-focus interviews are included under each SDG with individuals who have done comprehensive research or worked on a project related to said SDG. The authors of the report handpicked individuals that they knew were working on research related to a certain SDG or had received information about from the call for suggestions.

## Collecting Information

Information from published peer-reviewed articles relating to the SDGs was gathered from Scopus, the largest abstract and citation database of peer-reviewed literature. Scopus is a live database where the numbers extracted about the number of UI peer-reviewed articles can change slightly when information is updated or new journals are added to the database. Because of this, numbers can vary slightly between yearly publications of the Sustainability Report. In the Scopus database, articles in Icelandic are not included, though it is estimated that around 75% of all published peer-reviewed articles within UI are in the Scopus database. Therefore, it can be assumed that the number of articles in relation to SDGs from UI is likely higher than stated in this report. Information was gathered for the years 2019–2023 in the beginning of October 2024. Scopus does not provide specific metrics for SDG 17, so the total number of articles under each SDG for 2019–2023 is given under said SDG. Field-weighted citation impact (FWCI) is included under SDG 1–16 and is data obtained from the Scopus database for 2019–2023. FWCI is the citation impact normalised by the field and measures the number



Figure 1: The Sustainable Development Goals grouped into biosphere, societal, and economical goals, where the biosphere is the foundation of economies and societies. Source: Azote Images for Stockholm Resilience Centre, Stockholm University.

of citations received by an article divided by the expected number of citations for similar articles. A FWCI of more than 1 indicates higher than expected citations based on the global average for similar publications.

Results from the Times Higher Education Impact Ranking (THE Impact Ranking) were indicated in the report under each SDG. THE Impact Ranking is an annual ranking assessing universities on their commitment to the UN SDGs. The rankings are based on universities' teaching, research, outreach, and stewardship. UI hands in data on all 17 SDGs, but in the ranking, universities are assessed on their three highest ranking SDGs, along with SDG 17. The data indicated in the report are the newest results that were published in June 2024, based on data from 2022.

All information regarding the environmental performance of UI's operations, for example, waste, electricity, water usage, and carbon emissions, came from UI's Division of Resource and Operations. Data is compiled annually through the initiative *Green Accounting*, which is submitted to the Environmental Agency of Iceland on behalf of UI. Data from 2018–2023 is indicated under the chapter *Operations*, unless otherwise stated. A survey on staff and students' transportation habits was conducted in 2023, the results of which are featured in the report.

## Mapping

Information on research, teaching and learning, community outreach and partnership, student initiatives, and operations were mapped in accordance with each of the 17 SDGs. Some topics had a clear connection to a certain SDG, while others had several connections to different SDGs. These are indicated in the report.

The authors of the report examined all news and events series posted on UI's webpage from 2023 for data collection. All doctoral defences from 2023 were also analysed.

The authors of this report received valuable contributions, many of which made their way to the final report. We wish to extend a special thanks to all participants who took the time to send in their suggestions, without your assistance, this report would not have shed light on the incredible work and diverse research projects and courses at UI.

# Sustainability in Operations

The Environmental Policy for Operations for UI is written in accordance with Icelandic law no. 70/2012 law on climate and adheres to other laws and regulations on environmental issues with regards to operations. This policy was approved by the University Council in December 2022.

The environmental policy for operations is adapted to UI's strategy that is valid at the time. It puts an emphasis on environmental factors in the operations of UI and defines goals and sets out an action plan in this area. It is the policy of UI to minimise the environmental impact of its operations, protect the environment, prevent pollution and to reduce emissions from its operations by introducing countermeasures.

UI's performance with regards to the environmental impact of operations is specifically monitored and environmental goals are set, and an action plan applies to all staff and students. The reference year for monitoring performance is 2018.

## Paper consumption

**53%**  
reduction since 2018

**99%**  
of paper materials had certified environmental label in 2023

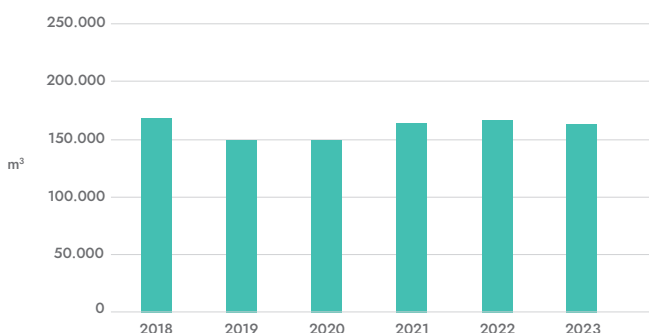


## Water consumption



**3%**  
reduction of cold water usage since 2018

**162.723**  
m<sup>3</sup> of cold water utilised in 2023



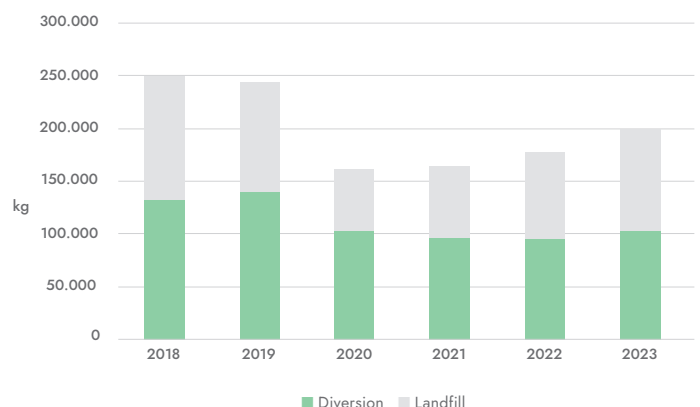
## Waste management



**52%**  
of waste recycled in 2023

**199 tonnes**  
of cold water utilised in 2023

**20%**  
reduction of total waste since 2018

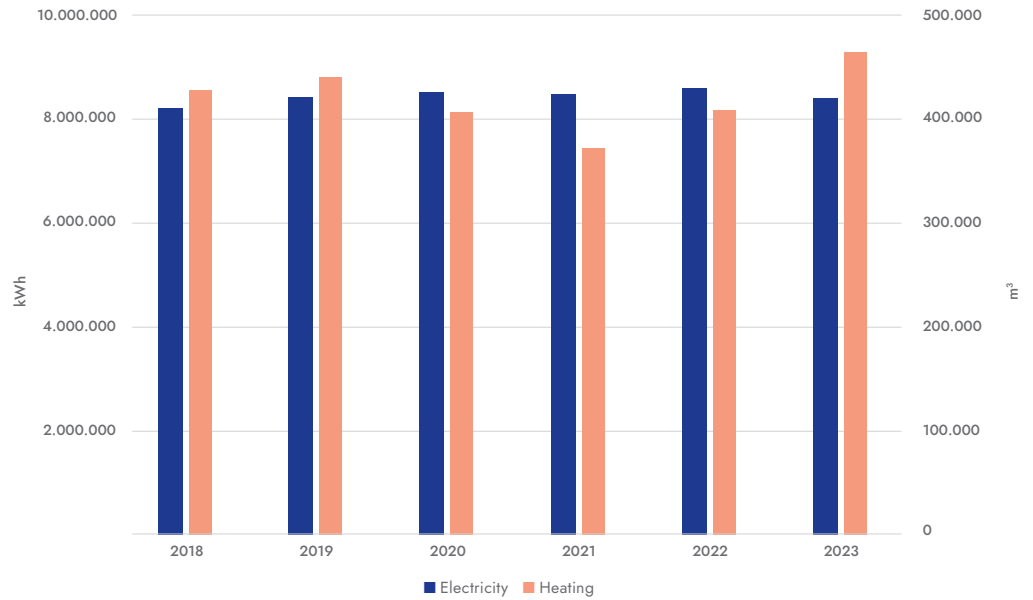


## Energy consumption

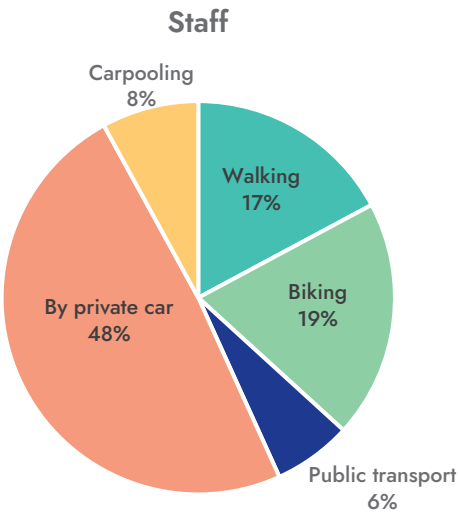
**2%**  
increase in electricity consumption since 2018

**9%**  
increase in hot water consumption since 2018

**100%**  
of UI's electricity is renewable



## Transportation

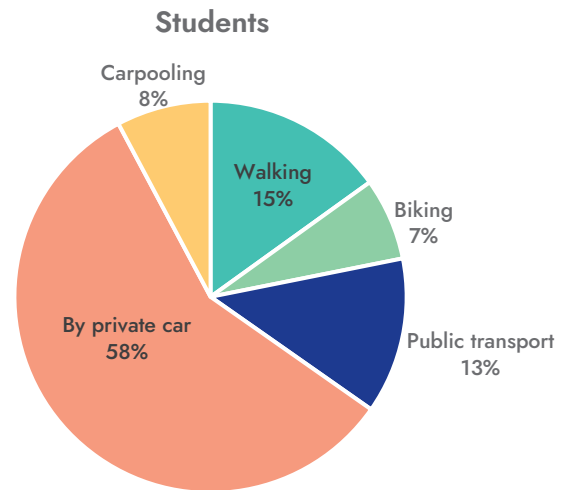


**43%** of staff commute in an environmentally friendly way in 2023

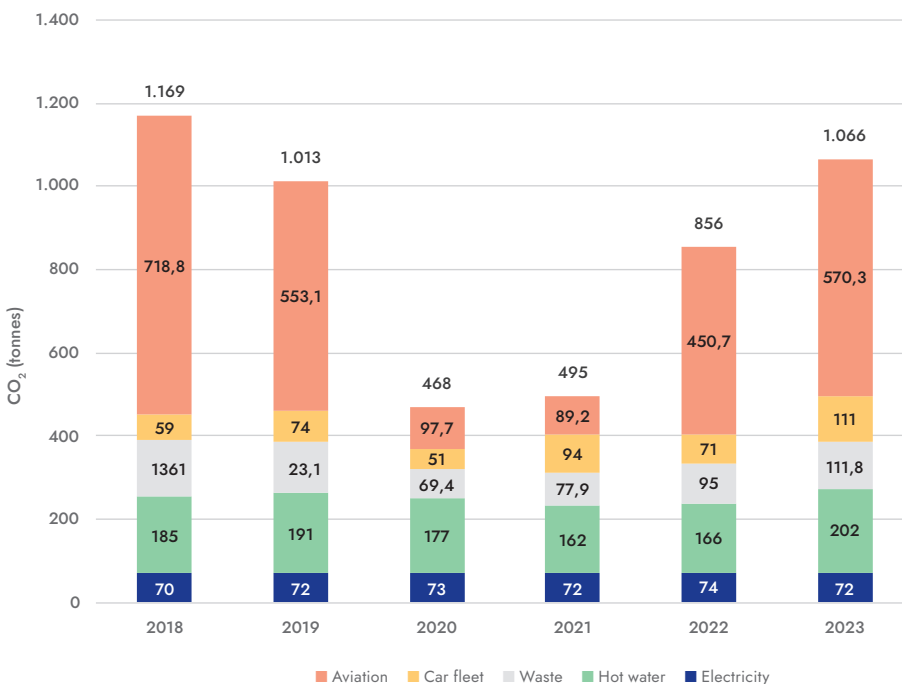
**35%** of students commute in an environmentally friendly way in 2023

**19%** of staff biked to UI in 2023

**46%** of UI car fleet are electrical vehicles



## Greenhouse gas emissions 2018–2023



**9%** reduction in total greenhouse gas emissions since 2018\*

**21%** reduction in emissions from aviation since 2018

**89%** increase in emissions from UI car fleet and other transportation since 2018

**2%** increase in emissions from electricity since 2018

**18%** reduction in emissions from waste since 2018\*\*

**9%** increase in emissions from hot water since 2018\*\*\*

\* of the factors that are monitored

\*\* emissions factor of waste increased in fall 2024 and emissions for prior years were updated

\*\*\* hot water was given an emission factor in fall 2024 and emissions from hot water were calculated retroactively

1 NO POVERTY



SOCIETY

# End poverty in all its forms everywhere



## RESEARCH

**49** Number of peer-reviewed articles from 2019–2023 with relation to SDG 1

**391** Number of citations from 2019–2023

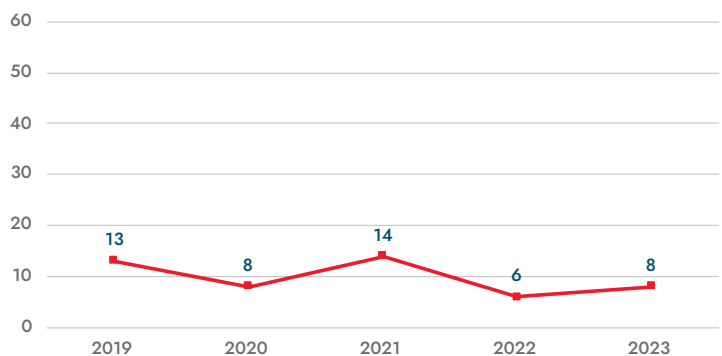
**1,17** Field-weighted citation impact from 2019–2023

## THE Impact Ranking results

**800–1000** out of **1093** in the world

**68,1** Research score out of **100**

## Number of peer-reviewed articles with relation to SDG 1



## Social Cost of Poverty

The aim of the project, which is funded by the Prime Minister’s Office, is to create knowledge that can guide policymaking to reduce poverty. The project focuses on four groups: immigrants, invalids, single parents, and students. The results give an idea of how costly poverty is to society in the country. The project is led by Halldór S. Guðmundsson, associate professor at the Faculty of Social Work, and Herdís Steingrimsdóttir, assistant professor at the same faculty.



## Social Landscape in Reykjavík

The project, led by Kolbeinn H. Stefánsson, associate professor at the Faculty of Social Work, is funded by the City of Reykjavík. The project aims to analyse how living patterns within Reykjavík, and the whole capital region, interact with poverty and shape various outcomes in people’s lives. The results of the project have revealed, among other things, that the residential segregation of low-income

people and middle- and high-income people in Reykjavík has increased. This leads to increased isolation among lower-income groups, where people with higher incomes are more likely to escape cohabitation with people with lower incomes.



## Social Policy, Welfare and Social Problems

The Social Policy, Welfare and Social Problems course is taught at the undergraduate level at the Faculty of Social Work. The aim of this course is to give students basic knowledge and understanding of the development and characteristics of welfare systems from the perspective of social work. Ways to define needs and social problems are among the learnings of the course, where special attention is placed on poverty and poverty research. In addition, the role of social workers in Social Services is discussed.





## The impact of limited educational opportunities on poverty

“Generally speaking, my research centres around the topic of social inequality in education and ways to increase equality. This is a broad topic, but I am particularly interested in how students’ social origin, as well as their ethnicity and gender, influences the type of education they obtain. Furthermore, I am interested in how the transition from school to work—or, in other words, the process of getting a job—is shaped by socio-economic background factors,” says David Reimer, Professor of the Sociology of Education, who leads the research project EDUCHANGE.

### Breaking down barriers and supporting accessible education

The EDUCHANGE project aims to reduce inequality during the transitions from compulsory to secondary education and from secondary to higher education. David, whose position as a professor is split between the School of Education and the

School of Social Sciences, notes that the project has clear connections to SDG 1 and SDG 10. “The project aligns with the UI26 policy to eliminate barriers and support collaborative, accessible education, reinforcing the link to SDG 10, Reduced Inequality, while simultaneously advancing SDG 1 by paving the way for inclusive educational and economic opportunities,” he explains.

Funded entirely by the European Union, the EDUCHANGE project specifically targets the reduction of barriers at critical educational transitions, directly addressing one root cause of poverty—limited educational opportunities. “By facilitating equal access to secondary and higher education, the project supports SDG 1 by equipping individuals from disadvantaged backgrounds with qualifications that enhance their economic opportunities,” David adds.

He continues: “Students from lower-income backgrounds, despite having similar academic potential, often opt out of higher education due to perceived costs and lower expectations for economic mobility. This contributes to sustained income inequality and limits access to higher-paying jobs. By addressing these disparities, my work seeks to ensure that socio-economic status does not prevent students from achieving their educational and career potential.”

### The education of future generations relies on research

When asked how research changes the world, David says it is a big question to address. “New knowledge based on research is the essential prerequisite for offering quality education in universities. Without research, it would be difficult to determine which methods and theories should be taught—or which approaches are outdated or simply false. In this way, research changes the world, as the education of future generations depends on it.”

## Social Counselling for University Students

Social Counselling is a pilot project that provides counselling to university students and their families regarding family issues, parenting, and communication. The goal is to train students in the professional qualification program in social work to provide professional advice and offer support to university students in difficulties they may be dealing with.



## Public Dental Clinic

The Faculty of Odontology provides dental services for the public. The service is available while teaching is in session. Student dentists provide treatments supervised by their instructors in the Faculty of Odontology’s clinical teaching facilities. This service is provided at a low cost and children aged 0–17 can get a free examination and analysis of their oral health.



## Free Legal Assistance from Law Students

Orator, the association of law students, provides free legal assistance to the public once per week during the school year. This legal aid service under the supervision of practicing lawyers has been operating for years.



## Various Psychological services at UI

» **The Department of Psychology runs a Student Psychology Clinic** where post-graduate psychology students offer psychological counselling. This service is provided at a low cost to university students and their children under the supervision of licensed psychologists, as part of their clinical training.

» **SÁLÆKT – Counselling for English-speaking students.** The University has provided this counselling free of charge to students since 2018. The goal is to help students learn to use an evidence based theoretical model to cope with stressful situations related to school, relationships, difficult feelings, and more.

» **Psychological services** are a part of UI’s career and guidance counselling and are free of charge for all students. Short-term (1 to 3 sessions per semester) individual therapy sessions are provided in Icelandic, English, Danish, and German. Other services at a low cost for all students include psychoeducation in groups.



## 2 ZERO HUNGER



### SOCIETY

# End hunger, achieve food security and improved nutrition and promote sustainable agriculture



### RESEARCH

**64** Number of peer-reviewed articles from 2019–2023 with relation to SDG 2

**1400** Number of citations from 2019–2023

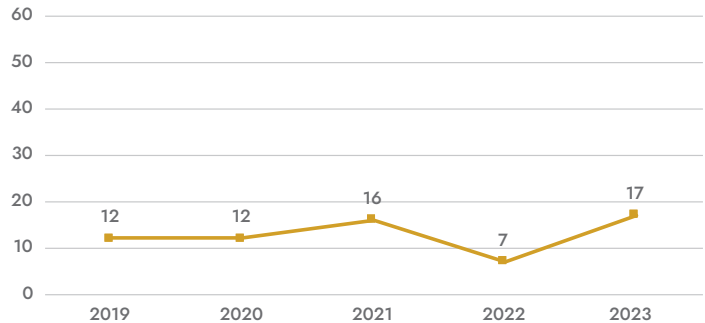
**1,53** Field-weighted citation impact from 2019–2023

### THE Impact Ranking results

**401–600** out of **803** in the world

**78,8** Research score out of **100**

### Number of peer-reviewed articles with relation to SDG 2



### Taste Buds Training for Fussy Eating Among Preschool Children

The first years of children's lives are important for future health and development, where a diversified and healthy diet is pivotal, but it can be difficult to get children to try new food. Berglind Lilja Guðlaugsdóttir, doctoral student in health promotion, along with her supervisor, Anna Sigríður Ólafsdóttir and Sigrún Þorsteinsdóttir, Postdoc, have researched taste buds training among preschool children with the objective to prevent or reduce fussy eating with repeated introduction of foods. This research could assist parents in dealing with children's fussy eating and prevent it from getting worse.



### The Relationship Between Infant Nutrition and Asthma

Research that Inga Þórsdóttir, professor in Nutrition at UI, is working on with a team of scientists could have a major impact on infant nutrition recommendations to remedy asthma. The study focuses on the relationship between the nutrition of children and asthma, but also the relationship to body weight and air quality. To study the role of nutrition in infancy as a prevention against asthma in childhood, data used includes health records from birth and data containing information on children's nutrition to one and half years old.







## Human-microbial relations in food and compost production

The project *Symbiotic Living: Human-Microbial Relations in Everyday Life* is an interdisciplinary collaborative project between UI, Matís, the National Museum of Iceland, and a diverse group of international partners. The project, led by Valdimar Tr. Hafstein, professor of folkloristics and ethnology, received a Grant of Excellence from the Icelandic Research Fund. “The project researches the coexistence of humans and microbes and how it is shaped through everyday cultural practices, present and the past. We focus on the creative power of microbes in food practices and people’s daily lives, following them from cultivation, baking, brewing, pickling, and skyr-making, through the digestive system, and back into the soil through composting. We study the impact of this symbiosis on people’s physical, mental, and social well-being.”

### Trust is the key to successful interdisciplinary collaboration

The study is conducted in collaboration between ethnologists, anthropologists, nutritionists, and biologists. Valdimar adds that strong mutual trust is the key to successful interdisciplinary collaboration across such a broad

field. “The project integrates qualitative, ethnographic methods used by ethnologists and anthropologists (including sensory ethnography and multispecies ethnography) with quantitative methods, sampling and biological analysis (such as food diaries and sequencing). In this way, the project bridges the social sciences with health and natural sciences,” Valdimar explains.

### Indications of positive effects from consuming pickled and fermented foods

In the project, the research team found indications that consuming pickled and fermented foods, containing high amounts of microbes, increases gut microbiome diversity and reduces inflammation. “The human body is largely composed of microorganisms, yet over the past century, we’ve lost both the quantity and diversity of this human microbiome, particularly in the gut. This is part of the extinction of biological diversity on Earth, which is also occurring within us,” Valdimar explains, adding, “After all, the boundaries between the external and internal worlds are remarkably blurred when viewed from the perspective of microbes.”

### The whole of society can be studied through food

When asked how folkloristics and ethnology relate to food, health, and nutrition, Valdimar explains that “food is a classic subject in folkloristics and ethnology, a subject which deals with people’s daily lives. Daily life has, of course, always largely revolved around deciding what to eat, how to obtain it, store it, cook it, and eat it. We can examine all aspects and variables of society through food: gender, life stages, origin, residence, groups, discrimination, professions, history, environment, relationships with other species, and more. Society is also always embedded in food, as most of us buy and prepare food for others and rarely eat alone. Food thus inherently contains our connections with other people, as well as with the animals and plants we consume and the microbes that help us digest it.” It was therefore only natural for ethnologists to collaborate in this project with other scientists who study food, health, and nutrition, with the novelty lying precisely in this broad collaboration, says Valdimar.

## Nutrition and Health

The Nutrition and Health course is taught at the undergraduate level at the Faculty of Health Promotion, Sports and Leisure Studies. The focus is on the association of nutrition to health and the role of nutrition in the prevention of chronic diseases related to lifestyle. It is also emphasised that students are trained to read and understand research in nutrition, and how to interpret results in relation to other lifestyles and health.



## Foodsystems and Food Security

The Foodsystems and Food Security course is taught at the undergraduate level at the Faculty of Food Science and Nutrition. The content of the course is diet, food system and related environmental effects, examples of diets that are discussed are vegan, keto and special diets. In the course, the life cycle of food is also discussed, from the procurement of raw materials to production,

consumption and disposal. Students also learn how to calculate the environmental impact of food and calculations based on the mass and energy accounting of food systems are discussed.



## Undergraduate Studies within the Faculty of Food Science and Nutrition

The Faculty of Food Science and Nutrition offers a combined curriculum for the first two years of their undergraduate studies, where sustainability and co-teaching are emphasised. All core courses in the programme align with specific SDGs. Both study programmes are interdisciplinary and provide insights into operations, sociology and environmental issues. The food science programme is based on natural- and life sciences, along with engineering and technology, while the nutrition programme is based on natural-, life- and health sciences.



## 3 GOOD HEALTH AND WELL-BEING



### SOCIETY

Ensure healthy lives  
and promote well-being  
for all at all ages



### RESEARCH

**1237** Number of peer-reviewed articles from 2019–2023 with relation to SDG 3

**34042** Number of citations from 2019–2023

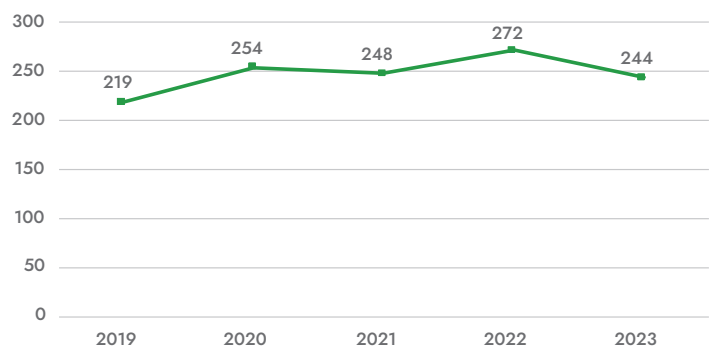
**2,39** Field-weighted citation impact from 2019–2023

### THE Impact Ranking results

**101–200** out of **1498** in the world

**87,4** Research score out of **100**

### Number of peer-reviewed articles with relation to SDG 3



### The Health of Relatives of the Elderly

The increased number of elderly people poses various challenges, for example for their relatives who often provide care. Kristín Björnsdóttir, professor of nursing and chair of the board of the Laboratory of UI and Landspítali University Hospital in Gerontology, leads a research group that studies the situation of caregivers to obtain knowledge of factors that prove to be challenging for it to be possible to respond with increased support. The study utilises a measuring instrument designed to assess the state of caregivers' health and needs.



### New Research Centre for Sport and Health Sciences

A new Research Centre for Sport and Health Sciences opened in 2023 in Laugardalur, where the Faculty of Health Promotion, Sport, and Leisure Studies is located. The centre is equipped with numerous new research instruments that greatly increase the possibilities for measuring and researching the physical performance of athletes, and the public. The equipment is of the same standard as that of the world's leading sports teams.



### Blood Screening to the Rescue

Scientists at UI have, for the first time, explained the prevalence of pre-stage multiple myeloma by screening over 75 thousand Icelanders with blood tests and collecting bone marrow samples from over 1600 people. The results indicate that pre-stage cancer of the bone marrow is present in 0,5% of individuals over 40 years old. Never before have so many individuals been screened for this asymptomatic pre-stage, making it possible to estimate how common it is for the first time.



### Research Laboratory in Obstetrics-, Women's-, Children's- and Family Studies

The Research Laboratory of Landspítali University Hospital in Obstetrics-, Women's-, Children's- and Family Studies was established in 2023 at the Women's and Children's Department at the hospital. It aims to create a community for scholars in the field. The laboratory's role is diverse, and for example works to promote interdisciplinary collaboration between academics within UI and Landspítali in obstetrics-, women's-, children's- and family studies, and create a platform and facilities for research for university students at all study levels in those disciplines.





## Advancing pharmaceutical science through collaboration in Malawi

Sveinbjörn Gizurarson, a professor at the Faculty of Pharmaceutical Sciences, is leading a large project in Malawi focused on establishing pharmaceutical production of medicines for children under the age of five. However, for this to be successful, there must be trained pharmacists in the region. To address this, he has also been involved in developing graduate-level pharmacy studies at Kamuzu University in Malawi. Sveinbjörn emphasizes that this kind of education is crucial for the country's sustainability. "There is a great need to build a specialized master's program in industrial pharmacology for pharmacists who want to work

in the industry. If we want these countries to be sustainable, we need to build knowledge locally and support them so they can produce their own medicine."

### Collaboration must be mutually beneficial

"I believe it is extremely important to build collaborative projects that benefit both countries. A good example is the number of teacher and student exchanges between Iceland and Malawi," Sveinbjörn says. Students and instructors work closely together in both Malawi and Iceland. "In this way, both parties gain a great deal from the collaboration, but I believe partnerships should always benefit both sides." Sveinbjörn also points out that there is a strong need for academic collaboration, which he hopes can be further developed.

### The distress deeply affects visiting scientists

Sveinbjörn notes that after Icelandic teachers and students visit Malawi, they are often deeply affected. "Malawi is one of the poorest countries in the world. The shortage of equipment, materials, and necessities makes scientists reflect on how to help the country become more self-sufficient. One way is by fostering partnerships. All the teachers and students I've spoken to want to see the country's sustainability strengthened."

## Protection Against Infections

Cell biology Professor Guðmundur Hrafn Guðmundsson and his colleagues have been working on the project Protection Against Infections, which received one of the largest grants the EU has provided for research projects in Iceland. UI leads the project in cooperation with the start-up company Akthelia Pharmaceuticals, of which UI is a co-owner. Many times, the pathogens that target humans have managed to evade the defensive peptides that shield humans from diseases and germs. The grant includes funding the creation of a drug that, when bacteria attack the immune system, causes the medication to repeatedly activate the defensive mechanism to kill the germs.



## Falls Among the Elderly

Falls are a public health problem among older people. Sólveig Ása Árnadóttir, Professor of physical therapy, has examined the experience of older people who have fallen, with the intent to propose more targeted prevention and services. The first results of a new study indicate that males are more likely to downplay the falls and are less willing to talk about their experiences. Reasons for this may be that people forget the fall, or that they intentionally cover up the event due to the fear of losing their independence.



## Introduction to Multidisciplinary Health Sciences

The course Introduction to Multidisciplinary Health Sciences is held at the School of Health Sciences every January, where freshmen students from all faculties participate in a joint Health Science Day. The main topic of the course is interdisciplinary cooperation and its importance to maximise success and impact in health sciences. All basic factors of cooperation are covered, such as the common view on the right to good health, communication and ethics. Furthermore, the role and responsibility of health sciences are analysed.



## VOFF Mental Health Days

The VOFF Mental Health Days were held for the first time in 2023 as a joint project between the UI student council and psychologists at UI's Student Counselling and Career Centre. The program focused on the general well-being of students, where speakers gave talks related to mental health in one way or another. Visiting dogs from the Red Cross were also present during the VOFF Mental Health Days, to the delight of participants.



**4** QUALITY EDUCATION



**SOCIETY**

**Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all**



**RESEARCH**

**145** Number of peer-reviewed articles from 2019–2023 with relation to SDG 4

**836** Number of citations from 2019–2023

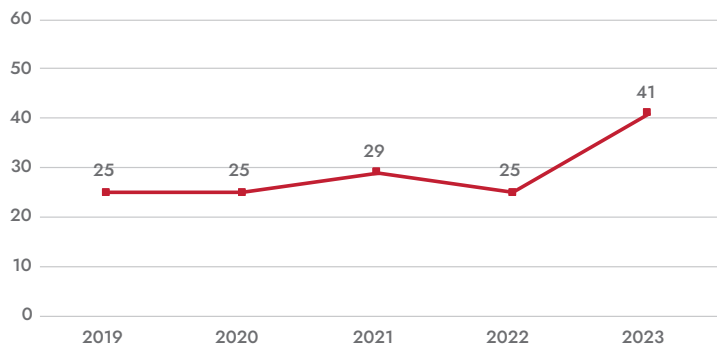
**1,08** Field-weighted citation impact from 2019–2023

**THE Impact Ranking results**

**801–1000** out of **1681** in the world

**77** Research score out of **100**

**Number of peer-reviewed articles with relation to SDG 4**



**Ísabrot**

In a study carried out by Ásthildur B. Jónsdóttir, Adjunct Lecturer within the Faculty of Subject Teacher Education, she examines how the project Ísabrot at the National Gallery of Iceland helps art teachers in elementary and secondary schools in education for sustainability. Ísabrot addresses contemporary challenges in environmental issues, particularly the climate emergency that threatens the world. The study focuses on how museums prepare for school visits and how they present interdisciplinary art workshops based on their artistic approach to glaciers, their melting and climate change.



**Education and Social Inclusion of Refugee Children and Youth in Iceland**

The migration of asylum seekers and refugees in Iceland has increased over the past years. Hanna Ragnarsdóttir, Professor of multicultural studies, received a Grant of Excellence in 2023 from the Icelandic Research Fund along with her colleagues to research how refugee children and youth from preschool age to secondary school age adapt in Iceland, both with regards to their study organization and their wellbeing in social and study environment. This study provides important information regarding the barriers to the study environment that refugee children and youth face, as well as their access to social connections.





Source unknown

## Menntaflétta supports learning communities

Menntaflétta is an open and accessible professional development program. It is a joint project between UI's School of Education, the University of Akureyri, and the Icelandic Teachers' Association, funded by the Ministry of Education and Children. The programme invites teachers and professionals from schools and recreation centres to participate in open and accessible webinars, expand their networks and use educational research and peer support to strengthen their work, explains Soffía Ámundsdóttir, project manager at Nýmennt, which leads the project. She adds that some courses are available in real-time on Zoom, while others are always available on the Menntaflétta website, the so-called Open Menntaflétta. "What the courses have in common is that they all aim to support the flourishing of learning communities in the participants' workplaces."

### Research-based professional development

Soffía explains that the courses in Menntaflétta are grounded in the philosophy of leadership studies and the development of

learning communities, incorporating research on how professional development can most effectively support teachers in their work. "In short, the philosophy of the leadership studies is that course participants, referred to as leaders, engage with course subjects within the learning community at their own school and place of work, with fellow teachers and colleagues. Each course is developed in collaboration between academics and education professionals and is based on state-of-the-art knowledge on each topic. An emphasis is placed on interactive conversations between experts and participants."

### Practical webinars accessible from any location

In each course within Menntaflétta, the emphasis is on integrating the subject matter with the participants' daily work. "In fact, it is emphasised that participants choose a course related to what is currently relevant in their respective school or educational institution. The courses introduce tools and strategies for supporting the development of the learning community, as well as resources related to the course subject. Each course spans the whole school year and typically consists of four to six sessions that are usually conducted online, making them accessible to professionals across the country."

### Promoting education and empowering teaching professionals

"One of the core themes of Menntaflétta is to support learning communities, within each course but also at the participants' workplaces. Leaders are encouraged to apply the course content to facilitate interdisciplinary collaboration at their institutions, thereby driving professional and institutional development. The courses also create a platform for dialogue between leaders across schools, institutions and regions. Ultimately, one of the main goals of Menntaflétta is to promote education and empower teachers, school administrators, and professionals nationwide to enhance learning and support student development," Soffía concludes.

## Kveikjum Neistann

Kveikjum neistann is a research and development project at the elementary school in Vestmannaeyjar, led by Hermundur Sigmundsson, Professor at School of Education, in collaboration with researchers at NTNU University in Norway. The project aims to strengthen reading instruction, providing students with strong support early in primary school to ease their acquisition of reading skills. Initial results showed a significant improvement in children's reading abilities from September 2021 to May 2022. For example, only 8% could read continuous text in September 2021, but by May 2022 that percentage had risen to 88%.



## Sustainability Education

Sustainable Education is a master programme that started in the fall of 2023 and is a transdisciplinary programme focusing on sustainability, one of the fundamental pillars of education according to the National Curriculum for pre-, compulsory and upper-secondary schools in Iceland. The programme is built on courses that focus on concepts and ideas of Sustainable Development and Sustainability Education in an international context as well as suggestions from the UN about what and how to approach sustainability in schools. The programme is also built on didactics and practicum teaching courses.



## ISLANDS: Master Program in Islands and Sustainability

The international Erasmus+ Mundus master's program in Islands and Sustainability (ISLANDS) is a collaboration between UI, the University of Groningen in the Netherlands, the University of the Aegean in Greece and the University of Las Palmas de Gran Canaria in Spain. The program combines training in scientific research and specialisation in the field of islands and sustainability. The collaboration received funding from the EU under the Erasmus+ program. During the year, the first graduation from the school took place. Four students graduated with double degrees, both from UI and the University of Groningen.



## NKG – Innovation Competition for Primary School Students

NKG, the primary school innovation competition, has been held annually since 1991 where 40 students get the opportunity to develop a project in a field of interest, from ideas to reality. The process supports students' creativity and increases both their self-esteem and initiative. The process starts in the fall and ends in the spring with a workshop where participants develop their ideas with the help of instructors from UI and other partners.



## 5 GENDER EQUALITY



### SOCIETY

# Achieve gender equality and empower all women and girls



### RESEARCH

**124** Number of peer-reviewed articles from 2019–2023 with relation to SDG 5

**1139** Number of citations from 2019–2023

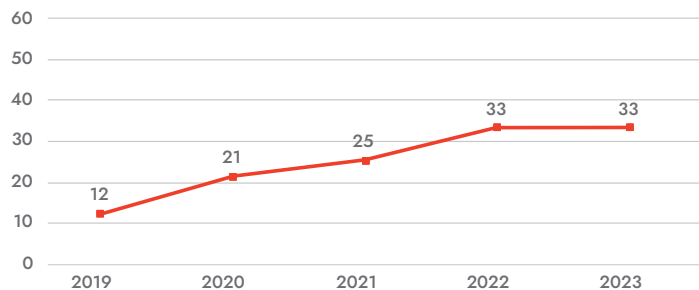
**1,74** Field-weighted citation impact from 2019–2023

### THE Impact Ranking results

**401–600** out of **1361** in the world

**79,9** Research score out of **100**

### Number of peer-reviewed articles with relation to SDG 5



### Ethics in Motion: Feminist Ethics and #MeToo (EMFEM)

EMFEM is a research project funded by the Icelandic Research Fund from 2023 to 2026. The project examines the impact of #MeToo and related movements on moral values and norms appearing in recent debates in and around the #MeToo movement in Iceland. The goal of the project is to examine the potential interplay between social movements, moral norms, and ethical theories, focusing on altered concepts and perceptions of responsibility. The project is led by Eyja M. J. Brynjarsdóttir, Professor of philosophy, and Nanna Hlín Halldórsdóttir, Research Specialist at the Centre for Ethics.



### Paint Like a Man, Woman! Women, Gender and Discourse on Art in Iceland from the Late Nineteenth Century to 1960

In Hanna Guðlaug Guðmundsdóttir's doctoral thesis, the main objective was to analyse the discourse on art in Iceland based on feminist methodology and theories in which the concept of gender occurs. The thesis shows the gendered discourse and discrimination of art genres, where the art creations of women, including handicrafts, were considered as "women's domain" while painting and sculpture were men's domain. The thesis throws light on the important struggle of women artists and women in general who fought against the gendered discourse and discrimination in the fields of culture and art.





## The importance of female role models in mathematics

“The idea for the camp came to me when I was a student at Hamrahlíð College,” says Nanna Kristjánsdóttir, who recently graduated with a bachelor’s degree in applied mathematics from UI, about how the “Stelpur diffra” math camp was founded. “I had wanted to attend similar camps abroad, but they were very expensive. I also felt isolated in the world of mathematics and wanted to meet other girls who shared the same interest in the subject.”

## Teaching and organisation of the camp led by female mathematicians

Nanna says that at the time, she didn’t really have any female role models in mathematics, but she found them in the camp’s instructors, Anna Helga Jónsdóttir, professor of statistics, and Bjarnheiður Kristinsdóttir, assistant professor in mathematics and mathematics education, who have been with her since the beginning. “Since then, it has always been a goal to involve as many women as possible in the organization of the camp. The camp’s organization and teaching are led by female mathematicians, and the support from the University of Iceland has been invaluable over the years.”

## Increased confidence and clearer ideas about the future

Nanna says that the camp participants are very happy with their experience, particularly noting an increase in self-confidence. “Based on the feedback surveys we conduct at the end of the camp, participants express a lot of satisfaction. They mention, among other things, increased confidence in the field, realizing they can achieve more than they initially thought, forming friendships, and gaining clearer ideas about their future goals. I really like that, because the goal, as in similar camps like ‘Stelpur rokka,’ is to build lasting relationships and to inspire the participants to become the rebels of mathematics.”

Proportion of senior female academics in 2023: **39,68%**

Proportion of women receiving a degree in 2023: **69,22%**

## MARK – Centre for Diversity and Gender Studies

MARK was founded in 2011 and has ever since held regular lectures and participated in various collaborative projects. MARK is a platform for research and education in the field of human rights and discrimination, equality, gender and diversity studies in a broad sense. MARK is operated at the School of Social Sciences at UI.



## All That Glitters is Not Gold: Gender, Equality and Sustainability in Iceland

The course is taught at undergraduate level at the Faculty of Political Science and emphasises Iceland’s reputation as an international frontrunner in gender equality and environmental issues. The course addresses the main topics of gender equality, queer issues, sustainability and environmentalism from a diversity and intersectional perspective, taking into account power relations in terms of gender, class, ethnicity and globalization. A special emphasis is placed on how equality and sustainability are related to Icelandic politics and society.



## Gender Equality in Schools

The course is taught at graduate level at the Faculty of Education and Pedagogy and focuses on gender studies and how key concepts – such as equality, gender, gender roles, gender identity, intersectionality, queer studies, stereotypes, gender-based violence, sex education, femininity, and masculinity – are useful to understand and organise schools. In the course, students learn to analyse learning environments, methods, and materials from a gender perspective. They also learn to analyse the choice of play in pre-schools, as well as in breaks and school sports.



## Status and Development of Equality at UI 2016–2021

In 2023, the fifth report on equality at UI was published, reviewing developments and the status of equality at UI from 2016 to 2021. The findings show that UI’s ambitious efforts have led to an action-based equality plan and increased awareness among students and staff. Proposals for further improvements were made, for example, emphasizing guaranteed access for all, gender ratio equalization, and integrated equality work across schools, faculties and work units within UI.



## 6 CLEAN WATER AND SANITATION



### BIOSPHERE

# Ensure availability and sustainable management of water and sanitation for all

#### RESEARCH

**81** Number of peer-reviewed articles from 2019–2023 with relation to SDG 6

**2600** Number of citations from 2019–2023

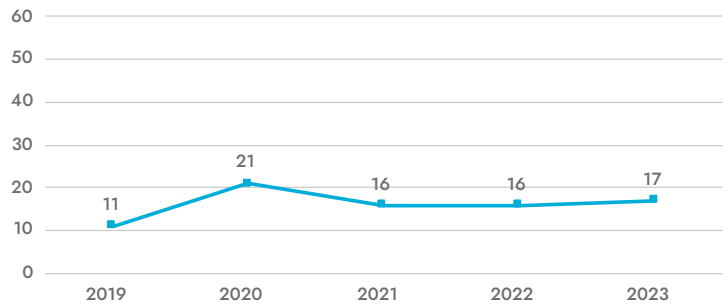
**2,18** Field-weighted citation impact from 2019–2023

#### THE Impact Ranking results

**401–600** out of **867** in the world

**75,1** Research score out of **100**

#### Number of peer-reviewed articles with relation to SDG 6



### Accel Water

The Faculty of Food Science and Nutrition participates in a four-year project called Accel Water alongside several other institutions from Iceland, Germany, Greece, Italy, and Spain. The project aim is to optimise fresh-water consumption in the food and beverage industry under a water-waste-energy nexus by introducing beyond state-of-the-art water reclaiming, reusing, and Artificial Intelligence-enabled monitoring and control technologies that will permit the use of reclaimed water in the manufacturing processes of food and beverages. The role of the Faculty of Food Science and Nutrition is to analyse the processing water streams with both microbiological and physicochemical analyses in order to assess the quality of ingredients in food processing that could, for example, be used in product development, especially in land and marine-based aquaculture.



### Water Resources Engineering Division

The Water Resources Engineering Division is located at the School of Engineering and Natural Science. The Division conducts numerous research in the fields of environmental engineering, hydrology, fire engineering, geology and power plant design. In the division, the staff of the Faculty of Environmental and Civil Engineering work on a variety of theoretical and practical projects in collaboration with companies in Iceland and with specialists from various universities abroad.







## Improvement of wastewater treatment facilities needed in Iceland

In Iceland, most collected sewage wastewater only undergoes preliminary physical treatment, which does not meet EU regulatory requirements. Bing Wu, Professor of Environmental Engineering, says that to meet the targets of SDG 6, Iceland must develop technically and economically feasible, environmentally friendly, and socially acceptable centralized and decentralized wastewater treatment processes.

## Numerous research projects related to SDG 6 being conducted at UI

Bing says that various research efforts are underway at UI regarding SDG 6. Her own research primarily focuses on membrane-based water and wastewater treatment, water reuse, and resource recovery. "We have developed lab-scale, energy-efficient membrane processes to improve wastewater treatment in Iceland. Wastewater is directly filtered by porous membranes without biological steps, which results in lower capital costs, a smaller footprint, easier maintenance, low sludge production, and superior permeate quality." She adds that the treated water can be used for nutrient recovery before being discharged into the environment, and the rejected organics can be collected for energy production, working toward a circular economy in wastewater treatment plants. "Research on system design, operational optimization, and techno-economic-environmental assessments is ongoing."

## Membrane systems for wastewater are an opportunity for the future

When asked about the opportunities in the research field, Bing Wu does not hesitate. "Future research should focus on scaling up membrane systems for adoption in Icelandic sewage wastewater treatment plants, mitigating emerging micropollutants through membrane systems, and using membrane-based processes for resource recovery from Icelandic industrial wastewater."

## Hydrology

The course is taught at the undergraduate level at the Faculty of Civil and Environmental Engineering. The objective of the course is to introduce students to the physical and chemical properties of water and the processes responsible for its occurrence, distribution and cycling, with emphasis on the terrestrial phase of the hydrologic cycle as well as the characteristics of the Icelandic water resource. Methods and models used in engineering hydrology and design are introduced and used to solve projects.



## Membrane Technology

The course is taught at the undergraduate and graduate levels at the Faculty of Civil and Environmental Engineering. Students get to know various practical uses of membrane technology applied in various industries such as utilities, including water and sewer, and in the environment for water and wastewater treatment. During the course, students learn about membrane physical, chemical, and mechanical properties, membrane system design and membrane operation units such as microfiltration, ultrafiltration and electro-dialysis.



## Water Quality

The course is taught at the graduate level at the Faculty of Civil and Environmental Engineering. Students explore the lifecycle of key pollutants found in surface water, groundwater and soils, their source, their fate in the environment, the human exposure pathways, and methods to restore water and soils.



## Free Drinking Water at UI

In Iceland, regular monitoring of the quality of drinking water is carried out by the local health authorities in accordance with the regulation on drinking water (est. 1995). At the UI campus, water is accessible in all buildings with water fountains and is also safe to drink straight from the taps. Because of UI's goal to minimise plastic and single-use items on campus, still water is not sold in plastic bottles on campus.



**7 AFFORDABLE AND CLEAN ENERGY**



**SOCIETY**

**Ensure access to affordable, reliable, sustainable and modern energy for all**



**RESEARCH**

**324** Number of peer-reviewed articles from 2019–2023 with relation to SDG 7

**5275** Number of citations from 2019–2023

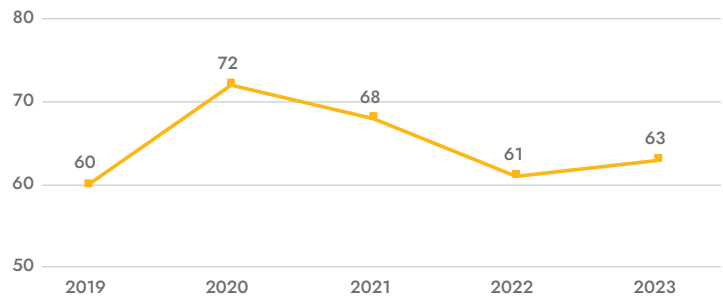
**1,22** Field-weighted citation impact from 2019–2023

**THE Impact Ranking results**

**601–800** out of **987** in the world

**61,7** Research score out of **100**

**Number of peer-reviewed articles with relation to SDG 7**



**Lithium-Mediated Electrochemical Ammonia Synthesis to Produce Ammonia**

Ammonia production is the largest carbon emitter of all chemical production consuming approximately 1–2% of the world’s energy supply. Lithium-mediated electrochemical ammonia synthesis (LiMEAS) presents a sustainable and the only proven process to produce ammonia at a high level of efficiency. However, despite achieving greater than 99% efficiency, challenges remain regarding the longevity of the process, primarily due to the degradation of electrolytes used in the system. Anna Bergljót Gunnarsdóttir, a postdoc at the Faculty of Industrial Engineering, Mechanical Engineering and Computer Science, is researching how to minimize this loss for this alternative to be feasible.



**Methods to Reduce the Amount of Carbon Dioxide in the Atmosphere**

Carbon dioxide (CO<sub>2</sub>) is the most common greenhouse gas and technologies are being developed that can sustainably produce fuel. Younes Abghoui, a Research Scholar at UI, and Egill Skúlason, Professor at the Faculty of Industrial Engineering, Mechanical Engineering and Computer Science, are, amongst others, researching technologies that can use renewable electricity to produce sustainable fuels as well as reduce CO<sub>2</sub> from the atmosphere. The focus is on metal carbonitrides, a material that has not been studied a lot, but is believed to have a great potential as chemical catalysts for this conversion of decarbonisation.





## SDG 7 on affordable and clean energy is a prerequisite for success in other SDGs

“Access to sustainable energy at an affordable price is a prerequisite for quality of life around the world,” says Brynhildur Davíðsdóttir, professor of Environment and Natural Resources. “Sustainable energy access is essential for economic and social progress, as well as for succeeding in the fight against climate change. That’s why meeting SDG 7 on sustainable energy is considered a necessary prerequisite for achieving success in the other 16 goals.” Brynhildur adds that in the Environmental and Resource Studies program at UI, there is a master’s level specialisation focused on the development of energy systems in the context of sustainability, and students in the program actively participate in the faculty’s research.

## We must not sacrifice more for less

Brynhildur emphasizes that how energy is obtained and used matters. “The sustainable development of energy systems requires that all dimensions of sustainability be considered when making decisions. Energy production should minimize environmental impact, ensure efficient use, and meet the basic needs of communities. We should never be sacrificing more for less.”

## Energy transition guided by sustainability

Brynhildur says that her research focuses on examining these issues in the context of Iceland’s energy transition. “We aim to take a holistic view of energy transition, rather than focusing on individual sectors as we’ve done so far, such as land transport. Instead, we are looking at what the energy transition means for the country and its people as a whole.” Brynhildur highlights the research projects STORM and H2AMN, which are funded by Nordic Energy Research, Rannís, and Orkustofnun, and focus on analysing the potential for energy transition in sea-related activities within the broader context of energy transition in other sectors. “Using a cross-disciplinary approach and scenario analyses, we assess how to achieve a sustainable energy transition. The results will hopefully guide the development of Iceland’s energy system in harmony with nature and society.”

## Energy and Resources of the Earth

The course is taught at the undergraduate and graduate levels at the Faculty of Earth Sciences. The course gives an overview of Earth’s energy resources, generation and use of fossil fuels, non-renewable and renewable energy sources. The course covers how resources are formed, are used, how long they will last and what effect the use has on the environment, the economy and society. Recycling of non-renewable resources is also discussed in addition to recent prosperity thinking based on the circular economy and wellbeing economy.



## Hydropower Plants

Iceland stands out internationally as almost all electricity is produced from renewable energy sources, with hydropower being one of the two most important energy sources in Iceland. Hydropower Plants is a course for both undergraduate and graduate students at the Faculty of Civil and Environmental Engineering that aims to provide insights into the technology and research involved in harnessing hydropower, with a special focus on Icelandic conditions. The course provides students with a foundation in the various aspects involved in the safe and well-considered design of such structures, with sustainability as a guiding principle.



## Sustainable Energy Options

The course is taught at the undergraduate and graduate levels at the Faculty of Life and Environmental Sciences. Students explore potential options in humanity’s search for sustainable energy and the world’s current energy consumption and fossil fuels are discussed. Students learn, among other things, about hydropower, geothermal energy, wave-, wind- and solar energy, and biomass energy. The physical principles behind each energy source are explained. Additionally, the environmental impacts of energy utilization are examined, as well as the policy and economics of different energy options.



## GEORG’s Fifteenth Anniversary

GEORG, a geothermal research cluster, celebrated its fifteenth anniversary this year, but UI has led the forum since its inception. With the mission of advancing geothermal energy research and sustainable use in Iceland and around the globe, GEORG is a non-profit organisation that has given UI faculty and students numerous opportunities. Members of GEORG include engineering firms, university and research institutes, energy companies, and engineering firms that all want to contribute towards reducing the use of fossil fuels as an energy source.



**8 DECENT WORK AND ECONOMIC GROWTH**



**ECONOMY**

**Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all**

**RESEARCH**

**188** Number of peer-reviewed articles from 2019–2023 with relation to SDG 8

**2805** Number of citations from 2019–2023

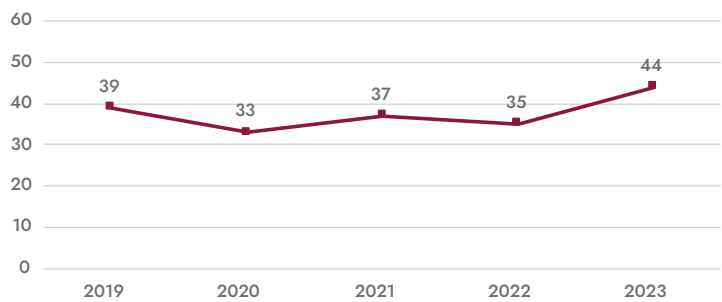
**1,71** Field-weighted citation impact from 2019–2023

**THE Impact Ranking results**

**401–600** out of **1149** in the world

**85,5** Research score out of **100**

**Number of peer-reviewed articles with relation to SDG 8**



**How to Close the Gender Gap in Economic Participation and Opportunity**

Ásta Dís Óladóttir, Professor at the Faculty of Business Administration, leads the research project together with researchers from UI and other partners. The aim of the research is the identification of tangible approaches towards closing the economic gender gap; the exploration of effects and interactions of equal pay standards; gender quota legislation and policies; gender balance in corporate leadership; and gender lens investing. A key outcome is the development and expansion of a transparent platform to gauge the impact of gender balance in corporate leadership on financial performance, sustainability and environmental indicators, applicable to companies worldwide.



**The Impact of Climate Change in East Iceland**

In an environmental historical study by Unnur Birna Karlsdóttir, Director at UI's Research Centre in East Iceland, the impact of climate change in East Iceland's society over the past 40 years is researched. The focus is on what sacrifices are acceptable to fight climate change. The project examines the oppositions of projects

related to renewable energy and environmental protection that have met in East Iceland, namely Kárahnjúkavirkjun, the proposed plan for a wind farm in the highlands of East Iceland and forestry used for carbon sequestration. The opposition to these projects is mainly due to their tendency to conflict with the protection of ecosystems and natural landscapes.



**Climate Footprint for Companies**

The course is taught at the graduate level at the Faculty of Life and Environmental Sciences. In the course, students develop skills to estimate corporate greenhouse gas emissions. Students learn to understand the main methods when estimating emissions, how external data is obtained and used, and which platforms are available for corporate disclosures. Furthermore, students learn the implications of scopes and how carbon offset programs work in relation to corporate emissions. The Greenhouse Gas Protocol is a foundation in this course, as the guidance serves as a key tool for multiple disclosure platforms.





## UI's Career Days enhance students' skills for participation in the labour market

Jónína Kárdal, career and guidance counsellor and project manager of UI's Careers Connect, oversees the Career Days program, an annual event held at the beginning of the spring semester. "The purpose is to provide students and other interested parties with information about career development during their studies and what they need to consider when preparing to enter the labour market. This is typically a five-day program focused on connecting education, working life, knowledge, and society." Jónína mentions that the main partners are the Financial and Employment Committee at UI, UI Science Parks, and Klak Icelandic Startups. "The origins of Career Days can be traced back to an initiative by UI's Student Counselling and Career Centre, which sought to better equip

students with the skills needed to enter the labour market from a career development perspective. The UI Science Parks have been generous in their support, and through their involvement, attention has been brought to the importance of innovation and entrepreneurship."

### University students will be better prepared to participate in a diverse and ever-changing professional landscape

The Career Days program has evolved significantly, both in terms of content and presentation. Jónína says that UI's Career Days have highlighted the efforts within the university to enhance students' skills in managing their studies and careers. "The benefit for students is that they will be better prepared to engage in a diverse and ever-changing professional landscape, as outlined in UI26. By participating, students can advance their career development, better navigate the dynamic labour market, and make a social impact. Society, in turn, benefits from this future human capital, ready to tackle the opportunities and challenges that lie ahead."

### UI helps students build a bridge between studies and practice

UI has a social responsibility, which includes preparing students for participation in the labour market and society, both in Iceland and abroad. Jónína highlights that UI helps students bridge the gap between academic studies and practical experience, showing them how their knowledge, skills, and abilities can be applied. "By offering education that addresses changes in the labour market, as well as challenges and opportunities in areas such as innovation and entrepreneurship, we are responding to the call of SDG 8 for decent work and economic growth," explains Jónína.

## Working Conditions and Wages at UI

### » Wage Policy

UI aims to provide employees with good wages and working conditions to be competitive in the domestic and international labour markets in hiring and retaining qualified staff. Wages are determined on the basis of objective and transparent criteria. The wage system guarantees consistency in the determination of wages and fair wage brackets for UI staff. The Wage Policy is consistent with [UI's Human Resource Policy](#). The University Council and the Rector are responsible for the Wage Policy.

### » Equal Pay Policy

UI has an Equal Pay Policy that aims to ensure all staff receive the same wages and the same terms of employment for the same work or work of equivalent value. The Equal Pay Policy is an integral part of the UI's Wage Policy.

### » Employment Practice Union

[Association of University Teachers \(Fh\)](#) is a trade union for all UI's employees and related institutions of UI. Fh makes wage contracts for its members that consists of wages tables, the right to sickness leave, vacation, the right for sickness leaves for children, sabbatical rights and right for continuing education. Fh is a member of the Association of Academics (BHM). Another related union is the Associations of Professors at State Universities. The association's primary role is to work on the wages and rights issues of professors and to protect their legal status.



## Labour Economics

The course is taught at the undergraduate level at the Faculty of Economics and provides an overview of the labour market. It covers the theory of supply and demand for labour and their determinants in both static and dynamic models. Models of human capital and education are derived. Students are given an overview of collective bargaining, labour unions and strikes as well as a short introduction to the theory of labour-managed firms.



## Financial and Career Committee

The Financial and Career Committee covers student employment issues as well as their relationship with the business community. The committee is responsible for all matters relating to student finance and employment. One of the committee's main purposes is to create a connection between students and the business community.



## 9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



### ECONOMY

**Build resilient infrastructure, promote inclusive and sustainable industrialisation and foster innovation**



### RESEARCH

**122** Number of peer-reviewed articles from 2019–2023 with relation to SDG 9

**2637** Number of citations from 2019–2023

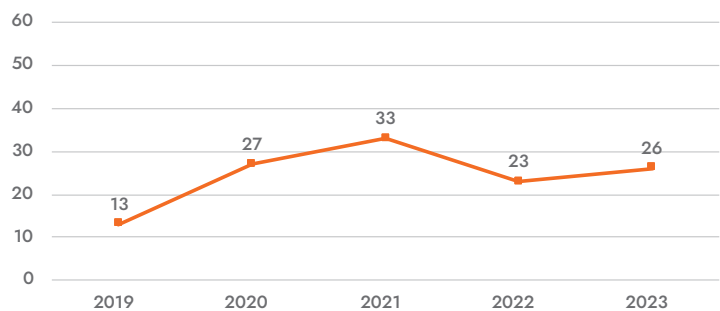
**1,93** Field-weighted citation impact from 2019–2023

### THE Impact Ranking results

**101–200** out of **1018** in the world

**59,6** Research score out of **100**

Number of peer-reviewed articles with relation to SDG 9



### Designing and Building Prosthetic Legs and Knees with Intent Control

Kristín Briem, a Professor at the Department of Physical Therapy, received a grant from the Össur and Ottobock Research Fund at UI. The grant was awarded to a project that Kristín is working on where the primary objective is to design, build, and test a prosthetic foot and knee system with myoelectric intent control with sensory feedback for individuals who have lost their leg above the knee. The users will be able to adapt the available mobility through the leg and foot to various tasks and situations.



### Oculus

Oculus was founded in 2003 in connection with research by Einar Stefánsson, Professor Emeritus at the Faculty of Medicine, and Þorsteinn Loftsson, Professor Emeritus at the Faculty of Pharmaceutical Sciences. The company is working towards developing eye drops containing nanoparticles that increase the absorption of the drug through the eyeball. The technology means that certain diseases can be treated with eye drops instead of intravitreal injections. The University of Iceland and Landspítali University Hospital own shares in the company. In 2023, Oculus became UI's first start-up to be listed on the Nasdaq Stock Market.



### Skuggsjá

Skuggsjá, a new laboratory for astrophysics, was opened in VR-III. The laboratory is partially funded by the so-called CMBBeam project supported by the European Research Council and will be used in the design and calibration of microwave telescopes of the future; telescopes intended to educate people more about the history of the universe. Skuggsjá also has equipment that opens new dimensions in teaching experimental physics, electrodynamics and mechanical engineering.



### Cooperation and Social Innovation in the Welfare Sector

The course is taught at the undergraduate level at the Faculty of Social Work. The aim of the course is to develop students' competencies to initiate and develop new solutions in the welfare sector. Emphasis is placed on how to cooperate and participate in groups. Students work with their own ideas for social innovation and work on a project that challenges collaboration both between and within groups. The SDGs are considered when working on the course assignments.





## Spark Social creates opportunities for unexpected connections and new ideas

Magnús Þór Torfason, Professor in the Faculty of Business Administration, says the experience of the Spark Social course has been extremely positive, particularly due to the opportunities it creates for collaboration between people from diverse backgrounds and perspectives. “The interdisciplinary approach has sparked unexpected connections and new ideas, where students have discovered how their expertise can be applied in areas they hadn’t previously considered.” He adds that the experience is valuable for students in projects beyond Spark Social, in both their studies and careers, especially in terms of working on complex social issues. “The course has also enhanced students’ understanding of societal challenges and how their fields of expertise can impact these issues.”

## Challenges requiring solutions that integrate knowledge from multiple disciplines

Magnús Þór believes that societal challenges like climate change and poverty require solutions rooted in knowledge from multiple disciplines. “By working in interdisciplinary groups, students learn to apply various perspectives and methods to define and solve problems. An interdisciplinary approach also helps them recognize how their own expertise can contribute to a broader context and interact with other fields.” In this way, Spark Social prepares students for real-world situations as societal projects often demand the collaboration of people from diverse backgrounds, Magnús Þór explains.

## Participating in international collaborations offers significant value for students

Magnús Þór specifically notes that international collaboration is a cornerstone of the course, giving students the opportunity to work with people from different cultures and learn from diverse approaches to problem-solving. “Societal challenges are often global, and by working in international groups, students gain a better understanding of how similar challenges manifest differently across countries. Furthermore, the international network formed during the course has proven valuable, as students establish meaningful relationships with peers from other parts of the world.” Through the Aurora partnership, Icelandic students gain access to the experience and knowledge of students from numerous prestigious European universities. “By working in multinational groups, students also learn to communicate across languages and cultural differences,” concludes Magnús Þór.

**Number of university spin-out companies: 21**

## Digital and Social Innovation

The graduate course, Digital and Social Innovation is taught at the Faculty of Philosophy, History and Archaeology. Diverse manifestations of innovation in culture and communication will be discussed, with a focus on digital technology. Emphasis will be placed on the activities and management of organisations that work in communication and the creative industries. The role of innovation and the creative economy, societal innovation, and how to sustain entrepreneurship in projects will be discussed.



## Innovation Hub for Education

The Innovation Hub for Education is a joint project of the Faculty of Education, the Department of Education and Youth at Reykjavík, businesses and the academic community. It supports innovation and entrepreneurship in education, both in formal and informal learning environments. The focus is on the implementation and evaluation of technology solutions in education and digital learning materials, as well as exploring how digital tools can support diverse work in the education sector with regard to inclusion.



## Free Facilities for Entrepreneurs in Sprotamýri

UI offers students and staff facilities free of charge at Sprotamýri – the Entrepreneurship Centre of UI in Gróska to develop their ideas. There are various support services in Gróska for entrepreneurs; also free of charge for students and staff. The facilities are open to all with ideas at all stages and all fields of study.



## Team Spark

Team Spark is UI’s racing team and is made up of students from the School of Engineering and Natural Sciences. Team Spark was established in the year 2010 by engineering students at UI and students in the team tackle a challenging task that involves building a racing car. From the beginning, the focus has been on developing an electric car. Every year, Team Spark competes in Formula Student, an international racing and engineering competition. The competitions take place on large racetracks and the competing cars have to meet strict criteria to be able to compete.



# 10 REDUCED INEQUALITIES



## ECONOMY

# Reduce inequality within and among countries



### RESEARCH

**209** Number of peer-reviewed articles from 2019–2023 with relation to SDG 10

**1703** Number of citations from 2019–2023

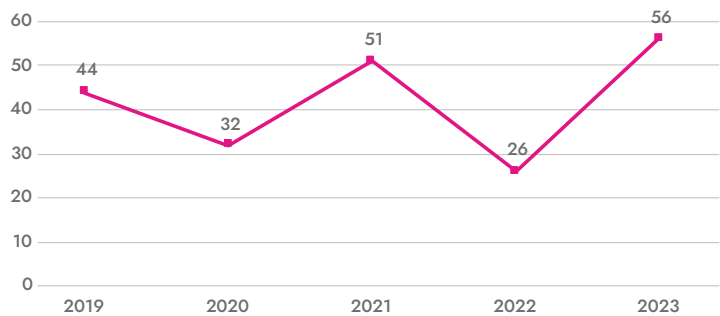
**1,48** Field-weighted citation impact from 2019–2023

### THE Impact Ranking results

**301–400** out of **1108** in the world

**81,3** Research score out of **100**

Number of peer-reviewed articles with relation to SDG 10



## Icelanders' Ideas About Foreign Accents

The number of immigrants in Iceland has increased in recent years, and with it, the number of people who speak Icelandic with a foreign accent has grown. In her doctoral thesis, Stefanie Bade studied the ideas of native Icelanders about foreign accents and examined factors that affect those ideas. The results of the study indicate, among other things, that the perception of certain factors such as listener effort, speaker effort, and ideas about the speaker's origin influence the evaluation of a foreign accent.



## Centre for Disability Studies

UI's Centre for Disability Studies is an interdisciplinary forum for research in the field of disability education, but the Centre was the first institution in this field of study in Iceland. The Centre for Disability Studies has conducted a number of research on issues and the status of disabled people in Iceland, either by itself or in collaboration with partners within UI or in the community.



## Sociology and Equality

The course is taught at undergraduate level at the Faculty of Health Promotion, Sports and Leisure Studies. It is designed to introduce students to the sociological perspective of the systematic study of human behaviour and social life with emphasis on equality, privilege and social inequality. The course addresses social equality, inequality and privilege in relation to class, gender, race, disability and globalization with a special focus on how it applies to the daily lives and future professions within the field of Social Education and Leisure Studies.



## Sprettur

Sprettur is a project of social innovation at the Division of Academic Affairs at UI. Sprettur supports and prepares students with an immigrant background to pursue university studies and become sustainable in their learning process through educational and social companionship and mentoring. The goal of Sprettur is to create equal opportunities in education towards integration.







## Many barriers between neurodivergent people and collaborative spaces

“The in-between or ‘third’ spaces where collaborative connections are most often made such as networking spaces at conferences, arts festivals and even workspaces are often difficult or impossible for neurodivergent people to navigate, and so too are project formats relying mainly on ‘face-to-face’ verbal interaction,” says Kathy D’Arcy, Postdoc at the Institute of research in literature and visual arts, and lead investigator in the AnFinn project. “As a

result, the contributions and innovations of neurodivergent people are often lost to creative and research discourses. As an autistic poet and researcher, these are issues which I am passionate about changing.”

## Challenges of researching while neurodivergent

AnFinn is a neurodivergent-led action research project exploring new kinds of online creative and collaborative spaces. “An international group of neurodivergent creative participants will use these spaces to play, create and experiment; to share our work through exhibition, publication and performance; and to develop frameworks for change in arts and academia.” Kathy says that she will also reflect on the challenges of “researching while neurodivergent” and what happens when neurodivergent researchers must use the very systems and spaces which they are seeking to challenge.

## Hopes to make sustainable real-world changes

“It is my hope that this project will spark conversations and increase awareness about the ways in which neurodivergent people have been excluded from collaborative spaces, what has been missed as a result, and how to make sustainable real-world changes to benefit all of society,” says Kathy D’Arcy in conclusion. Further information can be found at the project website [www.anfinn.hi.is](http://www.anfinn.hi.is).

## Icelandic Online for Children

The website Icelandic Online for Children was launched in April 2023, offering an interactive education with a game-based twist. The website is specifically designed to teach Icelandic as a second language to children aged 5-7 years, whose native language is not Icelandic, as well as Icelandic children who have grown up in a different language environment and are starting to read. The website has seven courses in different difficulty levels, and the teaching material takes into account the main curriculum of kindergarten and primary school.



## Equality Days

Equality Days have been held annually since 2009 and are a joint project of all the universities in Iceland. The idea is to help create a discussion about equality related issues and make them more visible within and outside UI. The topics encompass equality in a broad sense, and during the event, individuals working on equality issues within UI participate in scholarly discussions and a diversity of events.



## Divers-Cult

Divers-Cult is a project led by UI and is a collaboration between schools and researchers in Lithuania, Romania, Italy, Greece and Iceland. The project aims to enhance the diversity in elementary schools with new teaching methods, recommendations and tools from within education science. The objective of the project is to define a key intercultural competences framework for students, as well as to provide teachers with multicultural educational tools and guides that can be used for teaching.



## The Student Council’s Sports School

The cutest project of UI’s Student Council, the Sports School, operated in both spring and fall semesters of 2023. The Sports School is available for children between the ages of 2–5 years old and gives UI students the opportunity to bring their children to play in obstacle courses to cultivate their connection, and to promote their physical and social development. Classes take place in the UI gymnasium and after each class, participants are offered light refreshments.



# 11 SUSTAINABLE CITIES AND COMMUNITIES



## SOCIETY

**Make cities and human settlements inclusive, safe, resilient and sustainable**



### RESEARCH

**215** Number of peer-reviewed articles from 2019–2023 with relation to SDG 11

**3476** Number of citations from 2019–2023

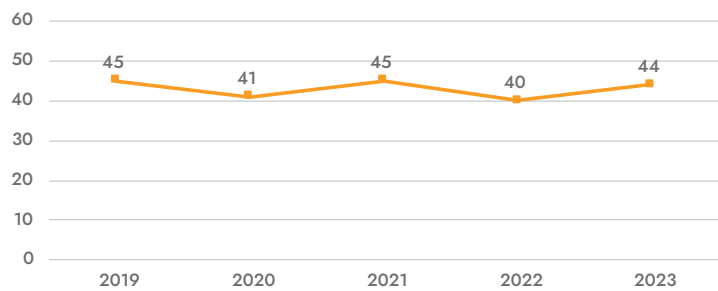
**1,55** Field-weighted citation impact from 2019–2023

### THE Impact Ranking results

**401–600** out of **1026** in the world

**77,2** Research score out of **100**

### Number of peer-reviewed articles with relation to SDG 11



### Emotional Connections with Places in the Centre of Reykjavík

In recent years, there have been rapid changes in the urban landscape in Reykjavík, such as old houses in the city centre being demolished. People's relationship to the physical environment is important when they feel that they belong in a certain place. One of the aims of a research project led by Ólafur Rastrick, Professor of Ethnology, is to examine how people attribute meaning and value to historical urban landscapes. Focus is directed to everyday places and the relationships that people have fostered with them by making their way around the city and staying in it.



### My Favourite Things

The research project My Favourite Things: Material Culture Archives, Cultural Heritage and Meaning worked to shed light on people's material possessions in the past and ponder how these objects form the cultural heritage of the Icelandic nation today.

The project was carried out by scholars of the humanities and social sciences at UI, cooperating with a group of international experts. The project was led by Sigurður Gylfi Magnússon, Professor at the Faculty of Philosophy, History and Archaeology, and received a Grant of Excellence from the Icelandic Research Fund.



### Cities and Urban Environment

Taught at undergraduate and graduate level at the Faculty of Life and Environmental Sciences, the course introduces theories and methods of urban geography and urban design, for the analysis of city life and the urban environment. The main subjects dealt with in urban geography and urban design for analysis and policymaking are covered, such as different social groups and residences, employment and transport, sense of place and quality of urban spaces, art and culture in urban spaces, nature in the city, and city branding.





Source unknown

## Vital to find ways to make cities and urbanisation processes sustainable

Jukka Heinonen, Professor at the Faculty of Civil and Environmental Engineering, says that globally, cities and the process of urbanisation

are increasingly becoming the dominant framework for organising human activities and development. "Therefore, it is of utmost importance to find ways to make them sustainable. Our most affluent societies, like Iceland, should be the ones demonstrating how this can be done. The most affluent bear the highest responsibility, meaning that if we cannot make it happen in Iceland, we cannot expect it to happen anywhere. The globe is also on the verge of ecological collapse, so the time is now or never."

### Research that focuses on the global climate impact

When it comes to his research, Jukka says it primarily focuses on the climate sustainability of human settlements. "It examines the global climate impact of a particular settlement

or society, including the so-called outsourced emissions it generates through the materials and energy it requires beyond its borders. While the focus is on climate sustainability, it cannot be achieved in isolation from the other main pillars of sustainability." He also emphasises the importance of considering the global consequences of local actions – particularly in globally affluent locations like Iceland.

### We can't keep living this way

"We are far from a sustainable state, and even farther from understanding what that state could be," says Jukka in conclusion. "The basic premise of sustainability is that everyone should be able to live in the same way, without it coming at the cost of future generations—otherwise, it is not sustainable. If the entire world were to start living as we do in Iceland, it would lead to an ecological catastrophe, one that could not be sustained for long, if at all. Therefore, the current situation is far from sustainable, and the current direction is not very promising either. More research is indeed needed, but so is engagement in discussions beyond academia."

## The Icelandic Immigrant Literacy Database

A database with manuscripts and letters from Icelanders who emigrated to North America was opened by the Árni Magnússon Institute for Icelandic Studies. Images of Icelandic manuscripts, books, letters and other documents can be accessed on the website and are for the first time available to the public. The project was led by Katelin Marit Parsons, Adjunct in Icelandic at UI.



## List-míla Tvö

The UI Art Museum's art exhibition, List-míla tvö, was officially opened in September 2023. The exhibition features 70 works of art by 46 artists, and contemporary Icelandic art is prominent. The exhibition is located in five buildings of UI and the connecting tunnels between buildings. The exhibition aims to allow students, employees and the public to get to know the UI art collection, which has around 1600 works, contributing to SDG 11.4.



## FIRST LEGO League Competition

Around 100 elementary school students aged 10–16 years from all over Iceland participated in the annual technology and design competition FIRST LEGO League. The competition aims to increase children's interest in technology and science and to enhance skills and solution-oriented thinking. The theme of the competition in 2023 was related to the interaction of science and technology with

arts and culture. The competing teams explored the world of art, how art is created and communicated and used methods of research, innovation and imagination to find new ways to create and communicate art around the world.



## University Concerts

For half a century, it has been a tradition at UI to host University Concerts. The concerts are held monthly, during the fall and spring semesters, and they all take place in the school's buildings. The concerts are open to everyone and are free of charge for all guests. Among the artists who performed at the concerts in 2023 are Mugison, Una Torfa and the choir Kliður.



## Gaia's Green Days

Gaia, the student organisation of the Environment and Natural Resources postgraduate programme, hosts annual Green Days in UI to inform students, staff and the public about various environmental issues. The theme of the Green Days in 2023 was sustainable transport. Various workshops, lectures and presentations were offered with insights and solutions on sustainable transport, where the focus was for example on the City Line, air pollution in Reykjavík and transport in the polar areas.



**12 RESPONSIBLE CONSUMPTION AND PRODUCTION**



**ECONOMY**

**Ensure sustainable consumption and production patterns**

**RESEARCH**

**181** Number of peer-reviewed articles from 2019–2023 with relation to SDG 12

**3661** Number of citations from 2019–2023

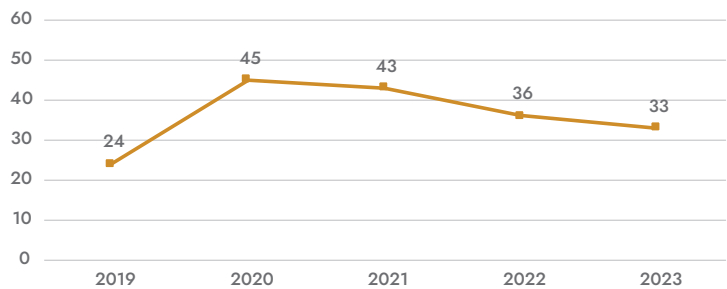
**1,82** Field-weighted citation impact from 2019–2023

**THE Impact Ranking results**

**101–200** out of **825** in the world

**68,1** Research score out of **100**

**Number of peer-reviewed articles with relation to SDG 12**



**3-D Printed Food**

New methods are being developed to 3-D print seafood byproducts from demersal fish production, which has so far not been used to a sufficient extent. The project provides knowledge on better utilisation of byproducts from whitefish processing and promotes innovation and new ways to use ocean resources sustainably. The research is led by María Guðjónsdóttir, Professor of food science, and is a collaboration between Matís and UNESCO-GRÓ Fisheries Training Programme.



**Logistics and Environmental Engineering**

The course is taught at both undergraduate and graduate levels in the Faculty of Industrial Engineering, Mechanical Engineering, and Computer Science. It focuses on the principles of logistics and supply management and their environmental impact. The course is divided into three main topics: purchasing operations for goods and services, inventory management, and transportation and distribution management. Finally, the environmental impacts of logistics are examined, integrating all three topics to provide a comprehensive view of sustainability.



**Ecological Innovation in Food Science**

The course is offered at both undergraduate and graduate levels at the Faculty of Food Science and Nutrition, in collaboration with the Confederation of Icelandic Industries, Matís and the Icelandic Innovation Centre. The course focuses on group work, guidance, and hands-on training, where students develop new environmentally friendly food and produce samples. In addition, students design the packaging and prepare a business and marketing plan.



**The Green Steps Project**

UI is implementing a Green Steps project, but all government institutions and offices are required to implement the Green Steps into their operations according to the Icelandic Government's Climate Policy. The project aims to promote eco-friendly operations in a systemic way and makes UI's work towards sustainability and environmental issues more targeted.





## Indoor cultivation of macroalgae in drillhole sea provides opportunities in many areas

The project, *Indoor Cultivation of Macroalgae in Drillhole Sea*, is a collaboration between UI, Matís, and the Hyndla start-up, funded by the Food Fund. María Guðjónsdóttir, a Professor at the Faculty of Food Science and Nutrition, leads the project on behalf of UI. “The aim of the project is to examine how the cultivation conditions for the novel species of red algae (i. *Schizymenia valentinae*), sea lettuce (i. *Ulva lactuca*) and dulce (i. *Palmaria palmata*) in tanks at the Marine and freshwater research station at Staður on the Reykjanes peninsula can be optimised. The drillhole sea near the Reykjanes Peninsula is nutritious and suitable for algae cultivation, but by cultivating indoors, you can control the conditions and thus obtain a safe harvest throughout the year, ensure stable and safer production, and increase the quality of products that are more suitable for human consumption.” María adds that efforts will be made to adjust the intensity of light and wavelengths for each species, examine the effect of day length, and more. The project also involves significant product development work to determine how products are most likely to succeed in the Icelandic market, as well as in other markets.

### Unforeseen circumstances present new tests

María says the project has been a fun experience in dealing with

unexpected events. However, due to the location of the research station at Staður on the Reykjanes Peninsula, near the site of the last volcanic eruption, access to the station has been difficult. “However, initial results show that both the novel species of red algae and sea lettuce grow well under the tested conditions. We also observe that the novel red algae seem particularly suitable for acidification, like sauerkraut, as the acidification enhances the desirable properties of the red algae, such as colour, taste, and texture.”

### Algae can be utilised even more effectively than we do now

With the increasing number of people on the planet, we need to explore new ingredients that can satisfy this demand and promote healthy eating habits. Various types of algae are particularly promising, as they are rich in nutrients and minerals but are significantly underutilised, especially for human consumption. The novel species of red algae, for example, is considered a so-called novel food as it grows almost exclusively near Iceland and is generally not used for human consumption in the Western world,” María says. She specifically mentions that by cultivating indoors, production can be controlled, contributing to improved quality and increased access to products, even year-round, while reducing potential negative effects from the environment, such as the risk of excessive concentrations of heavy metals, toxins, or microplastics in the products. “Cultivation indoors requires some use of electricity and water, but responsible use of these resources is considered when evaluating the production processes.”

### Essential to establish relationships and partnerships for the responsible use of resources

María believes that it is extremely important that UI participates in innovative projects like this where underutilised ingredients are studied, as Iceland is rich in natural that must be used responsibly and sustainably. “Such utilisation can only be achieved through detailed research on the value and food systems involved in each case. The research project further contributes to the university’s fruitful collaboration with industry and start-ups, which, due to the proximity and small size of the country, is in a unique position here in Iceland. We should use these relationships and partnerships to ensure the responsible use of the country’s resources,” she says in conclusion.

## Sustainability in Daily Operations

UI has made various changes in its operations to systematically reduce negative environmental impacts and increase sustainability in daily operations.

### » Digital Examination

Implementation of digital examination at UI began in 2019. Digital examination significantly reduces paper usage.

### » Computers

The Division of Information Technology at UI is responsible for providing computers to university staff. UI is required to buy computers under the framework agreement for government agencies which includes requirements for environmental certification. The division also emphasises extending the lifespan of all old computers to prevent them from ending up in landfills. Examples of initiatives include offering staff the option to purchase their old laptops for a small fee and sending usable old laptops to the Red Cross.

### » Environmentally Certified Cleaning Services

UI requires that cleaning services provided at UI are environmentally certified. This ensures that the service provider actively works on reducing their negative environmental impacts by offering environmentally certified products and methods in their cleaning services.



## Sustainability in Laboratories

Laboratory work is extremely energy intensive and results in massive amounts of plastic waste. However, there are ways to improve this and reduce the environmental impact of laboratory-based research. In 2023, the Biomedical Centre at UI took the first steps towards addressing this issue. Seminars were hosted where staff and students were informed about this issue and suggestions for improvements were introduced. By the end of the year 2023, the working group BMC Green Labs was established which will be working on ways to make research in biomedical sciences more environmentally friendly.



## Matspor in Háma

Matspor has been set up in Háma at Háskólatorg, initiated and followed through by the Student Council. Matspor is a tool that calculates the carbon footprint of hot meals offered daily in Háma, and puts it in context with how far a passenger car would have to be driven to release the same amount of greenhouse gases. Matspor also enables the customers of Háma to compare the carbon footprint of the dishes available at Háma at any given time.





BIOSPHERE

**Take urgent action  
to combat climate change  
and its impact**

**RESEARCH**

**256** Number of peer-reviewed articles from 2019–2023 with relation to SDG 13

**5008** Number of citations from 2019–2023

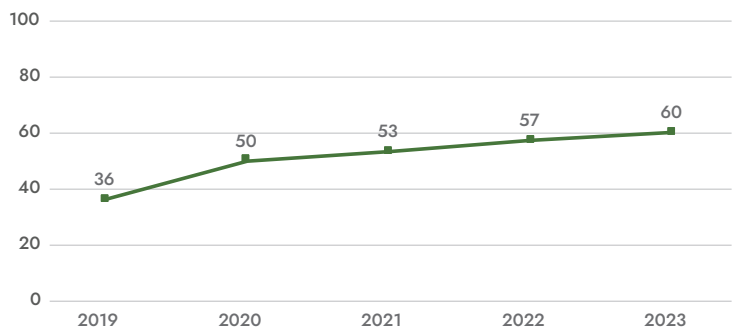
**1,62** Field-weighted citation impact from 2019–2023

**THE Impact Ranking results**

**101–200** out of **924** in the world

**75,0** Research score out of **100**

**Number of peer-reviewed articles with relation to SDG 13**



**Melting of Glaciers**

Among the effects of the decline of glaciers are a rise in sea levels, reduction of water around the world and increased risk of floods. In a study conducted by Guðfinna Aðalgeirsdóttir, Professor of glaciology, and other researchers, the shrinking of endemic glaciers was predicted. Results indicate that about two-thirds of them will disappear by 2100 based on the current outlook, and the average temperature in the world will then be 2,7 degrees higher than it was before the industrial revolution.



**1,5 Degree Compatible Living in the Nordic Conditions: Attitudes, Lifestyles and Carbon Footprints**

The Nordic countries are perceived as green due to their low-carbon energy systems. However, their global climate impacts are among the highest when the emissions are allocated based on consumption. In this project, led by Jukka Heinonen, Professor at the Faculty of Civil and Environmental Engineering, in collaboration with Aalto University and the University of Helsinki, the carbon footprints (CFs) of Nordic residents are calculated using a consumption-based method, which allocates all the global production chain emissions of all the goods and services that the individual consumes. The assessment employs the input-output approach, and the

CFs are connected to the remaining global carbon budget for halting global warming to 1,5 degrees. It studies how pro-environmental attitudes are reflected in the CFs; ultimately if 1,5 degree compatible living is possible in the affluent Nordic countries, and how to stay on the 1,5 degree compatible mitigation pathway towards zero carbon living.



**Carbon Footprint of Food Produced in Iceland**

The project aims to provide reliable and clear information to consumers and other stakeholders about the environmental impact of food that is produced in Iceland. In addition, efforts are being made to develop a methodology that is in line with international standards and requirements, which leads to the comparability of carbon calculations of food produced in Iceland to such calculations in other countries. The project is a collaboration between Matís and the Faculty of Food Science and Nutrition.



**Ecological Footprint Learning Lab for Students**

Brynhildur Davíðsdóttir, Professor of Environment and Natural Resources, leads a project on the ecological footprint for UI, but the project is a cooperation between UI and York University. The aim is



## Communicating knowledge about climate change to the public has never been more urgent

Þorvarður Árnason, Director of the Hornafjörður Research Centre, says that global climate change is, in many ways, a more challenging issue than the environmental problems we have dealt with in the past. “These issues are much larger in scale, both in time and space, and they present a complexity we have not encountered before.” After all, it involves the Earth, all its life, and all of humanity. It has never been more urgent to communicate knowledge and information to the public, but that communication is by no means a simple matter.”

## Develop new ways of communication

The Hornafjörður Research Centre has sought to make an impact by developing new ways of communicating scientific knowledge. Science is the basis of our work - it gives us grounding - but the challenge lies in effectively communicating this scientific knowledge to diverse groups of recipients,” says Þorvarður. “In this case, science and art are two sides of the same coin; they are inseparable for effectively conveying sound knowledge in an honest yet impactful way.” This is also related to psychological and social science research on the attitudes and perceptions of key target groups, particularly young people. Thus, communication requires a very interdisciplinary and coordinated approach to working

## Numerous important and exciting projects outside the capital area

When asked about the importance of research centres in rural areas, Þorvarður says that UI is and has always been a national institution, although in recent times it has also evolved into a research university that seeks international recognition. “This dual emphasis resonates in the work of the research centres. They strive to connect with as many areas of the local community as possible while forming a bridge to the academic community both domestically and internationally, thus creating opportunities for an interactive flow of knowledge between them. There are a vast number of important and exciting projects outside the capital area, and we must take care of them alongside other projects that the academic community undertakes.”

to address urgent challenges in the world by teaching and improving the measurements of the ecological footprint and biocapacity. One part of the project is a learning lab that is intended for both graduate students and postdoctoral fellows. Students take, among other things, a course that deals with the ecological footprint and its use, as well as a course that focuses on the analysis of ecological footprints.



## Environmental Humanities

The Environmental Humanities course is taught at graduate level at the Faculty of Icelandic and Comparative Cultural Studies. In this course, the connection of literature with the ocean, natural disasters, climate, parts of the land, aesthetic sense and the future of life on planet Earth is studied. The course aims to answer questions regarding the connection between literature and nature or the environment. This connection is what concerns ecocriticism, which is introduced in the course, along with other research fields within environmental humanities.



## Blueness

An exhibition titled Blueness was held by Þorvarður Árnason, Director of the UI Hornafjörður Research Centre, at the Svavar Guðnason Art Museum. Glaciers were the main subject of the

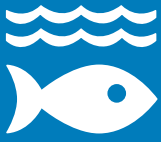
exhibition, which could be described as an animation that unfolded and expanded into three-dimensional space. Climate issues have been a growing part of Þorvarður’s work in recent years, and the exhibition reflected how the blue colour of the glaciers is related to nature, communicated the importance of climate issues and highlighted the role of museums and exhibitions in the fight against catastrophic warming.



## Survey About Sustainable Transportation Among Staff and Students

In autumn 2023, the Social Science Research Institute conducted an online survey among UI staff and students to map their transport habits. The goal of the survey was to, among other things, analyse the importance of specific measures to promote the use of sustainable transportation and to identify obstacles to increase sustainable transportation to and from school. The main results were that the respondents most often came alone in a car all year round. It was more common for students to come alone in a car than for staff. Staff were more likely than students to walk or cycle to campus, but students were more likely than staff to come by bus. Conducting a transport survey is part of UI’s environmental policy.





BIOSPHERE

# Conserve and sustainably use the oceans, seas and marine resources for sustainable development



RESEARCH

**159** Number of peer-reviewed articles from 2019–2023 with relation to SDG 14

**2080** Number of citations from 2019–2023

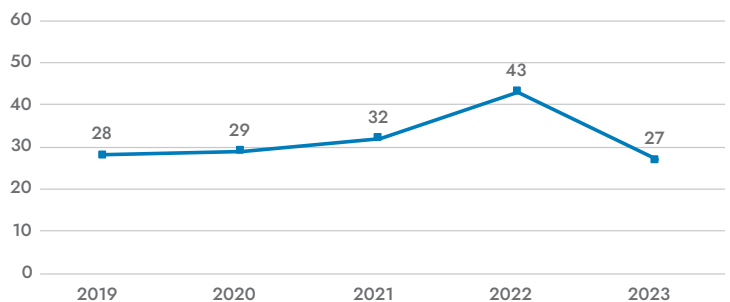
**1,19** Field-weighted citation impact from 2019–2023

THE Impact Ranking results

**201–300** out of **628** in the world

**69,7** Research score out of **100**

Number of peer-reviewed articles with relation to SDG 14



## Genetic Structure and Diversity of Brown Trout Populations

In research on the population structure and diversity of brown trout stocks in Lake Þingvallavatn, the Hengill area, and surrounding areas genetic materials from 300 fish were analysed. Results showed that the genetic relationship between the stocks in the area greatly reflects the connection of waterways and the presence of waterfalls that the fish cannot bypass. Marcos Lagunas, PhD Student, Arnar Pálsson, Professor of bioinformatics, Zophonías Oddur Jónsson, Professor of molecular genetics, and Sigurður Sveinn Snorrason, Professor Emeritus, all participated in the research.



## Underwater Robotics Sensor Networks

New opportunities in freshwater and underwater communications have increased in recent years due to developments in telecommunications, networks and smart devices. The technology enables networks of sensors to monitor wild fish stocks and ocean conditions. However, there are still some obstacles, underwater sensors require long-term powering and electromagnetic signals underwater attenuate, making it difficult to use them for radio communica-

tions. Kristinn Andersen, Professor and Director of the Division of Academic Affairs at UI and Ian F. Akyildiz, Visiting Professor within the Faculty of Electrical and Computer Engineering, received a Grant of Excellence from RANNÍS to find solutions to this problem.



## Species Identification of Freshwater Fish in Rivers Using Artificial Intelligence

Hafsteinn Einarsson, Associate Professor at the Faculty of Industrial Engineering, Mechanical Engineering and Computer Science, along with his students and specialists at the Marine and Freshwater Research Institute, has been researching whether automatic methods with artificial intelligence can be used to identify the species of freshwater fish identified in fish counters. Having AI categorise data from fish counters that ichthyologists have done so far will both result in time and cost savings and in addition, counting can become more accurate. The research could also be used as a countermeasure in the fight against the unwanted migration of farmed fish into rivers.







## Promoting ocean literacy and sustainability within school communities

Jóna Guðrún Jónsdóttir, Adjunct, and Rannveig Björk Þorkellsdóttir, Professor, both at the School of Education, lead the SEATALES project on behalf of UI. The project, which revolves around promoting ocean literacy and sustainability within school communities, is funded by the Erasmus+ programme. Six participants from four countries are involved in the project: Iceland, Romania, Greece, and Portugal.

### Improving teachers' knowledge of ocean-related subjects

"The project aims to design and develop learning materials called SEATALES while also training teachers to enhance

their knowledge of ocean-related subjects. This, in turn, enables them to diversify and improve their teaching methods, for example, through drama, role-playing, and promoting education in ocean literacy," Jóna Guðrún and Rannveig Björk explain. In addition to creating and developing these materials, podcasts and videos on ocean literacy will be produced for both students and teachers.

### The project aligns with the SDGs and UI's vision for the future

Jóna Guðrún and Rannveig Björk emphasise the importance of addressing global warming. "The oceans cover over 70% of the Earth's surface and play a crucial role in regulating the planet's climate and supporting biodiversity. We cannot ignore the fact that human activities, such as pollution and overexploitation, have a significant impact on the ocean." They note that the project is therefore highly important and aligns well with the UN's Sustainable Development Goals and UI's vision for the future.

## Research Methods for Fish, Marine and Freshwater Biology

This graduate course taught at the Faculty of Life and Environmental Sciences introduces current methods of studying aquatic organisms and ecosystems, with case studies drawn from active research projects. In the course, students are introduced to various topics related to aquatic ecosystems and learn about the existing theoretical background, methodologies, their strengths and weaknesses, and examples of analyses and results.



## Studying Marine Mammals in the Wild

The course is held in the summer at Húsavík and is taught at the undergraduate and graduate levels at the Faculty of Life and Environmental Sciences. Teaching both takes the form of lectures and fieldwork on board the boats of whale-watching companies. Students learn about the diverse assemblage of whales off Húsavík and the theory and practice behind different cetacean research methodologies, which the students then get to experience firsthand. The methods that students learn about are photo-identification, tracking cetaceans at sea and ship-based survey techniques.



## The Biology of the Mesopelagic Zone

The biology of the mesopelagic zone is a weeklong course taught at the undergraduate and graduate level at the Faculty of Life and Environmental Sciences. Students will develop valuable knowledge of one of the most understudied ecosystems in the world's oceans which is the habitat of the largest fish biomass in the ocean. The course is held in partnership with experts from the SUMMER project, the Marine and Freshwater Research Institute and the University of Iceland.



## Arctic Sense

Arctic Sense: Using Virtual Reality in Marine Education is a project funded by Nordplus, headed by the University of Iceland Research Centre in Húsavík in collaboration with partners in Iceland, Denmark and Norway. In the project, immersive 360 content and linear footage were collected to create a virtual reality educational program for schools and museums across the Nordics. Virtual reality was then used to give students an insight into the lives of whales and the pollution that threatens their existence out at sea.



# 15 LIFE ON LAND



## BIOSPHERE

Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss



### RESEARCH

**99** Number of peer-reviewed articles from 2019–2023 with relation to SDG 15

**1173** Number of citations from 2019–2023

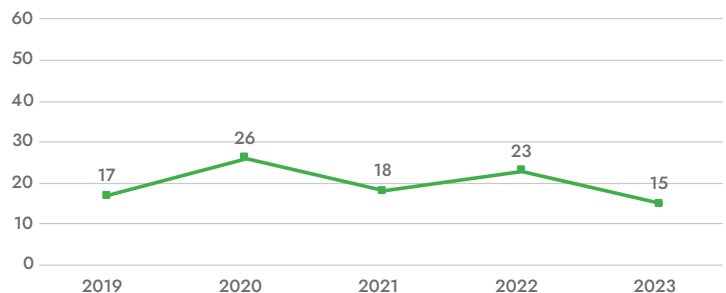
**1,32** Field-weighted citation impact from 2019–2023

### THE Impact Ranking results

**401–600** out of **741** in the world

**68,7** Research score out of **100**

Number of peer-reviewed articles with relation to SDG 15



### The Effect of the Mink on the Common Eider

Jón Einar Jónsson, Scientist and Director of the UI Research Centre in Snæfellsnes, studied ecosystem changes on islands in Breiðafjörður Bay with his colleagues, focusing on the survival of the Icelandic common eider. The research is based on data that goes back more than a century. Results indicate that the advent of the mink had a greater effect on the decline of the eider than climate change and that the eider will not be able to defend itself against the mink, which puts pressure on eider populations.



### Mapping of Ceratopogonidae and Fruit Flies

Research on ceratopogonidae and fruit flies aims to investigate their distribution in Iceland. Arnar Pálsson, Professor in Bioinformatics, leads the research and together with his colleagues has studied the distribution and analysed the genetic material of these flies, where the focus is for example on mapping the distribution of these species in the capital area and their progress over the summer. The

research is partially funded by the Student Innovation Fund, which enabled three undergraduate students in biology to participate in the project.



### The UI Research Centre in Þingeyjarsveit

The research centre was established in 2023 and is operated in close collaboration with Hulda Centre for Nature Humanities. Together, the centres publish the series Huldurit, where the results of research in the field of environmental humanities are published. Among the goals of the series is to strengthen the position of the humanities in the field of natural research and actions regarding environmental issues. The first academic paper in the series was published in 2023 and was entitled Disasters in Literature and Art, which discusses how environmental threats appear in contemporary Icelandic literature and art.





## The role of the highlands in ecological restoration efforts

The PHOENIX project focuses on promoting citizen participation in the European Green Deal's ecological transition, allowing citizens to actively engage in policymaking

related to environmental governance, says Benjamin Hennig, Professor at the Faculty of Life and Environmental Sciences, who leads the project on behalf of UI alongside Jón Ólafsson, Professor at the Faculty of Icelandic and Comparative Cultural Studies. "Through participatory and deliberative practices, PHOENIX aims to involve communities in shaping sustainable policies tailored to different regions across Europe. The Icelandic pilot study within PHOENIX explores issues related to the role of the highlands in ecological restoration efforts."

### An innovative online tool that uses gamification to engage the public

For the Icelandic pilot, Benjamin says they successfully completed local case studies focusing on sustainable land

use in the highlands. "A key outcome was the development of the Land Use Game, an innovative online tool that uses gamification to engage the public in envisioning the future utilization of highland areas (i. þjóðlendur). This interactive platform allows citizens to contribute their ideas and perspectives on ecological restoration and other land uses."

### Inclusion of diverse voices in shaping sustainable policies

Benjamin states that there is a clear connection to SDG 15. "This collaborative model directly supports SDG 15 by addressing restoration efforts and the sustainable management of ecosystems. Our participatory framework tests approaches that ensure local communities and stakeholders not only benefit from the project but also actively contribute to shaping long-term, sustainable solutions." The PHOENIX project as a whole benefits society by promoting greater citizen engagement in environmental governance, ensuring that diverse voices are included in shaping sustainable policies, says Benjamin. "Through participatory decision-making, it strengthens democratic processes. The project's localised approach creates more effective, context-specific solutions to environmental challenges."

## Mói – Land Use and Biodiversity

UI's Research Centre in South Iceland maintains the website moi.hi.is which provides information on the impact of land use on moorland bird populations and offers recommendations and measures for moorland bird conservation. One of the biggest challenges we face today is balancing the protection of biological diversity with increased land use. Moorland birds are a particularly suitable indicator of biodiversity, as they are both common and require diverse habitats, in addition to being sensitive to human activities. A significant portion of the world populations of several moorland bird species nest in Iceland, and Icelanders have committed, through laws and biodiversity agreements, to protect such birds. One of the goals of the website is therefore to compile information on the conservation and biology of moorland birds and how this information can be used to promote nature conservation and the protection of biodiversity.



## Art, Nature and Society

The course Art, Nature and Society is taught at the undergraduate level at the Faculty of Subject Teacher Education. The course introduces the historical and social context of nature observation and social criticism, with an emphasis on the links between critical pedagogy and contemporary art practices. The focus is on contemporary artists who engage with nature and social interpretations. In the course, a special emphasis is placed on sustainable practices such as the reuse of materials, environmental conservation, and citizenship education.



## Environmental Issues

Environmental Issues is a course for undergraduate and graduate students at the Faculty of Life and Environmental Sciences and provides students with a broad knowledge of environmental issues. Students learn about concepts such as sustainable development and biodiversity. Emphasis is placed on global climate change, the application of ecological knowledge to environmental problems, as well as ethics and the history of environmental conservation are discussed.



## Environmental Humanities

The course is taught at the undergraduate and graduate level at the Faculty of Icelandic and Comparative Cultural Studies. The course focuses on the relationship between literature and nature or the environment. Among other things, the connection of literature with the ocean, natural disasters, climate, parts of the land, aesthetic sense and the future of life on planet Earth are discussed. In the course, works from various periods of the history of Icelandic literature are read and analysed in view of critical theories within environmental humanities.



**16** PEACE, JUSTICE AND STRONG INSTITUTIONS



**SOCIETY**

**Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels**

**RESEARCH**

**151** Number of peer-reviewed articles from 2019–2023 with relation to SDG 16

**1561** Number of citations from 2019–2023

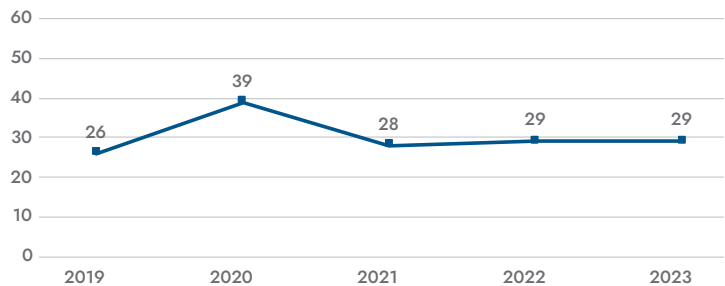
**1,32** Field-weighted citation impact from 2019–2023

**THE Impact Ranking results**

**201–300** out of **1086** in the world

**78,8** Research score out of **100**

**Number of peer-reviewed articles with relation to SDG 16**



**Becoming at Home in a Globalised World: Citizenship and Inclusion in Relation to Cultural Diversity within the Context of Icelandic Education**

The main objective of Eva Harðardóttir’s doctoral thesis was to understand how citizenship and inclusion are presented and perceived in relation to cultural diversity within the context of Icelandic education. The doctoral project points out the importance of approaching citizenship and inclusion in a critical and decentred manner. That involves thinking holistically about the role of education in a globalised world where cultural diversity is taken into account.



**Emotional Political Discourse in Online Media**

Emotions affect people’s ability to assess situations, perceive information and make decisions, whereas political decisions are no exception. Luke Field, a postdoc at the Faculty of Political Science at UI, researches the role of emotions in political attitudes and behaviour. Data from Iceland, Great Britain and Ireland are used to examine the use of emotional rhetoric in election messages on the internet and to examine how emotions in politicians’ messages can influence the choice of the voter who receives the message.





Source unknown

## Sports and politics truly do mix

Vitaly Kazakov, RANNÍS Postdoctoral Fellow at UI, says that his research project, “Sports Mega-Events and Their Political Memory,” investigates the public and media memory of recent international football tournaments. “I try to understand the lasting effects of popular sporting events, like the World Cups and European Championships, as well as their overlap with political issues and crises. I interview fans and journalists about their memory of recent tournaments, as well as study event-time and post-event media coverage. I hope this approach helps us better interpret the way sporting events both inform and are informed by the public’s understanding of wider political and social issues.”

## Awareness of the political use of sport

Vitaly has found that most fans, journalists, and sports professionals are keenly aware of the dynamics associated with the political use of sports; however, there are complex feelings about what should be done regarding “sportswashing” or other misuses of sport for political goals. “I am looking forward to extending my analysis to the media coverage in the coming months and conducting interviews in other national settings.”

## Sports programmes as tools for development and conflict resolution

“Very few people agree with the common but misleading idea that ‘sport and politics do not mix.’ In practice, most of my respondents are strong believers that sports are inherently political. This interrelationship is manifested in a wide variety of ways, from international sports investments by foreign governments and companies in sports clubs and industries to expressions of contemporary societal debates, such as those around race, gender, and sexuality on the sporting field.” Vitaly concludes by stating that there are strong links between sports and movements for peace and justice. “Sports diplomacy is one such area where sports programmes are used to advance development and conflict resolution in various parts of the world. Sports build bridges in the international setting, connecting everyone from heads of state to regular people and youth.”

## Criminology

Criminology is a master’s programme that started in fall 2023 in the Faculty of Sociology, Anthropology and Folkloristics. Among other things, the programme aims for students to broaden and deepen their knowledge of criminology. The focus is on crime and various types of deviance, legal- and law enforcement system, law and justice, and Iceland’s overall position compared to other nations.



## The Icelandic Web of Science

This year, an agreement on the cooperation between UI and the UI Lottery was signed where the support of the Icelandic Web of Science was the guiding light. Since the beginning of the Icelandic Web of Science, the support of the UI Lottery has been important and has thus had a great impact on science communication in Iceland. A great number of people visit the website each week, or the equivalent of 13% of all Icelanders. The web fits well within UI’s strategy (UI26), where the emphasis is on various ways of communication.



## University Governance

### » UI Finances

UI publishes the University financial data each year, accessible to all on UI’s webpage.

### » University Council

The University Council for UI is appointed according to Act no. 85/2008 on public universities. The council is composed of the University Rector and members from the University community; students; Ministry of Higher Education, Science and Innovation; and Industry.

### » Regulation of UI

UI, as a public higher education institution falls under the auspices of the Ministry of Higher Education, Science and Innovation. Two acts in particular cover higher education and the operation of the University; The Higher Education Act, no 63/2006 and the Act on Public Higher Education Institutions, no 85/2008.

### » Code of Ethics

The Code of Ethics of UI encapsulates the main ethical values and responsibilities integral to work and studies at the UI. It lays out standards for the conduct of all members of the university community, on and off campus. The Code of Ethics is presented with reference to the UI’s core values, which are professionalism, equality and academic freedom, as well as perspectives on teamwork, integrity and sustainability.



**17** PARTNERSHIPS FOR THE GOALS



**Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development**

**RESEARCH**

**3604** Number of peer-reviewed articles from 2019–2023 with relation to SDG 1–16

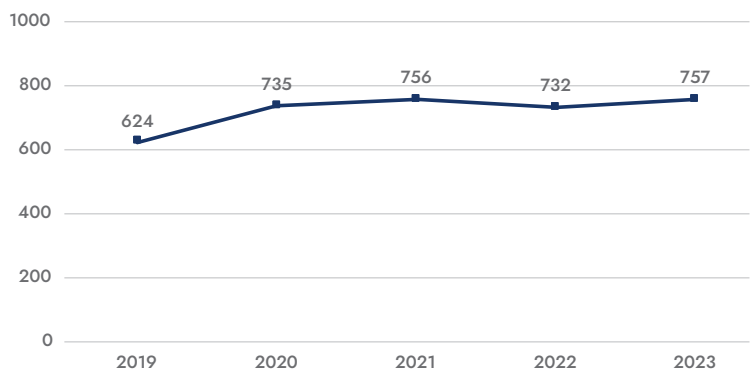
**69787** Number of citations from 2019–2023

**THE Impact Ranking results**

**301–400** out of **2031** in the world

**72,8** Research score out of **100**

**Number of peer-reviewed articles with relation to SDG 1–16**



**Iceland’s Negative Spillover Effects**

Specialists at the UI Sustainability Institute wrote a chapter in Iceland’s VNR report to the UN on the status of the SDGs in Iceland. The chapter draws from a recent assessment the institute did, which shows that Iceland’s spillover effects on other countries are quite negative, meaning that Iceland is negatively affecting other countries’ abilities to reach the SDGs. Iceland’s main spillover effects are related to high consumption and imports, as well as the fact that the circular economy is still immature.



**Global Health**

The course is taught at the graduate level in the Faculty of Medicine and provides an overview of public health from a global perspective. Special emphasis is placed on the SDGs and the Icelandic government’s implementation plan. Specialists from various sectors cover topics such as health predictors, determinants of health, and the burden of disease in low-income countries and regions with

social inequality, as well as policies aimed at improving primary health care and public health in these areas. Students also visit institutions involved in foreign policymaking and refugee resettlement in Iceland.



**Human Rights and Human Diversity**

The course is taught at the graduate level at the Faculty of Education and Diversity. Human rights are discussed from the perspective of human diversity and the development of inclusive societies. It looks at the historical development and recent challenges to the concept of human rights. A special focus is placed on the UN Convention on the Rights of Persons with Disabilities. Students will develop the capacity to apply a human rights perspective to the analysis of the rights of minority and marginalised groups, such as disabled people and immigrants.





## Interdisciplinary collaboration is a key element in ARCADE

Pia Hansson, Director of the Institute of International Affairs at UI, explains that ARCADE is an interdisciplinary course designed for master's and doctoral students that focuses on the Arctic and the challenges the region faces. The course is a joint project of UI, the University of Tromsø, and the University of Greenland. "Students participate in three week-long courses in Iceland, Norway, and Greenland, where they gain a deeper understanding of the multifaceted effects that climate change has on the Arctic. The students also receive leadership training, which includes, among other things, training in performance and how to communicate their research to the government and the

public. Pia says the project's goal is to increase the interest of young academics in Arctic issues to build knowledge and promote increased research collaboration across disciplines. "The project thus contributes to enhancing the knowledge and capacity of communities in the Arctic to respond to and adapt to the changing conditions brought about by climate change."

### Important to work together to find creative solutions to complex issues

For us to effectively address the challenges we face in the Arctic, Pia says we need a strong academic community. "We believe it is important to train students to examine issues from an interdisciplinary perspective and to collaborate across borders to find creative solutions to these complex problems. At the same time, it is crucial that the results of research are reflected in society. That's why ARCADE also trains its students in communicating their research through both speech and writing, encouraging them to contribute to informed policymaking," says the director.

### The challenges of climate change cannot be solved with a single approach

In conclusion, Pia mentions that interdisciplinary collaboration is a key factor in projects like ARCADE that address multifaceted challenges requiring extensive knowledge from different academic fields. "The challenges posed by the effects of climate change on communities, the environment, and politics in the Arctic cannot be solved with a single approach."

## Internship at the United Nations Association in Iceland

The course is available in both the fall and spring semesters at the graduate level within the Faculty of Political Science. It includes an eight-week internship at the UN Association in Iceland, where students have the opportunity to apply their knowledge and understanding to the professional work of the UN. Tasks for interns include work on UNESCO schools, the UN SDGs, the Peace Games, presenting the UNDP development report, Globalis, updating content on the association's website, and planning and preparing events.



## UArctic

The University of the Arctic (UArctic) is a network that brings together universities, research institutes, and other institutions engaged in Arctic-focused research and education. UArctic's goal is to generate knowledge about the challenges faced by Arctic residents and societies and to support sustainable development in the region. UI is an active participant in the network. In 2023, Gunnar Stefánsson, a professor of industrial engineering at UI, was elected Vice President of Research at UArctic.



## Declaration of Intent on Collaboration Between UI and Hallormsstaðaskóli

Jón Atli Benediktsson, Rector of UI, Bryndís Fiona Ford, Headmaster of Hallormsstaðaskóli, and Áslaug Arna Sigurbjörnsdóttir, Minister of Higher Education, Science and Innovation, signed a letter of intent for the two institutions to begin formal discussions on collaborating in university-level studies in creative sustainability. This programme would take place at Hallormsstaðaskóli and be organised by UI. As outlined in the letter of intent, the collaboration with Hallormsstaðaskóli will enable UI students to access a specialised, practical research programme under the guidance of experts in sustainability, design, environmental and climate change, food production, and other disciplines.



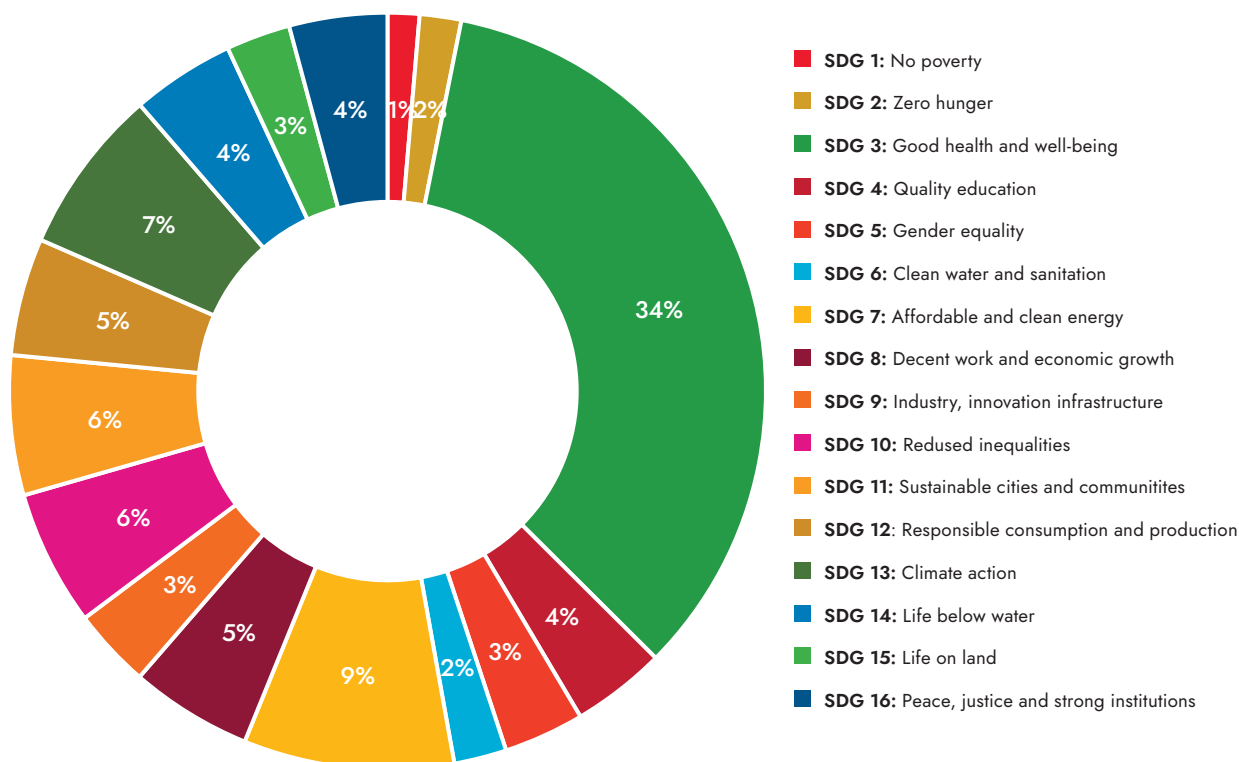
## UI's International Division

The International Division oversees and manages the international affairs of UI. The division is responsible for administrating and developing international student exchange agreements, participating in international networks, and cooperating with academic partners. UI welcomes about 2000 international students annually and provides various services for incoming international students and visiting staff.



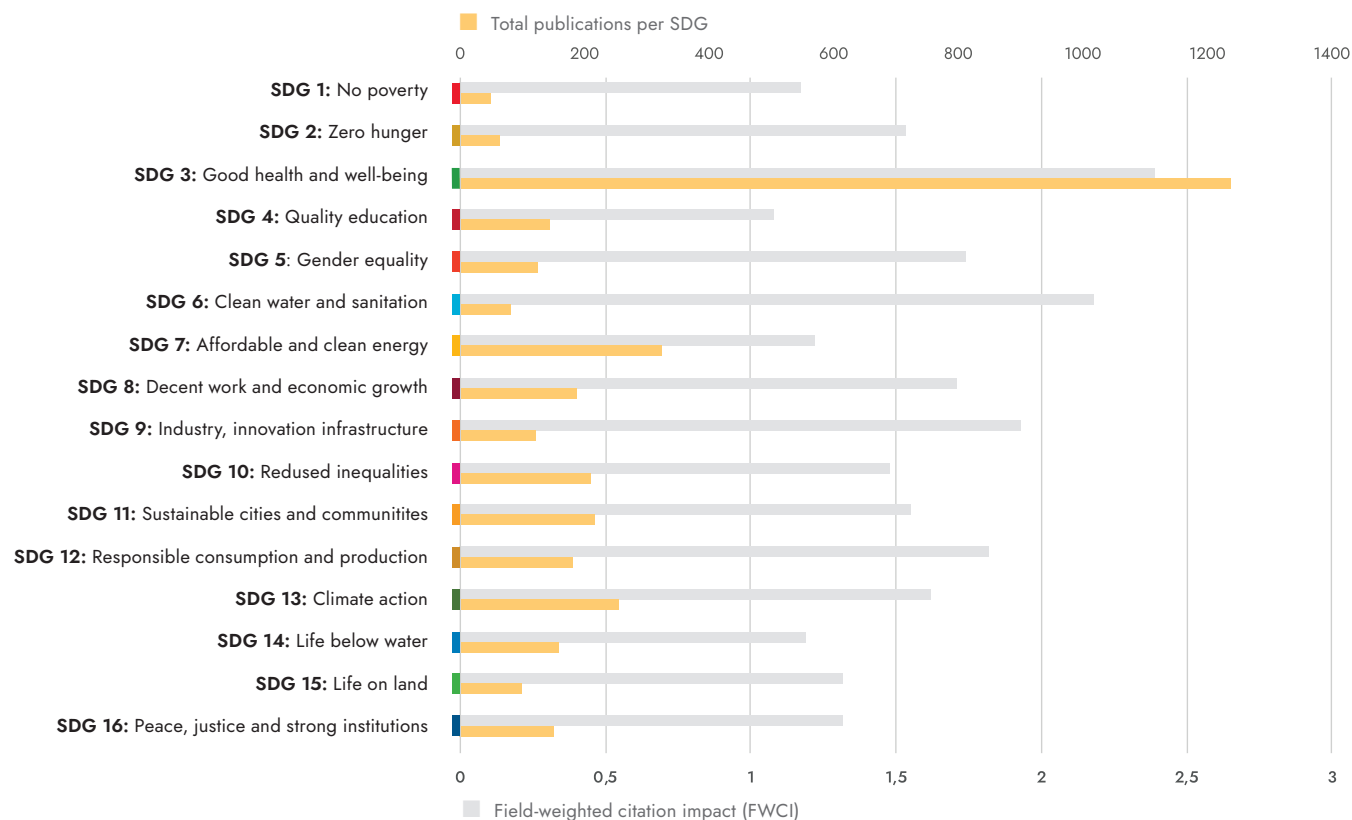
# SDGs by the Numbers

Proportion of peer-reviewed articles with relation to SDG 1–16 (2019–2023)



Research publications from UI span all the SDGs. SDG 17 is not included in the Scopus database as keyword searchers are ill suited to identify partnership.

## Publications per SDG (2019–2023)



The field-weighted citation impact is the ratio of the citation for all publications and the number of citations expected based on global average for that field of study. A value greater than 1 indicates a higher-than-average impact. Publications generated by UI have stronger than average impact for all SDGs.





## THE Impact Ranking Results

Sustainable Development Goal	Our rank 2022	Our rank 2023	Our rank 2024	<span style="color: green;">■</span> Positive trend <span style="color: yellow;">■</span> No change between years <span style="color: red;">■</span> Negative trend
<b>SDG 1:</b> No poverty	401–600	601–800	801–1000	■
<b>SDG 2:</b> Zero hunger	201–300	201–300	401–600	■
<b>SDG 3:</b> Good health and well-being	201–300	201–300	101–200	■
<b>SDG 4:</b> Quality education	601–800	601–800	801–1000	■
<b>SDG 5:</b> Gender equality	201–300	201–300	401–600	■
<b>SDG 6:</b> Clean water and sanitation	401–600	401–600	401–600	■
<b>SDG 7:</b> Affordable and clean energy	401–600	301–400	601–800	■
<b>SDG 8:</b> Decent work and economic growth	301–400	301–400	401–600	■
<b>SDG 9:</b> Industry, innovation infrastructure	101–200	100	101–200	■
<b>SDG 10:</b> Redused inequalities	301–400	201–300	301–400	■
<b>SDG 11:</b> Sustainable cities and communities	201–300	201–300	401–600	■
<b>SDG 12:</b> Responsible consumption and production	201–300	101–200	101–200	■
<b>SDG 13:</b> Climate action	101–200	101–200	101–200	■
<b>SDG 14:</b> Life below water	201–300	101–200	201–300	■
<b>SDG 15:</b> Life on land	201–300	201–300	401–600	■
<b>SDG 16:</b> Peace, justice and strong institutions	301–400	201–300	201–300	■
<b>SDG 17:</b> Partnerships for the goal	601–800	101–200	301–400	■
<b>Overall ranking for impact</b>	401–600 out of 1406	301–400 out of 1591	201–300 out of 1963	■

Times Higher Education (THE) Impact Ranking measures how universities worldwide are performing against the SDGs. The ranking results from 2022, 2023 and 2024 are shown, along with an indicator of the trend from 2023 to 2024. In 2024 UI is ranked 201–300 out of 1963 universities in the world regarding commitment to sustainability and making a positive societal impact through its research, teaching, operations, community outreach and partnership. In the ranking, universities are assessed on their three highest ranking SDGs, along with SDG 17.



# Opportunities for Improvement

The following recommendations are based on the goals outlined in the University of Iceland's strategy for 2021–2026 (UI26) and its Work Programme on *Sustainability in Teaching, Research and University Management*. These recommendations were initially presented in UI's first Sustainability Report for the year 2021.

The following section includes the four focus areas represented in the strategy, they are prioritised as critical, very important, and important. The status of each recommendation is noted, accompanied by a brief summary of developments in each focus area.

## Recommendation:

- A vice rector and/or a manager in central administration are made responsible for sustainability (and SDG) related issues. This role can be supported by the sustainability committee and the Sustainability Institute.

*UI's Rector has assigned the Vice-Rector of Science responsibility for sustainability-related matters at the University. Further project development will be carried out in collaboration with UI's Sustainability Committee and the Sustainability Institute at UI.*

**FOCUS 1: Raise awareness and understanding of sustainability through presentations and workshops as well as through sustainability research and education dashboards.**

## Critical:

- In 2023, a presentation about sustainability and the SDGs are held for staff in each school and central administration.
- Symposium about the findings of the UI's Sustainability report held in early 2023.
- UI's Sustainability report is produced annually, and the editorial team are given greater time and support when making the report.

## Very Important:

- Workshops about sustainability and the SDGs are made available for staff.
- Work regarding Aurora SDG education dashboard and Aurora SDG research dashboard continue and are disseminated in 2023.

## Important:

- In 2023, revive the series of meetings about the university and the SDGs that were suspended because of Covid-19 (the series on the SDGs were held from late 2019 to early 2020).

- Make the SDGs symbols visible in all events and news at UI's website and inner web Ugla. This makes mapping of events and research related to the SDGs more accessible, and more visible to the UI community. Made available in 2023.

*In 2024, no general presentation on sustainability was held for UI staff. However, informal discussions on sustainability took place throughout the year. Additionally, sustainability and findings from the UI Sustainability Report were presented at a Sustainability Symposium in December 2023. Several workshops were conducted in 2024 to support teachers in creating assessment tools aligned with the LOUIS competency framework. A workshop on higher education for sustainability was also offered to teachers. Funding was secured to revive the series of meetings on the university and the SDGs, with the first event scheduled for November 2024. Efforts are underway to incorporate the SDG symbols visibly on UI's webpage, although a specific timeline for completion has not yet been established. The Aurora SDG Research Dashboard is complete, and development of the SDG Education Dashboard is underway.*

**FOCUS 2: Focus on sustainability in teaching and learning by increasing the number of courses and support for teachers. Make study programmes and courses related to sustainability available for students from all disciplines.**

## Critical:

- A course about sustainability and the SDGs is developed and made available for students from all disciplines in the school year of 2023.

## Very important:

- UI should appoint an SDG specialist, who could support teachers when implementing sustainability/SDGs in courses. This should be done in collaboration between the Division of Academic Affairs, Central administration, and UI's schools.

## Important:

- A continued mapping of the UI's curriculum in relation to sustainability and the SDGs, similar to the work done in 2019/20. Courses should have a clear connection to the SDGs in the curriculum with a visible SDG symbol. Made possible in 2023.

An interdisciplinary course on sustainability and the SDGs for students from diverse academic backgrounds has yet to be developed. Further deliberation is necessary to determine the best approach for implementing such a course, and close collaboration among the five schools is essential. Although no decision has been made on appointing an SDG specialist to support instructors, efforts are underway to devise alternative methods of educator support. Notably, there is significant ongoing work to comprehensively align UI's curriculum with the SDGs.

### FOCUS 3: Work towards making the University carbon neutral by mapping emissions and introducing countermeasures.

#### Critical:

- UI needs a deeper understanding of the scope of UI's emission from its operations from current status, for example with respect to commuting of staff and students, procurement, new construction, etc.
- UI sets a climate action plan and policy regarding operation and measurable goals and countermeasures. To achieve carbon neutrality, UI needs to weigh costs and benefits of different options for carbon offsetting for remaining emissions and decide which option to use.

#### Very Important:

- UI sets ambitious goals and a time plan regarding transportation to enable staff and students to commute using environmentally friendly transportation modes by implementing incentive programmes to reduce single-vehicle commuting.
- The current transportation contract for staff should be revised.
- The infrastructure for bicycles should be strengthened, e.g., locked bike shelters.
- Evaluation of expanding the area in which parking fees are applied at campus area should continue.

#### Important:

- UI staff will be encouraged, through various means, to reduce carbon emissions of their air travel, and provided incentives to fly less. This evaluation should start in 2023.
- A special funding and grants should be made available for online conferences. Better facilities should also be established where people can participate online.

In 2023, UI expanded the scope of its emissions assessment to include those generated by staff and student commuting. Strong evidence suggests that commuting makes up a significant portion of UI's Scope 3 emissions. UI's environmental operational strategy was officially adopted in December 2022, but it will continue to evolve as the university gains a deeper understanding of its emissions scope. No decision has been made regarding carbon offsetting for remaining emissions, nor has a specific timeframe for achieving carbon neutrality been established. UI is prioritising the development of infrastructure to promote sustainable mobility. In 2025, the university will open a new bike storage facility with changing and showering facilities in the Saga building. Two additional locked bike sheds are included in the 2025 budget plan, pending approval. The University Council has also approved the expansion of parking fee areas on campus. Concurrently, improvements to the transportation contract for staff are under discussion, along with considerations for providing students with access to discounted annual passes for Strætó, the public transportation system. Minimal attention has been given to reducing emissions from staff flights or to implementing incentives for reducing air travel among UI personnel.

### FOCUS 4: Evaluate whether sustainability and interdisciplinarity should be taken into account when allocating grants from the University's competitive funds:

- Start the evaluation process before spring 2023. The process should be led by the UI's Science Committee. By the end of 2023 the evaluation should be completed.

The evaluation process regarding the consideration of sustainability and interdisciplinary aspects in the allocation of grants from UI's competitive funds has been completed and implemented in UI's Research Fund. In addition, sustainability has been taken into account in the criteria for postgraduate studies at UI.

## Closing thoughts

Sustainability and diversity are central to the University of Iceland's 2021–2026 strategic plan. Marking a significant milestone, the university published its inaugural Sustainability Report in 2022—the first of its kind among Icelandic universities. The university aims to lead in sustainability across research, teaching, operations, governance, and community engagement.

Since the release of the inaugural Sustainability Report, notable progress has been made toward the university's goal of carbon neutrality. This involves carefully tracking emissions and implementing countermeasures. However, sustaining momentum and establishing a clear timeline for achieving carbon neutrality remains essential.

In recent years, the focus on promoting sustainability has grown, yet there is still a need to expand these efforts and engage more university staff. Supporting educators in integrating sustainability into their teaching and fostering interdisciplinary connections is essential. This can be achieved by prioritising sustainability in the curriculum and providing robust support for faculty members.

The university must also ensure that sustainability-focused programmes and courses are readily accessible to students from diverse academic backgrounds, fostering a well-rounded and inclusive approach to sustainability education. Continuous collaboration and cooperation are essential to build momentum, as are efforts to raise awareness and deepen understanding both within the university and the broader community.

To maintain its leadership in sustainability, UI must continue its strong efforts and set even higher aspirations, making sustainability a foundational element in its operations, teaching, and research initiatives.



# UNIVERSITY OF ICELAND