# Sustainability Report





## **Editorial Team**

Hafdís Hanna Ægisdóttir, Director, Sustainability Institute

Ásdís Björk Gunnarsdóttir, Project Manager, Sustainability Institute

Lára Hrönn Hlynsdóttir, Project Manager, Sustainability Institute

Sólrún Sigurðardóttir, Project Manager, Division of Operations and Resources

Any queries concerning the content of this report can be directed to the Sustainability Institute at the University of Iceland at sshi@hi.is

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

Published November 2023

# 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.

## Contents

Note from the Rector
Note from the President of the Student Council
Executive Summary
Opportunities for Improvement
Sustainability in Focus: A Closer Look
Aurora and Sustainability in Teaching 10
Approach
Sustainability in Operations
Insights from UI's Schools
<b>SDG 1</b> : No Poverty
<b>SDG 2</b> : Zero Hunger
SDG 3: Good Health and Well-being
SDG 4: Quality Education
<b>SDG 5</b> : Gender Equality
SDG 6: Clean Water and Sanitation
SDG 7: Affordable and Clean Energy
<b>SDG 8</b> : Decent Work and Economic Growth
SDG 9: Industry, Innovation and Infrastructure
SDG 10: Reduced Inequalities
SDG 11: Sustainable Cities and Communitites
<b>SDG 12</b> : Responsible Consumption and Production
<b>SDG 13</b> : Climate Action
<b>SDG 14</b> : Life Below Water
<b>SDG 15</b> : Life on Land
SDG 16: Peace, Justice and Strong Institutions
<b>SDG 17</b> : Partnership for the Goals
SDGs by the Numbers
Opportunities for Improvement





## Note From the Rector

The University of Iceland proudly presents its second sustainability report. Building upon the success of last year's inaugural sustainability report, which was warmly received, we are delighted to share our continued commitment to sustainability and our progress in this vital area.

Since the release of our first sustainability report, the University of Iceland has made significant strides in its journey towards sustainability. Our commitment to sustainability aligns with our strategic goals outlined in the UI26 strategy for 2021–2026, which places sustainability and diversity at its core. This reinforces our commitment to lead in sustainability across teaching, research, and knowl-edge creation, with a clear focus on sustainable operations and carbon neutrality.

The Times Higher Education (THE) Impact Ranking, in which we have shown remarkable improvement in the past year, is an important benchmark. Unlike traditional rankings, THE Impact Rankings evaluate both scientific influence and community impact, underlining our commitment to making a positive difference beyond academia.

In this year's report, we emphasise the contributions of the University's five Schools to sustainability and our efforts to integrate sustainability into teaching and learning. We also present interviews with professionals aligned with each United Nations Sustainable Development Goal (SDG).

Beyond our campus, the University of Iceland leads the Aurora network, a consortium dedicated to the SDGs. These global goals address pressing challenges, and we actively engage in international collaborations to address them.

This report underscores our unwavering dedication to sustainability, reflecting our ongoing journey to become a more responsible institution. Together, we can ensure a brighter and more sustainable future, with the University of Iceland leading the way in promoting sustainability across all fronts. Join us in setting a positive example for generations to come.

In Ath Benedikterson



# Note from the President of the Student Council

Students are often at the forefront of social change, the same can be said for sustainability issues, both inside and outside the University of Iceland. One of four main priorities in the university's policy (UI26), sustainability and diversity, came about largely due to pressure from students. The Student Council of UI has secured the Green Flag for the school for four years. The Student Council has also long fought for more environmentally friendly transport at the University of Iceland, by pushing for the construction of bicycle shelters and improved services of public transport. The latest project, Matarspor, enables all those who buy hot food in Háma at Háskólatorg to make informed decisions about their consumption and its consequences. In February 2019, the Student Council, together with the National Association of Students and the Icelandic Upper Secondary Student Union, started climate strikes every Friday. The demand of the strikes is that the government declares a state of emergency due to climate issues and that they, together with companies, take action to stop the climate crisis. The strikes were inspired by Greta Thunberg's Fridays for Future.

The University can educate its students and inform them about sustainability and its importance. Many believe that this can only be done in the fields and subjects that directly deal with environmental and natural sciences, but that is certainly not the case. I have no doubt that sustainability can be introduced in every course taught at UI. However, it is a rather broad requirement, it would be more appropriate to start with one course in each study programme, which deals with sustainability in some way. In this way, the university can make future CEOs, administrators and teachers think about the importance of sustainability. UI also has the potential model sustainability in practice. The University enjoys enormous trust in the community and is one of the largest workplaces in the country. UI therefore should not hesitate to stand up, show courage, and take the lead on implementing sustainable solutions. The Student Council believes that the University of Iceland should be a leader in the discussion about and the fight against climate change and that it is the University's responsibility to emphasise the seriousness of the issue, support the science and demand that all parties take their suggestions and climate change seriously with the necessary actions. At the Student Council meeting in October 2022, a proposal was submitted and approved to the effect that the Student Council would challenge UI to declare a climate emergency and follow up on the declaration by preparing an action plan for the University. This is the second time that the Student Council has presented such a challenge, but in the spring of 2019, the Student Council declared a climate emergency and approved a proposal to the effect that the University and the government do the same. By declaring a state of emergency, UI is taking a clear stand and thus puts pressure on its own operations, as well as on other institutions and companies, to respond. Nothing stands in the way of UI's ambitious actions in climate matters except the decisions of its management. The students' position is clear. We have made our positions known.

> Rakel Anna Boulter, President of the Student Council



This is the second annual University of Iceland's (UI) sustainability report, which underscores our dedication to the UN Sustainable Development Goals (SDGs). In this report, we offer valuable insights into the numerous ongoing initiatives at the university aligned with each SDG. Our overarching goal is to continually enhance our sustainability endeavours, striving to elevate our institution's performance in addressing global challenges and contributing to a more sustainable future. The creation of this report was commissioned by UI's Sustainability Committee and executed by the Sustainability Institute at the University of Iceland.

Sustainability and sustainable development are central concepts of our time. In the UN's 1987 report *Our Common Future*, frequently referred to as the Brundtland's report, sustainable development is defined as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs." This definition transcends mere environmental concerns, encompassing three fundamental pillars of sustainability: economic, social, and environmental. These pillars are intrinsically interconnected, and if one weakens, the entire structure risks collapse.

To effectively address the pressing challenges we face today, such as those outlined in the SDGs, we must actively demonstrate sustainability in practice. This is an arduous endeavour that necessitates long-term thinking, a holistic perspective, resilience, and unwavering courage. Every one of us must partake in this collective effort. So, what steps can we take? How can we contribute to sustainability and forge a brighter future for all, whether in Iceland or across the globe? The solution lies in embracing a sustainable mindset, transforming it from a fleeting trend into a way of life.

Higher education institutions play a pivotal role in driving the much-needed societal change. As incubators for future talent and thought leaders, universities bear a unique responsibility in fostering stewardship and nurturing an aware citizenry. The pressing global challenges demand a fresh perspective, and universities, as influential institutions, are at the forefront of catalysing these transformations. The University of Iceland is actively pursuing a leadership role in addressing these challenges by incorporating the Sustainable Development Goals (SDGs) into its 2021–2026 Strategy (UI26), where sustainability and diversity are fundamental pillars.

## Approach

The work of UI was mapped in relation to the UN Sustainability Development Goals (SDGs), and divided into five main areas: research, teaching and learning, community outreach and partnerships, operations, and student initiatives. A variety of channels were employed to gather this information.

To solicit input, we initiated a call for suggestions addressed to all UI staff members and doctoral students. In the call, participants were asked to provide information on diverse topics, projects and courses related to sustainability and the SDGs in the year 2022.

Interviews with individuals that have done comprehensive research or worked on a project related to sustainability are included under



each SDG. The interviewees were handpicked based on their work. Furthermore, we collated information from published peer-reviewed articles related to the SDGs. This data was sourced from Scopus, the largest abstract and citation database for peer-reviewed literature.

All information concerning the environmental performance of UI's operations, including aspects such as waste management, electricity consumption, water use, and carbon emissions, is sourced from UI's Division of Resources and Operations. This information is compiled on an annual basis through the Green Accounting initiative and subsequently submitted to the Environmental Agency of Iceland on behalf of UI.

A comprehensive mapping of UI's activities in relation to the 17 Sustainable Development Goals (SDGs) is presented in this report. Within each SDG, a diverse range of UI's initiatives is showcased and categorised. This mapping serves a dual purpose: it both spotlights the extensive work undertaken at UI, and also provides a clear and concise demonstration of how research, education, community engagement, student initiatives, and operational efforts align with the SDGs.

For each SDG, we present the quantity of peer-reviewed articles related to that goal, along with their respective citation counts and the field-weighted citation impact. Additionally, we provide UI's performance in the Times Higher Education Impact Ranking for each SDG, offering a comprehensive view of the university's contributions to global sustainability.

## Opportunities for Improvement

The recommendations below are built upon the goals of University of Iceland's strategy for 2021–26 (UI26) and its Work Programme on Sustainability in Teaching, Research and University Management. These recommendations were presented in UI's inaugural 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, along with a summary of what has transpired 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
   Little progress



In recent years, sustainability and sustainable development have become common topics of discussion. However, for some, the true essence of sustainability remains somewhat elusive. Is it merely another passing buzzword in our lexicon?

We frequently encounter references to companies and organisations producing sustainability reports, discussions on the importance of sustainability education across all levels of schooling, and the United Nations' Sustainable Development Goals (SDGs) that provide a roadmap for global sustainability. Yet, what exactly does sustainability entail, and why is it so important?

In the UN's 1987 report *Our Common Future*, frequently referred to as the Brundtland Report, sustainable development is defined as *development that meets the needs of the present without compromising the ability of future generations to meet their own needs*. This definition transcends mere environmental concerns, encompassing three fundamental pillars of sustainability: economic, social, and environmental. These pillars are intrinsically interconnected, and if one weakens, the entire structure risks collapse.

Before the concept of sustainable development emerged, it was often believed, both by governments and businesses, that economic growth was the most crucial factor, and the interests of nature and society would have to yield to economic viewpoints.

In the early days of the sustainability discourse, it was stressed that all three pillars were equally important. With increased knowledge over time, it has become clear that economic growth cannot surpass the finite boundaries set by the Earth's ecosystems. Earth's resources are limited, and by overexploiting them, we disrupt the delicate balance of ecosystems and climate, as daily news from around the world continues to demonstrate.

The three pillars of sustainability include social issues, nature, and the economy. Nature and the environment are undoubtedly the foundation of achieving sustainability, as nature places specific constraints on us, both economically and socially. However, sustainability is a much broader concept than solely concerning nature and the environment. It also encompasses health and well-being, social justice, culture, and economic life. Sustainable development emphasises the importance of a holistic and longterm perspective rather than short-term gains and growth.

Conspicuous examples of such overexploitation include deforestation, the extinction of species, and the ominous spectre of climate change. Being sustainable entails establishing economic and social systems that do not harm the natural world—an undertaking that presents a formidable challenge.

We often encounter terminology like "sustainable resource management" and "sustainable production." In these contexts, sustain-



# Sustainability in teaching at the University of Iceland

Hólmfríður Árnadóttir, Head of the Centre for Teaching and Learning, says that UI has implemented sustainability in teaching in various ways, "for example, by integrating sustainability into the university's strategy in terms of organisation, operations and support services." She continues, "UI also contributes to sustainability through the work of teachers and students regarding scientific knowledge and the relationship between education and society, how we maintain balance and promote sustainability with research as a guide. Academic freedom in research is accompanied by ethical responsibility regarding the subject of research, and the viewpoints of the environment, nature and society as a whole must be taken into account in all projects, discussions and policy making."

# Technology helps implement sustainability in education

According to Hólmfríður, the opportunities in implementing sustainability in teaching practice lie with increased technol-

ogy. "A sustainable support service enables teachers to access support materials and education in an accessible way, it shortens communication channels and brings the service closer to teachers with the help of technology. At the same time, technology enables us to promote a digital environment in teaching and learning and access to distance and online learning." She adds that distance learning enables those who cannot go on site to study regardless of location and increases social justice for the more sparsely populated areas. "Distance and online learning reduces travel and increases environmental protection in the sense that students can get an education in their local area with less cost, disruption and pollution that can result from such."

## How can UI promote sustainability?

UI aims to become a leader on topics of sustainability and environmental issues, says Hólmfríður. "UI's policy stipulates the promotion of a digital learning environment and distance learning, which truly pertains to sustainability and is an important balancing tool." She mentions that international collaboration is important for the implementation of sustainability within UI. "Through international collaboration where knowledge sharing and research collaboration are key, for example, in the Aurora collaboration network, we learn from each other as collaboration can increase guality, save time and contribute to greater knowledge and understanding." Hólmfríður emphasises the possibilities that technology offers. "Sustainability, where technology eases the burden, increases possibilities, and supports teaching development and the work of teachers in a positive way, is extremely important, as technology can facilitate the set-up of courses, project work and submission, feedback, assessment and promote active discussion." Lastly, she adds, "As the University of Iceland, it is important to constantly look at how all of us who work here can contribute to increased sustainability in our work."

ability signifies activities that promote sustainable development namely, those that refrain from depleting natural resources beyond the Earth's capacity for regeneration. In simpler terms, we avoid eroding our capital or depleting our precious land.

To effectively address the pressing challenges confronting us today—be it climate change, the repercussions of conflicts, or the gaping chasm of wealth inequality—we must actively demonstrate sustainability in practice. This is an arduous endeavour that necessitates long-term thinking, a holistic perspective, resilience, and unwavering courage. Every one of us, from universities, government leaders to small and large businesses, institutions, municipalities, and individuals, must partake in this collective effort.

So, what steps can we take? How can we contribute to sustainability and forge a brighter future for all, whether in Iceland or across the globe? The solution lies in embracing a sustainable mindset, transforming it from a fleeting trend into a way of life.

Higher education institutions play a pivotal role in driving the

much-needed societal change. As incubators for future talent and thought leaders, universities bear a unique responsibility in fostering stewardship and nurturing an aware citizenry. The pressing global challenges demand a fresh perspective, and universities, as influential institutions, are at the forefront of catalysing these transformations. The University of Iceland (UI) is actively pursuing a leadership role in addressing these challenges by incorporating the Sustainable Development Goals (SDGs) into its 2021–2026 Strategy (UI26), where sustainability and diversity are fundamental pillars.

This marks the second sustainability report of the University of Iceland, following last year's inaugural report. In this report, we showcase our commitment to the SDGs by highlighting research, teaching and learning, operations and governance, student initiatives, and community outreach and partnerships associated with each Sustainable Development Goal. Our aim is to continually improve in our sustainability efforts, making a good university even better when it comes to addressing global challenges and creating a more sustainable future.



Aurora is a partnership of nine European universities focused on innovation in teaching with the purpose of tackling complex societal challenges. The overarching objective is to graduate students with the skills and mindset necessary to thrive in and contribute to everchanging societies.

Sustainability is the focal point of Aurora's educational vision, which is reflected in the link between the collective curriculum of the collaborating universities and the SDGs. Furthermore, Aurora encourages interdisciplinary cooperation to solve societal problems. Inclusive teaching methods are prioritised, and assessment focuses not only on the subjects, but also on strengthening the students' personal skills. Aurora places great emphasis on the internationalisation of learning and teaching, illustrated by the increased availability of exchange studies and mobility options. Student mobility includes opportunities abroad, but also encompasses a variety of other opportunities, such as virtual mobility and "internationalisation@home", which refers to visits by international teachers and students.

## **Teaching for Societal Impact**

The University of Iceland leads the Aurora working group "Teaching for Societal Impact". The group promotes innovative teaching development in line with Aurora's educational vision, providing teachers with tools to integrate sustainability into curriculum design and teaching. Content for teachers is accessible on the Aurora webpage, https://aurora-universities.eu/, and a specific sub-page for teacher support is under development, https://aurora-universities.eu/support-for-teachers/. The page will include information on the community of teachers and teaching experts already engaged with Aurora's work, which will allow future users to seek support in their teaching development endeavours.

## **UI's First Steps in Aurora Teaching**

The year 2022 marked a turning point in teaching related matters at UI. The course, *Spark Social*, focused on social entrepreneurship and sustainability, was further developed in



In the fall of 2022, Aurora experts on teaching came together at the University of Iceland and developed digital guidelines for teachers. The guidelines facilitate greater understanding of Aurora's vision in education, teaching development, and teaching methods. Their input provided a valuable contribution to making information and tools visible and appealing to university educators.

collaboration with two Aurora universities, the Copenhagen Business School, and the University of Naples Federico II, with the aim of opening it to all Aurora students in 2023.

UI also took part in developing and teaching the interdisciplinary micro-credential "Understanding Europe", alongside the University of Duisburg-Essen. The programme teaches students about the societies, politics, and cultures of Europe, with a specific focus on sustainability.

In the spring of 2022, the Rector of UI signed a letter of intent to confirm UI's participation in the development and teaching of Aurora's joint MS study programme *Digital Society and Global Citizenship*. Five Aurora universities are signed on as active participants, preparing to offer the program from the year 2025 onwards. The interdisciplinary programme will aim to increase the number of ICT experts who can tackle the rapid societal changes caused by the digital revolution and its possible negative effects in developing countries.

# APPROACH

This is the second 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 2023, with the reference year for the report being 2022, with few exceptions (otherwise stated). Research projects mentioned in the report were either in progress or completed in 2022. Doctoral projects mentioned in the report all culminated with a doctorial defence in 2022.

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's staff members and doctorial 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 2022. 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's staff. The deans of all five schools and the directors of all divisions were then asked to encourage their staff members to answer the call for suggestions.

Meetings with deans from all five schools, heads of faculty and/or other representatives were held from May-August 2023. Those meetings were important for the continuous work regarding sustainability at UI and to discuss opportunities and challenges regarding sustainability within each school. A meeting with the Student Council of UI took place in August 2023, at which they were invited to contribute to the Sustainability Report. Students have an important voice when it comes to sustainability, both within the university and in society, and their impact and relation to the SDGs is significant.

In this year's report, it was decided to include in-focus interviews under each SDGs with individuals that 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. In the Scopus database, articles in Icelandic are not included, though it is estimated that around 75% of all published peer-reviewed articles of UI are in the Scopus database. Therefore, it can be assumed that the number of articles with relation to SDGs from UI may be higher than stated in this



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.

report. Information was gathered for the years 2018–2022 in beginning of October 2023. Scopus does not provide specific metrics for SDG 17, so the total number of articles under each SDG for 2018-2022 is given under said SDG. Field-weighted citation impact (FWCI) is included under SDG 1-16 and is data obtained from Scopus database for 2018-2022. FWCI is the citation impact normalised by the field and measures the number 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 the 17 SDGs, but in the ranking, universities are assessed through their three highest SDGs, along with SDG 17. The data indicated in the report are the newest results that were published in June 2023, indicating data from 2021.

All information regarding the environmental performance of UI's operation, 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, that is submitted to the Environmental Agency of Iceland on behalf of UI. Data from 2018–2022 is indicated under the chapter Sustainability in Operations, unless otherwise stated.

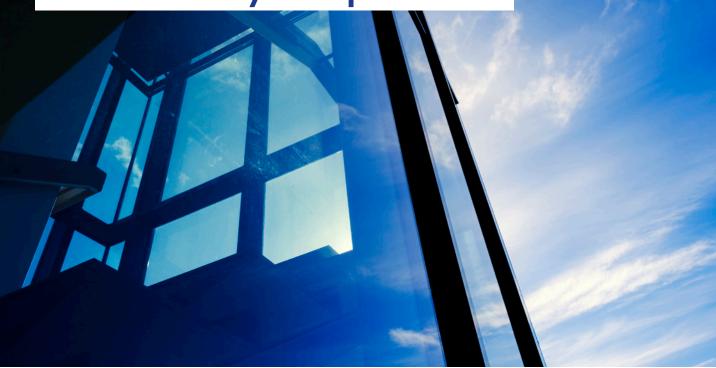
## Mapping

Information on research, teaching and learning, community outreach and partnership, student initiatives, and operation 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 the UI's webpage from 2022 for data collection. All doctorial defences from 2022 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 that took the time to send in their suggestions, without your assistance, this report would not have shed light to 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.

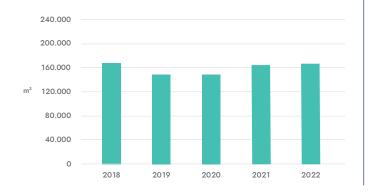
## Water consumption

## 1%

reduction since 2018

## 166.365

m³ of inbound cold water in 2022



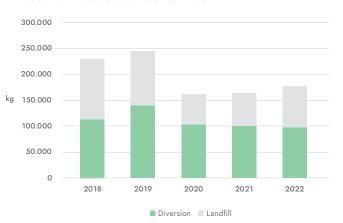
## Waste management



## **54%** of waste recycled in 2022

**178 tonnes** of waste volume in 2022

**23%** reduction in waste volume since 2018

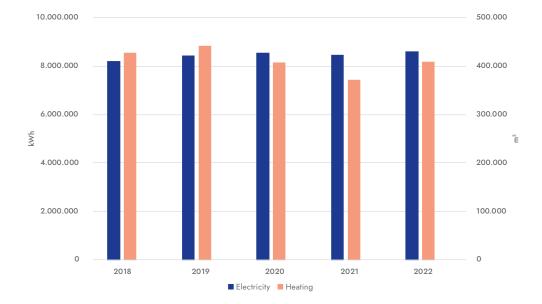


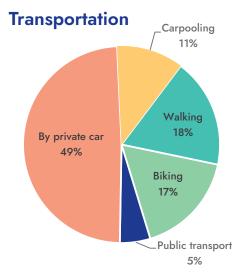
## **Energy consumption**

**5%** increase in electricity consumption since 2018

**4%** reduction in heating since 2018

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





## 40%

of staff commute in an environmentally friendly way in 2022

**17%** of staff biked to UI in 2022

**48%** of UI car fleet are electrical vehicles

## **Paper consumption**

**30%** reduction since 2018

**99%** of paper materials had certified environmental label in 2022



## Greenhouse gas emissions





# **28%** reduction in total greenhouse

gas emissions since 2018\*

**37%** reduction in emissions from aviation since 2018

## 22%

increase in emissions from UI car fleet and transportation since 2018

## 23%

increase in emissions from electricity since 2018

## 30%

reduction in emissions from waste since 2018

\* of the factors that are monitored

# Advancing Sustainability: Insights from UI's Schools

## A Note from the Dean

## of the School of Education

The School of Education works with professionals who have the courage, knowledge, and sense of purpose to develop modern teaching and learning environments and empower individuals to face complex challenges in the present and future. Academic staff and students at the School of Education conduct important and diverse research, lead innovation, and influence the development of school and leisure activities. Sustainability became one of the six fundamental components of education in the integrated main curriculum for kindergarten, primary, and secondary school levels in 2011. Subsequently, a significant focus on sustainability was implemented within courses at the School of Education, not least teacher education and in pedagogy and education sciences. All student teachers take a mandatory course in sustainability education, and in 2022, sustainability education was introduced as a new specialisation in the five-year teacher education program. With the introduction of the United Nations' Sustainable Development Goals, tools were created for the academic staff of the School of Education to use them as a guiding light in studies and research. In recent years, the understanding of the importance of social and educational innovation has increased. To deal with important challenges in education, the School of Education, in collaboration with the Department of Education and Youth at the City of Reykjavík, established the Innovation Hub for Education. The Hub is intended to bring together the academic and professional community, students, and the private sector to develop and implement together new ways in school and leisure activities. In 2022, a new work unit was established within the School of Education entitled NýMennt, which supports the social impact of educational research and its dissemination by organising career

development for professionals in the field of education, supporting innovation and teaching development within the university and in the Icelandic educational community. Various projects have already been launched, including a collaboration platform on educational technology and its implementation; a project on the promotion of STEAM education in collaboration with the School of Engineering and Natural Sciences; strengthening parenting skills in cooperation with schools and the government. Targeted action in educational research and social projects related to professional development and innovation in the field of education is the most important way for the School of Education to participate in creating a more sustainable and better society.

## A Note from the Dean of the School of Engineering and Natural Sciences

The School of Engineering and Natural Sciences is working to fulfill the strategic vision of the University which aims to lead the way in sustainability through teaching, research, and knowledge creation. The School of Engineering and Natural Sciences has worked to identify its strength with regard to the United Nations Sustainable Development Goals (SDGs). The School of Engineering and Natural Sciences surveyed the faculty to identify the alignment of teaching and research with the SDGs. In the area of research, our faculty prioritised Goal 9 (Industry, Innovation, and Infrastructure); Goal 13 (Climate action); and Goal 7 (Affordable and Clean Energy). This clearly shows the breadth of the research and the cooperation between faculties. As an example of cooperation that spans all three goals is a strong cooperation between faculties of mechanical engineering and earth sciences in developing solutions in geothermal energy at extreme pressures and temperatures. This has led to participation in several European projects. In the area of teaching, Goals 9 and 13 were also ranked in top three, as was Goal 4 (Quality education). This reflects the importance of our university in providing quality education in our fields. The emphasis in teaching is reflected in our interdisciplinary Environmental and Natural Resources Programme, which emphasis both climate actions and clean energy from various points of view and type of renewable energy source. The School of Engineering and Natural Sciences has also worked on aligning its operation to sustainability and is participating in a governmental program called The Green Steps Programme and has already accomplished two of the steps regarding internal operations.

## A Note from the Dean

## of the School of Health Sciences

At the University of Iceland's School of Health Sciences, sustainability is related to both research and teaching in various ways. SDG 3 (Good health and well-being) is the core of all activities within the School of Health Sciences, but its activities are directly or indirectly related to many other SDGs as well. The School of Health Sciences has taken numerous steps towards sustainability. An example of this is the School's policy to reduce the use of paper and instead use electronic data. It is also worth noting that the Laboratory of Pharmacology and Toxicology was the first within the University of Iceland to complete all five Green Steps and has also received certification for environmental management systems (ISO 14001) and occupational health and safety management systems (ISO 45001) which aim to reduce negative environmental effects, prevent occupational accidents, and increase health and safety in the workplace. In the School of Health Sciences, sustainability has been integrated into teaching, research, and innovation to answer the students' call for such an emphasis, and at the same time, the contemporary demand for there to be a strong connection between the faculties' disciplines and sustainability. In the Faculty of Food Science and Nutrition, for example, this has led to increased student satisfaction and more opportunities for the department to apply for national and foreign research grants. The Faculty of Nursing and Midwifery has worked on various SDG related projects, particularly in connection with cultural sensitivity, working with a global approach, and on environmental issues. The physiotherapy course of study participates in the international project Environmental Physiotherapy Agenda 2023, which promotes teaching about the earth's ecosystem, the environment and sustainability in undergraduate courses in physiotherapy. Finally, the staff of the Faculty of Pharmaceutical Sciences leads a joint project with the purpose of building pharmaceutical production and building an MS programme in Pharmacy in Malawi. It is essential to consider sustainability from various perspectives, and at the School of Health Sciences, there are numerous opportunities to further engage in sustainability, which is crucial for teaching and research grants.

## A Note from the Dean

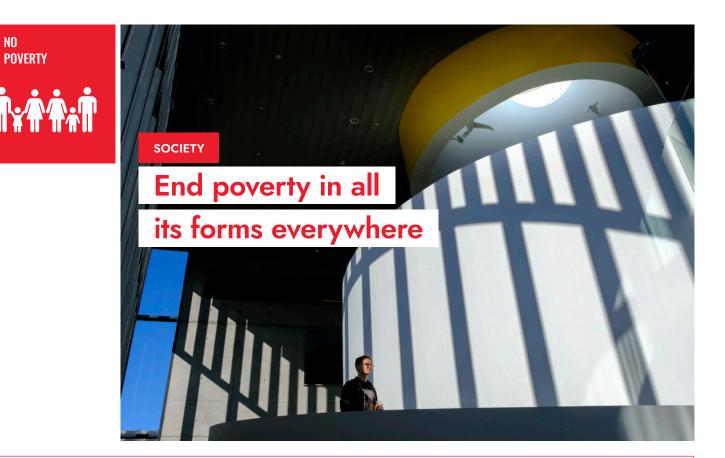
## of the School of Humanities

At the School of Humanities, direct strategic planning and work with sustainability is ongoing. Many subjects in all departments at the School of Humanities relate directly to sustainability. However, in many cases, these elements have not yet been sufficiently highlighted, or made visible and more work is needed to strengthen them in an organised manner. Within some subjects, courses are taught with a clear reference to sustainability, this applies to subjects in theology, in equality studies, in practical cultural communication, and in ethics. We aim to sharpen these priorities within the School of Humanities by raising these issues in an organized manner within individual departments. The School of Humanities has developed a draft policy which sets forth a plan to revise the descriptions and learning criteria of study lines and courses so that they emphasise sustainability. In the context of that review, academics and administrators will be asked to look for opportunities to develop learning focuses so that they can increase the awareness and effectiveness of sustainability thinking within the community of teachers and students. Additionally, the School of Humanities' teaching committee has created a forum where the issue will be discussed at an open meeting organised by the committee. As far as research within the School of Humanities is concerned, in many places it touches on important issues related to sustainability and the UN's Sustainable Development Goals. This applies to research related to culture, social relations and the integration of individual groups, languages and their cultural contexts, arts and culture, philosophy, morals and ideology – in the contemporary and in the historical light in which many subjects are studied. We aim to start working on defining these different studies better so that we can better understand how they are already working with sustainability and how they could be shaped to do this even better.

## A Note from the Dean

## of the School of Social Sciences

For decades, academics in the social sciences have been teaching and researching the well-being of people in diverse societies around the world. Although the word sustainability is not found in the search engine timarit.is until 1997, many of us in the fields discussed sustainability using other words for a long time. Research on the interaction between man and nature, on the use of natural resources, the distribution of power, wealth and other means of coping, the relations between indigenous peoples and other peoples regarding the use of resources, and the access of different social groups to the quality of life and institutions are just a few examples of the big "old" subjects of social sciences that deal precisely with sustainability. It was a cause for celebration when the United Nations presented the Sustainable Development Goals in 2015; goals that both elevate and frame many of the issues that we in the social sciences have handled for a long time in teaching and in research. We connect to the word sustainability and the Sustainable Development Goals in different ways, and we use them to varying degrees in our teaching, our research, and our conversation with society. Some academics continue to deal with important issues without necessarily using concepts emphasised by international organisations. The accumulation of knowledge continues, but academics may miss the opportunities inherent in the focus on sustainability. Opportunities to obtain research grants, opportunities to present results, and opportunities to engage students in learning that is relevant to addressing society's challenges. The opportunities for the School of Social Sciences are many when it comes to sustainability, for example when academic disciplines are ranked on an international rating scale, and I encourage all of us to embrace those opportunities.



## RESEARCH

NO

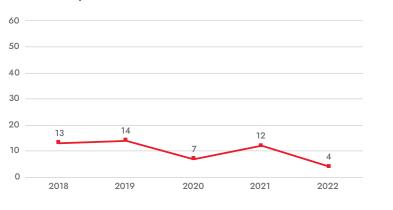
**50** Number of peer-reviewed articles from 2018-2022 with relation to SDG 1

**355** Number of citations from 2018–2022

**1,47** Field-weighted citation impact from 2018-2022

**THE Impact Ranking results** 600-800 out of 876 in the world 69,5 Research score out of 100

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



## **Þjóðarspegillinn**

Since 2003, the University of Iceland has hosted Þjóðarspegilinn, an annual conference in Social Sciences which is free and open to all. The conference is not only a platform for academics, but also encourages active dialogue between the social sciences and wider society. Rather than focusing on one specific topic, the conference emphasises seminars with connections to social sciences. This allows for a vast range of pertinent topics and discussions related to the Sustainable Development Goals. Many seminars at the 2022 conference focused on inequality, social class, poverty and the welfare system.



## **Health and Inequality**

The Health and Inequality course is taught at graduate level at the Faculty of Sociology, Anthropology and Folkloristics. In this course, the focus is on the relationship between social standing and health but those who are more vulnerable in society have, in general, worse health than those with more resources. One of the most important contributions of sociology is an understanding of how

larger societal forces (for example, the health system and the welfare system) shape individual lives. In this course the relationship between social standing and health is studied.



## **Ul's Centre for Writing**

The Centre for Writing offers free writing support for all students, faculty and staff at the University of Iceland from all schools, faculties, and departments in both Icelandic and English.



## **UlcelandX**

UlcelandX is the University of Iceland's platform for developing and delivering massive open online courses (MOOCs) to a global audience of learners, in collaboration with edX.org. The courses are free and open to everyone.





## We need more research about the long term impacts of childhood poverty

Associate Professor of Social Work Hervör Alma Árnadóttir says that one of the main tasks of social workers is to strive for social equality by working against the poverty of individuals, families and communities. In her view, the sustainable development goals (SDGs) are intertwined in this endeavour: "Here in the social work department, we integrate the SDGs into most of our courses. It has been criticized that research in general, and also those related to poverty, are primarily based on information from adults, which lacks children's experience of living in poverty. Children's experiences are important when the research topic concerns the social status of those who grow up in vulnerable and difficult conditions, such as poverty."

## Is inequality a problem in Iceland?

Hervör Alma says that in Iceland it has been difficult to battle against poverty despite the various actions that should prevent inequality. The consequences experienced by children living in such conditions include unacceptable housing conditions, limited access to leisure activities and social isolation. Stability is desirable in the upbringing of children, including security in terms of residence and a safe home.

# Research on children living in a socially complex situations

In the past years Hervör Alma has mostly been working on research with children that live in socially complex situations. "In general, children's participation in research has increased, but the group of children who live in complex social situations, who are marginalised, have fewer opportunities to express themselves about their important experiences." Finally, Hervör Alma says that children need to be involved in the development of services intended for them to increase their success and seek solutions to social injustice: "It is the role of social workers to provide opportunities for children to express their experiences, and to advocate for them to improve the situation of all children."

## **Social Counselling for University Students**

Social Counselling 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 learn to provide a wide range of treatments, for example dental cleaning, root canal procedures, fillings and dental prosthesis. 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.



### 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.

#### » SÁLRÆKT

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.



## 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. Once per week the law students, in cooperation with Alma, an independent rental company, offer legal advice especially for tenants. Additionally, in cooperation with Deloitte, Orator also invites individuals to receive free assistance with their tax reports once per year.

















## RESEARCH

**66** Number of peer-reviewed articles from 2018–2022 with relation to SDG 2

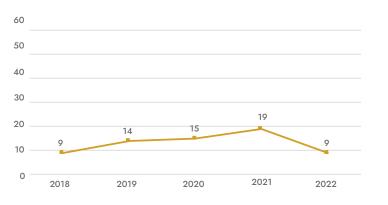
**2281** Number of citations from 2018–2022

**1,67** Field-weighted citation impact from 2018–2022

THE Impact Ranking results 201-300 out of 647 in the world

78,3 Research score out of 100

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



## Fussy Eating in Children: A Food Based-Intervention in a School Setting

Difficult eating behaviours such as fussy eating are consistently found in young children, and those with neurodevelopmental disorders (ND). Fussy eating tends to peak in early childhood and then reduce, but less so for children with NDs. Studies have found links to fussy eating and children with obesity, as eating habits are shaped by the child's environment, heredity, and family. Understanding fussy eating in children with obesity and comorbid disorders is important as acceptance of healthy foods tends to be low. Studies indicate that increasing acceptance of healthy foods is difficult, especially in children with NDs. This was the subject of Sigrún Þorsteinsdóttir's doctoral thesis, which investigated children's eating habits and found that taste education intervention for children and their parents can reduce fussy eating and increase food diversity in children.

## BlueGreenFeed

BlueGreenFeed is an international and interdisciplinary research project focusing on the synergy of blue and green sectors for resilient biomass production and processing to develop sustainable feed ingredients for European aquaculture. Aquaculture is the fastest growing production of animal protein in the world and is considered one of the most resource-efficient ways to produce protein. The production requires less feed, water, and land. It also has a significantly lower carbon footprint than land-based livestock production. However, one of the challenges for growth is the need for nutritious and sustainable aquaculture feed resources. BlueGreenFeed focuses on producing new feed ingredients to allow for growth. The project thus aims to increase and optimise resource utilisation in bio-based industries and ensure a sustainable blue economic growth.





## Sustainable diets for a healthy lifestyle

Þórhallur Ingi Halldórsson, Professor in the Faculty of Food Science and Nutrition, says that the objective of the interdisciplinary research project Sustainable Healthy Diets is threefold: firstly, to measure the carbon footprint of Icelanders' diet, as shown in the National Dietary Survey 2019–2021, secondly, to make ecological assessments of Icelandic food and production systems, including the carbon footprint of Icelandic food production, especially meat and fish, and finally, to investigate motivations that drive consumers to switch to a more sustainable diet, and economic factors related to those motivations. These three objectives are intertwined in the research.

## A slight change in our diet can have considerable positive impact on our carbon footprint

When asked about the main findings at this point, Þórhallur says, "In mapping the carbon footprint of Icelanders' diet we saw that it is similar to other nations in northern Europe. We have a rather high carbon footprint because we eat a lot of red meat which weighs heavily, but red meat weighs about 50% of the carbon footprint of our diet even though it contains a minority of the calories we consume daily. We have also seen that those who follow a diet that contains meat, but an amount that is closer to the recommendations set forth about eating more plant based, they have a considerably lower carbon footprint. So, with a slight change in the diet towards a lower meat consumption has considerable positive impact on our carbon footprint. The average Icelander eats about 700g of meat per week, but by reducing it to 350–400g as recommended, the effects are considerable."

# Food production accounts for about 30% of all emissions

"People are realising that food production has a huge environmental impact," says Þórhallur, which is why this research project is relevant to people and their choices. "Food production takes up enormous amounts of land and requires a lot of energy. Today, food production accounts for about 30% of all emissions in the world. People have been realising that, and while we will always come to eat, and most people will continue to eat meat, we will be able to do so knowing the carbon price of our diet. We are trying to see what we can do better."

# An interdisciplinary approach is vital when it comes to sustainability

The research is interdisciplinary and researchers working on the project come from various fields of study. The reason for this, Þórhallur says, is because "sustainability and diet in general require more than a singular approach. There is no single discipline that covers sustainability and if we are going to be successful it is not enough to only quantify things, we need to understand how people behave, how we produce, and how we can make positive change without turning the jobs of certain individuals upside down or forcing people to change. This is why we need to have e.g., economists and ethnographers involved in this project."

## Innovation in Value Creation of Food Side Streams

In this two-week course available to graduate students in the Faculty of Food Science and Nutrition, students are presented with the opportunities to explore utilisation of side streams from various food groups, and asked to tackle issues related to reducing food waste and creating value from surplus food processing. The theoretical foundation of the course is followed by a three-day hackathon, during which students work in groups with participants outside the course to identify new challenges and opportunities in the development and production of new products and reduce food waste. Students are offered to use the incubation facilities of Fab Lab, Innovation Centre of Iceland and Matís, Iceland's food science and biotech laboratory. At the end of the course, students promote their ideas through pitching, resulting in creation of a draft of business plans for a potential start-up.



## "Nærumst og njótum" the TV Series

Anna Sigríður Ólafsdóttir, professor of Nutrition at the School of Education hosted a TV series in 2022 at RÚV, the Icelandic National Broadcasting Service, which followed a diverse group of people as they rethink their nutrition and dietary habits in order to eat better and enjoy a healthier lifestyle.



## Food Waste Initiatives at UI

The Student Services, which operates Háma the UI canteen, has consistently worked to reduce food waste in their operation. At Háma, special attention is given to production based on demand. Items that are not sold within a specific timeframe are sold at a discount the day after. Háma also operates smaller canteens all over campus, and all products sold there are carefully managed to prevent unnecessary waste. On Saturday afternoon, customers have the opportunity to choose Háma items at reduced prices to clear out the refrigerators. Finally, Háma donates surplus items and food to *Samhjálp*, for individuals in need and who are unable to provide food for themselves.



Research





Community outreach and partnerships



Operations and governance





### RESEARCH

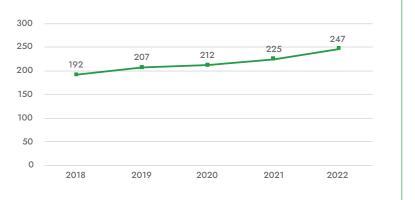
**1083** Number of peer-reviewed articles from 2018–2022 with relation to SDG 3

25381 Number of citations from 2018-2022

**2,32** Field-weighted citation impact from 2018–2022

THE Impact Ranking results 201–300 out of 1218 in the world 87,9 Research score out of 100

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



### Mina and the Land of Dreams

An Icelandic health education game, Mina and the Land of Dreams was designed and published by the innovative company NunaTrix ehf. The purpose of the game is to prepare young children for anesthesia when undergoing medical procedures by informing them about what to expect and teach them coping strategies for anxiety and fear. Brynja Ingadóttir, senior lecturer in nursing, developed the video game with her colleagues to help children deal with this fear. Part of the project explores if the game is culturally competent for use in Nepal and if its implementation into hospital care in Nepal is feasible. The project received several grants and is a collaboration between experts at UI, Landspítali University Hospital, and the University of Turku in Finland.



## The SAGA Cohort

The SAGA cohort is one of the largest scientific undertakings specifically designed for improved understanding of the impact of trauma on women's health and the potential genetic underpinnings of varying trajectories of health after exposure to such trauma. The results of the study show, among other things, that almost 50% of women experienced more than one adverse childhood experience (ACE) in their childhood and about 10% have experienced five or more ACEs. The ACEs most strongly associated with psychological symptoms and reduced resilience in adulthood were emotional neglect, sexual violence, bullying, and mental health problems at home.



## The European Community Respiratory Health Survey

A research group at UI and Landspítali - the National University Hospital of Iceland, led by Þórarinn Gíslason, professor emeritus, and Bryndís Benediktsdóttir, professor emeritus, has embarked on a new phase of a multinational research project investigating the effects of the environment, lifestyle, sleep, and health on the respiratory systems of Icelanders. The project is titled "The European Community Respiratory Health Survey – ECRHS" and involves a large group of scientists from across Europe and Australia. The aim of the research is to assess the prevalence and nature of asthma and allergies, was well as changes in the respiratory system and their relationship to various lifestyle, environmental and health factors.



### **Health Promotion I**

In the course Health Promotion I, which is taught to students learning about physiotherapy, a focus is placed on the relationship between the environment and health, as well as the impact of climate change on health and capabilities. The course explores how the UN SDGs relate to physiotherapy. Emphasis is placed on the fact that the work of a physiotherapist has a small carbon footprint since it primarily involves movement, touch and communication. Students in the course are encouraged to consider the role of physiotherapy in climate action and how nature can be utilised in therapy, promoting active transportation for physiotherapy clients. The programme also participates in the international project *Environmental Physiotherapy Agenda* which contributes to the integration of environmental and sustainability education into the foundational curriculum of physiotherapy.



## Hugrún, a student-led organisation for mental health education

Axel Pétur Ólafsson, chairperson of Hugrún, an organisation for mental health education, tells us that Hugrún was established in the spring of 2016 by students in nursing, medicine, and psychology at the University of Iceland. "The organisation is run on grants, voluntary donations and fundraising. Its goal is to give young people mental health psychology education, free of charge. The lectures provided are to educate young people about mental health, mental disorders, and the recourses available. By doing so the hope is that the awareness of mental health will improve, it will eliminate prejudice and empower young people."

## Mental health education for young people

Hugrún's educators volunteer and travel all over the country to give lectures to high schoolers, some have lectures from Hugrún every year. The organisation has an active website which is available in Icelandic, English, and Polish with the aim to make educational material on mental health and mental disorders accessible in plain language. Axel says that Hugrún also has organised several campaigns about the various aspects of mental health.



## Hugrún plans to keep the discussion about mental health active

Axel says: "We in Hugrún want to continue to be visible and keep the discussion about mental health active and thus improve young people's knowledge of mental health and mental disorders. This is how Hugrún wants to promote health and well-being in society."

## **Children's Wellbeing**

Children's Wellbeing is a postgraduate diploma programme that was first offered in 2022 by the Faculty of Social Work. The course is intended to support the implementation of the Prosperity Act, on integrated services for children, which entered into force on January 1, 2022. The diploma programme aims to meet the needs of people who provide services to children and their families. This includes providing specialised knowledge of children's issues, services emphasising children as participants, integration of services, interdisciplinary collaboration, teamwork, and case management. The study path is offered in cooperation with the Ministry of Education and Children, and representatives from the National Agency for Children and Families sit on the studies committee.



## UI's Actions in the Covid-19 Pandemic

In 2022, UI took various actions to promote stronger infection control against Covid-19, increase the safety for staff and students on campus and contribute to society's efforts to combat the virus, such as providing rapid antigen testing at the University Centre, free of charge. In addition, UI contributed to research in relation to Covid-19. The Centre for Public Health Science at UI was a participant in the COVIDMENT consortium, a research collaboration involving leading scientific groups from six Northern European countries, focusing on long-term effects of the COVID-19 pandemic on public health, with special emphasis on mental health. As part of this, The Centre for Public Health Science led a research project, involving nearly 250,000 individuals across the six counties. The findings of the study indicate that the impact of COVID-19 on mental well-being is substantial, with the severity of COVID-19 being an important predictor of the risk of mental symptoms.



## **Student Community Projects**

UI students have been involved in numerous projects to raise public awareness for science and research work conducted at UI.

#### » Ástráður – for preventive action

Medical students of UI visit upper secondary schools in Iceland to talk about the importance of STD prevention and prevention of unwanted pregnancies. The goal is to meet with new students in upper secondary school since this allows medical students to reach the greatest target audience.

#### » Teddy Hospital

The Public Health Organisation of Medical Students has made it possible during the past few years for preschool children to visit the hospital with their sick or injured teddies and toys. The goal is to prevent children from developing a fear for healthcare professionals, and the hospital environment, and to give medical students an opportunity to practice interacting with children.



## Year of health at UI 2022–23

UI strives to create a motivational, sustainable and happy work environment that supports the health and wellbeing of the staff. As such, there are many long-running health promotion initiatives at UI. In order to create a stronger framework for staff health promotion, the academic year 2022–23 was divided into five periods that focus on a specific area of health for each period and lectures and other events related to that aspect of health were offered. These themes were physical health, professional health, mental health, personal health and social health. Each year, staff of UI are also offered vaccination against annual influenza, free of charge.









Community outreach and partnerships









#### RESEARCH

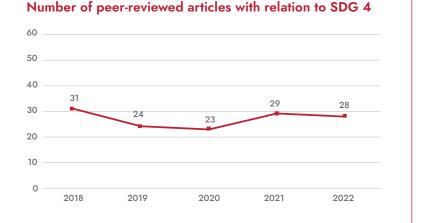
**135** Number of peer-reviewed articles from 2018–2022 with relation to SDG 4

**810** Number of citations from 2018–2022

**1,14** Field-weighted citation impact from 2018–2022

THE Impact Ranking results 601-800 out of 1304 in the world

77,2 Research score out of 100



#### Integrating Character Education and the Values Aspect of Environmental and Sustainability Education

Although fostering values is promoted within Environmental and Sustainability Education (ESE), and a shift in values seen as essential for sustainable future, many educators appear uncertain or conflicted about whether, or how, to approach values education. The findings in Karen Elizabeth Jordan's doctoral project, indicate existing common ground between ESE and character education via school climate/ethos and role modelling; service-learning; interdisciplinarity, real world and holistic learning; taking a wholeperson approach to education; the need to address the humannature relationship; and the need to redress the purpose of education, particularly regarding challenges instrumentalism and neoliberalism in education.

## Q

### TINK@School

TINK@School is an international research project lead by UI. The project envisages using tinkering as an engaging experiential method to unlock the student's creativity and support the teachers and schools in their efforts to design and apply meaningful interventions on sustainability and climate change topics. Tinkering is a hands-on learning approach and way to develop understanding about the world. Learning through tinkering relies on direct experiences with real phenomena, things that learners can see and touch. In the project, educational projects about sustainability and climate change will be developed for students aged 8 to 12.



### Menntakvika; Research, Innovation and Development

The School of Education's annual and popular conference Menntakvika is held in October each year, one of UI largest conference. There the latest research in pedagogy, education and leisure studies are presented. In 2022, sixty-one seminars were offered, both on site and live streamed. Over 200 studies were presented, many of which have strong reference to the UN SDGs, concerning projects on e.g. innovation and development at all school levels, quality of teaching, inclusive schooling, marginal groups in schools and climate issues in education to mention few. Admission to the conference is open to all and free of charge.



## Menntaflétta PD Programme

Menntaflétta is a PD Programme that started in 2020 that invites teachers and professionals from school and leisure activities to participate in open and accessible webinars. The aim is, among other things, to expand networks and use educational research and peer support to strengthen their work. The courses are open to everyone, regardless of residence, and there are no participation fees. Menntaflétta is a joint project of University of Iceland's School of Education, the University of Akureyri and the Icelandic Teachers' Association, and is funded by the Ministry of Education and Children's Affairs.





# Cooperation between Iceland and Uganda in nursing and midwifery

Brynja Ingadóttir, Associate Professor in the Faculty of Nursing and Midwifery says the project, *Cultural Sensitivity and Caring*, came to be when she met a woman from Uganda while they were both doing their PhD. They had an interest in collaborating and received an Erasmus+ grant that made working together possible.

# Emphasis on health systems and culture, work, and education

Brynja says though the pandemic took its toll on the project, they made the best out of an unfortunate situation and

worked together online. From autumn 2022, the project received two delegations from Ugandan partners, and one visit was made to Uganda: "During the visits, emphasis has been placed on introducing our health systems and culture, work and education in nursing and midwifery and on creating connections between people." When it comes to the research that has been conducted Brynja says: "Professor Helga Gottfreðsdóttir was the co-supervisor of a doctoral student in midwifery studies, and one peerreviewed article has been published from that collaboration. A study is being prepared in Uganda on the self-care of patients with diabetes, and they have been asked for help in developing a postgraduate course in nursing."

# Exciting opportunities for both staff and graduate students

The project is still in development but partners and guests from Uganda have attracted the interest of staff and students in the diversity and cultural sensitivity in modern society. Brynja adds: "We see many exciting opportunities for both staff and graduate students to get to know how they work towards the same goals in nursing and midwifery in Iceland and Uganda, to educate qualified health care workers and provide treatment, based on evidence-based knowledge that contributes to the health of the public and patients, despite the great difference in facilities and infrastructure."

## Sustainability Education and Leadership

Sustainability education and leadership is a graduate level course at the School of Education. The purpose of the course is to provide participants with opportunities to work with institutional and systems approaches in working with sustainability and sustainability education. Examples of the issues the course covers are leadership for sustainability, identifying wicked problems, relations between science and sustainability, rural development and sustainability, and the creation of shared values, such as in corporate social responsibility.

1	

## Sprettur

Sprettur is a project at the Division of Academic Affairs at UI for college students 18 years and older that aim to go to university. Sprettur supports and prepares youth with immigrant back-grounds for university studies. The goal of Sprettur is to create equal opportunities in education. All participants in Sprettur are provided with a mentor, who is a student at UI, throughout the programme. The mentor's main role is to support and encourage participants in their studies and social life. Mentors also work to create a constructive relationship with the participants, serve as a positive role model, and participate in events organised in Sprettur. The mentor for Sprettur take part in an elective course, available within all study courses, and receive 5 credits for their year as a mentor.



## **Community Projects, Children's Education**

UI aims to strengthen its ties with Icelandic society and promote increased interest and understanding of science. Below are some projects related to children's education:

» University of Youth

The University of Youth (UoY) is for youngsters between the age of 12 and 14. The aim is to promote interest in and understanding of science by offering courses that are linked to all academic fields of UI, taught by staff, students, and University partner institutions. An emphasis is placed on ensuring equality and diverse backgrounds of students and UoY to promotes special support to students of foreign origin, by offering participate free of charge. In recent years, a course has been offered at UoY dedicated to the UN SDGs. In 2022, UoY received an award from the Icelandic Centre for Research for Science Communication.

#### » The University of Iceland Science Centre – UniSci

UniSci introduces visitors to the wonders of science and technology in an interactive way, through discovery, play and experimentation. The aim is to spark interests in science both for youth and society at large and support primary school teaching. At its Centre, UniSci welcomes school group visits and offers teacher training courses, free of charge. All members of the UniSci are students or teachers at UI. UniSci is guided by the UN SDGs in all its activities and work.

#### » The University of Iceland Knowledge Train

The Knowledge Train travels yearly around Iceland, in close cooperation with local municipalities and schools in each destination. The aim is to give inhabitants in rural areas equal opportunities accessing events of this kind and to support schools and education. On board are courses from the UoY and travelling version of UniSci, taught by teachers and students from UI. The knowledge train is guided by the UN SDGs in all its work.















-



#### RESEARCH

**128** Number of peer-reviewed articles from 2018–2022 with relation to SDG 5

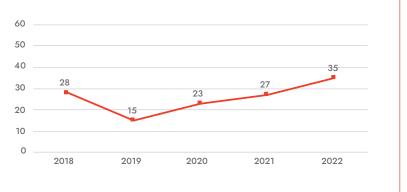
825 Number of citations from 2018–2022

**1,61** Field-weighted citation impact from 2018–2022

THE Impact Ranking results 201–300 out of 1081 in the world

**79,6** Research score out of **100** 

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



### Gendered and Structural Violence: The Discourse on Intimate Partner Violence in Iceland

The goal of Katrín Oddsdóttir's doctoral thesis is to understand how violence thrives and is discursively maintained in Icelandic society, with a special focus on the project of heterosexuality and men who have been violent towards women. The results indicate that young people draw heavily on heteronormative discourses and gendered norms in their understanding of consent in intimate relationships. Also, the research exposes the differences between the perpetrators' and the victims/survivors' perspectives and understandings of intimate partner violence.

## Q

## Parental Leave Policies and Social Sustainability

UI's Social Science Research Institute is part of a 4-year research project about Parental Leave Policies and Social Sustainability, where it leads two working groups. The project, which involves 32 partners from 22 countries, aims to advance and disseminate research and knowledge about the significance of paid parental leave for the social sustainability of societies. The aim is to set the scene for future parental leave policy research from the new perspective of social sustainability while making the field more coherent across disciplines and beyond academia. The project is funded by the European Cooperation in Science and Technology (COST).



# Cooperation Agreement of UI and the City of Reykjavík Renewed

UI and the City of Reykjavík have renewed their cooperation agreement on gender equality research. **RIKK** – **Institute for Gender**, **Equality and Differences** will oversee the implementation of the agreement on behalf of UI, as the collaboration has been ongoing since 2000. The aim of the partnership is to support increased gender equality research and the dissemination of scholarly knowledge in the field between both parties through ongoing research and education in the field of gender studies. This agreement has had significant impact on the activities conducted by RIKK and its direct connection to UI, contributing to innovation in both education and research at UI.

## Q 🔬 🛃

## **Applied Gender Studies**

A diploma programme in Applied Gender Studies provides students with practical knowledge and preparation for work on equality issues. The diploma programme covers the general basis of gender studies, examines the position of the genders in Icelandic society and examines the official gender equality policy and its implementation. The aim is for students to acquire a general foundation in gender studies, understand its interdisciplinary content, and main weaknesses and strengths.





# The impact of gender, culture, and work on the decision to have children

"'Fertility intentions and behaviour in Iceland' (FIBI) is a three-year research project which received the grant of excellence from the Icelandic research council (RANNÍS) in 2022." Says Ásdís A. Arnalds, Director of the Social Science Research Institute. With Ásdís, the other principal investigators are Ari Klængur Jónsson, and Sunna K. Símonardóttir.

## **Changes in fertility in Iceland**

Ásdís says that during the past decade, fertility in Iceland has decreased considerably, although the number of births increased somewhat during the COVID-19 pandemic. "The project addresses these rapid demographic developments by exploring the determinants behind changes in fertility during the past decades. It seeks answers to questions such as whether there are differences in childbearing related to social background, and how parenting culture impacts fertility decisions."

## Focus on family policies

In the project, a special focus is placed on family policies and their effectiveness in shaping fertility decisions, including whether current policies offer enough support to families with children and whether they adequately reflect the diversity of Icelandic families. Ásdís adds, "The project applies qualitative and quantitative methods to analyse socioeconomic differentials in childbearing, to seek answers to how gender, parenting culture, and work-family reconciliation shape childbearing decisions, and how LGBT+ parents and migrants make decisions on parenthood."

## Young women view motherhood as distressing

Ásdís mentions that the project has already produced some valuable findings, including "from focus group interviews with young childless women of childbearing age that show that young women view motherhood as distressing and likely to negatively impact their social position. Another finding is that a rise in the total fertility rate in Iceland during the hight of the COVID-19 pandemic was mainly due to an increase in births for educated women, who already had children."

Proportion of women receiving a degree in 2022: 69%

Proportion of senior female academics in 2022: 38%

### Girls Calculate – Maths Camp for Girls and Non-Binary Teenagers

Girls Calculate (Stelpur diffra) started in 2021 and is for all girls and non-binary kids at upper secondary school who are interested in learning more about all kinds of subjects within mathematics. Led by Nanna Kristjánsdóttir, BS student in mathematics at UI, the goal is to inspire more teenage girls to pursue a passion for maths and to challenge various stereotypes about the discipline. Girls Calculate project was nominated for the President of Iceland's Innovation Award earlier this year, an honour bestowed on just six student projects supported by the Student Innovation Fund. The project is now collaborating with the University of Iceland Science Centre and other parties.



2:2

## International Collaboration on Equality Work

Collaboration between UI and the University in Coimbra, Portugal that is part of Gender@UC project in the field of gender equality funded by the EEA Reconstruction Fund. The fund's primary goal is to contribute to a more equal Europe; socially and economically. Porgerður J. Einarsdóttir, professor of gender studies, leads the project on behalf of UI.

## UI Receives Jafnvægisvogin Award

UI, along with over 70 other organisations, received recognition from Jafnvægisvogin, a gender equality project of the Association of Businesswomen in Iceland (FKA). This initiative aims to achieve gender balance in the leadership of companies and institutions. UI has been a member of the Jafnvægisvogin project since 2020, and it commits to continuously working towards achieving gender equality in leadership positions within UI.



## **Equality Focused Student Organizations**

#### » Ada – Women in Information Technology

Ada creates a platform to empower women pursuing and education in tech-related fields at UI. Ada aims to establish a safe environment for women to create connections, share their experiences, and support each other. Ada also provides information to potential students about the opportunities in tech related fields in increase the female role models in tech

#### » The Feminist Organisation of UI

The Feminist Organisation of UI is both for students and staff of UI. The organisation is apolitical and fights for gender equality.

















## RESEARCH

**70** Number of peer-reviewed articles from 2018–2022 with relation to SDG 6

**1561** Number of citations from 2018–2022

**2,58** Field-weighted citation impact from 2018–2022

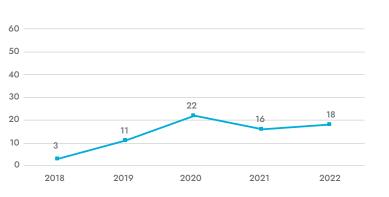
THE Impact Ranking results 401-600 out of 702 in the world

66,4 Research score out of 100

# Micropollutants in Drinking Water and Wastewater in Reykjavík

Micropollutants in surface and drinking water are an emerging concern because of their toxicity, long lifetime and potential for bioaccumulation in the food chain. While many of these pollutants are traditionally not monitored as part of routine operations in Iceland, some have been identified in selected water supplies. Wastewater provides an indication of anthropogenic pollutants discharged into surface waters and can be used to assess potential threats to ecosystem and human health. To date, limited knowledge exists on flame retardants, phenols and PFAS in Icelandic waters. These compounds originate in a range of consumer products and building materials and have been detected in both drinking and wastewater abroad. The goal of the research is to measure these three chemical groups in drinking and wastewater in the capital region of Iceland and will give insight to potential risk to local population in Iceland.

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



# Improving Drinking Water Quality in Small Water Supplies in the Nordic Countries

This project aims to develop recommendations on how to secure safe water in small water supplies via a risk-based approach. Drinking water quality at small water supplies world-wide has been shown to be of poorer quality than at the large supplies and waterborne disease outbreaks and non-compliance to regulation are most frequent in small supplies. The project aligns well with SDG 6, that is to achieve universal and equitable access to safe and affordable drinking water for all by 2030. To achieve this, the new EU Drinking water Directive (EU DWD 2184/2020) requires a risk-based approach to ensure drinking water quality for supply systems and increased transparency and information to the public referring to the human right declaration and that water is a public good, not a commodity.

Q





## Hydrologic performance of sustainable urban drainage systems in cold maritime climates

"Sustainable urban drainage systems (SUDS) are gaining increased popularity as cost-effective, environmentally friendly, and sustainable measures to address urbanization and climate change challenges by dealing with stormwater close to where it falls with the ultimate goal of achieving climate resilience." Says Tarek Zaqout, Postdoctoral researcher at The Water and Wastewater Association and adds: "SUDS serve the purpose of promoting localised handling of stormwater, reducing runoff generation at its origin, and improving water quality. The benefits of SUDS extend beyond stormwater management and reach multidisciplinary fields including socio-economic and environmental gains."

#### Passion for environmental issues, sustainable development, and water resources management

"I decided to take on the challenge of starting my PhD working on this project, which stems from my passion for and interest in addressing environmental issues, sustainable development, and water resources management, a field that is of paramount importance to the environment, society, and the well-being of people." Tarek's current research is on quantifying urban flood risk: "Currently, I am working on quantifying urban flood risk using data from Regional Climate Models (RCMs) to assess the impacts of climate change on future urban runoff generation in cold climates for different climate scenarios and explore potential mitigation measures. "

## **Research opportunities for the future**

Tarek says that he foresees various research opportunities in the coming years in this field: "including the utilisation of SUDS for carbon capture, the enhancement of biodiversity, the mitigation of urban heat island effects, and the creation of a sustainable living space."

## Water Resources Engineering Division

The Water Resources Engineering Division is located at the School of Engineering and Natural Science. The Division conducts 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 universities Europe and North America.



## **Accel Water**

The EU's biggest manufacturing industry is food and drink production. At the same time, it is one of the most water and energy intensive industries worldwide, consuming 56% of the available water for industrial and urban use. Additionally, food processing embeds 28% of the total energy used for production. In this 4-year project, 18 organizations from 5 countries, including the Faculty of Food Science and Nutrition at UI, work towards optimising freshwater 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. At the same time, it will allow waste and energy reclamation, optimisation and management, and consequently will promote environmental sustainability, cost savings, and the development of added value products and value chains through material recovery.

## Wastewater Collection and Urban Drainage

The course "Wastewater Collection and Urban Drainage" is taught at an undergraduate and graduate level in the Faculty of Civil and Environmental Engineering. The objective of the course is to provide insight into the collection and transportation of wastewater in urban areas. By the end of the course, students will have a demonstrable ability to explain the role of civil and environmental engineers in improving sanitation and climate resilience of cities, to describe the key pollution concerns associated wastewater and indicators of sewage strength, to design sanitary sewage and stormwater systems, to describe the causes for urban floods in cold climate, and to describe climatic adaptation with (blue-green) stormwater urban drainage.



### 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 regulation on drinking water (est. 1995). At UI campus, water is assessable in all buildings with water fountains and is also safe to drink straight from the taps. UI also wants to minimise plastic and single use items on campus, and therefore, still water is not sold in plastic bottles at campus.















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

#### RESEARCH

**198** Number of peer-reviewed articles from 2018–2022 with relation to SDG 7

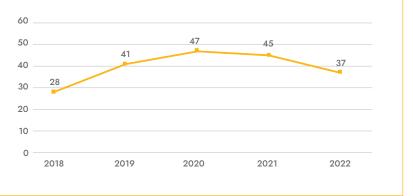
2553 Number of citations from 2018–2022

**1,21** Field-weighted citation impact from 2018–2022

THE Impact Ranking results 301-400 out of 812 in the world

62,4 Research score out of 100

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



#### Corrosion Behaviour of Materials in High-Temperature Geothermal Environments

High enthalpy geothermal fluid utilisation has a potential for growth for green and sustainable energy production. Geothermal energy production is often limited by the corrosive nature of the geofluids utilised. For successful, safe, and economically efficient operation, several technological challenges have to be overcome including the appropriate selections of material(s) for casing, pipelines and other equipment. In Andri Ísak Þórhallsson's doctoral project, corrosion behaviour was studied for carbon steel and several corrosionresistant alloys tested in contact with synthetic geothermal fluids at high temperatures. Results indicates that it can be concluded that the corrosion-resistant alloys are immune to corrosion damage in high-enthalpy superheated geothermal fluid and should be selected in preference to carbon steels in such environments.

## Q

## Electroreduction of Carbon Dioxide to Form Useful Chemicals Such as Fuel

Just as green plants use CO2 as raw material to form various organic chemicals, this greenhouse gas can be used as raw material in man-made technological applications. In this research project, electroreduction of CO2 is studied using computer calculations in order to gain understanding of the mechanism and rate of the various steps in the process so as to help design systems with better performance. The production of hydrogen by electrolysis of water is also part of this project. The UI's School of Engineering and Natural Sciences received a Centre of Excellence grant from the Icelandic Research Fund for the project, which is also part of a Marie Curie initial training network involving ten other research groups in Europe.



#### Nature-based Tourism in Renewable Energy Landscapes: Attitudes of Tourism Stakeholders

With increasing renewable energy infrastructure (REI) development and growing nature-based tourism (NBT), encounters between these two sectors becomes more likely. In Edita Tverijonaité's doctoral project, the aim was to gain more knowledge on the complex interrelationships between NBT and REI in order to facilitate sustainable development of both. In the project, the NBT-REI nexus was investigated with a special focus on the Icelandic Central Highlands, which contain vast wilderness areas and are important for both NBT and renewable energy harnessing. The results reveal low compatibility of present-day NBT and REI, especially in areas perceived by tourism stakeholders as wilderness. Tourism service providers view the Central Highlands and its wilderness as a valuable resource that should be protected from further REI development, however, issues such as ensuring access to the area might lead to conflicts between NBT and nature conservation and hinder preservation of wilderness. The findings of this doctoral thesis demonstrate that the context



## A solution to the world's energy and climate crises

Sveinn Ólafsson, Research Scientist at the Institute of Physical Sciences says that the goal of the project, *Hydrogen electrical energy*, is to find a solution to the world's energy and climate problems. "The innovation of this project is to produce electricity directly with the help of new nuclear technology. This technology is based on a historically unexplained 30–120+ years old known phenomenon in nature that has been called cold fusion LENR or low energy nuclear reactions."

# Tenured researchers take a risk doing research in this field

Sveinn talks about how he started to do research on hydrogen electrical energy. "In 1989, cold fusion first made world news as the energy saviour of the world according to the research of Fleischmann and Ponz. Then research groups around the world

surrounding each REI project, namely various factors related to its location, REI itself and the perception and preference of tourism stakeholders play a crucial role in shaping potential impacts of REI and NBT and should be taken into consideration when planning REI developments in natural areas.



## European Collaboration for Sustainable Ammonia Production

UI and the company Atmonia, which was founded based on research within UI, have initiated an innovation project in collaboration with five other European institutions and companies aimed to develop a proof-of-concept N2 electrolyser to produce liquid ammonia for fuel and fertiliser, designed for direct coupling to sustainable energy source. The technology within the VERGE project will be the first of its kind. The ability to produce sustainable ammonia directly from renewable electricity has high global significance as its current industrial production process is responsible for 1% annual anthropogenic greenhouse gas emission. In the field of maritime transport, up to 3% of annual anthropogenic GHG emission can be avoided by moving from fossil fuels to ammonia as an energy carrier.



tried to repeat the results, few succeeded except for a few groups scattered around the world that formed a scientific community in the field that have held 25 conferences on the subject." Sveinn stared to find interest in the field after 2011, and in 2014 he started to focus even more on the subject. "In 2014 I became almost solely focused on the research field after I met few regular, but elderly, scientists who were struggling with a very difficult problem. Which I only know now in 2023 has a history of over 120 years. Unfortunately, most of these researchers have now passed away as it was only 50+ year old tenured researchers who could take the risk of doing research in this field. Pseudoscience was/is the word used for cold fusion and almost still is." Sveinn adds that he turned 50 in 2011.

### An energy technology can supersede all others?

When it comes to opportunities in the field and what effect they will have Sveinn does not hesitate. "The opportunities presented by this field of research and technology are formidable and will cause tremendous changes in our lives as it adds to the computing, internet and artificial intelligence revolutions that rule all now a days. The technology can supersede all other energy technologies very quickly once its physics has been fully understood and the material technology has been perfected. Iceland will lose its unique status as an energy country, and the same can be said for all other energy countries."

## Orkusproti start-up company

The University of Iceland and Sveinn founded the start-up company *Orkusproti* in 2022 with the purpose of working on the development of this technology once basic research has demonstrated its effectiveness. Sveinn adds that after 10 years of development in the field UI is the only university that has experimental facilities to carry out research in the field.

## Environmental Engineering, Renewable Energy

At the School of Engineering and Natural Science, a master's programme in Environmental Engineering is offered. The programme aims to enable students to analyse and develop engineering solutions to environmental topics, which are becoming increasingly important in modern society. Students choose one specialisation out of four. One of these areas of specialisation relates to renewable energy, in which the emphasis is for students who want to harness energy in a sustainable way by developing renewable energy options with a focus on hydropower and wind energy. Students concentrate on renewable energy potential from interdisciplinary viewpoints and in-depth study of hydropower design and operation.



## FIRST® LEGO® League Competition

FIRST® LEGO® League competition is an international competition inviting primary school students to take part in exciting projects which create skills in science, engineering, technology, and mathematics (STEM). The themes and challenges of the competition are renewed every year and are based on the UN SDGs, the theme for 2022 was SDG 7 and SDG 13. The projects aim to stimulate innovation and build self-confidence, collaboration, and communication skills. Teams compete in four categories: robotics, programming and design, innovation, and core values. Around 200 pupils from all over the country take part each year. Since its inception, around 4000 students have taken part in Iceland.





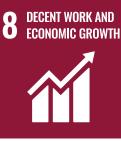




Community outreach and partnerships







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

#### RESEARCH

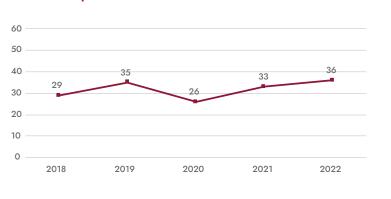
**159** Number of peer-reviewed articles from 2018–2022 with relation to SDG 8

**2101** Number of citations from 2018–2022

ECONOMY

**2,0** Field-weighted citation impact from 2018–2022

THE Impact Ranking results 301-400 out of 960 in the world 83,1 Research score out of 100 Number of peer-reviewed articles with relation to SDG 8



### **Arctic Guides Safety Education**

Recent decades have seen a huge change in Arctic tourism. While the local economy has grown, issues related to environment, safety, and risk management in the extreme Arctic conditions must be investigated with an aim towards sustainable development solutions. Partners in the project include the Department of Geography and Tourism at UI, Department of Safety at the University of Stavanger, Faculty of Health Science, School of Sport Science at The Arctic University of Norway (UiT), FAS Upper secondary school in Southeast Iceland (Framhaldsskólinn í Austur-Skaftafellssýslu) and vocational school Campus Kujalleq in Greenland. The objective of the cooperation is to enhance knowledge sharing in the development of guide education in the Arctic environment with a special focus on increased involvement and integration of research on tourist safety in the Arctic.



#### Careers Connection and UI Science Park Connect Students and the Business Sector

UI Careers Connection and UI Science Park have signed a partnership agreement with the aim of promoting collaboration and enhancing the connection between Icelandic society, businesses, and the public sector. As part of the agreement, a special emphasis is placed on enhancing skills of students in innovation and entrepreneurial activities. One of the roles of the Science Park is to serve as an innovation hub and bring together the business sector and the UI community, including staff and students, to create new opportunities for research and collaborative projects.





# Importance of promoting sustainable tourism

Professor Gunnar Þór Jóhannesson, who specialises in tourism at the Faculty of Life and Environmental Sciences, says that there are numerous reasons to promote sustainable tourism. He says: "Sustainable tourism is fundamentally about managing our resources well. By promoting awareness of sustainability and combining the focus of sustainability with the activities of companies in the tourism industry, we are securing the basis of the industry in the long term and increasing the likelihood that the tourism industry will strengthen communities and not use too many natural resources." Gunnar Þór mentions that he feels an increased interest in sustainable tourism among companies as well as among public entities. "Some companies are working on strategies in this area, and sustainability will be a guiding principle in the government's new tourism plan."

## A variety of opportunities in the field

There are many opportunities in the field of sustainable tourism, says Gunnar Þór, noting that the concept of sustainability is sometimes vague: "It (sustainability) is thrown out as a label in the greenwashing of companies and institutions, and it needs to be linked to real actions if it is to have any value. It is difficult to imagine constant growth as sustainable. Various companies have taken steps in the right direction, but there is a lack of advice and guidance on how to make operations more sustainable and what sustainability can mean in a service industry such as tourism."

# Sustainability is a common thread for geography and tourism studies

Finally, Gunnar Þór says there is a lot happening in this field within UI. "For example, sustainability is a common thread in the geography and tourism curriculum, and we link to this discussion in most courses. We put a lot of effort into training the students to approach this discussion in a critical way and to find practical solutions. In this way, we try to prepare them to take an active part in shaping the activities of companies in a responsible way."

## Sustainability and Future of Organisations

The Sustainability and Future of Organisations course is taught at graduate level at Faculty of Business Administration. The main objective of the course is to introduce to students the range of developments that will affect organisations in the future and the role of sustainability in future of business. This course is unique in its focus on the future of organisations, within sustainability context, presenting holistic view of the organisation and its context.

### Ø

### **Career Days**

Career Days at UI were held for the seventh time, and special emphasis was put on employment issues and preparing students of UI for participation in the job market. Student Counselling Centre, Career Connection of UI, the Students Financial and Economic Affairs Committee and University of Iceland Science Park organised the event. This year's theme was Career Skills for the Future. On the agenda were workshops with experienced professionals form the business sector, advice on how to prepare for job interviews, CV writing, and guidance in implementing ideas. Participation was free of charge and open to all.

### 2:2

### 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 Ul'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.



### **Financial and Career Committee**

The Financial and Career Committee is concerned with some of the major interests of UI students. The 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. The purpose of the committee is to create a connection between students and the business community.







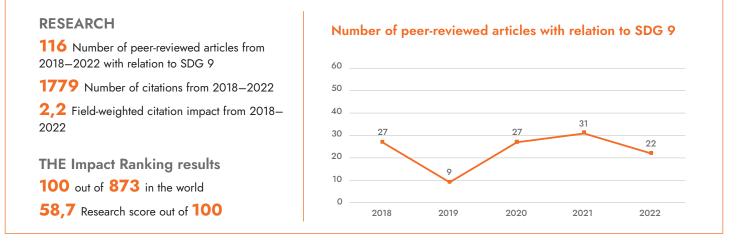












## **BIOZOOSTAIN**

BIOZOOSTAIN works on sustainable utilisation of marine bio resources to produce high quality food-first products and develop prediction tools for the best targeting of catching hot-spots. The main objectives are to fully process valuable ingredients which are taken ashore as a side-stream during pelagic fishing, to develop new high-quality products for the food supplement, cosmetic and nutra-/pharmaceutical markets in a sustainable and ethical way. The project is funded through the ERA-NET BlueBio Cofund Call.



## **Digital Communication and Innovation**

At the School of Humanities, a diploma programme is offered in digital communication and innovation that places emphasis on students acquiring a good foundation and preparation for work in the field of digital media. Innovation and entrepreneurship are emphasised, as well as practical methods for realising ideas. Recent technological developments have revolutionised the world, and future technological developments will push further change. Therefore, there is a growing need for individuals with the skills and abilities to lead innovation in the field of digital development in all sectors.

## **Innovation Hub for Education**

UI and Reykjavík City signed an agreement regarding establishing and operating the Innovation Hub for Education. The Hub supports various types of innovation and entrepreneurship in the field of education, both in formal and informal learning environments, development of ideas and methods, skill development, new ways of learning and teaching, digital learning environments and education for the future. The aim is to bring together forces of innovators from the education system, the academic community, and the business sector to create a diverse platform for shaping and developing new methods in the field of education.



## NKG – Innovation Competition for Primary Schools

The NKG is an innovation competition for students in Icelandic primary schools. The student's work takes place in the participating schools around Iceland during the school year. The students receive instructions on how to develop a project from an idea to reality in their field of interest, activating the creative power of students and rational thinking, enhancing their self-esteem and resourcefulness. Great emphasis is placed on ideas being linked to societal challenges and special emphasis is placed on SDGs 1, 2, 3, 4, 5, 7, 11 and 12. NKG ends with a workshop where participants have an opportunity to realise their ideas further with the help of instructors from UI and other partners. In the finals, the President of Iceland delivers a grand prize and recognition papers.





# *Snjallræði:* Start-up Social supports projects that tackle societal challenges

"Snjallræði or Start-up Social, is an innovation growth space which is hosted by the University of Iceland in collaboration with the University of Reykjavík, the University of Akureyri and MIT design," says Oddur

Sturluson, Project Manager at the Innovation Hub for Education at School of Education. He says that the growth space received great support from its sponsors, City of Reykjavík, Marel, and Landsvirkjun, and Start-up Social combines design thinking and sustainable innovation to support projects that tackle societal challenges.

## Start-up Social is a great step for teams that want to have positive impact on society

Oddur says that Start-up Social is open to teams that are working on an innovative or entrepreneurial project where the goal is to have a positive impact on society. He names several teams that have come out of Start-up Social that have already had a positive impact in the society: "Many projects, for example in projects in health care, projects that focus on gender equality, and sustainable innovation, have participated in Start-up Social. Just to name a few examples, *Bergið* Headspace and *HEIMA* app have participated but all former participants can be found on Start-up Social's website: snjallraedi.is"

## Unique platform for promoting innovation

Oddur says that one of goals of Start-up Social is to give teams and projects support that they would otherwise not have. "Many Business accelerators and workshops that exist for innovation and entrepreneurship evaluate applicants and tailor the mechanism around creating companies that are suitable for index investing. Such an approach, of course, excludes a lot of social innovation that does not fit into that box. Start-up Social is thus a unique platform for using innovation in areas where profit is not the primary goal."

## Number of university spin-out companies: 20

## **Innovation Accelerators at UI**

UI collaborates on various innovative platforms and accelerators that support entrepreneurs in developing their business ideas. » Academy for Women Entrepreneurs (AWE) Programme

UI participates in Academy for Women Entrepreneurs (AWE) in collaboration with the US Embassy in Iceland. The programme is aimed specifically at women and to support them in developing their business ideas, offer education and know-how, and to strengthen social networking. Prizes are awarded for the best business plan in both individual and team categories. Other collaborators are the Association of Business Women in Iceland (FKA) and Women of multicultural ethnicity network in Iceland (W.O.M.E.N).

#### » Snjallræði – Startup Social

Snjallræði – Startup is a 16-week incubator that supports strong teams that are passionate about solution to contemporary challenges and supporting the UN SDGs. The incubator is in collaboration with MITdesignX, and MIT experts come to Iceland and share their knowledge. The goal of the incubator is to promote innovation that addresses contemporary challenges, thus it is an important platform for community start-ups. The focus is on promoting sustainability in innovation and building start-ups that directly support one or more of the UN SDGs from the outset. UI is one of the collaborators of Snjallræði – Startup Social.

#### » Gulleggið

Gulleggið is a competition for young entrepreneurs to start realising their ideas, run by KLAK – Icelandic startups. Gulleggið starts with an open Masterclass, where the aim is to develop an idea and create a presentation that allows teams to take the next steps. 10 teams are then selected to the final round of Gulleggið. As an idea competition, competitors may not have received fundings or generated revenues from the idea when they begin. UI is one of the supporters of the competition and in addition, students from Innovation and Entrepreneurship Committee of UI, University of Reykjavík, and University of Akureyri form the project management team of the competition.



# Sprotamýri – UI's Start-up and Entrepreneurship Centre

Sprotamýri is the Entrepreneurship Centre of UI, where student and staff can access facilities and assistance from support entities such as KLAK – Icelandic Startup and the Innovation Hub for Education while working on their innovative ideas. Sprotamýri is an open workspace which are allocated three times a year. The facilities are free of charge.



# Innovation and Entrepreneurship Committee of the Student Council

The Student Council's Innovation and Entrepreneurship Committee has the role of promoting innovation and entrepreneurship among students at UI. The committee works closely with KLAK – Icelandic Startups and communicated their projects among university students. The committee has undertaken projects such as *Gulleggið*, the largest innovation competition in Iceland, and Student talk (Ted Talk).



















## The Transition from Preschool to Primary School

The transition from preschool to primary school is considered one of the key events in life and likely to have an impact on academic success, development, and well-being into adulthood. The aim of Björn Rúnar Egilsson's doctoral project was to explore the experience of parents of children with diverse language and cultural backgrounds when their children transitioned from preschool to elementary school. The results indicate both commonalties and differences in the experiences and attitudes of the parents towards the transition from preschool to primary school. The study findings highlight the importance of understanding different perspectives of parents and the need for further research to support positive transition for all children.



## Vocational Studies for People with Disabilities, Diploma

The School of Education offers a two-year undergraduate diploma in vocational studies for people with disabilities. The main purpose of the programme is to provide opportunities for full social participation and to prepare students for work. In 2022, students opened the exhibition *#Iwanttowork* and organised a conference *We want to educate ourselves!* where the goal was to inform the community about the importance of education and the experience of the students in higher education.



## World of Words in Iceland

Many children from homes where Icelandic is not the only language spoken experience challenges communicating effectively in Icelandic during their preschool years and beyond. Difficulties with Icelandic in the preschool years can have long-term negative consequences for children's language, literacy, academic, social, emotional, psychological, and vocational outcomes. For example, half of all students with two non-Icelandic parents drop out of upper secondary education. This project is a cluster randomised controlled trial of a teacher-delivered intervention for increasing the Icelandic language skills of children in preschool, especially children who are multilingual. The Project is led by Kathryn Margaret Crowe, Adjunct Lecturer in Speech Pathology at School of Health Science.



## **Diversity and Inclusion in Organisations**

In this course, taught at the Faculty of Business Administration at the School of Social Sciences, students are offered the opportunity to recognise the need to develop inclusive work environments that operate on equity principles and values that support and engage all employees. The aim is to engage students in critically examining the issues and dilemmas of managing and valuing diversity in contemporary organisations in an increasingly globalised world. At the same time, students explore the challenges that leaders and practitioners face in the strategic management of diversity and the implementation of diversity initiatives and training in organisations.



## People with disabilities need access to pursue high education

Nína Margrét Ingimarsdóttir, former student of Vocational Studies for People with Disabilities, says that the programme has helped her getting out of her comfort zone. "We were in class with non-disabled people,

and it has also helped me not to be shy to chat with them. I have met many people both from the diploma programme and in the classes I have attended with non-disabled people." She says that the programme caught her interest when she was finishing her studies in career path in Fjölbrautaskólinn í Breiðholti College. "I applied for this program because it was interesting, fun, informative and they had so much fun learning to offer. Unfortunately, only a few people got in because they only let in every other year at the time but now, they take every year which I am happy with."

### Opening opportunities for the future

Nína Margrét points out that this programme is important because it raises awareness that people with disabilities can also do many things like non-disabled people. "Also, to show teachers from other fields of study that we can take the same courses as others, do the same tasks even though some of them are difficult and we may sometimes need help. It is also important to be able to study at the university. It increases self-confidence, helps to get out of the comfort zone and opens opportunities for the future."

#### Insights help with tackling various tasks

Nína Margrét says, "The program has given me a lot of opportunities. Like this summer, we went to Austria on a graduation trip to meet people in similar studies as us. We got to know their studies and ours, which was really fun. We also gave a lot of lectures in both Icelandic and English, which was a bit challenging but fun." Nína Margrét has bright hopes for the future as she talks about her goals and interests. "In the future I would like to work with children and animals. I also like to take pictures with a camera and do so in my spare time."

## Equality and Diversity Related Work Within UI

UI is committed to promoting equality and diversity in all fields and strives to be at the forefront in all areas of equality.

## » Equality Action Plan

UI's first Equal Action Plan was approved by UI Council in 2000, with the current plan for 2021-23. Discrimination based on sex, gender, skin colour, disability, sexual orientation, gender identity, ethnicity, body shape, age, health, religion, views, residence status, financial means, nationality, race or culture is prohibited at UI. All members of the UI community are responsible for ensuring equality, but the ultimate responsibility lies with the Rector and the University Council. The Equality Action Plan applies to all students and staff.

#### » Equality Officer

The Equality Officer holds an administrative position within the UI and oversees equality-related matters, working alongside the Equal Rights Committee as well as chairing the Council for Disability Rights. Among other thing, the role is to ensure the implementation of the Equal Rights Policy, provide technical advice on equality-related matters as well as working towards making equality and diversity an established part of UI.

#### » Equality Rights Committee

The Equality Rights Committee of UI oversees equality in a broad sense on behalf of the Rector and the University Council. Each of the schools within UI has Equality Rights Committees and in the central administration. Their chairperson makes up the central Equal Rights Committee of UI, a student representative and a chairperson appointed by the Rector. The equality officer also attends the committee's meetings.

#### » Professional Council on Responding to Gender-Related and Sexual Harassment

The UI Council appoints a Professional Council on Responding to Gender-related and Sexual Harassment and other sexual

violence in accordance with rules of procedure. Harassment, violence, or inappropriate behaviour can be reported on Ugla, UI's internal network for students and employees.

» Council for Disability Rights

The Rector appoints the Council for Disability Rights, in accordance with Article 12 of the Regulation on disability services for study at the UI, no. 481/2010. The role of the Council is to oversee issues concerning people with disabilities within UI, as well as students with special needs. It also regularly reviews the policies of UI concerning people with disabilities and prepares and follows the Equal Rights Policy concerning people with disabilities.



#### **Equality Focused Student Organizations**

#### » Q-Queer Student Association

The purpose of Q is to give queer students an opportunity to socialise in a safe environment, to provide them with support. and encourage cohesion. Q aims to be a visible force within UI on behalf of gueer students and to fight for equality and respect, especially concerning the topics of sex/gender, gender identity, and sexuality as well as educating students and teachers on these issues.

» Asian Students Association in Iceland

A joint social platform for Asian students at UI. The Association holds many events, like social networking, posts about events that are of interest and is a great platform for sharing experience and support.









Community outreach and partnerships





## RESEARCH

**210** Number of peer-reviewed articles from 2018–2022 with relation to SDG 11

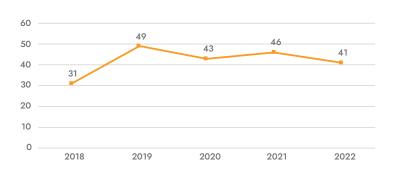
**2868** Number of citations from 2018–2022

**1,63** Field-weighted citation impact from 2018–2022

THE Impact Ranking results 201–300 out of 860 in the world

79,6 Research score out of 100

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



### Home and Away: The Impact of Housing in Reykjavik on Activity Spaces and the Resulting Environmental Impact

Cities play an important role in creating a sustainable future, as urban areas will soon be home for up to 66% of the global population and cities are estimated to cause about 75% of global energy-related CO2 emissions. The purpose of the project is to use activity spaces as a method to understand how people interact with the urban environment in Reykjavík. The study investigates how housing and the size and shape of neighbourhood relate to the wellbeing of inhabitants and greenhouse gas (GHG) emission. The aim is to create an urban environment that minimises day-today GHG emission while meeting the wellbeing neds of its citizens. Jukka Heinonen, professor at the Faculty of Civil and Environmental Engineering, is conducting the study.



## The Árni Magnússon Institute for Icelandic Studies

The role of this academic research institute at UI is to conduct research in the field of Icelandic studies and related scholarly disciplines, in particular Icelandic language and literature, to disseminate knowledge in these fields, and to preserve and augment the collections entrusted to its care, contributing to SDG target 11.4. The Institute's Manuscript Department carries out a variety of projects involving Icelandic manuscripts which were repatriated to Iceland in 1971–1997. The collection is preserved under the best possible conditions, and emphasis is placed on cataloguing, maintenance, augmentation and increasing accessibility. The Department of Ethnology and Folklore is in charge of the Institute's ethnography collection, containing audio recordings of oral heritage and traditions. Emphasis is placed on the preservation, maintenance, classification and cataloguing of the collection, in order to make it more readily accessible.





# Cultural heritage inspires innovation in a circular economy

CENTRINNO is a Horizon2020 project that started in 2021 and ends in spring 2024 says Þorgerður Jennýjardóttir Einarsdóttir, Professor in Gender Studies at the Faculty of Political Science, who leads the project on behalf of UI. "In the project the cultural heritage is used as inspiration for innovation in the spirit of a circular economy. The participants are nine cities and culturally historically important regions in Europe. In Paris, Copenhagen and Tallinn, food culture is the focus, crafts and design in Barcelona, Geneva and Zagreb, and textiles in Milan, Amsterdam and Blönduós. The Gender Studies at UI participates in the project together with the Textile Centre of Iceland."

# Textile is an interesting factor in the context of sustainability

Porgerõur says that textile is a fundamental part of people's daily lives and particularly important in the global economy. "Women make up 70% of those who work in textile production, mostly in poorer countries where wages are low, and regulations are weak. In the richer countries of the world, we have fast fashion and an aggressive market that feeds on stereotypes and unrealistic appearance requirements." Porgerõur adds that since the 2000s, the global production of clothes has almost doubled, while they end up in the trash ever faster. "Textiles are the fourth largest environmental stress factor due to private consumption, and it is estimated that around 8–10% of the total emissions of greenhouse gases in the world can be attributed to the textile industry."

# People in power hold responsibility for this crisis

The innovation and reuse of textiles in the spirit of a circular economy is simply inevitable says Þorgerður but she notes that the responsibility is not only on individual level: "This is not only the responsibility of consumers, it is no less the responsibility of those who control the journey, governments, manufacturers, designers, marketing and distributors."

# **Environmental Planning**

In the course "Environmental Planning" taught at the Faculty of Civil and Environmental Engineering, students get an overview on the environmental state of the world and on the main environmental impacts arising from using and developing the human societies. Students should be able to evaluate and compare the different urban forms and planning objectives form the perspective of their impacts. The emphasis is on analyses and evaluation of the impacts of various types of land-use on the environment. In the course, students get an overview of current environmental problems, both on global and local scale, and how the concept of sustainable development influences planning.



# The University of Iceland Art Collection

UI's Art Collection marks a unique position in the world of Icelandic museums, as it does not reside in an actual gallery but is enjoyed on a daily basis in the vibrant and dynamic environment on campus. Exhibitions are put up all over campus making art a participant in university operations and an inspiration for research and innovation. The objective of the exhibition is to give students, staff, and the general public a chance to see the diverse collection, contributing to SDG 11.4.



#### **Nature Based Solutions in Urban Areas**

Nature-based solutions are key in reducing and adapting to climate change. A special forum at the Democracy Festival entitled, *"People's meeting on nature-based solutions in urban areas,"* was

part of the event series, "Together with nature: Nature-based solutions and their impact in a wider context." Among other things, it presented how to reduce negative effects and create an urban space that works with nature and not against it. The seminar and the series of events were held by Sustainability Institute at UI in collaboration with the Nordic House.



# **Biking Initiatives at UI**

UI aims to promote the use of sustainable mobility by staff and students, both for environmental and public health reasons. One of those initiatives is to strengthen cycling at UI. UI participates yearly in the competition called Bike to Work. The main goal of this campaign is to raise awareness about active transportation methods that are both economical, healthy, and environmentally friendly. The National Olympic and Sport Association of Iceland (ÍSÍ) organises the campaign, and there is a competition among all workplaces in the country registered where number of active commuting kilometers is recorded during the period. During Bike to Work, UI offers staff access to a free service proved by Dr. Bike, who visits the university campus and provides services such as bike inspections, tire pumping, and other minor repairs to staff's bicycles. The students of UI actively participate as well, and the Student Council of UI and the Environment- and Transportation committee have also collaborated with ÍSÍ to organise similar competitions between students of UI, called Bike to School, which takes place during the fall.









Community outreach and partnerships







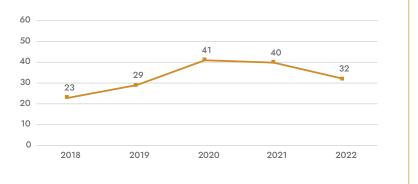
**165** Number of peer-reviewed articles from 2018–2022 with relation to SDG 12

**2571** Number of citations from 2018–2022

**2,04** Field-weighted citation impact from 2018–2022

THE Impact Ranking results 101–200 out of 674 in the world 64,4 Research score out of 100





# Effects of Onboard Processing on Groundfish Quality

Sæmundur Elíasson's doctoral project investigated the processing onboard fresh fish trawlers, focusing on bleeding and cooling processes and the effects on product quality and shelf-life. The results show that it is not advisable to store whole ungutted cod in onboard RSW for more than 24 hours. The study outcomes can provide technical developers with premise and requirements for further technical solutions needed to deliver fish of the highest possible quality and with a maximum shelf-life to secondary processing.

# Q

# **Icelandic Dictionary of Clothing**

The Icelandic Dictionary of Clothing is a research project that aims to explain in words the comprehensive academic field of clothing. The glossary demonstrates the complex process of clothing manufacturing from concept to completion and will thus increase knowledge, understanding and respect for clothing manufacturing. This focus is linked to the SDGs, with a focus on responsible consumption and production when it comes to clothing, such as making good choices when buying clothing, using it longer and to reuse and recycle. The dictionary with Icelandic vocabulary and uniform use of words about clothing will serve as an important basis for development and education in the field.



# AliCE-WHy

Aluminium recycling for hydrogen production - from waste through hydrogen energy to alumina (AliCE -WHy) is a research project that aims to create a technological solution for the recycling of aluminium waste, increasing the efficiency of recycling, the end result of hydrogen for energy use and the production of further low-emission aluminum products. The expected end result is the development of technology and prototype for power generation from waste aluminium through production of hydrogen and further recycling by-product aluminium hydroxide. The research is a collaboration between UI, the University of Latvia, the Lithuanian Energy Institute and the Iceland Technology Center and is funded by EEA Grants.



# Sustainable Supply Chain Management

The course Sustainable Supply Chain Management explores different aspects of logistics from the perspectives of sustainability, including the selection of suppliers, procurement, inventory management, transport and distribution, as well as the impact of the circular economy on sustainability. Emphasis is placed on the building deeper knowledge in a specific field of logistics by choosing a project that is determined by the students' interest.



Teaching and

earning









Knowledge can combat overconsumption and pollution in the clothing industry

"In the course Sustainability in Textiles at the School of Education, students get to know the power of fashion as one of the most important sources of income for the world's richest nations."

Says Ásdís Jóelsdóttir, Assistant Professor at the Faculty of subject teacher education, and Supervisory teacher of the course. "Through project work, which includes reuse and innovation, they learn how complex clothing production is carried out by low-paid labour under health-damaging conditions due to environmentally polluting toxins used for example in cotton cultivation, processing of synthetic materials and textile and clothing production."

# We need to talk about production and consumption at the same time

Ásdís talks about that the responsibility that lies with the

# The Exhibition A Brave New World

The exhibition 'A Brave New World' shown at the Nordic House is based on a collaborative course between students from the MA Design programme at the University of the Arts and students of Anthropology, Health Sciences, and Environmental and Natural Resources at UI. In conversation with researchers and practitioners, the students explored, highlighted, and interpreted ways to move forward on road ahead. The works are connected to a number of SDGs, for example sustainable production of wool and construction, the protection of ocean life, our relationship with healthy ageing, environment and gender equality and the environment.



# **Green Steps Project**

UI is implementing a Green Steps project. According to the Icelandic Government's Climate Policy, all government institutions and offices are required to implement the Green Steps into their organisations. The project aims to reduce negative environmental impacts of their operations and enhance environmental awareness among staff members. The Green Steps work on seven categories that aim to minimise negative environmental impacts, like procurement, waste reduction and recycling, electricity and heating and transportation.



# **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. For example, during the last paper-based entrance examination at the Faculty of Medicine in 2021, exam materials filled 40 boxes of A4 size paper. The number of assignments and exams submitted digitally increased from 35.000 in 2019–21 to 75.000 in 2021–22.

companies who need to find ways to make production more environmentally friendly and improve employee wellbeing and produce products that we really need. "Ethical consumption is however the responsibility of consumers because they can reward those companies that assume social responsibility by doing business with them, while punishing those that do poorly by boycotting them."

# Sustainable lifestyles can prevent clothing waste caused by textile production

Ásdís is clear when it comes to sustainable lifestyle. "The most effective way to a sustainable lifestyle is to extend the lifetime of your own clothing and create new ones from used clothing and other textile products, thus maintaining a stable cycle within households. After all, it is the simplest way to prevent clothing waste and other negative consequences caused by textile production. Basic knowledge in textile studies and textile methods is an important way to activate that thinking in action."

#### » Computers

The Division of Information Technology at UI (UTS) provides computers to university staff. UI is required to buy computers under the framework agreement for government agencies and requirements for environmental certification. UTS has also emphasised extending the lifespan of all old computers to prevent them from ending up in landfills, 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 Nordic Swan Certified. This ensures that the company is actively working on reducing their negative environmental impacts, for instance, by offering environmentally certified products and methods in their cleaning services.

#### 

# Vegan Wednesday at Háma

Transportation and Environmental Affairs Committee of the Student Council, that lead the project Greenflag – eco schools for UI, organised a vegan initiative at Háma, the food canteen, in the autumn of 2022. Each day, there is a choice of two hot dishes at Háma, one which is always vegan. The committee decided that on Wednesday, only a vegan hot dish option should be available, and the initiative was called Vegan Wednesdays.



#### **Green Days**

Green Days is an annual event series organised by students in Environment and Natural Resources (Gaia). Green Days events offer a wide range of workshops, lectures, and presentations with insights and solutions to the world's most pressing environmental challenges. Green Days aims to raise awareness of environmental sustainability matters, both within the UI and beyond. The theme for Green Days 2022 was Consumption and Waste: Think Circular. Topics ranged from Doughnut Economics, composting, and food rescue to sustainable investment, and climate anxiety.







**234** Number of peer-reviewed articles from 2018–2022 with relation to SDG 13

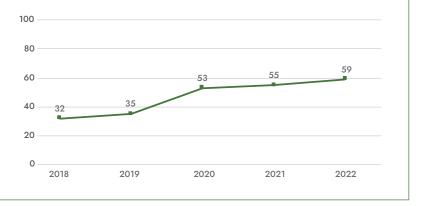
**4243** Number of citations from 2018–2022

**1,85** Field-weighted citation impact from 2018–2022

THE Impact Ranking results 101-200 out of 735 in the world

73,5 Research score out of 100

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



#### Managing Unprecedented Risk: Unstable Slopes in Iceland and Greenland

Stephanie Matti's doctorial thesis aimed to increase the understanding of how disaster risk management is conducted for unprecedented climate change-related hazards. This was done by examining the social dimensions of the unstable *Svinafellsheiði* slope from different angles including the contribution of local knowledge to newly emerging hazards, the effects of risk mitigation measures on psychosocial wellbeing, risk communication with affected demographics, and planning for relocation. A key recommendation is that government authorities pivot from determining risk management and relocation options, to providing a structure to underpin and support community agency.



#### PHEONIX

PHOENIX is a research project that connects a multidisciplinary group of 15 partners from across Europe. The aim is to study, enrich, and test participatory and deliberative practices to improve the European Green Deal pathway and build a better, greener future for all, as ecological transition can only succeed if it is conducted in a fair and inclusive way, through the involvement, commitment and active contribution of citizens. Ul's role in the project is to conduct a pilot study in a two-staged approach. The first is to better understand the concerns and views of communities when it comes to ecological restoration efforts at the local level, engaging with locals to identify their views and concerns, giving them the opportunity to envisage their proposals for a greener future. Secondly, a Citizens' Assembly will be created with the aim of engaging residents and citizens in developing policy proposals for ecological restoration at a national level.



# Icelandic glacier Web Portal

The Icelandic glacier web portal was opened in 2022 and is a collaborative effort by UI, the Icelandic Meteorological Office, the Institute of Earth Science at UI, *Landsvirkjun* (The National Power Company), the Iceland Glaciological Society, the National Land Survey of Iceland, and the Sout East Iceland Nature Research Centre. The portal displays measurements of glaciers and an overview of glaciological research and variations of Icelandic glaciers. Information about glaciers and how they are changing is disseminated to the public and natural science enthusiasts through the web portal. In the glacier web portal, numerous historical photographs of the same location over different years clearly show the changes that Icelandic glaciers have undergone, and continue to experience at an accelerating pace.





# Theology has much to offer the field of climate change

Arnfríður Guðmundsdóttir, Professor in Systematic Theology with an emphasis on Feminism, says that the nature of theology concerns itself with everything related to our daily lives and the society in which we live. "Christianity professes faith in God, who is the creator of heaven and earth. Therefore, it is assumed that creation is good, and our task is to protect it. The situation in the world due to a warming climate shows that we have not done our job. Theology has to respond to the situation that has arisen and ask theological questions about the future of life on earth." Arnfríður says that in her research, she has put a lot of emphasis on the role of theology in our present time, "because of the urgency of the climate problem, it was right to ask what theology has to offer in this field."

# Putting the climate crisis in a theological context

The students in theology are very interested in discussing climate change in class say Arnfríður, "Like most of us, they are concerned about what is happening and its effect on future generations. I believe it is imperative that we help our students put climate issues into a theological context and give them the tools to address them responsibly once they graduate."

#### The impact of climate change on women

"In my research the gender perspective is always present" says Arnfríður. "I have been discussing the impact of the climate crisis on the lives of women who live in poverty and powerlessness in their communities. The climate justice debate has helped us understand that it is not just about technical solutions, but also about basic human rights."

# **Eco Digital**

The EcoDigital is an Erasmus+ KA2 project which takes action to reduce the environmental impact of digitalisation. The aim is to motivate people to realise the importance of the digital waste problem and to develop positive changes in young people's behaviour with the aim of conveying such behaviours in the wider society. Rannveig Björk Þorkelsdóttir Associate Professor and Jóna Guðrún Jónsdóttir Adjunkt Professor at UI's Faculty of Teacher Education are the leaders of the EcoDigital international project.



# **Climate Change**

Climate change is a global issue and one of the more challenging environmental problems of the present and near future. The course *Climate change* is offered both for undergraduate and graduate students from different schools at UI. Students generally have very different backgrounds, which gives the opportunity to learn about climate change from different viewpoints. In the course, basic evidence and science behind climate change and modelling of future scenarios are explored. Impacts and vulnerability to efforts to mitigate and adapt to climate change as issues such as climate refugees, gender aspects, and negotiations are addressed.



#### Practical Training in the Use of Geospatial Technologies in Hazard Research and Response

This intensive field course provides students with first-hand experience of using geospatial technologies that are important for both basic research and practical response planning in locations exposed to natural hazards. The course focuses on two methodological innovations: one for understanding physical processes that contribute to landslide hazards, and the other for enabling meaningful participation of local publics in hazard research and response. The course was held in Seyðisfjörður, a community in East lceland that is exposed to avalanches and landslides, and was based on active student involvement where students gain experience in cross-cultural teamwork and awareness of the SDGs. The course was made available to all students throughout the Aurora University Alliance.



# **Green Flag**

In 2022, the Student Council and the Environment and Transportation and Environmental Affairs Committee received the Green flag certification for the third time. The Green flag is awarded as part of the Icelandic Environment Association's Eco-School programme which aims to improve environmental and sustainability education and support sustainability strategies in schools. One of the events this year was a Green Freshman's day, where emphasis was put on vegan options at Háma, UI's canteen, as a low emission food option, a collaboration with the e-scooter company Hopp that offered students and staff to ride for free, and planting of trees on campus. The highlight of the *Green Freshman's day* was when the Green flag was delivered at a formal ceremony and hoisted in front of UI's Main Building.



















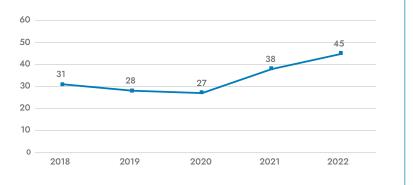
**169** Number of peer-reviewed articles from 2018–2022 with relation to SDG 14

1700 Number of citations from 2018–2022

**1,19** Field-weighted citation impact from 2018–2022

THE Impact Ranking results
101-200 out of 504 in the world
73,1 Research score out of 100

#### Number of peer-reviewed articles with relation to SDG 14



#### Suðurnes Research Centre

The Suðurnes Research Centre's research focuses on the marine environment, with an emphasis on ecology and effects of pollutants on marine life. The main projects of the center in 2022 were continuous research on crabs and mussels with emphasis on monitoring, toxicology, and biological parameters in the animals in relation to pollution. Additionally, a new collaboration with the Environment Agency of Iceland began, which focuses on pollution levels in the harbors. In addition, the centre is responsible for pollution monitoring and research for Isavia regarding the disposal of sludge from Keflavík airport.



# Research Centre on Ocean, Climate and Society (ROCS)

ROCS is a collaboration between the University of Copenhagen and UI. The goal of the Centre is pursuing new understanding of how human communities in Icelandic population have impacted and been impacted by changes in ecosystem services caused by climate change. The interdisciplinary research group went on research cruise in collaboration with *Hafrannsóknarstofnun* (e. Marine and Freshwater Research Institute) and their research vessel, Árni Friðriksson. The research cruise's primary goal of collecting sediment samples for eDNA analysis was reached with seventeen cores retrieved. The cruise plays a central role in ROCS Centre's overarching investigation of the historical relationships between ecosystem structure and climate development as well as reciprocal effects on human societies.





# We need more research on northern bottlenose whales

When asked about how his specialisation came to be. Paul Wensveen, research specialist at the Faculty of Life and Environmental Sciences, says it happened by chance. "I was studying to be become an audiologist in the Netherlands in 2007 when I, by chance, became involved in studies on marine mammal hearing and the behavioural effects of man-made noise. Since then, I've specialised in the natural behaviour of cetaceans and their responses to man-made ocean noise."

#### Icelandic offshore waters are an important habitat for Northern bottlenose whales

"Northern bottlenose whales are beaked whales, a group of poorly understood deep-diving cetaceans known to be highly sensitive to navy sonar" says Paul. "They can dive for over 2 hours and over 2 kilometres deep. Our research has shown that Icelandic offshore waters are very important habitat for these whales. We have uncovered seasonal distribution patterns using deep-sea sound recorders and found that the species makes very fast, long-distance migrations to the Azores and back, which we hypothesise is for skin moult. During these migrations they travel through high-risk areas with sonar exercises and seismic airgun surveys."

#### Mysteries remain about the impact of noise on whale behaviour

Paul says that to conserve the oceans we need information about its species, but many basic questions about northern bottlenose whales remain unanswered. "The high seas are largely unregulated. Potential future challenges for the species include deep-sea mining for rare minerals and noise associated with trans-Arctic shipping and the opening of the Finnafjord harbour."

# Hyperoodon Movements in the Northeast Atlantic - HYPMO

HYPMO is a UI research project on the movement ecology of the elusive northern bottlenose whale, Hyperoodon ampullatus, and its vulnerability to noise exposure. Northen bottlenose whale is highly sensitive to noise from powerful acoustic sources like naval sonar and potentially seismic airgun arrays. HYPMO addresses this lack of knowledge by studying the movement ecology and their vulnerability to exposure to manmade noise. HYPMO is supported by RANNÍS, the Icelandic Research Fund, and RANNÍS Infrastructure Fund with additional support from UI and University of St Andrews.



# **Fish Ecology**

At the Faculty of Life and Environmental Science, the course Fish Ecology is offered, where students explore the diversity of fish species, their adaptations to the environment, and how the ecosystem influences their numbers and vice versa. The course examines issues including classification of fishes, key adaptations to the aquatic environment, environmental effects on the distribution and number of fish, and key taxa of salt and freshwater fishes of the northern hemisphere.



# **Beach Walk at Grótta**

UI, in collaboration with the Icelandic Museum of Natural History and the Iceland Tourism Association offer an annual beach walk at Grótta, which is part of the project Hiking trips with Science tips. The purpose of these walks is to explore the various organisms found along the shore, given the diverse animal, bird and plant life at Grótta shore. Thousands of Icelanders of all ages have enjoyed taking part in these walks through the years. Participation is free and open to all.













**108** Number of peer-reviewed articles from 2018–2022 with relation to SDG 15

**1291** Number of citations from 2018–2022

**1,46** Field-weighted citation impact from 2018–2022

THE Impact Ranking results 201–300 out of 586 in the world

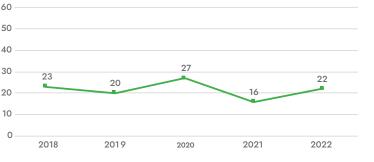
68,4 Research score out of 100

# Effects of Land Conversion in Sub-Arctic Landscapes on Densities of Ground-Nesting Birds

In Aldís Erna Pálsdóttir's doctorial thesis the aim was to study if and how four types of newly introduced structures/habitats (roads, summer houses, power lines and plantation forests) in the Icelandic lowlands affect the density and species composition of ground-nesting birds in the surrounding area. The thesis concludes that two species, Redwing and Snipe, were found in higher densities or showed no change with distance from the structures, while Meadow Pipit, Black-tailed Godwit, Golden Plover, Dunlin, Oystercatcher, Whimbrel, and Redshank occurred in significantly lower densities. In the research it is recommended that planning of future infrastructure locations and configurations should be designed to reduce impacts on the ground-nesting bird population.







#### Exploration of the Microbial Communities within the Basaltic Subsurface of the Volcanic Island Surtsey in Iceland

Surtsey is a volcanic island located off the south-east shore of Iceland. It was formed during successive eruptions from the seafloor between 1963-67. Surtsey is officially protected and represents an exceptional natural setting for studying colonisation and succession of life on land. Also, the new island is rich for study off subsurface microbial communities associated with newly formed basaltic tuff deposits in a seawater-hydrothermal system that is still active and at temperature approaching the presumed thermal limit for functional life. The doctoral thesis of Pauline Anne Charlotte Bergsten presents the first and most comprehensive research of the Surtsey subsurface biosphere. All the findings point to an active microbial colonisation of the Surtsey since the eruption ended, with possible sources of colonisation coming from the surrounding ecosystems via microbial dissemination and possible adaptation. These findings establish a foundation for future research on the microbial communities that inhabit the Surtsey surface and their temporal succession in the face of a cooling and changing hydrothermal environment.

Q



# We need a better understanding of Earth's ecosystems

"The Earth's ecosystems are the foundation of all life on our planet, including humanity, which is an integral part of the Earth's biosphere. Earth's organisms drive the processes that make the Earth habitable", says bóra Ellen Þórhallsdóttir, Professor of Botany at Faculty of Life and Environmental Sciences. She continues, "Biological diversity, including genetic diversity, is essential for the maintenance of life, resilience to disturbances, and adaptation to changing conditions. Diversity is the raw material for the ongoing evolution of life. Earth's biosphere is the most complex, diverse, and multifaceted phenomenon we know. We are changing fundamental processes that affect the atmosphere, soil, and the cycles of water and nutrients. To survive, we must gain a better understanding of these phenomena, systems, and processes."

#### **Research on Birch and Roseroot**

Þóra Ellen has several research projects underway, among them

is BirkiVist which relates to large-scale restoration of birch ecosystems in the 21st century. "BirkiVist is kind of a multifaceted project", says Þóra Ellen, "The first part of the project is to analyse what promotes or hinders the natural recovery of birch ecosystems, and where in Iceland there are conditions for the natural colonisation of birch. The possible benefit of a birch ecosystem for soil carbon sequestration is also being studied, as well as above- and below ground biodiversity. The project is also connected to cultural, aesthetic, and experiential aspects." Another large-scale project that Þóra Ellen is a part of is Roseroot: Selection and cultivation of roseroot as a high-quality product on the market. The project goal is the sustainable cultivation of roseroot in Iceland, conceived as a possible sideline for Icelandic farmers. "Roseroot is probably the most valuable medicinal plant in Icelandic flora", says Þóra Ellan and adds: "Over 40 companies sell it on the international market, and its estimated value in 2015 was 3.5 billion ISK." The species was added to the CITES list (Convention on International Trade in Endangered Species of Wild Fauna and Flora) earlier this year. "With this project, we are trying to create a foundation for sustainable production of this natural medicine, thereby reducing the collection of wild populations and creating a basis for diversification in Icelandic Agriculture through eco-friendly production."

#### Environmental science has a long history at UI

Finally, Þóra Ellen mentions her course Environmental science and she emphasises the importance of it being taught at the University of Iceland. "I have held the course Environmental Science since 1986, which has never been cancelled, where for example biodiversity, habitat destruction, conservation of landscapes and wilderness land use, and sustainable development are discussed. I think this is the elective course in the department that most people have taken, at least if you take the last 15–20 years. It is crucial that this kind of course continues to be taught at the University of Iceland."

#### MÓI – Land Use and Biodiversity

In recent years, various studies on the relationship between land use and biodiversity have been conducted at the UI's Research Centre in South of Iceland. The research center maintains a website, moi.hi.is, with the aim of providing accessible information for protecting moorland bird and learn about them. The connections between moorland birds, people, and the land are unique, in part because some moorland birds are more common in Iceland than anywhere else in the world. About 85% of all moorland birds nest on the lowlands of Iceland, and land use there will determine the future of the population. There are indications that Icelandic moorland birds population is decreasing, as human disturbances have increased significantly on the lowlands in recent decades. Given the ongoing and foreseeable changes in land use and natural environments in Iceland, moorland birds are likely to face significant constraints in the near future. Gathering information about moorland birds conservation and biology can promote nature conservation.



# Environment and Natural Resources, Natural Resource Management

The Environment and Natural Resources (ENR) master's programme is a unique interdisciplinary and international programme that provides academic insights into the various aspects of environmental issues and utilisation of natural resources. Students choose from one of five specilisations, one being natural resource management. The management of natural resources (including conservation) in a diverse perspective where the focus is both on theory and practice of the nature and reasons of the degradation of natural resources and possible solutions. Specific topics include forests, soils, land-use, wildlife, biodiversity, wilderness areas, protected areas, water, ecosystems services and diverse management systems.



#### **Hiking Trips with Science Tips**

Hiking Trips with Science Tips is a series of walks and is a collaborative project of the UI and the Icelandic Touring Association (FÍ), and has been held since 2011. The goal is to raise public interest in education and pursue healthy outdoor activities as well as to draw attention to the diverse work of HÍ and FÍ. In 2022 two events had special focus on insects and bugs in the Icelandic fauna, mushrooms, and the importance of biodiversity. Participation is free of charge and open to all.









Community outreach and partnerships







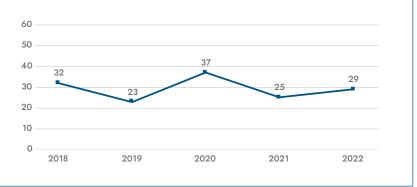
**146** Number of peer-reviewed articles from 2018–2022 with relation to SDG 16

**1082** Number of citations from 2018–2022

**1,34** Field-weighted citation impact from 2018–2022

THE Impact Ranking results 201–300 out of 910 in the world 72,2 Research score out of 100

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



# The **RECLAIM** Project

The project, Reclaiming Liberal Democracy in Europe in the Postfactual Age (RECLAIM), received a grant for three million Euro from the EU's Horizon Europe programme. This is a three-year grant, and the aim of the project is to study the implications of post-truth politics on democracy in Europe. The Institute of International Affairs hosts the project, and it is led by professor Maximilian Conrad.

# Q 😥

# Fear, Conspiracy and Distrust in Politics

This course is taught at an undergraduate level at the Faculty of Political Science and is also made available to psychology students. In the course, fear, conspiracy theories, and mistrust in politics is explored from the interdisciplinary perspective of political psychology with support from other related disciplines, but understanding the root of these issues is vital to ensure public access to unbiased information and ensuring inclusive and participatory decision-making.

# Ż

# **Imagine Forum**

The Imagine Forum is Höfði Reykjavík Peace Centre's annual conference held in cooperation with the Icelandic Ministry for Foreign Affairs and Nordic Women Mediators. The focus of the 2022 conference was the shortcomings of contemporary approaches to peace building and how to address them, and how to develop effective and inclusive peace processes for the future.

# **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.





# **UI's Ukraine Project builds** connections with Icelandic society

Jón Ólafsson, Professor in the Faculty of Icelandic and Comparative Cultural Studies, says that the Ukraine Project, or the Ukraine Centre, started out informally as a response to Russia's invasion of Ukraine in February 2022. "In the beginning, the focus was on providing events that are both educational for Icelanders about what is happening in Ukraine, the war in particular, but also about the culture and politics of Ukraine. This has been done through conferences and panels, but also through film. In addition, the project aims at connecting better with the Ukrainian community in Iceland, which has been guite successful."

#### A need for education and information about Ukraine

As part of the project's educational and information sharing role, "we've had a podcast that has kept up a certain dialogue and conversation," says Jón. "This summer we also

had eight students on grants from the Student Innovation Fund, working on projects related to Ukraine, the war and history, and they regularly wrote articles that were published on the website of the Ukraine Project." "We have received great feedback on the project as a whole and have managed to build something up that that I think people can see as credible and done with integrity and realness," says Jón when asked about the success of the project.

#### The Ukraine Centre provides opportunities for research cooperation

The project has also created opportunities in building a knowledge base and experience in regional studies within the Faculty of Languages and Cultures, centred on Ukraine and creating a venue for research cooperation between Icelandic and Ukrainian researchers. "We have received clear indications that there is a great interest in Icelandic medieval history in Ukraine as we have a shared history and common cultural roots from the Viking era. So, we foresee increased cooperation in this area."

#### Sharing expertise is the future of the Ukraine Centre

Jón looks forward to developing the future of the Ukraine Centre. "I would like to see it having a role in communicating expertise to institutions, both in the public and private sector, and becoming a platform for those focusing on specific issues in and around Ukraine. In the future it could support teaching, but also host research projects and cooperation, and hosting interesting and educational events for both university students and the public."

# **UI in Solidarity with Ukraine**

The University of Iceland strongly condemned the Russian invasion of Ukraine and expressed solidarity with university students and staff of Ukrainian universities, as well as the entire nation. The University provided the Directorate of Immigration with free access to 75 rooms in the Saga building for housing refugees, which was used to full capacity. UI offered psychological support for students and staff who are citizens of Ukraine or Russia. Distance students at Ukrainian universities could access facilities on the UI campus, including internet and study facilities. UI offered a free English summer course in response to the Russian invasion of Ukraine for refugees planning to pursue higher education in Iceland. A special information site was launched, available in both Icelandic and English, for people who had fled Ukraine. The site contains information about the University's position and actions taken. In addition, an FAQ site about the possibilities to apply to study or continue their studies at the University of Iceland was made available for Ukrainian students. All collaboration with universities and institutions in Russia was put on hold.

# **Ukraine Related Events**

The Institute of International Affairs, the Institute of Public Administration and Politics in cooperation with the Political Science Association held events about the consequences of the invasion for security in Europe and, what is the importance of international cooperation in time of war, as well did the Institute of International Affairs host an open seminar about The Shaken Geopolitics of the Ukraine Conflict.

UI's Ukraine project has organised various movie screenings and lectures, with the goal to increase knowledge and understanding of Ukraine in Icelandic society. Special emphasis is placed on cultural life, history, media, and politics. The project is a part of The EDDA Research Center, in collaboration with the Vigdís International Centre and the Institute of International Affairs. It is overseen by Jón Ólafsson, Professor of Cultural Studies and Helga Brekkan, Project Manager.















#### Number of peer-reviewed articles with relation to SDG 1-16 RESEARCH 1000 **3232** Number of peer-reviewed articles from 2018-2022 with relation to SDG 1-16 800 706 692 658 **52852** Number of citations from 2018–2022 599 577 600 **THE Impact Ranking results** 400 101-200 out of 1625 in the world 200 73,5 Research score out of 100 0 2021 2018 2019 2020 2022

# Aurora SDG Research

Aurora is a partnership of like-minded and closely collaborating research intensive European universities. The aim is to use their academic excellence to drive societal change and contribute to the UN SDGs. One of the initiatives is the **SDG Research Dashboard**. The dashboard displays research publications that relate to the UN SDGs, how open and freely available these are to society and what (non-)governmental organisations make use of these publications in their policy. The other project is the **SDG Classifier**. The service classifies a given text according to the SDGs. The **AI is trained for mapping multi-lingual academic papers** to the UN SDGs.



# **IRIS Raises Visibility of UI Research and its Impact**

A new information system for research at Icelandic universities and their institutes has been launched. This system opens many new opportunities to draw attention to the diverse range of research taking place at the UI and its societal impact. The system is called IRIS (Icelandic Research Information System) and is designed to manage all research activity and the societal impact of research findings in Iceland. It also offers overviews of research activity by researcher, institution and subject as well as international collaboration by scientists and academics in Iceland.



# **Societal Impact**

UI's strategy is entitled "A Better University for a Better Society", and one of the main focal points is supporting and impacting societal development, both with dynamic studies and diverse knowledge creation through research. Therefore, a new website dedicated to the societal impact of research scientists at the University has been launched, factors that can increase the societal value of research are listed on the website and also how research can in general impact various aspects of society and the environment. The projects listed are connected to all the SDGs in one way or another.



# ARCADE – Leadership Programme to Meet Challenge of the Fast-Changing Arctic

ARCADE, The Arctic Academy for Social and Environmental Leadership, is a unique 10-month, intensive multidisciplinary programme for a competitively selected cohort of 14 young pioneering graduate students. ARCADE aims to answer a call for innovative ways to meet the challenge of the fast-changing Arctic with a leadership programme that focuses on creative solutions with an interdisciplinary approach. The students work on under the leadership of academic experts, participate in three intensive programs in



# **Students in Faculty of Food** Science and Nutrition want to include the SDGs in their studies

Ólafur Ögmundarson, Associate Professor at the Faculty of Food Science and Nutrition, says that the faculty's selfevaluation report stated a clear wish of the students and foreign evaluators that sustainability should be part of the faculty's DNA.

#### Sustainability in the core of the courses

"All core courses in the faculty have defined which Sustainable Developments Goals the course focuses on, as well as the basic competency aspects of sustainability have been defined for the same courses" says Ólafur. "In addition, two new courses have been created, where the main focus is on the connection between the faculty's specialisation and sustainability, where students get to know how complex it can be to meet the requirements of achieving all aspects of sustainability, as well as realising the spillover effects between the different Sustainable Developments Goals when comes to food and nutrition."

# The SDGs provide opportunities

Ólafur is clear that the gain of adding the SDGs to the faculty's DNA is great. "The benefit of this has been that the students' understanding of sustainability has increased in the broadest sense, but all the SDGs relate to food and nutrition in some way or another. Having sustainability as part of the faculty's DNA has also created great opportunities in the pursuit of both national and international grants."

Norway, Greenland, and Iceland, and present their projects at the Arctic Circle Assembly. The programme is a collaboration between the Centre for Arctic Studies, the Sustainability Institute at UI, Ilisimatusarfik - University of Greenland, The Arctic University of Norway UiT, The Arctic Initiative and the Arctic Circle.



#### Soft Skills Development through Video Gaming

In this graduate level course at the Faculty of Education and Diversity, students learn about and enhance three types of soft skills for themselves, all of which are key in sustainability competences. The first is Cognitive Flexibility, which is defined as the ability to see patterns and generate different options to analyse and solve or new situations. Cognitive Flexibility plays an important factor in keeping an open mind in front of new and unexpected events or problems. Second, is Team Management skill, which is the ability to motivate, develop and direct people as they work, identifying the best people for the job. It implies conflict and emotional management of the group itself and orientation to global results. Third, is the Judgement and Decision-Making skill, which is considering relative strengths and weaknesses of the possible actions and to choose the most appropriate one. The course was made available to all PhD students throughout the Aurora University Alliance.



#### **Collaborating on a New Master's Programme** on Islands and Sustainability

Islands are special cases for sustainable development. Within the current global economic and social system islands in many cases face economic, social, political and cultural marginalisation; unless they cooperate. Cooperation is needed in research and education on the ways to manage islands and raise capacity building in island communities. The new Erasmus+ Mundus Joint Master Degree Programme in Islands and Sustainability (acronym: ISLANDS) combines training in scientific research with a thematic specialisation on Islands and Sustainability. It also provides multi-faceted training of research skills for social science and environmental research. The ISLANDS programme 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 partnership was funded by the European Union of 3.6 million EURO under the Erasmus+ scheme.

	/
_//	
11	



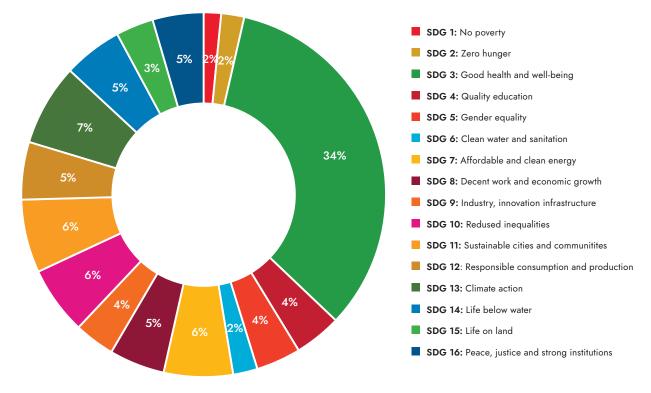






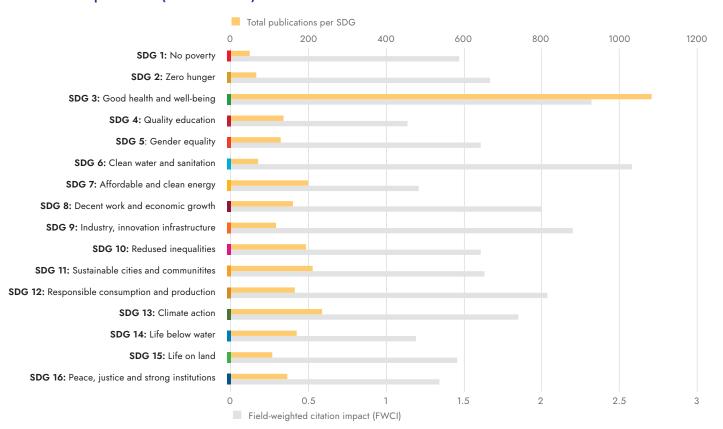
# **SDGs by the Numbers**

# Proportion of peer-reviewed articles with relation to SDG 1-16 (2018-2022)



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 (2018–2022)



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 are having stronger than average impact in all fields of SDGs.



# **THE Impact Ranking Results**

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

Times Higher Education (THE) Impact Ranking measures how universities worldwide are performing against the SDGs. The ranking results from 2022 and 2023 are presented. In 2023 UI is ranked 301–400 out of 1591 universities in the world regarding commitment to sustainability and making a positive societal impact through its research, teaching, operations, community outreach and partnership.



The recommendations below are built upon the goals of the University of Iceland's strategy for 2021–26 (UI26) and its Work Programme on Sustainability in Teaching, Research and University Management. These recommendations were presented in UI's inaugural sustainability report for the year 2021.

The following section includes the four focus areas represented in the strategy. The recommendations are divided into critical, very important and important. The status of each recommendation is indicated, along with a short summary of what has transpired in each focus area. Insights from the Student Council of UI, who were asked to revise the recommendations set forth and provide their opinion, is included where applicable.

#### **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.

A crucial issue remains unresolved at UI as there is currently no designated individual or department (such as a vice rector or central administration manager) that holds ultimate responsibility for overseeing sustainability efforts. Consequently, there is ambiguity regarding who should take the lead in implementing the recommended measures. This matter has also been highlighted by the Student Council, which advocates for the appointment of a dedicated individual who can assume responsibility for sustainability within 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 2023, there was no open presentation held for UI's staff concerning sustainability. Nevertheless, meaningful discussions on sustainability occurred with the academic and administrative leaders of UI's five Schools, yielding valuable insights into the opportunities and challenges these Schools face in this regard. Additionally, sustainability and the findings from the inaugural UI Sustainability Report were presented twice at the University Forum. The Student Council has strongly emphasised UI's role as a leading institution in knowledge creation and its commitment to sustainability and community outreach. In 2023, although the series of meetings pertaining to the SDGs was not reinstated, the plan is to initiate the series in 2024. Efforts are underway to incorporate the SDGs symbol visibly on UI's webpage. However, a specific timeline for its completion has not yet been established.

#### 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 the 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 addressing sustainability and the SDGs for students from diverse academic backgrounds has yet to be created. It is evident that further deliberations are necessary to determine the best approach for implementing such a course, and it is imperative that the five Schools collaborate closely in this endeavor. Although decision has not been reached regarding the appointment of an SDG specialist to provide support to instructors, there are ongoing efforts to devise alternative methods of supporting educators. Notably, there is a substantial ongoing effort to align UI's curriculum with the SDGs comprehensively, with the goal of completing this integration by 2024/25.

# **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, the UI will expand the scope of its emissions assessment to include emissions generated by the commuting of both staff and students. There is strong evidence indicating that commuting constitutes a significant portion of UI's scope 3 emissions. UI's environmental operational strategy was officially adopted in December 2022. However this strategy will continue to evolve as the university gains a deeper understanding of its emissions scope. Regarding the issue of carbon offsetting for the remaining emissions, no decision has been reached. UI is prioritising the development of robust infrastructure to promote sustainable mobility. In the 2023–24 period, the university plans to construct three new secure bike shelters on campus. Additionally, the University Council has approved parking fees on campus. Simultaneously, improvements will be made to the transportation contract for staff, and students will have the option to purchase an annual pass for Strætó, the public transportation system, at a reduced rate. The Student Council strongly advocates for providing UI students with substantial discounts on public transportation. Little to no attention has been given to minimizing emissions resulting from flights or implementing incentives to reduce 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 not yet commenced.

# **Closing thoughts**

Sustainability and diversity are at the core of the UI's 2021–2026 strategic plan. In a significant milestone, the inaugural sustainability report was published in 2022, marking the first-ever sustainability report among Icelandic universities. The university aspires to emerge as a leader in sustainability across research, teaching, operational practices, governance, and community engagement.

Since the release of the inaugural sustainability report last year, substantial progress has been made in the university's efforts to achieve carbon neutrality. This involves carefully tracking emissions and implementing countermeasures. However, it is crucial to maintain the momentum and establish a clear timeline for achieving carbon neutrality.

Over the past year, there has been an increased focus on promoting sustainability. Still, there is a need to expand these efforts and engage more university staff. It is imperative to support educators in seamlessly integrating sustainability into their teaching methods and fostering interdisciplinary connections. This can be achieved by emphasising sustainability in the curriculum and providing robust support for faculty members.

It is vital for the university to take steps to ensure that sustainability-focused study programmes and courses are easily accessible to students from diverse academic backgrounds. This approach will promote the development of a well-rounded and inclusive approach to sustainability education. The importance of ongoing collaboration and cooperation cannot be overstated, as these are vital for building momentum. Equally crucial is the imperative to raise awareness and deepen understanding, both within the university and in the broader community.

To maintain its leadership in sustainability, the UI must persist in its commendable efforts and aim for even higher aspirations. It should prioritise the integration of sustainability as a foundational element within its operations, teaching, and research endeavours.



# UNIVERSITY OF ICELAND

Sæmundargata 1 / 102 Reykjavík / +354 525 4000 / www.hi.is