

# SUSTAINABILITY AWARD

# 2024

Award-winning  
Projects



 **Federal Ministry  
Republic of Austria**  
Climate Action, Environment,  
Energy, Mobility,  
Innovation and Technology

 **Federal Ministry  
Republic of Austria**  
Education, Science  
and Research

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# The Austrian Sustainability Award for Higher Education Institutions



## History and Background

■ The Austrian Sustainability Award is a joint initiative of the Federal Ministry for Climate Action, Environment, Energy, Mobility, Innovation and Technology and the Federal Ministry of Education, Science and Research and was established in 2007 as a means of promoting and increasing awareness for sustainability processes within Austrian higher education institutions. As centres of innovation and as educational institutions, they play an important role in implementing the Sustainable Development Goals (SDGs). The Sustainability Award serves both as recognition for outstanding achievements and as an incentive for other institutions to intensify their efforts. The Sustainability Award has been presented biannual since 2008. The award is coordinated by Forum Umweltbildung, an important institution for education for sustainable development in Austria.

## Characteristics

■ The Sustainability Award recognises projects that promote the transformation to a sustainable society in line with the 17 Sustainable Development Goals of the United Nations (SDGs). This can be achieved through creative research approaches, development in science and of the arts, encouraging teaching and learning methods, inclusive concepts for the whole

institution, education for sustainable development and for climate protection as well as dialogues with society, politics and culture in the sense of the Third Mission. The award has a holistic organisational development approach and is addressed to all higher education institution members regardless of role, function and area of activity, for example students, lecturers, researchers, administrative staff and regional decision-makers.

In 2024, the prize will be awarded in the following four categories:

- Learn
- Research
- Anchor
- Cooperate

An independent jury assessed the projects submitted and selected the nominees. In each category one project is honoured in gold and two in silver. The evaluation criteria included creativity, innovation and exemplary character of the submitted projects. Also their transformative impact was evaluated, taking into account whether the project extends beyond the institution and at what level (awareness, behavioural patterns, system, mental concepts) the impact is achieved. The Sustainability Award will be endowed with a total of € 20,000 in 2024.

## Looking back, looking forward

■ Until 2007, sustainability initiatives at Austrian universities were isolated from one another and did not always receive the attention they deserved. In 2008, when the Sustainability Award was presented for the first time, the winners were selected from 43 projects. In the following years, the figures remained relatively stable with approx. 80 submitted projects. The year 2024 saw a new record with 181 projects submitted. The Sustainability Award is also recognised beyond Austria's borders and serves as a model for similar initiatives across Europe. The biennial rhythm will be maintained, and the next round of the Sustainability Award is scheduled to take place in 2026. You can find the latest information on our website (German only):

[www.sustainability-award.at](http://www.sustainability-award.at)



Photo: © BKA Andy Wenzel

**Federal Minister of Education,  
Science and Research  
Ao. Univ.-Prof. Dr. Martin Polaschek**

 **Federal Ministry  
Republic of Austria  
Education, Science  
and Research**

■ Sustainable development focuses on overcoming current challenges while taking into account economic, social and cultural aspects. Education is a decisive factor in supporting the necessary social transformations for a healthy planet. Austria's universities, universities of applied sciences and university colleges of teacher education make a significant contribution to the implementation of the Sustainable Development Goals of the 2030 Agenda within their legally mandated responsibilities.

Future-orientated teaching provides students with the necessary skills and abilities to act for informed decision-making for the benefit of society and the natural environment. Application-oriented and transformative research activities address important issues for intergenerational justice. Enabling economic and technological innovation and social progress, research findings serve as evidence for decision-making processes. Higher education governance is increasingly targeting the holistic integration of sustainability into all areas of activity. The initiatives of the Sustainability Award cover a broad spectrum of measures, for example in the areas of mobility, networks and cooperations – both within and across higher education institutions.

The large number of inter-institutional projects illustrate that complex challenges require interdisciplinary and inter-institutional approaches and that Austrian higher education institutions cooperate excellently both nationally and internationally. A record number of projects for the Sustainability Award 2024 were submitted with over 180 submissions. These reflect the quality of higher education institutions activities in the field of sustainability and testify to the excellence of higher education as well as the creativity and innovative strength of students, teachers and researchers.

Since 2008, the Sustainability Award has repeatedly put the spotlight on higher education institutions' activities in the field of sustainability. In the past two years, the award has been restructured in order to represent a contemporary understanding of sustainability: The award ceremony was expanded to include a networking component, enabling exchange and mutual learning between participants. The categories were revised and prize money introduced in order to recognise the commitment of the award winners accordingly. A high-level international jury assesses the creativity, innovation and transformative impact of the submitted projects. The redesign of the award meets our high standards of transparency, participation and interdisciplinarity. I am proud to share the results with you.

With this in mind, I would like to thank all participants for their great commitment and congratulate the award winners! You are all making an important contribution to the sustainable development of our higher education institutions and our society.

A handwritten signature in green ink, appearing to read 'Martin Polaschek', written in a cursive style.



Photo: © BMK/Cajetan Perwein

Federal Minister for Climate Action,  
Environment, Energy,  
Mobility, Innovation and Technology  
**Leonore Gewessler, BA**

 Federal Ministry  
Republic of Austria  
Climate Action, Environment,  
Energy, Mobility,  
Innovation and Technology

■ At the heart of our efforts to implement the 2030 Agenda is a shared vision: a sustainable and livable future for all. Around 10 years ago, the Sustainable Development Goals (SDGs) were developed collectively through one of the most comprehensive consultation processes in history. Ten million people from over 80 countries contributed to shaping this global compass. At the halfway point of the 2030 Agenda, it is clear: climate protection and biodiversity conservation are not only necessary measures for crisis management, but also unique levers to steer our society towards a fairer, more resilient and innovative future. The negative impacts of the climate crisis and biodiversity loss, manifesting in extreme weather events such as floods and heatwaves in Austria and across the globe, undoubtedly pose great challenges. But addressing them also holds opportunities to initiate long-term positive change.

Now is the time to sustainably shape our shared future. The path toward a societal model that is fair, resource-efficient, decarbonized, and circular requires coordinated action at all levels: science, society, and politics. This is where the Sustainability Award 2024 plays a crucial role. It brings projects from universities into the spotlight and celebrates tangible solutions that strengthen our society for current and future challenges. As centers of knowledge production and adaptable incubators of the next generations, universities are key contributors to the implementation of the 2030 Agenda.

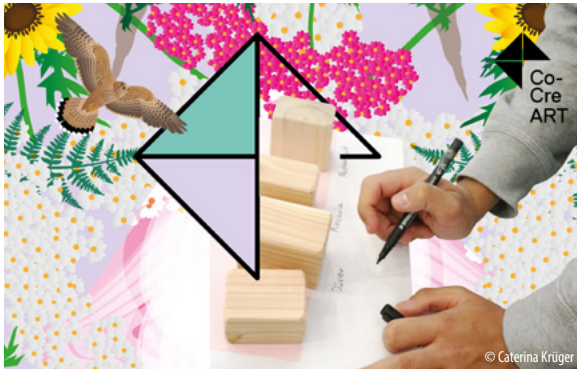
The 17 SDGs of the UN serve as a guide for a just, sustainable, and inclusive future. Since 2016, Austria has successfully worked to integrate these goals at all levels. The progress – especially in the last four years – is remarkable: in the current 2024 Sustainable

Development Report, Austria ranks 6<sup>th</sup> out of 167 countries. Despite this strong performance, we still face significant tasks ahead. Action is particularly needed in areas such as gender equality, sustainable consumption, and biodiversity protection. The SDGs are not only targets but also a roadmap for sustainable transformation. Universities play a decisive role in this transformation through their innovative projects and current research, contributing significantly to the sustainable development of our society. The projects submitted for the Sustainability Award 2024 are a powerful indication that Austria is actively and creatively engaging with the major questions of our time.

Particularly noteworthy is the work of the jury, consisting of Verena Ehold, Daniel Fischer, Căcilia Regner, Klaus Taschwer, Eric Veulliet, and Katrin Vohland. In a careful process, they not only identified outstanding projects but also highlighted the essential role that educational institutions must play in taking responsibility and driving forward solutions for sustainable development. Only by bringing together all these initiatives and the commitment of each individual will we be able to meet the challenges of the climate and biodiversity crises. By continuing to follow the path of sustainable development today, we lay the foundation for a future in which humans and nature live in harmony. The Sustainability Award is an important building block on this journey, and I thank all those involved for their valuable contributions.

## GOLD

### Co-CreART. Co-Creating Change! – inter-institutional project

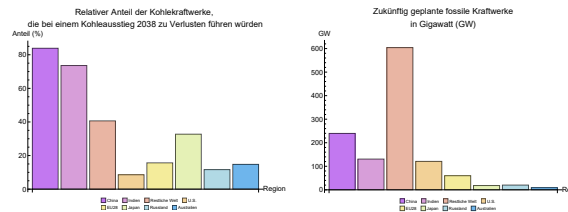


The project Co-CreART. Co-Creating Change! is about creating the inter- and transdisciplinary CrEART Lab together with and for children and young people. It is a place of learning in the form of a mobile and expandable laboratory that includes various participatory educational formats. These should make it possible to experience pioneering practices and creative solutions in the innovative field of climate protection and encourage users to get involved themselves. What is special about the resulting educational program is that artistic-creative and scientific-technical approaches are intertwined, and challenges are addressed from different disciplinary perspectives and in exchange with actors from a wide variety of fields. The program focuses on the topics of sustainable building and living as well as climate-friendly mobility. The sustainable use of resources forms the basis for all educational formats.

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## SILVER

### New Topics for ESD and Mathematics Education, both scientific and interesting – University of Graz



Mathematical modeling has been a central component of mathematics education in Austria since its firm inclusion in the curriculum. It makes a significant contribution to foundational experiences according to Winter (1996), by helping to “perceive and understand phenomena of the world around us, which concern or should concern us all, from nature, society, and culture, in a specific way” and to “acquire problem-solving skills that go beyond mathematics”.

However, mathematical modeling is always in a field of tension between curricular feasibility, relevance, and attractiveness for students. Together with experts from the University of Graz (KFU), the Vienna Chamber of Labor, BOKU, and HAUP, teaching materials have been developed based on current scientific publications. These materials address topics such as sustainability, inflation, weather forecasting, wealth distribution, coal phase-out, and climate models to address the aforementioned tension.

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## SILVER

### Peer-Learning – Education for Sustainable Development – University of Innsbruck



The aim of the peer learning activity “Education for Sustainability” is to develop learning outcome-oriented concepts for Education for Sustainability oriented courses. The development of the concepts for the respective courses took place as part of a three-day event, the Peer Learning Activity. A central concern was to develop course concepts with clear references to the Sustainable Development Goals, a common understanding of learning outcomes and a focus on interdisciplinary team teaching.

The concepts developed will be implemented as part of courses in the winter semester 2024, whereby the implementation in team teaching, i.e. by two lecturers, is an incentive for lecturers on the one hand, but also enables or strengthens the implementation of the corresponding concepts in the first place.

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GOLD

**ReCon: A resilient hook-and-loop fastening system for building components**  
 – Graz University of Technology

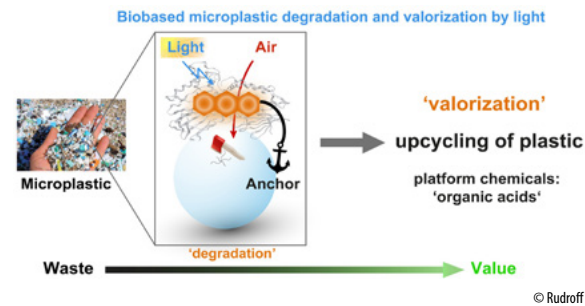


The circular economy opens up a significant reduction in primary resource requirements and sustainability in the construction industry as a result of an appreciation of the value of the elements, building components and building materials used. Circular buildings primarily require a deconstructable and flexible design of the structural interfaces between components with different functions, materials and lifespans and the management of data relevant to the circular economy. The structural level is addressed in the ReCon project by combining concrete and timber components with the very high-performance hook-and-loop connection and forming part of a hook-and-loop connection itself. Complemented by component data management on an electrotechnical and digital level with the help of RFID chips, QR codes and material pass ports, a transformation of the construction industry towards a sustainable circular economy is addressed at various levels.

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SILVER

**EcoFusion: Pioneering Light, Air, and Nature for Microplastic Degradation and Recycling**  
 – Vienna University of Technology



The goal of this research is to find a new and better way to deal with microplastic pollution. Microplastics are tiny bits of plastic that end up in the environment. Right now, we often dispose of plastic in ways that harm the environment. The project suggests a new method to recycle microplastics by creating a special enzyme that uses light and air to break down plastics in water. The primary aim of this project is to discover an improved method for upcycling these plastics into valuable materials, aligning with the concept of a sustainable and closed-loop society.

The innovative aspect of this initiative involves the utilization of specialized proteins capable of generating reactive oxygen species (ROS) upon light exposure. These proteins are affixed to additional elements to facilitate sticking to plastic surfaces. This unique approach targets microplastics and aims to solve the pollution problem.

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SILVER

**Fashion & Robotics**  
 – inter-institutional project



The fashion industry is today characterised by a particularly large number of ecological and social imbalances. Complex global production networks and supply chains are highly fragmented with thousands of stakeholders. The true costs of clothing is usually not included in the widely travelled textile end products. The social conditions of production are far away from the UN sustainability goals. As a result of climate change and changes to ecosystems, the availability of raw materials is under threat. The Fashion & Robotics research project is making an important contribution to systemic change in the fashion industry by developing biobased 3D materials and new processes. A process was researched in which entire garments made of bacterial cellulose grow seamlessly and three-dimensionally in textile membranes. Innovative digital robot-controlled processes have been developed to enable a production and a collaborative repair of clothing on site.

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## GOLD

**Borrowing of a KlimaTicket Steiermark (KlimaTicket Styria)**  
– Montanuniversität Leoben



For just €1 per day, students can travel more flexibly, sustainably and affordably. The rental is managed by the ÖH Front Office, which is open every day and where students use the services of the student union on a daily basis.

Since the launch in April 2024, the two stocked transferable versions of the KlimaTicket Steiermark (Climate Ticket Styria) have been so well booked up until the end of the semester that not only a continuation, but also an increase in the number of KlimaTickets is being considered.

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## SILVER

**ISTA Biodiversity Campus**  
– Institute of Science and Technology  
Austria ISTA



One of the planetary boundaries is biosphere integrity. Current policies are overshooting the planetary limits significantly, resulting in biodiversity loss, loss of habitats, and destruction of natural feedback loops. As scientists, we want to raise awareness and strengthen observations while also finding ways to protect biodiversity. Why not start with our surroundings, the ISTA campus? The goal of the ISTA biodiversity project is to use the skills and knowledge of scientists on campus and beyond to increase biodiversity and protect habitats for animals, plants, and other living organisms. Combining research and citizen science tools will help to monitor biodiversity on campus. Moreover, we want to look at how changes to buildings and the environment can be implemented to maintain and increase biodiversity. Finally, the impact on social interactions on campus in our green spaces will be monitored. Thus, we want to serve as an example of environmentally conscious campus development.

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## SILVER

**The global multi-hub academic conference: Sustainable and inclusive** – University of Graz



Global conferences emit enormous amounts of CO<sub>2</sub> and exclude colleagues who cannot afford registration, travel, and accommodation. A multi-hub conference can solve both problems simultaneously. Many academic disciplines have regular regional conferences on different continents. They can be held simultaneously and electronically networked, mixing face-to-face and virtual communication throughout (cf. International Conference on Music Perception and Cognition ICMPC; Argentina, Australia, Austria, Canada, 2018). Real-time interaction can be maximized by situating three hubs eight hours apart, with other hubs close to them in time. To maximize connectivity, the working day at each hub is divided into two 4-hour sessions separated by a 4-hour siesta. Speakers and remote audiences communicate using widely available equipment. A typical conference might have 1000 active participants at 7 hubs (e.g. North & South America, Europe, Africa, India, East Asia, Australia).

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## GOLD

**1<sup>st</sup> Austrian Forum on Transformation**  
– University of Continuing Education  
Krems



The 1<sup>st</sup> Austrian Forum for Transformation brought together representatives of 75 civil society organisations in an innovative dialogue process to develop shared visions for a good life on a liveable planet. The core topics of the 2-day dialogue were sustainability and justice, both of which were informed by statements from speakers from Bangladesh, Sudan and Peru as well as statements from scientists about the urgency of social-ecological transformation. At the centre of the dialogue process was networking of diverse civil society organisations from the areas of science, climate and environmental movements, aid organisations, religious communities, business and civil society in a general sense. Presentations about initiatives, projects and approaches allowed representatives to identify new opportunities for cooperation and gave an impulse for new shared action.

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## SILVER

**Working Group “Students” of the Alliance of Sustainable Universities in Austria** – inter-institutional project



The “Students” working group of the Alliance for Sustainable Universities unites student groups and initiatives, as well as the environment/sustainability departments of the student representatives (ÖHs) at university and national level. In addition, there are experts from the Alliance’s expert group to promote exchange among each other. The main aim of this working group is to exchange information and work on relevant issues. As a first project, the working group developed a “Sustainability compass for students” brochure, which was published in Fall 2024. In this brochure sustainability initiatives, points of contact, study programs, lectures and more are collected. The aim is to make it easier for students to get an overview of opportunities in and around their study programs so that they can get involved in sustainability in a targeted manner. Finding and using synergies between the groups is a great added value.

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## SILVER

**Scientists 4 Future Austria**  
– inter-institutional project



The aim of the S4F association is to promote an inclusive, safe and appreciative environment for the collaboration of transformation researchers. The peaceful protests by students under the Fridays for Future banner in 2018/2019 called on decision-makers to listen to “the voice of science”. However, when it comes to transformation issues such as mobility, housing and land use, it is crucial to first bring together different scientific perspectives and disciplines in order to be able to act together as the “voice of science”. To do this, power relations in science, such as gender discrimination and disciplinary barriers, must first be overcome. Appreciative and respectful interactions between experts unfold the potential of multi-perspectivity, which represents our best chance of tackling the complex challenges of the climate crisis in a scientifically sound and socially effective way.

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