The University of Zurich

The University of Zurich (UZH) is the largest university in Switzerland. Founded in 1833, UZH was the first university in Europe to be established by a democratic state. As a member of the League of European Research Universities (LERU), UZH is one of Europe’s most prestigious research institutions. In 2014, UZH created the role of the Sustainability Delegate to encourage and coordinate its contributions to sustainable development.

UZH in 2018

This is the short version of the first sustainability report of the University of Zurich. Please find the full report (86 pages) here: www.sustainability.uzh.ch/report
Research
UZH’s seven faculties as well as its research priority programs, Centers of Competence and cooperation projects all generate knowledge that contribute to the goals of sustainable development. The research process itself is grounded in ethical principles.

Teaching
Much of what is taught in UZH’s courses contributes to education for sustainable development. Innovative forms of teaching and learning alongside a focus on diversity and inclusion play an important role in building the competencies needed to promote sustainable development.

Governance, Administration and Operations
The aim of UZH’s structures and processes is to ensure equal opportunities and careful use of natural resources. Infrastructure development, sustainable procurement and mobility issues are crucial in this regard.

The University in Society
Academic findings contribute to sustainable development when they become a part of on-the-ground decision-making. UZH makes a significant contribution here by engaging in an intensive, multifaceted dialogue with decision makers and the public.
All faculties at UZH develop fundamental knowledge needed for sustainable development. The research activities of different faculties and departments/institutes are coordinated and furthered within University Research Priority Programs (URPP) and Centers of Competence. Selected examples are presented below.

University Research Priority Programs

Global Change and Biodiversity
Understanding the relationship between biodiversity loss and global change (e.g. changes in land use or climate change) is one of the challenges of our time. This URPP researches feedback mechanisms between biodiversity loss and global change using an interdisciplinary approach to integrate biophysical, biological and chemical changes (earth drivers) with social, economic and political changes (world drivers).

Solar Light to Chemical Energy Conversion
Using renewable energy is a fundamental component of sustainable energy supply. The URPP investigates new materials and processes that allow to capture energy from sunlight to store it as chemical energy in the form of hydrogen. This involves using chemical catalysts to implement the partial reactions of the photosynthesis process, optimizing and combining them into a functional system.
Centers of Competence

Center for Ethics
The Center for Ethics promotes reflection on questions of moral philosophy as well as both theoretical and applied ethics. Questions of justice and human dignity are central interdisciplinary topics.

Centre for Human Rights Studies
The center explores the relationship between human rights and the economy, examining human rights obligations within the scope of business activities.

Citizen Science Center Zurich
Citizen science is a form of open research where interested volunteers can take part in research projects. The goal of the Citizen Science Center Zurich is to increase the number, quality and relevance of academic findings by involving the public in research processes. These findings in turn contribute to achieving the Sustainable Development Goals (SDGs).

Zurich-Basel Plant Science Center
The center carries out applied and fundamental research in all areas of plant science: for instance, researchers work within transdisciplinary fellowship programs on questions of sustainable agriculture.
UZH Sustainability
Teaching

Education is a general prerequisite for sustainable development. It is not only what is taught that is important, but also how: Innovative forms of teaching and learning alongside a focus on diversity and inclusion play an important role in building the skills needed to promote sustainable development. Last but not least, the teaching process should also involve the careful use of resources. Selected examples are presented below.

Academic Programs and Courses

Students at UZH have access to the following sustainability-related study programs and courses:

**Study Programs**
- Major and Minor “Earth System Science” at Bachelor’s and Master’s level
- Minor “Environmental Sciences” at Bachelor’s and Master’s level
- Interdisciplinary Master “Gender Studies”
- Joint Degree Master “Religion, Economics and Politics”

**Examples of Courses**
- Introduction to the Fundamentals of Sustainability
- Ethics, Theory and Law in Medicine
- Animal Welfare Law
- Teaching Science and Sustainability
- Pluralism in Economics
- Sustainability and the Financial Sector
The University of Zurich created its Teaching Fund in 2016 to support innovative teaching formats. The Teaching Fund promotes projects which are of university-wide relevance as well as specific projects of teaching staff. Examples include the development of open online courses (MOOC), a competition for business ideas that tackle social challenges and educational games on the topic of sustainable banking and behavioral ethics.

Pilot Project: Paperless Final Theses

In the fall of 2018, the Faculty of Business, Economics and Informatics started preparing for a move from paper-based to electronic final theses. The aim is to make the entire process paperless – from topic assignment to final submission. This change alone can help prevent around 6.5 tons of greenhouse gas emissions each year.
UZH Sustainability Governance, Administration and Operations

UZH contributes to sustainable development by creating fair studying and working conditions, promoting responsible behavior and taking a careful approach to resources and the environment in its operations.

Diversity and Equal Opportunity
UZH recognizes the value of diversity and is dedicated to promoting diversity, preventing discrimination and ensuring equal opportunity. UZH instituted its Diversity Policy in 2018 in order to embed these values on an institutional level. As stated in the “Gender Policy Code of Conduct”, UZH “aims to achieve a balanced representation of women and men at all levels and in all functions”. However, this goal has not yet been achieved in all functions and bodies.

Student Volunteerism
UZH supports student volunteering. Organized by students from all higher education institutions in Zurich, the Zurich Sustainability Week is a student-led initiative that has garnered several international awards.

Ethical Principles
UZH requires its researchers to follow the rules of good academic practice and has implemented organizational and procedural measures (e.g. the adoption of the “UZH Policy on the Ethical Review of Research Projects Involving Human Subjects”) to ensure that these are adhered to.
Transparency and Outside Interests
The University has been publishing the outside professional activities and interests of its professors and of all members of the Executive Board on its website since 2017. UZH is the first university in Switzerland to maintain a central, accessible and up-to-date online database of the outside professional activities and interests of its professors.

Sustainable Investment
In 2017, the Executive Board of the University passed the “Recommendations for Action with regard to Sustainable Investments” (in German). These recommendations define the fundamental values of UZH with regard to financial investments and are aimed at those who represent UZH in an official capacity on boards where they have influence on investment decisions.

Leadership Culture and Co-Determination
The University adopted its “Leadership and Management Principles” in 2018 to establish a shared understanding of what constitutes good leadership. The co-determination rights and representation of different interest groups (e.g. privatdozents, non-professorial academic staff and students) are embedded in the University Act.
UZH Sustainability
Governance, Administration and Operations

Energy Demand
In 2018, UZH used 120 gigawatt hours of energy (corresponding to the energy demand of 6,800 Swiss households). Despite growing numbers of students and employees as well as an increase in building space, the total energy needed by the University has increased by only 2 percent since 2008.

Since then, the share of energy from renewable sources has increased by 10 percentage points to a total of 78 percent. This is primarily due to the University’s switch from fossil fuels to district heating, an increasing portion of which comes from renewable sources.

Renewable Energy and Energy Efficiency Indicators

<table>
<thead>
<tr>
<th></th>
<th>2008</th>
<th>2018</th>
<th>Trend</th>
</tr>
</thead>
<tbody>
<tr>
<td>Share of energy from renewable sources</td>
<td>67.4</td>
<td>77.6</td>
<td>↗</td>
</tr>
<tr>
<td>Electricity demand per UZH member</td>
<td>1,085.1</td>
<td>958.4</td>
<td>↘</td>
</tr>
<tr>
<td>Heating demand per energy reference area</td>
<td>91.9</td>
<td>86.8</td>
<td>↘</td>
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</tbody>
</table>

In the calculation of UZH members, six students equal one employee (full-time equivalent, FTE).
Greenhouse Gas Emissions

Air travel undertaken by UZH employees accounts for the biggest portion of greenhouse gas emissions (measured in CO₂ equivalents), followed by electricity and heat consumption, commuting, cafeteria food provisioning, production and disposal of IT equipment for employees, vehicle fleet and manufacturing of externally sourced paper. Emissions from air travel, IT equipment, vehicle fleet and paper refer to UZH employees and are partly based on projections.

Greenhouse Gas Emissions by Activity

<table>
<thead>
<tr>
<th>Activity</th>
<th>2008</th>
<th>2018</th>
<th>Trend in %</th>
<th>Share of energy from renewable sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air travel</td>
<td>8,299</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Commuter traffic</td>
<td>5,449</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vehicle fleet</td>
<td>190</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cafeteria food provisioning</td>
<td>2,040</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Electricity and heat consumption</td>
<td>6,008</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Production/disposal of IT equipment</td>
<td>1,186</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Paper manufacturing</td>
<td>171</td>
<td></td>
<td></td>
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</tbody>
</table>
Buildings
UZH operates around 23,100 rooms in 213 buildings.

The University has worked together with its partners to develop an integrated site plan to ensure that its space development is in line with its own requirements as well as those of the local population, the environment and urban planning. The core of this site plan is the two-campus strategy, which concentrates on the City and Irchel campuses.

Waste
Waste is recycled whenever possible to reduce the University’s environmental impact. In 2018, 67.1 percent of waste generated by UZH was separately collected.

Mobility
Air travel by UZH members generated a total of 8,299 tons of greenhouse gas emissions, accounting for 36 percent of the total greenhouse gas emissions of the University. There is a latent conflict of objectives between one of the goals of the UZH Mission Statement, “Fostering international collaboration in research and teaching”, and the goal of climate protection. From a sustainability perspective, solutions to this conflict must be found wherever possible (e.g. virtual communication, combining trips) while protecting freedom in research and teaching.
Catering
The environmental impact of catering services such as running the cafeteria and hosting receptions mainly stems from the production and transport of food. In 2018, UZH sold 1,130,791 meals, which accounted for around 2,040 tons of greenhouse gas emissions – 20 tons fewer than in 2017. An average vegan meal at UZH causes around 0.7 kg of greenhouse gas emissions, while a vegetarian meal causes 0.9 kg and a meat or fish-based meal causes 2.3 kg.

Percentage of Meat-/Fish-Based, Vegetarian and Vegan Meals

<table>
<thead>
<tr>
<th></th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meat-/fish-based meals</td>
<td>69%</td>
<td>64%</td>
</tr>
<tr>
<td>Vegetarian meals</td>
<td>25%</td>
<td>25%</td>
</tr>
<tr>
<td>Vegan meals</td>
<td>6%</td>
<td>11%</td>
</tr>
</tbody>
</table>
UZH helps to shape public discourse through its research, teaching, science communication and dialogue with decision-makers in politics and business.

Dialogue with Decision-Makers
UZH’s dialogue with decision-makers in politics and business occurs primarily in the context of joint projects. Furthermore, UZH researchers advise decision-makers and international organizations such as the WHO and OECD on issues of sustainable development. The University’s researchers also contributed to the Sixth Assessment Report of the United Nations Intergovernmental Panel on Climate Change (IPCC).

Dialogue with the Public
Most of UZH’s dialogue with the public takes place via its individual researchers, via the media and through public access to museums and the Botanical Garden. Additional activities for dialogue with the public include:
– Children’s University of Zurich
– Senior University of Zurich
– UZH Science Lab
– Life Science Learning Center

UZH also publishes its own academic magazines and is active on social media. Furthermore, UZH puts on events such as the Scientifica research fair, Talk im Turm panel discussions and the 100 Ways of Thinking science festival in 2018.
Sustainability Networks

UZH is involved in numerous networks that deal with sustainability issues. These include:

– Klimaplattform der Wirtschaft Zürich
– Sustainable Development Solutions Network Switzerland
– International Sustainable Campus Network
– Climate KIC
– COPERNICUS Alliance

Credits

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