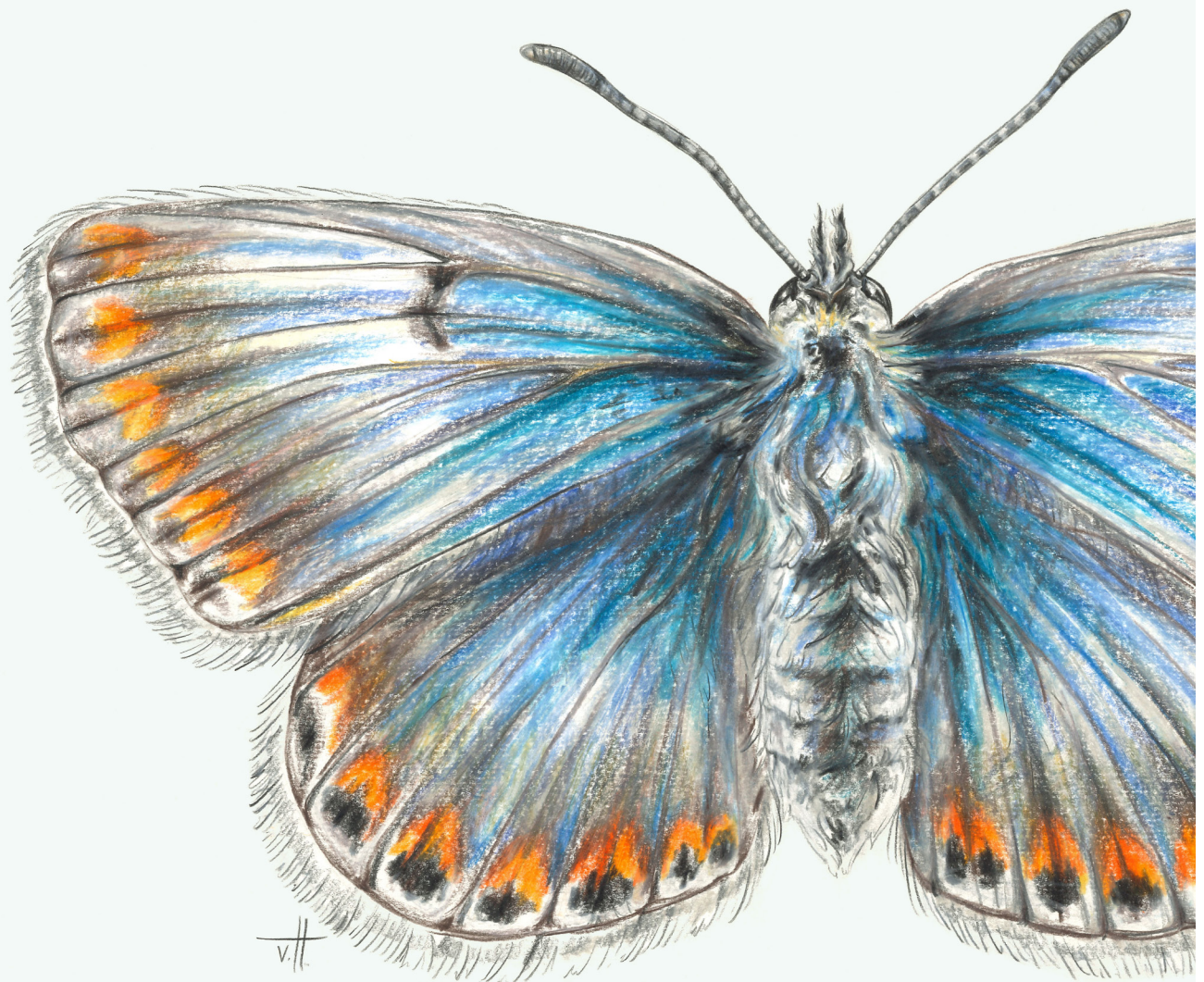




University
of Bremen

Updated

Environmental declaration 2023





Foreword



Dear university members, dear interested reader.

This is now the 20th Environmental Statement of the University of Bremen! 20 years of environmental management according to EMAS with many achievements in environmental and climate protection. In 2004, the first environmental statement of the University of Bremen was published, something special for us at that time. Today, in 2023, the publication of the environmental statement is a regular part of our work and more important than ever. Especially in recent years, it has become clear that climate protection has become increasingly urgent. We are no longer talking about a temporary, regional climate crisis. A climate catastrophe with global consequences for the entire earth is looming on the horizon. Fires in the Mediterranean and in the German low mountain regions, the melting of glaciers in the Alps, floods with many victims in Asia and high waters in numerous regions of the world make this visible. It becomes clear that climate change is a problem of the whole world community and can only be stopped and prevented together.

Nevertheless, every individual is being called upon. This also applies to the University of Bremen with its more than 3,500 employees and almost 20,000 students. In order to meet this social challenge, the rectorate is developing a new mission statement with the participation of the students, which will incorporate climate protection, climate justice, climate neutrality and sustainability.

The University of Bremen has therefore set itself the ambitious goal of becoming a pioneer in the field of sustainability. In order to achieve this goal, we have developed a sustainability strategy and established a separate Sustainability Office to complement our environmental management, which focuses on the implementation and monitoring of our sustainability goals. The AS Commission on Sustainability, Climate Justice and Climate Neutrality complements this goal in the Academic Senate.

We thank all employees for their support and commitment to sustainability, climate justice, and environmental protection. Our collective goal is to minimize the environmental impact of our work and create a sustainable future. We are confident that together we will be successful!

A handwritten signature in blue ink that reads "F. Meyer". The signature is fluid and cursive.

Frauke Meyer
Chancellor of the University of Bremen

Overview of the university's key figures



The university at a glance

Number of students: 18,631
53 % female students

Students by field of science:

6,667 Natural sciences and engineering
10,976 Social sciences and humanities
2,33 Student teachers
(Rest: Doctoral students and certificates)

Graduates: 3,187

1,688 Bachelor
1,304 Master
91 State law examinations
301 Doctorates and habilitations
(Rest: Other)

Personnel: 3,578

2,323 Academic staff (320 professors)
1,255 Administrative and technical staff

Budget (in million euros):

402 Total
115 Third-party funds

International affiliations:

2,871 Foreign students
948 from Europe
1,359 from Asia
370 from Africa
182 from America
7 from Australia
(Rest: stateless persons and others)

693 Partner universities

Awards (Figures from 2021):

23 ERC Grant
1 Cluster of Excellence
7 Leibniz Prizes

(Figures taken from "Uni in Zahlen 2022")

The environmental management system

The environmental management system of the University was validated in May 2018 according to the EMAS III – Regulation (Regulation (EC) No. 1221/2009), which came into full validity on January 11, 2010, for the University of Bremen at the location Bibliothekstraße 1 in 28359 Bremen. With reference to the environmental management system, there have been no significant changes since the last revalidation. We would like to refer to the consolidated environmental statement 2022.

Environmental Goals and Environmental Program 2022/23

The following listing shows the current environmental measures to improve environmental performance, achieve targets and objectives and ensure compliance with legal obligations in the environmental field

in accordance with Regulation (EU) 2018/2026 Annex Chapter B lit. e. The listing also gives an overview over the measures implemented in the last two years.

Measures	Implementation period	People in charge	Status
Environmental goal: Further development of environmentally compatible and safe handling of hazardous substances (1)			
Planning of a hazardous materials day 2023	February 2023	Robert Crueger	Measure cancelled – Work overload
Planning of an emergency response day 2023	January 2023	Department 02, Chancellor	Planning canceled
Environmental goal: Optimization of paper consumption (2)			
Conversion of towel dispensers in sanitary rooms to paper-saving systems with EU-ECO label Paper	December 2020	Department 4	Measure currently being implemented. Further buildings will be updated
Note on economical paper consumption in the sanitary rooms	December 2022	Climate Protection Manager	Flyers and stickers are printed, stickers placed in the sanitary rooms
Environmental goal: Optimization of energy and water consumption (3)			
Replacement of light bulbs in all buildings to LED with the target of a total of 5 % energy savings in the respective buildings, starting from 2018	July 2021	Department 4, Facility Management	Measure is currently being further implemented. Energy savings of 26 % have already been achieved in the administration building. Other buildings have been added
Planning and implementation of an energy saving campaign with the target of 3 % energy savings on total consumption, calculated from 2018	November 2021	AK EMAS, Climate Protection Manager	Measure has been implemented.
Application for a position for climate protection management to implement the climate protection concept	May 2022	Environmental management coordinator, university chancellor	The position is established, environmental management coordinator acts as climate protection manager
Replacement of motors in the ventilation systems with the target of 12 % energy savings in relation to the buildings	December 2022	Department 4	Measure has been implemented
Energetic building analyses	December 2022	Climate Protection Manager	The measure is in the preparation process. Buildings must be selected in cooperation with the Department of “Building management”

Measures	Implementation period	People in charge	Status
Planning of a solar system on the BIBA building (99 kW _{peak})	December 2022	Solar Cooperative, Department 4	The measure is being prepared. Construction cannot take place at the moment due to the order situation of the companies
Examination of the rooftops whether the installation of solar panels is possible	December 2023	Department 4	Measure started
Environmental goal: Reduction of personal waste quantities (4)			
Development of a poster series on the careful and environmentally sound handling of waste	January 2022	Climate Protection Manager	Deadline extended, Posters and stickers are currently being printed
Separate collection of sanitary papers. If appropriate, disposal as substitute fuel	January 2024	ZAE	The measure is in the planning process
Environmental goal: Further development of emergency prevention and fire protection (5)			
Fire safety training, trainings for - fire protection assistants, - technical advisors - building contact persons - emergency call acceptance fire training (after technical conversion)	December 2022	Department 4, Fire protection north (experts)	In planning process
Implementation of measures as part of the fire protection in the GW 1 building	December 2022	Department 4	Measure started
Implementation of (partial) building evacuation exercises in the "Marum", according to the fire protection concept	July 2023	Department 4, Fire protection north (experts)	Concept is completed
Environmental goal: Optimization of traffic connections to the campus (6)			
Survey of bicycle parking spaces on campus with the aim of improving the parking situation for bicycles	December 2019	Climate Protection Manager, Staff SfWG	Measure completed
Development of a mobility concept for the technology park	December 2022	Climate Protection Manager	Planning started, date postponed to December 2022
Planning and implementation of a mobility survey in cooperation with the Technology Park eV.	May 2023	Climate Protection Manager	Planning has started, offers have been obtained
Planning and installation of a bicycle garage	August 2023	Department 4; Climate Protection Manager	Planning completed. Reconstruction will start soon
Environmental goal: Good communication in the area of work safety, health and environmental protection (7)			
Establishment of a bureau for sustainability	April 2023	Students for Future, Climate Protection Manager	Project has started
Planning and implementation of an information day for building management	October 2023	Department 4; Climate Protection Manager	In planning, start date postponed
Development of a sustainability strategy	December 2023	AS Commission, NKK	Measure has started

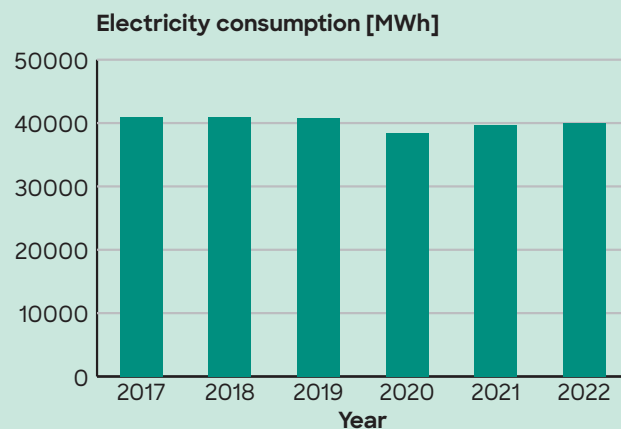
Measures	Implementation period	People in charge	Status
Development of a new corporate policy for the University with supplements on climate protection and sustainability	December 2023	Rector's Office	A first concept has been developed
Environmental goal: Optimization of environmental protection from start on at the planning stage (8)			
Planning of the Marum3 building, considering energy aspects and the strict legal requirements of the state of Bremen (passive house)	Completion 2019	Department 4; SFWG	The construction project has been started
Planning of the energy-efficient modification of the A-block NW2	December 2019	Department 4	Planning has started and was postponed due to cost and time reasons several times
Environmental goal: Broader integration of sustainability aspects in research and teaching (9)			
Establishment of a commission for sustainability, climate justice and climate neutrality	April 2021	University Management, Academic Senate	First meeting has taken place. The commission now meets regularly. Measure implemented
Energy consumption of private households in the context of the Energy Transition (Subproject of the ClimateInnoGovernance Research Network)	August 2021	Artec - Sustainability Research Center	Research project has started
Climate-resilient City-Urban-Rural Cooperation - Regional innovations of energetic biomass use and governance (KlimaInnoGovernance)	August 2021	Artec - Sustainability Research Center	Measure was implemented
Project: Energy consumption at the University of Bremen - What is the climate's influence?	March 2023	Institute for Geography	Research project has begun. Integration of this project into teaching will start in the summer semester of 2022
Planning and implementation of a new online course on the topic of climate protection & climate justice. The course can be taken by all students in the state of Bremen as a 3 CP course	April 2023:	Dr. Denis Pijetlovic and Katharina Lingenau in Department 7	Planning process has started
Planning and implementation of the joint project BregoS (Bremen goes Sustainable) with all universities and selected research institutes in Bremen	December 2024	Prof. Dr. Marko Rohlf, Climate Protection Manager	The project design has been granted. First network meetings have taken place
Senatra - Service Learning and Sustainable Transformation at Universities (BMBF)	September 2025	Prof. Dr. Georg Müller-Christ and Dr. Bror Giesenbauer	The project design has been granted and the project started
Project "climateurope2" - Research project on the provision and effective use of climate knowledge and the implementation of a European climate policy	February 2027	Prof. Dr. Michael Flitner (artec)	The project has been granted and started

Measures	Implementation period	People in charge	Status
Environmental goal: Preservation and promotion of biodiversity (10)			
Influence of the new green space management on the species diversity of insects	July 2021	Institute for Ecology	The students have started with their master's or bachelor's theses
Development of a bird cadastre on campus (BA)	December 2021	NUB, Biodiversity Hub	Measure was implemented
Influence of vegetation structure on insect diversity and biomass development	April 2022	Institute for Ecology	The students have started their master's or bachelor's theses
Development of a communication structure for more biodiversity on campus	December 2023	Institute for Ecology, "Campus goes Biodivers"	Planning process has started
Nesting facilities on the buildings for swifts	December 2023	Nabu, "Campus goes Biodivers"	Planning process has started
Examining whether further areas on campus can be made available as "flowering areas"	May 2024	"Campus goes Biodivers", Biodiversity Hub	Measure was extended because of further demand

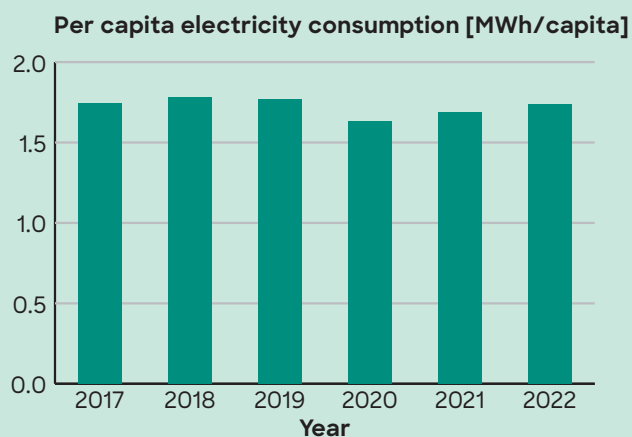
Overview of consumption data 2022

Electricity

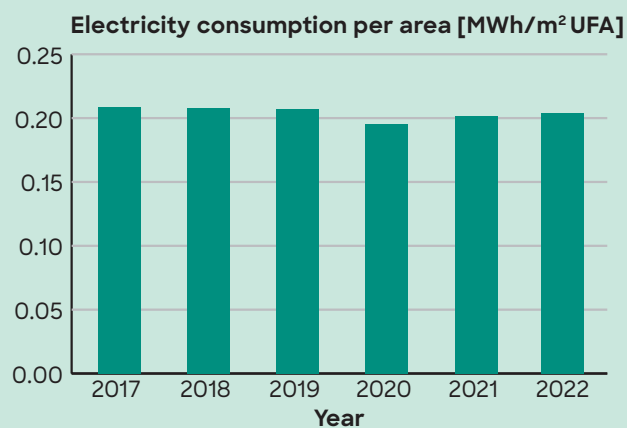
The University of Bremen obtains 100 % of its electricity from renewable sources.



Electricity consumption at the University of Bremen over time course



Specific electricity consumption per capita at the university over time course



Specific electricity consumption per main floor area [HNF]

Heat*

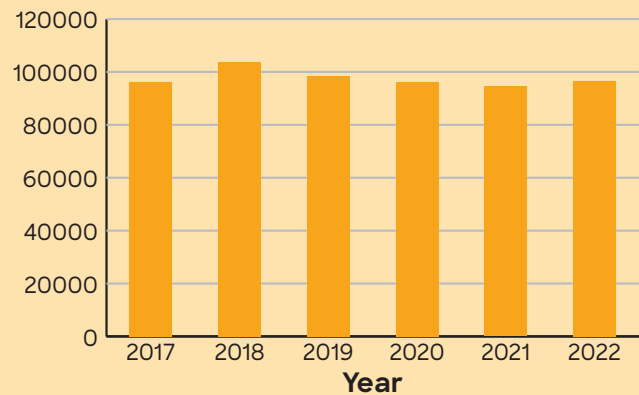
District heating from the Bremen waste-to-energy plant is obtained as part of the combined heat and power (CHP) system. The use of steam at MHW Bremen results as a secondary process from the incineration of waste.

Emissions / share of renewable energies

The emissions of the University of Bremen are mainly related to energy consumption. Since the University of Bremen obtains so-called "NaturStrom" from the energy supplier swb and receives heat from the nearby waste-to-energy plant, it does not generate any CO² emissions by its own.

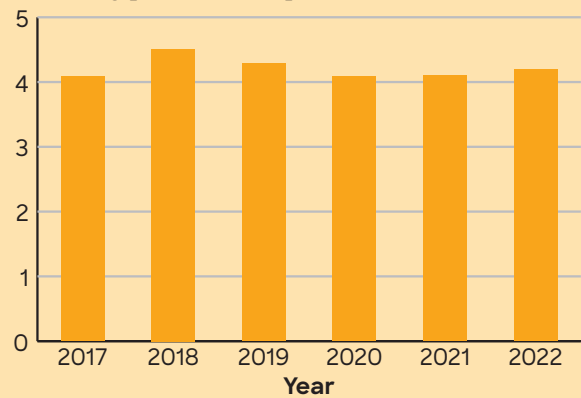
The share of renewable energies is 100 %.

Energy consumption for heating and cooling [MWh] (degree day adjusted)



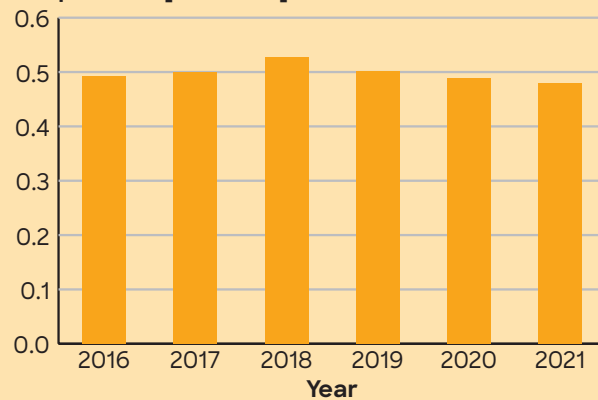
Heat consumption of the university over time course

Per capita energy consumption for heating and cooling [MWh/capita]



Specific heat consumption per capita at the university over time course.
(*Incl. heat for cooling production)

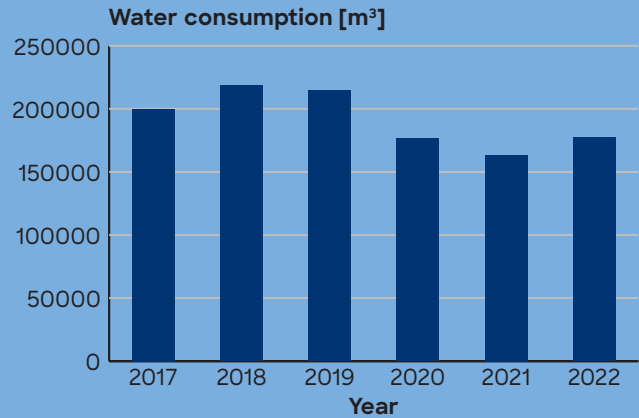
Energy consumption for heating and cooling per area [MWh/m²]



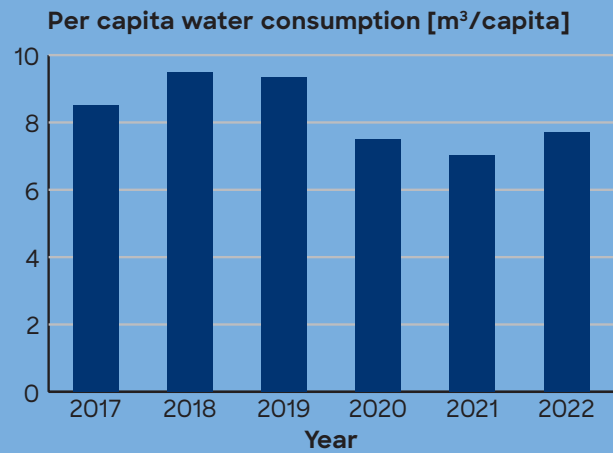
Specific heat consumption per main usable area [HNF]

Water*

In 2021, a slight downward trend in water can be observed again. This may be due to the Corona crisis and the closure of the university. On the other hand, area-wide water saving techniques in all sanitary rooms were updated.

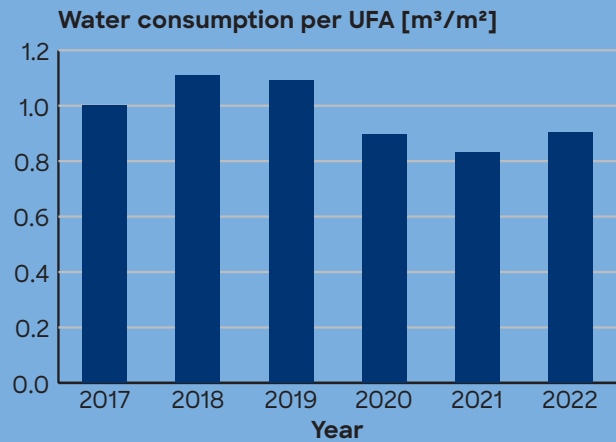


Water consumption of the university over time course



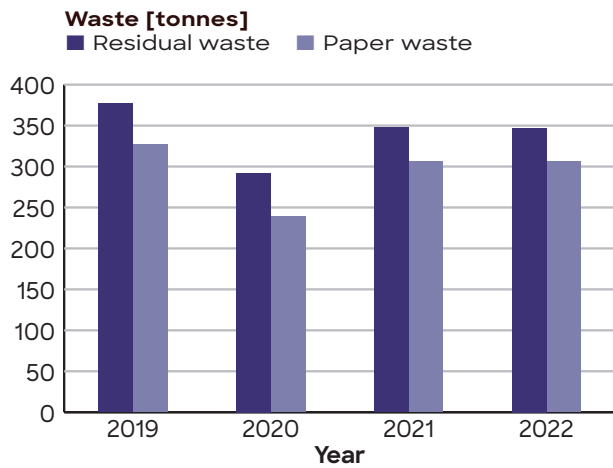
Specific water consumption per capita at the university over time course

* Including water for drinking, cooling, soft water and swimming pool operation. (The operating costs of the swimming pool are allocated to the university.)

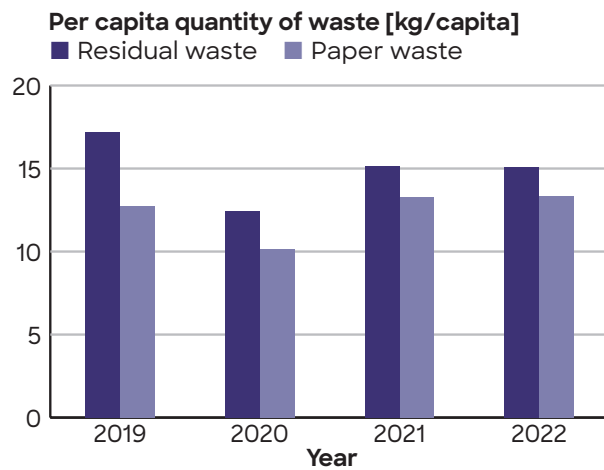


Specific water consumption per main usable area at the university over time course

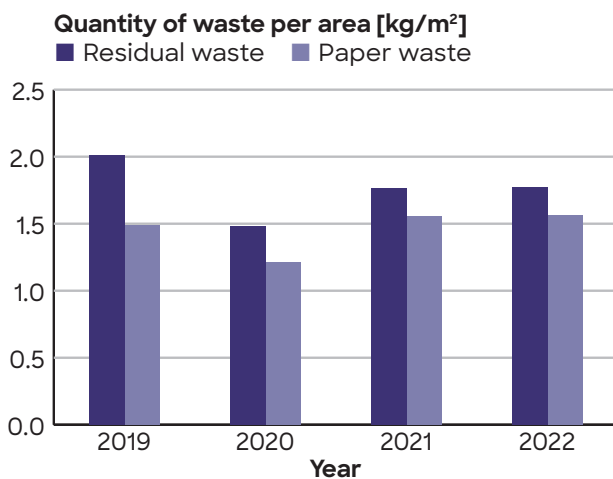
Waste



Quantity of residual waste and waste paper at the University of Bremen

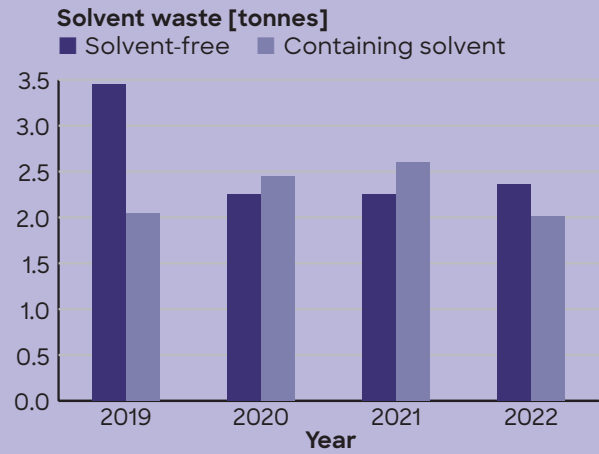


Quantity of residual waste and waste paper per capita (employees and students)



Volume of residual waste and waste paper per main usable area [HNF]

For solvent waste and hazardous waste, no data per capita or per area were reported, since only about 40 % of the university employees have contact with hazardous waste and/or solvents.



Quantity of solvent mixtures over time course



Volume of hazardous waste over time course

Material efficiency

For several years, the University of Bremen has been strongly committed to improve material efficiency. Various projects are working on the goal of using material more efficiently.

Paper consumption is in 2020, probably caused by the Corona crisis, decreased significantly. For 2022, with 5.5 million sheets of recycled paper, there was a slight increase again. In comparison, in 2021 paper consumption was 4.9 million sheets of recycled paper. The University of Bremen has been participating since 2016 in the survey conducted by the Initiative proRecyclingpapier on the use of recycled paper at universities. In 2022, the University of Bremen already used 95 percent recycled paper labeled with the “Blauer Engel” (Blue Angel) in its administration. For the future, the University plans to increase the proportion of these papers even more.

Other materials, such as chemicals and consumables, cannot be listed at present because they are often bought in decentralized quantities.

Biodiversity

Biodiversity is a core indicator of the environmental management system of the University of Bremen. In April 2018, it was identified and defined as a key environmental aspect in the Environmental Committee. Initial measures in this regard were included in the environmental program. This was described in detail in the Environmental Statement 2019. With the amendment of the EMAS III regulation, in particular Annexes I – IV, further reference factors have now been defined.

Ground floor area:

520,297 m²

22.6 m² per member

Areas of sealed surfaces:

269,388 m² (52 % of total area)

11.7 m² per member

Near-natural areas:

250,909 m² (48 % of total area)

10.9 m² per member

In recent years, the University of Bremen has undertaken some activities to improve biodiversity on

© Felix Clebowski / Universität Bremen



campus. Biotopes have been created, nesting boxes have been distributed on campus and insect hotels have been manufactured. Now 160 nest boxes and 30 insect hotels have been installed and more activities are being planned. In 2020, mowing of the meadows was limited and this will continue in the coming years.

The measures are accompanied by the biology department in cooperation with the nature conservation group at the University of Bremen and the garden maintenance. The project “Campus goes Biodivers” is now well established and combines environmental protection with elements of teaching and research activities.

Environmental and social responsibility

The University of Bremen is aware of its environmental and social responsibility. As an educational institution, we have a special responsibility to prepare our students for the challenges of a sustainable and responsible future. For this reason, we have decided to use ISO 26000 as a guide for our activities. ISO 26000

provides us with a framework to consider our social responsibility in all areas of activity and to strengthen our efforts towards sustainability.

In addition to the topic of the environment, the relevant norm includes six other core topics:

CSR: 7 main topics



Reference source: Vitt, J.; Franz, P.; Kleinfeld, A.; Thorns, M. (2011): Gesellschaftliche Verantwortung nach DIN ISO 26000 – Eine Einführung mit Hinweisen für Anwender. Beuth Verlag, Berlin, Wien, Zürich

Human Rights

The University of Bremen respects human rights in all aspects. In science and administration, it consciously does not use any products or services that have been produced in violation of human rights. When selecting suppliers and partners, it also makes sure that the observance of human rights is taken into account.

It advises its employees that human rights are respected and promoted. In research and teaching, it demands that human rights are adequately taken into account in the curricula and that research is oriented towards finding solutions to human rights problems.

The University of Bremen actively participates in the promotion of human rights and in the political debate on human rights aspects.

Employment Practices

The University of Bremen always strives to ensure that all work processes within the company are fair, transparent and equitable.

Equal treatment and non-discrimination in hiring, compensation, promotion and working conditions are important criteria in everyday university life. This also includes, for example, the implementation of flexible working hours and the creation of working conditions that make it possible to combine work and family life. For example, Bremen University has been certified as a family-friendly university for about 10 years.

In all work processes, it ensures that occupational health and safety measures are observed and workloads are reduced. Training and continuing education on labor rights and job duties are made available to all employees.

The university ensures that discrimination and bullying do not take place in the workplace. For this reason, it has established a complaints mechanism in its organization. It ensures the implementation of a fair payment system, taking into full account the requirements of the minimum wage.

Fair business policies

The University of Bremen always strives to establish fair and transparent conditions in its contracts with

business partners. It demands that they comply with environmental and social standards. It emphasizes the importance of maintaining fair competition, preventing corruption, participating in a politically responsible manner, and respecting property rights.

By following fair business practices, Bremen University can ensure that it acts ethically and morally correct and fulfills its responsibility towards society.

Consumer affairs

The core topic “consumer affairs” defined in ISO 26000 refers at a university to students, employees, but also to partners and providers.

In this context, the University of Bremen ensures that it provides students and employees with access to sustainable products (research results) and services (teaching and continuing education). For example, when procuring materials and services, important sustainability criteria are taken into account wherever possible and the information on this is communicated transparently. Students and employees are being sensitized to sustainable consumption and encouraged to practice resource-saving behaviors and to choose environmentally friendly alternatives. In 2020/21, for example, an energy-saving campaign was carried out throughout the university.

Supplier and partner relationships

When choosing suppliers and partners, the University of Bremen pays attention to their socially and ecologically responsible behavior.

Community involvement and Development

The University of Bremen is aware that it plays a central role as the largest public sector employer in the state of Bremen and is accordingly committed to promoting the common welfare. It communicates and cooperates with all relevant stakeholders. It has described all of this in a risk analysis. It integrates students, employees, alumni, local companies and

also the state government. It supports educational and social projects and promotes cultural and environmental initiatives. It complies with all local laws and regulations and takes social and ethical principles into consideration in all business decisions.



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Legal conformity

The University of Bremen can confirm that it has acted in accordance with the law and that no violations of the law are known. There have also been no known submissions from the senatorial authorities or other interested parties.

All environmentally relevant requirements are listed in a legal register that can be viewed by all university members on the Internet platform. The legal register is updated every three months.

<https://www.uni-bremen.de/umweltmanagement/redirection/rechtsverzeichnis>

Legal regulations

In the paragraphs below, important regulations for the University of Bremen are listed for the individual environmental aspects:

- Act on the promotion of closed substance cycle waste management and ensuring environmentally compatible disposal of waste with the resulting ordinances and technical rules (Closed Substance Cycle Waste Management Act – KrWG).
- Law on the marketing, return and environmentally friendly disposal of batteries and accumulators. Core of the law is the provision on the marketing, return and environmentally friendly disposal of batteries and accumulators (BattG).
- Law for the protection against hazardous substances with the resulting regulations and technical rules (Chemicals Act – ChemG).
- Law on the implementation of occupational health and safety measures to improve the safety and health of employees at work (ArbSchG).
- Ordinance on the national and international transport of dangerous goods by road and rail (Dangerous Goods Ordinance for Road, Rail and Inland Navigation (GGVSEB)).
- Law on the regulation of water resources with the resulting regulations and technical rules (Water Resources Act – WHG).
- Law for the protection against harmful effects on the environment caused by air pollution, noise, vibrations and similar processes with the resulting ordinances and technical rules (Federal Immission Control Act – BImSchG).
- Technical rules for hazardous substances: Storage of hazardous substances in portable containers with the appendices contained (TRGS510).
- Ordinance on the return and disposal of used batteries and accumulators. (Battery Ordinance – BattV).
- Bremen implementation act on the avoidance and disposal of waste (BremAGAbfG).
- Energy Saving Ordinance (EnEV).
- Ordinance on industrial safety and health (BetrSichV).
- Ordinance on installations for handling substances hazardous to water (AwSV).
- Regulation (EC) No. 1221/2009 of the European Parliament and of the Council of 25 November 2009 allowing voluntary participation by organizations in a community eco-management and audit scheme and repealing regulation (EC) No. 761/2001, and Commission Decisions 2001/681/EC and 2006/193/EC.
- Bremen local law for the amendment of the local law on the disposal of waste in the Municipality of Bremen (local law amending the of waste disposal).
- Drainage Local Law (EOG).

DECLARATION OF THE ENVIRONMENTAL VERIFIER ON VERIFICATION AND VALIDATION ACTIVITIES

The undersigned, **Dr. Georg Sulzer**, EMAS environmental verifier with the registration number **DE-V-0041**, accredited or licensed for the domains **85.42.1 and 72.2 (NACE code)**, confirmed to have verified whether the entire organization, as described in the organization's updated environmental statement:

University of Bremen
Location: Leobener Straße, 28359 Bremen, Germany
with the registration number (DE-112-00022)

complies with all requirements of regulation (EC) No. 1221/2009 of the European Parliament and of the Council of 25 November 2009 allowing voluntary participation by organizations in a Community Eco-Management and Audit Scheme (EMAS), as amended by regulations (EU) 2017/1505 and (EU) 2018/2026.

By signing this declaration it is confirmed that

- the verification and validation have been carried out in full compliance with the requirements of regulation (EC) No 1221/2009, as amended by regulations (EU) 2017/1505 and (EU) 2018/2026,
- the result of the assessment and validation confirms that there is no evidence of non-compliance with the applicable environmental legislation,
- the data and information in the organization's updated environmental statement give a reliable, credible and true picture of all the organization's activities within the scope stated in the environmental statement.

This statement cannot be equated with EMAS registration. EMAS registration can only be carried out by a competent body in accordance with regulation (EC) No 1221/2009, as amended by regulations (EU) 2017/1505 and (EU) 2018/2026.

This declaration may not be used as a stand-alone basis for informing the public.

Altfraunhofen, May 2023



Dr. Georg Sulzer, Environmental Verifier (DE-V-0041)
Hangleite 2, 84169 Altfraunhofen, Germany

We will submit the next updated environmental statement in March 2024.
The next consolidated environmental statement will be presented in March 2025.

Information

www.uni-bremen.de

www.uni-bremen.de/umweltmanagement

Imprint**Publisher**

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Dr. Doris Sövegjarto-Wigbers

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