DTU

We develop technologies for people and **sustainable change**

Sustainability Report 2023

ENVIRONMENT, SOCIAL, AND GOVERNANCE

DTU's research into everything from energy islands, wind energy, and green fuels to carbon capture and sustainable production is important to the green transition—nationally and globally. These are technology areas in which DTU has a strong research position. Our core services—research in technology and natural sciences, education of engineers, development of innovative solutions, and scientific advice—constitute DTU's greatest effect on the sustainable transition.

But our ambitions also include acting responsibly in all our operations in relation to how we as a university impact the environment, consume resources, create socially sustainable surroundings, and run our organization properly. In this report, we put DTU's sustainability initiatives into words, figures, and ambitions. We show how we strive to 'keep our own house in order'.

The report is based on the ESG structure (E—Environment (environment and climate impact), S—Social (social contribution) and G—Governance (management and organizational development)).

Environment
Resource consumption with care

Social
Attractive place to study and work

Governance
Governance with accountability and research integrity

DTU SUSTAINABILITY REPORT 2023

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EDITORS HENRIK MIELBY, LENE SPASØ, AND LOUISE SIMONSEN
PRODUCTION MARIANNE TINGKOV
ILLUSTRATION BENNY BOX
PHOTOS BAX LINDHARDT, SIGNE BJERKE TERMANSEN, NIELS NYGAARD, LINE JUUL GREISEN, MIKAL SCHLOSSER, JESPER SCHEEL, KAARE SMITH

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"We believe that the development can be changed, that we have the opportunity to act, that we can create a better future. A sustainable future."

At DTU, we take responsibility!

The world is facing major challenges with rapid climate change, global environmental pollution, and shrinking biodiversity. The outlook is bleak. But, at DTU, we are optimistic. We believe that the development can be reversed, that we have the opportunity to act, that we can create a better future. A sustainable future

DTU takes sustainability seriously. We have integrated sustainability in the curricula and competence profiles of all our study programmes. We have also introduced a DTU charter for engineers, which all our students are encouraged to adopt. The objective of our DTU Charter is to work with sustainability from environmental, economic, and social perspectives.

We're committed to a sustainable future through the development of value-creating technology for people. Many different types of technology. The DTU Centre for Absolute Sustainability is a fairly recent initiative aimed at assessing and advising on technologies that support sustainable change. The centre conducts research and development in systemic and quantitative sustainability.

We create an inclusive study and working culture that embraces everyone. We want to promote a sense of community and a good environment—both in how we interact with each other and in our physical surroundings. DTU's campuses are used as living labs for the development of solutions that minimize environmental and climate impacts in new construction, energy supply, operations, and waste sorting.

We focus on how DTU is managed, how we act as a university, and how we balance freedom of research with ethical, secure, and responsible international collaborations.

At DTU, we act: We create technology for people. Sustainable technology.

In this report, we put DTU's sustainability initiatives into words, figures, and ambitions.

I hope you enjoy reading it.

Anders O. Bjarklev
President

About DTU

DTU is an elite technical university of international reach and standard. We are engaged in education, research, scientific advice, and innovation which contribute to growth and welfare.

DTU's **research** is conducted at a high international level and with major initiatives in a number of socially relevant engineering disciplines, including sustainable energy technology, life science, and digitalization.

DTU is Denmark's largest **educational institution** for engineers. We educate engineers with in-depth academic competency and great commitment, and we train our students to think entrepreneurially and across disciplines.

DTU has a strong **innovation system** for its students, employees, and partners. The research-based innovation is supported through courses, competitions, mentoring, coaching, acceleration programmes, and soft funding. DTU Skylab is DTU's innovation hub, a meeting place for researchers and students which offers the opportunity to develop and test technology for people in practice.

DTU provides scientific advice. The collaboration is often anchored in long-term strategic framework agreements with Danish ministries and includes handling and effective management of major societal challenges such as pandemics, sustainable resource consumption, and the green transition.

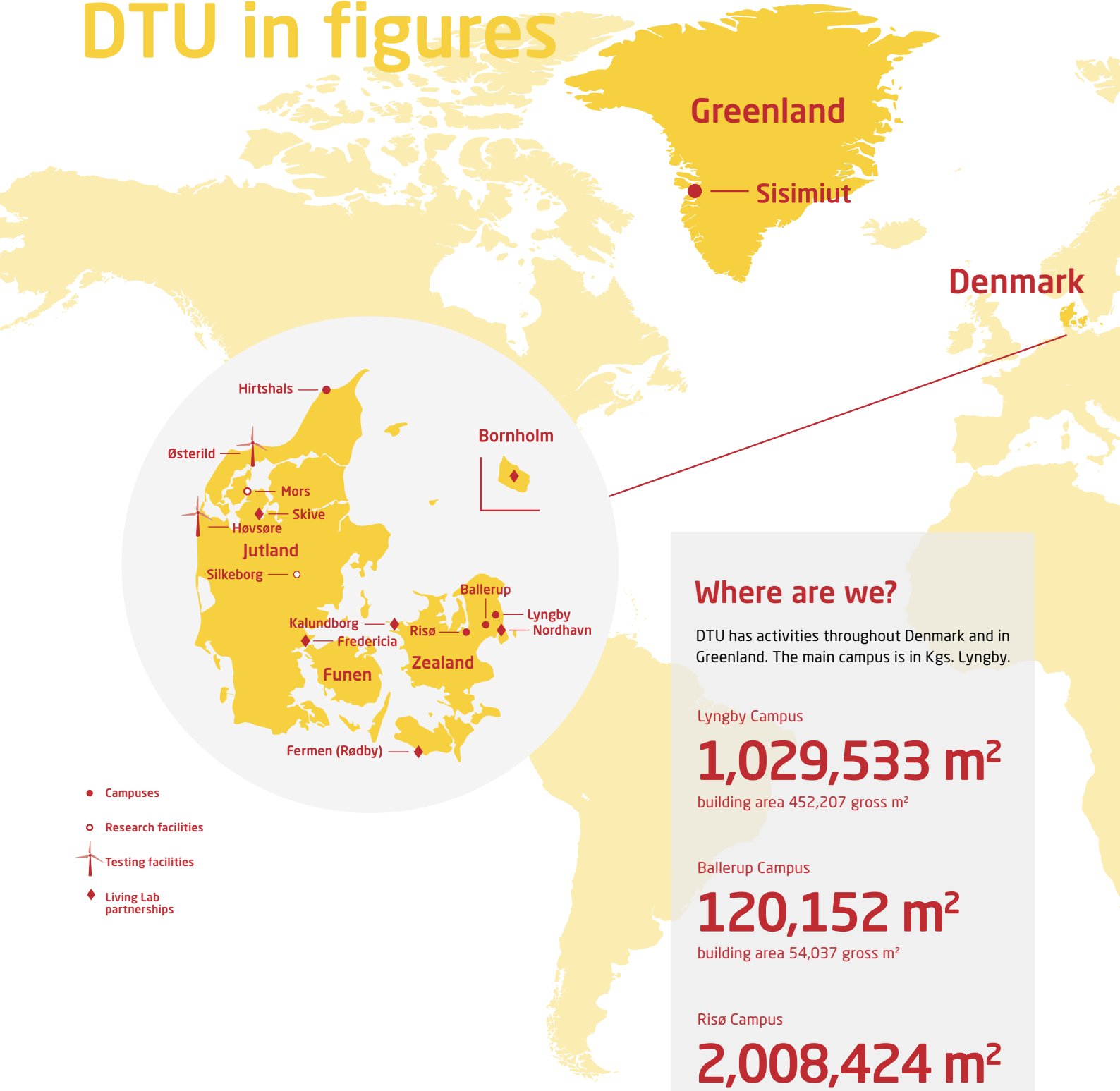
Ever since Hans Christian Ørsted founded the University in 1829, DTU's mission has been to develop and create value using the natural sciences and the technical sciences to benefit society. What is regarded as beneficial to society has changed over time, but the mission remains the same.

DTU's current strategy is called Technology for people 2020-25 and is based on the same mission we have always had, with three objectives setting a direction for our day-to-day work:

- We offer Europe's best engineering education—throughout life
- We develop technologies for sustainable change
- We assume leadership of the opportunities offered by digitalization.

With sustainability as an objective, we have set a new direction for our mission to benefit society.

DTU in figures



Where are we?

DTU has activities throughout Denmark and in Greenland. The main campus is in Kgs. Lyngby.

Lyngby Campus

1,029,533 m²

building area 452,207 gross m²

Ballerup Campus

120,152 m²

building area 54,037 gross m²

Risø Campus

2,008,424 m²

building area 63,181 gross m²

Who are we?

13,523
students are enrolled at DTU

33%
of the enrolled students are women

39%
of FTEs are women

2,520
engineers graduated from DTU in 2022

5,970
FTEs work at DTU

97
different nationalities are embraced by DTU

4,643
students admitted to BEng, BSc, and MSc programmes in 2022

Average age

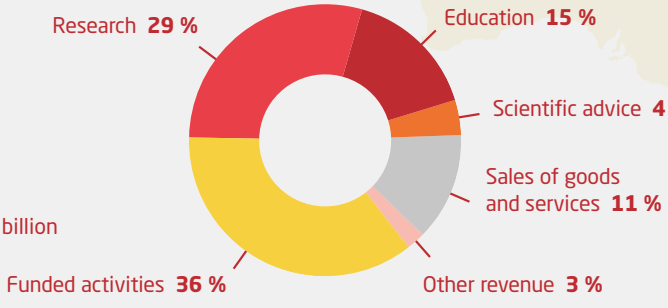
Faculty (professors, associate professors, assistant professors)	49 years
Scientific staff	36 years
Technical/administrative staff	45 years

How do we work?

Revenue

DTU had revenue totalling

DKK 5.8 billion



DTU in figures

Study programmes

19 BEng programmes

20 BSc programmes

33 MSc programmes

17 PhD schools

716 international exchange students at DTU in 2022

600 DTU students studied abroad in 2022

119 exchange agreements with international universities

23 joint international programmes

Research

5,254 research publications in 2022

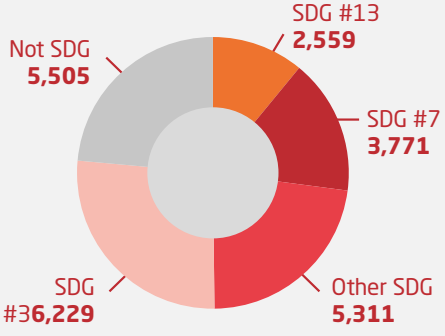
1.51 Normalized Citation Impact*

73% of the publications are co-published with institutions outside Denmark

17% of DTU's publications are among the world's top 10 % most cited

** Note: Citation Impact (number of citations per publication) normalized for research topic (Web of Science categories), year of publication, and publication type. The value 1 represents the world average, and DTU is thus 51 % above this.*

SDG publications*



** DTU's publications, which are classified as SDG publications in the Web of Science. SDG stands for Sustainable Development Goals, the UN's 17 Sustainable Development Goals.*

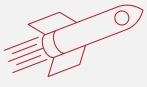
Scientific advice

DKK 240 million

From agreements on scientific advice between DTU and Danish authorities

Innovation

71



new start-ups were established based on knowledge and technology from DTU in 2022

34

inventions were commercialized

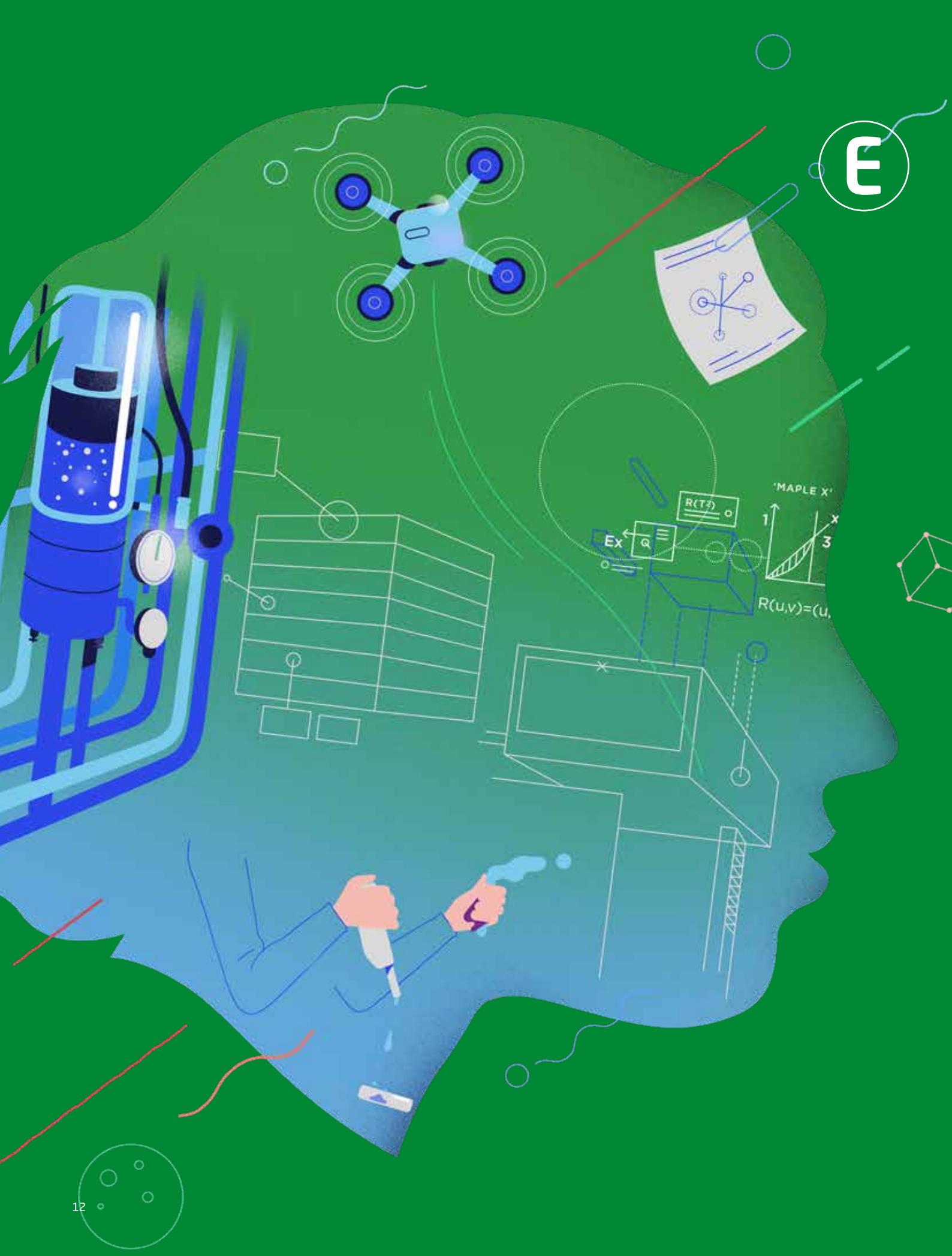
1,884

projects between DTU and the business sector

Rankings

	Nordic region*	Europe	The world
Leiden Ranking Proportion of Publications in Top 10 %	1	41	113
Leiden Ranking Proportion of Publications with Industry	2	5	14
QS World University Rankings	9	48	121
Best Global Universities U.S. News	10	64	165
THE World University Rankings	7	51	126
Academic Ranking of World Universities Shanghai Ranking	10-11	51-73	151-200
World University Research Rankings	1	1	2
EngiRank EU Ranking	1	1	-

** The Nordic region includes Denmark, Sweden, Norway, Finland, and Iceland*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Resource consumption with care

At DTU, we experience that both students and employees are aware of their own habits and want to act sustainably. We are therefore working to create a physical environment that allows students, employees, and all users of DTU's campuses to minimize their own resource consumption. Internally as well as in collaboration with others, we strive to develop circular solutions that minimize resource consumption. DTU owns the building stock at Lyngby Campus and Ballerup Campus. This provides a unique opportunity to adopt a long-term perspective and to work with holistic solutions that promote both sustainability and profitability. Therefore, DTU has decided that all new construction projects and major renovations must have a high sustainability standard. This also means that the University has decided that DTU's campuses and operations will function as living laboratories for technology development.

The work with responsible resource use is divided into focus areas concerning 'environmental impact from university operations', 'carbon emissions from energy consumption' and 'sustainable campus development and mobility'. These focus areas are elaborated on in the following based on the measuring points that DTU uses to monitor and assess its resource consumption.

Focus area: Environmental impact from university operations

Environmental and climate accounts

DTU wants to strengthen the University's overall climate and environmental reporting to create momentum and visible goals for our sustainability initiatives. In collaboration with Universities Denmark, we are preparing a model that ensures uniform and transparent linking of financial data with climate data for Danish universities. This is especially relevant to our procurement of goods and services.

In addition, DTU is developing a method for calculating carbon emissions in connection with the students' and staff's transport to and from our campuses.

Finally, DTU focuses on increasing the accessibility and quality of data on the University's operations to support the further development of the environmental and climate accounts.

Measures	Baseline	2025 objective
Environmental and climate accounts		
Improved data collection and handling to increase transparency and strengthen the quality of DTU's environmental and climate accounts.	The joint standard for Danish Universities' climate accounts.	The environmental and climate accounts have been implemented and are used to establish ambitions, goals, and targets for measures aimed at reducing DTU's overall footprint.

Procurement

DTU has strengthened its sustainability initiatives in procurement, and a sustainable procurement policy was developed in 2020. As our procurement agreements become due for renewal, the University's goods ordering system will contain more products manufactured in accordance with recognised sustainability standards. Procurement agreements are entered into with suppliers and manufacturers that comply with the UN principles for sustainable corporate governance.

Measures	Baseline 2022	2025 objective
Procurement		
DTU's public procurement procedures follow the processes for DTU Procurement Sustainability.	The DTU Procurement Sustainability Model is implemented in all procurement agreements and individual purchases above DKK 100,000.	80-90 % of DTU's procurement will be covered by the DTU Procurement Sustainability Model.

Reuse

DTU endeavours to consume less by reducing purchases and instead reusing resources such as furniture and fittings. Especially at Lyngby Campus, there is a constant flow of office furniture and fittings that are being reused.

To make it easier to reuse furniture and fittings, work is being done to organize storage capacity and to build up an internal database with information about what is in stock. In addition, second-hand furniture is restored in those cases in which it can be reused in new or renovated buildings.

Measures	Baseline 2021	2025 objective
Reuse		
Optimization and planning of storage facility for reused furniture and fittings A method will be established for registration of reused items.	DTU has developed a practice for reuse of furniture and fittings.	Increased share of reused furniture and fittings.

Waste

Waste can be a renewable resource, and as much waste as possible must therefore be sorted correctly. Students' and staff's knowledge of and focus on sorting of waste have increased in recent years. DTU will increase the share of actually recycled waste. This objective will be met by supporting good waste sorting behaviour, optimizing waste processing, and continuing the development of the University's physical infrastructure.

Mandatory training of those responsible for handling hazardous waste has resulted in better hazardous waste management as well as a better and safer working environment.

Measures	Baseline 2021/2022	2025 objective
Waste		
Measures for behavioural change aimed at better waste sorting. Requirements for suppliers that they can process the waste better and that they can document this.	A test check from 2021 showed that 54 % of the residual waste could have been recycled, specially processed, or deposited. 49 % of all waste was actually recycled in 2022.	By 2025, maximum 30 % of the residual waste must be waste that should have been recycled, specially processed, or deposited. By 2030, this must be maximum 15 %. Increase the actual recycling percentage: 60 % in 2025 70 % in 2030 75 % in 2035 By comparison, the national targets are: 55 % in 2025 60 % by 2030 65 % in 2035

Air travel

In 2020, DTU launched a sub-policy for transport and meeting activity. The sub-policy promotes a reduction of the need for air travel and calls on staff to choose the mode of transport with the lowest carbon emission for necessary travelling.

The initiatives must be measurable and visible. DTU is therefore working to calculate the number of kilometres flown and to increase awareness of alternative modes of transport.

Measures	Baseline 2019	2025 objective
Air travel		
DTU will reduce the number of kilometres flown per FTE.	8,916 km flown per FTE, equal to a carbon emission of 1,450 kg per FTE.	Number of km flown per FTE will be reduced by 25 %.

**) the figure is corrected for flights in connection with mandatory travel activity, for example under international collaborations.*

Water consumption

DTU will increase the share of collected rainwater that can be used for irrigation of green areas on campuses and for cleaning of outdoor areas. At Lyngby Campus, water consumption can be monitored via a dashboard, and work is being done to develop a similar system for the other campuses. The dashboard allows systematic monitoring of and follow-up on the development in water consumption.

Measures	Baseline 2022	2025 objective
Water consumption		
DTU will reduce tap water consumption and increase the volume of collected water for use in outdoor areas.	163,319 m^3 equal to 10.7 m^3 per student and employee.	Tap water consumption has been reduced by 10 %.

Historical development	2017-2019 (avg.)	2020	2021	2022
Waste volumes				
Waste volume (tonnes)[A]	3,025	2,263	2,513	2,611
Waste volume per student and employee (kg)[B]	216	216	166	171
Share of waste volume delivered for recycling[C]	65 %	62 %	67 %	49 %
Waste volumes, broken down by processing type (tonnes)				
Recycling	1,971	1,410	1,683	1,288
Combustion	865	613	597	970
Special processing	157	213	208	201
Waste volumes distributed per location (tonnes)				
Lyngby	2,381	1,838	2,174	2,132
Risø	348	267	175	378
Ballerup	175	112	97	65
Other	86	45	67	37
Air travel				
Total number of km flown[D] (km)	53,866,261	13,076,561	5,910,049	27,206,780
Carbon emissions (kg)[E]	8,230,962	2,061,099	1,125,875	2,346,633
Number of km flown per employee (km)	9,204	2,234	1,015	4,557
Carbon emissions per student and employee (kg)	1,406	352	193	393
Flight destinations (1,000 km)				
The Nordics	3,078	878	439	2,019
Europe	12,810	2,022	2,359	10,447
Overseas	34,029	3,490	2,093	14,739
Tap water				
Consumption of tap water (m^3)	170,481	136,712	133,699	163,319
Consumption of tap water per student and employee (m^3)	12.2	9.5	8.8	10.7

A) All waste volumes registered on all campuses B) Decreases in 2021 are attributed to the COVID-19 pandemic and related reduced activity level on campus C) Recycling percentage for all fractions and all campuses. Stated as 'delivered for recycling'. D) Decrease in number of km flown is attributed to the COVID-19 pandemic and related travel restrictions E) DTU's tour operator (Carlson Wagonlit) provides information about related carbon emission factor and km travelled for the individual flights. DTU recognizes 'Radiative Forcing Factor' and scales up for the few flights purchased outside the agreement.

Focus area:

Reduced carbon emissions

DTU is continuously working to reduce carbon emissions related to energy consumption. This is done by reducing energy consumption and promoting the use of renewable energy sources.

Reduction of energy consumption

DTU adopts a two-tiered approach to energy-saving measures: Via behavioural changes through the involvement of building users and via initiatives aimed at reducing energy consumption for the technical facilities of the buildings.

DTU has developed a dashboard that shows historical and current energy consumption at building level (in kWh and carbon emission). Energy consumption data are made available to all university units so that they can monitor their own consumption and see the effect of energy-saving measures. Dashboard data are also used to identify opportunities for reducing energy consumption in the individual building. As buildings and installations are maintained and new technology is developed, DTU will implement technical improvements aimed at reducing carbon emissions from buildings.

Measures	Baseline 2021	2025 objective
Reduction of energy consumption		
DTU will reduce energy consumption per student and employee.	Energy consumption per student and employee: 9.7 MWh.	Objective 2025: 5 % Objective 2030: 10 % In relation to baseline (average of consumption in 2017, 2018, and 2019)

Renewable energy sources

In 2022, 60 % of the electricity in the Danish energy system came from wind and solar energy. The increased share of electricity from renewable energy sources has contributed to a significant reduction in DTU's carbon footprint from 0.9 tonnes per student and employee in 2021 to 0.6 tonnes in 2022.

DTU is continuously examining the possibilities of stimulating the expansion of renewable energy in the Danish energy system in connection with procurement of electricity from renewable energy sources, and DTU switches to other energy agreements if they demonstrate a significantly lower environmental impact. In addition, we develop local solutions that minimize our climate footprint. For example, solar cells are installed on existing buildings. At Lyngby Campus, a heat pump will be established that can cover 35 % of DTU's annual, current heating needs by recycling heating from the University's remote cooling system. The heat pump contributes to an annual reduction of carbon emissions of 180 tonnes relative to the existing heating supply.

Measures	Baseline 2021	2025 objective
Reduction of carbon emissions		
DTU will reduce carbon emissions from energy consumption per student and employee.	Carbon emissions per student and employee: 0.9 tonnes.	Approved climate strategy and action plan, including targets for reduction of carbon emissions related to DTU's energy consumption.

Historical development	2017-2019 (avg.)	2020	2021	2022
Energy consumption per student/FTE				
Electricity consumption (MWh per student and employee)	4.6	4.4	4.5	4.3
Heating consumption (MWh per student and employee)	5.2	4.7	5.2	4.4
Total energy consumption (MWh per student and employee)	9.8	9.1	9.7	8.7
Carbon emissions (Tonnes per student and employee)	1.6	1.1	0.9	0.6
Energy consumption (MWh)				
Electricity consumption (absolute electricity consumption, incl. electricity for research processes)	64,410	63,703	67,877	66,084
Heating consumption (absolute heating consumption, incl. heat for research processes)	72,943	68,220	78,481	68,193
Total energy consumption	137,353	131,923	146,358	124,277
Total carbon emissions from electricity and heating (tonnes)				
Carbon emissions from electricity	11,478	6,246	5,656	3,827
Carbon emissions from heating	11,484	8,921	8,323	5,081
Carbon emission from total energy consumption[A](electricity and heating) (tonnes)	22,962	15,167	13,979	8,908
Carbon emission from electricity per location[B] (tonnes)				
Lyngby	8,190	6,018	7,329	2,850
Risø	2,247	1,552	1,906	703
Ballerup	301	200	206	82
Other	398	193	197	192
Carbon emissions from heating per location (tonnes)				
Lyngby	9,003	7,661	7,078	4,339
Risø	883	639	571	386
Ballerup	404	393	445	139
Other	534	228	229	216

A) Carbon emission from electricity consumption reflects the national energy mix. DTU has purchased carbon neutral power certificates for the total electricity consumption. B) East Denmark (Sjælland and Bornholm are connected with Sweden and Germany) and West Denmark (Jutland and Funen are connected with Norway, Sweden and Germany). Therefore, Energinet divides Denmark into East and West, as there are different energy sources and consequently different CO_2e emission factors for electricity in Denmark. Using East Denmark for DTU's Zealand locations and West Denmark for DTU's Jutland locations gives a truer and fairer view.

Focus area:

Sustainable campus development and mobility

Campus development, new construction, and building operations

DTU follows the voluntary certification scheme for sustainable construction, DGNB. In the DGNB system, a building project or an urban district is evaluated based on six qualities: Environmental, economic, social, technical, process and area, while the operation of a building is evaluated based on three qualities: Environment, economic and social. In Denmark, the certification process is handled by Rådet for Bæredygtigt Byggeri (formerly Green Building Council Denmark).

DGNB certification is not the end goal for DTU's initiatives for improving sustainability in existing and future buildings, but a method for creating a systematic and transparent approach. It may be necessary to deviate from the DGNB criteria in particularly complicated research-intensive buildings. Such deviations are always reconciled and verified by Rådet for Bæredygtigt Byggeri.

In 2022, three buildings at Lyngby Campus were selected for a pilot project on mapping how DTU meets the criteria in the DGNB standard for buildings that are already in use. A number of development areas were identified in this connection. DTU currently focuses on indoor climate, biodiversity, mobility, energy consumption, and outdoor environment. The result of this work gives an indication of the extent and pace of further certification of the building stock.

Measures	Baseline 2020/2022	2025 objective
Campus development, new construction, and building operations		
DTU certifies all new buildings and extensive renovations in accordance with the manual for *'DGNB for new buildings and extensive renovations'*.	DTU had the first buildings certified in accordance with the DGNB manual for new buildings and extensive renovations in 2021.	All new buildings are certified at minimum DGNB Gold.
DTU will maintain DGNB planning certification of Lyngby Campus as an urban area by continuing to develop the campus in a more sustainable direction.	Lyngby Campus achieved DGNB planning certification at Gold level in 2021.	Maintenance of DGNB plan certification of Lyngby Campus at Gold level.
DTU qualifies its sustainability initiatives in the operation of the building stock via the manual for *'DGNB for buildings in use'*.	Identified and prioritized improvement points that reinforce a systematic approach. The implementation of the priority areas constitutes the foundation for further certification.	Implementation of strategic energy management based on ISO 50001 standard as well as a data-driven system for improving the indoor climate at DTU.

Indoor climate

In 2022, DTU has determined the extent to which and how DTU's work with indoor climate meets the DGNB standard for buildings in operation. In future, DTU will focus on developing a structure for monitoring and systematic follow-up on the indoor climate (acoustics, air quality, lighting conditions, and thermal indoor climate). To streamline this work, digital tools are being developed for monitoring the indoor climate.

DTU's new building projects and major renovations are planned with particular attention to creating a good indoor climate with minimal environmental impact.

Measures	Baseline 2022	2025 objective
Indoor climate		
DTU will strengthen its actions and initiatives aimed at ensuring a high-quality indoor climate with minimum environmnetal impact that concurrently supports a good study and working environment.	Work is being done to improve the indoor climate on an ad hoc basis and as required. New buildings have stringent indoor climate requirements.	A system has been established for ongoing assessment of and follow-up on the indoor climate in existing buildings.

Biodiversity on campus

DTU's campus areas contain very different natural surroundings, and, until 2022, ad hoc measures have mostly been taken to increase biodiversity. Since 2022, DTU has developed guidelines for promoting biodiversity on its campuses. The work has resulted in adjustments to operations and further training of campus service staff in the practical biodiversity work.

In the new guidelines, DTU requires that 90 % of the newly planted vegetation must be species that belong in a Northern European geographical context. None of the species on campus must be on the Danish Environmental Protection Agency's list of invasive species in Europe and Denmark. This applies both to new plantation and maintenance of the areas. Cohesive green areas and more water reservoirs will provide the basis for robust natural surroundings with habitats for more species. The aim is to achieve greater biodiversity and site-specific biodiversity on DTU's campuses.

Measures	Baseline 2021	2025 objective
Biodiversity		
DTU will increase biodiversity in its campus areas.	Mapping of biodiversity at Lyngby Campus began in 2021.	90 % of the newly planted vegetation on DTU's campuses are species that belong in a Northern European geographical context.

Mobility

DTU has a goal of getting more people to walk and cycle to and from the campuses. A number of facilities have therefore been established on Lyngby Campus that make it easier to combine public transport with cycling and walking—including new cycle paths, pavements, thoroughfares, and crossing options. To support the switch to electric vehicles, charging points are established on the campuses on an ongoing basis. So far, there are 118 charging points for electric cars/sharing cars on the three large campuses.

Overall, it must be easy for staff and students to move about on foot, by bicycle, with public transport and electric cars.

Measures	Baseline 2021	2025 objective
Mobility		
DTU will reduce environmental and climate impact from transport to, from, and on campus	Mobility is a key theme in the strategic campus plans. The construction of the Greater Copenhagen Light Rail started in 2021.	An interdisciplinary strategy and local action plans have been prepared for the establishment of charging points for electric vehicles. New infrastructure and facilities have been established on Lyngby Campus for pedestrians and cyclists, making it easy and safe to get around campus as well as to and from the Light Rail stops. The parking norm for cars has been reduced, and the establishment of new infrastructure for private cars has been initiated, creating more space for pedestrians and cyclists on campus.

Historical development	2020	2021	2022
DGNB standard			
Urban areas	Lyngby Campus received DGNB Gold planning certification.		Preparations for recertification of Lyngby Campus were initiated.
New construction and extensive renovations		DGNB certifications in 2021 • Building 374 certified at Gold and Diamond • Building 357 pre-certified at Gold • Building 112 pre-certified at Gold	Extensive renovation: • Building 116 certified at Silver • Building 208 pre-certified for Gold New construction: • Building 313 pre-certified at Gold
Buildings in use			Buildings 114, 201 and 409 selected for pilot project aimed at certification in 2023. DTU has entered into a strategic partnership with Rådet for Bæredygtigt Byggeri with a view to qualifying further work with certification of the operations of the buildings.


S

Attractive place to study and work

DTU's believes that many of the challenges facing the world require engineers with a sustainability mindset. This is a big responsibility that we want to inspire all students and graduate engineers to pursue.

Sustainability is an integrated part of all DTU's study programmes, and all students will complete programme components intended to boost their competence in innovation and entrepreneurship. The social dimension of sustainability includes social responsibility and room for diversity in all matters (for example culture, ethnicity, and gender). Together with the PF student association, Polyteknisk Forening, the University runs a number of activities aimed at supporting student well-being.

A good working environment is also important to the University. We undertake a social responsibility to meet the objective of inclusiveness in public institutions, for example by focusing on an inclusive work environment where there is room for differences, and by creating a framework that encourages us to talk about how we are thriving. DTU is an international university, and equality between gender and nationalities is a matter of course. Integration of international employees is a high priority, so that the meeting with the University as a workplace and with Danish society is experienced smoothly and supportively.

DTU's work with the social dimension of sustainability is therefore grouped by focus areas that concern 'diversity, equality, and inclusion', 'well-being, health, and safety', as well as 'academic, professional, and social communities'. These focus areas are elaborated on in the following and based on the measuring points that DTU uses to assess and continuously improve its social capability.

Focus area:

Equal access to education and career

Internationalization

In recent years, there has been a general increase in admission of international MSc students, and 47 % of the University's MSc students had an international background in 2022. DTU's study programmes are compared with those of several hundred universities globally on an ongoing basis. According to the International Student Barometer, which is published by the British analysis institute i-graduate, 93 % of DTU's international students are either very satisfied or satisfied with their student life at DTU. 92 % of the international students will actively and at their own initiative, or if asked, encourage other students to study at DTU.

At DTU, there are 114 different nationalities among the students and 101 among the staff. Therefore, the University is aware that it is necessary to understand cultural challenges and identify opportunities for improvement on an ongoing basis that can create an even more inclusive and international university environment for both students and staff.

Measures	Baseline 2021	2025 objective
Internationalization		
DTU is an attractive place to study for international students.	46 % of DTU's students are international.	The number will be increased with special focus on admissions in globally oriented continuing education as well as self-paying students.
DTU is an attractive workplace for international researchers.	55 % of DTU's scientific staff are international.	The share will, as a minimum, be maintained with focus on ensuring that DTU remains an attractive workplace that can attract and retain global talents.

Young researchers

DTU wants to attract young research talents. The University is therefore working to develop special career opportunities—tenure tracks—as an attractive and internationally recognizable career path, which aims to promote the academic and professional development and independence of assistant professors and researchers at an early stage in their careers. The focus will, for example, be on strengthening that part of the tenure track which includes a mentor programme with focus on personal, academic, and professional development.

Measures	Baseline 2021	2025 objective
Age		
DTU is an attractive workplace for young researchers.	Out of 705 junior scientific staff members (postdoc, researcher, assistant professor), 148 were employed in open-ended positions, equal to 21 %.	25 % young researchers in open-ended positions.

Accessibility

DTU works to create physical accessibility for disabled people, with flexible curricula, and to ensure easy access to guidance and support for people with special needs. Initiatives have included the initiation of work to ensure that students who need Special Educational Support experience that such a need is not an obstacle to studying at the University.

In combination with other measures (for example special exam conditions, adapted study plan, exemptions, etc.), Special Educational Support can provide the individual students with better pre-requisites for completing their study programme. In 2022, 804 students received support. This corresponds to 7 % of the total number of students.

Measures	Baseline 2021	2025 objective
Accessibility		
DTU must be physically, socially, and pedagogically accessible to the individual student.	773 students with functional impairment receive support under the public scheme Special Educational Support, equal to 6 % of the total number of students.	100 % of students with identified needs receive support.

Gender balance

Since 2018, the proportion of women admitted to BSc and MSc programmes has been around 32-35 %, whereas the intake of women in BEng programmes has increased from 23 % in 2018 to 28 % in the following years. Over a 20-year period, the gender balance has changed from 20-21 % women to 32-34 % women on an ongoing basis. The University wants to maintain and continue this development.

The average proportion of women in the intake in the BEng, BSc, and MSc programmes covers large differences between the individual study programmes. For example, the BSc programme in Electrical Engineering has 6 % women, as opposed to 64 % women in Architectural Engineering. DTU has held IT and Engineering Camps for female high school students to strengthen the recruitment work for the study programmes in IT, Electrical Engineering, and Mechanical Engineering.

DTU's work with Diversity, Equity, & Inclusion (DE&I) also comprises competence development, inclusive management, and balanced and bias-conscious recruitment. Therefore, hiring managers' and HR employees' competences are developed to create better balance in recruitments and career progression. For example, a masterclass has been held for HR partners on bias-conscious management as part of the support for the DE&I work at the university units. DTU prepares an annual diversity report, which is continuously developed to include more parameters and more intersectionality.

Measures	Baseline 2021	2025 objective
Gender		
The gender balance among newly admitted BSc students must reflect the gender balance among high school students who meet the admission requirements at DTU. About 40-45 % are women.	In 2021, there were 28 % women on the BEng programmes and 33 % women on the BSc programmes.	The proportion of women admitted to the BSc programmes is to increase by 1 % per year with up to 45 % women as a target.
Gender balance among PhD students	35 % women and 65 % men.	Higher proportion of women
Gender balance among researchers in open-ended positions	22 % women and 78 % men.	Higher proportion of women
Gender balance among researchers with management and/or HR responsibilities	18 % women and 82 % men.	The proportion of women is to increase by 1 % per year with 35 % women as a target.
Gender balance among permanent administrative and technical staff	49 % women and 51 % men.	Same level
Gender balance for administrative and technical staff with management and/or HR responsibilities	45 % women and 55 % men.	Same level
Gender balance for University Leadership and Management Forum.	19 % women and 81 % men.	The proportion is to be increased with a target of 35 % women and 65 % men.
Gender balance for DTU's Board of Governors.	40 % women and 60 % men.	Same level
IT and Engineering Camps targeted at female high school students.	150 participants	250 participants

Historical development	2017-2019 (avg.)	2020	2021	2022
Internationalization				
Total MSc students	4,092	4,834	5,373	5,598
Share of MSc students with international background	40 %	41 %	46 %	47 %
Number of nationalities among the students	100	107	114	97
Total researchers, FTEs	3,246	3,278	3,302	3,382
Proportion of international researchers	29 %	30 %	31 %	33 %
Number of nationalities among the staff	102	102	114	101
Age				
Total researchers, FTEs	3,246	3,278	3,302	3,382
Total number of junior scientific staff positions (postdoc, researcher, assistant professor)	-	-	705	898
Number of open-ended junior scientific staff positions	-	-	148	160
Share of open-ended junior scientific staff positions	-	-	21 %	18 %
Accessibility				
Number of students with functional impairment receiving support under the public scheme Special Educational Support (SPS)	-	560	773	804
Percentage of total number of students	-	-	6 %	6 %
Gender balance (share of women)				
Newly admitted BEng students[A]	25 %	26 %	28 %	26 %
Newly admitted BSc students	35 %	35 %	33 %	33 %
Total student population	29 %	30 %	31 %	33 %
PhD population (DTU staff)	-	35 %	35 %	35 %
Permanent scientific staff[B]	-	-	22 %	28 %
Management, scientific staff (managers with HR responsibilities)	-	19 %	18 %	19 %
Permanent technical and administrative staff[C]	-	-	49 %	50 %
Management, technical/administrative staff (managers with HR responsibilities)	-	43 %	45 %	46 %
DTU's University Leadership and Management Forum	-		19 %	18 %
DTU's Board of Governors	-	40 %	40 %	40 %

A) The BEng programme is a Bachelor of Engineering programme. B) Only scientific staff without a date of termination are included. C) Only technical/administrative staff without a date of termination are included.

Historical development	2017	2018	2019	2020	2021	2022
Gender distribution in admissions to the BEng, BSc, and MSc programmes (share of women)						
Bachelor of Engineering (BEng)	-	23 %	27 %	26 %	28 %	26 %
BSc	-	33 %	36 %	35 %	33 %	33 %
MSc	-	33 %	31 %	34 %	33 %	38 %
Gender distribution in Faculty						
Professors, total[A]	188	195	276	285	298	289
of which women	11 %	13 %	13 %	14 %	14 %	14 %
Associate professors, total	439	436	439	434	437	419
of which women	15 %	17 %	17 %	17 %	18 %	18 %
Assistant professors, total	99	105	99	88	80	101
of which women	36 %	30 %	31 %	35 %	34 %	30 %

A) The BEng programme is a Bachelor of Engineering programme. B) Only scientific staff without a date of termination are included. C) Only technical/administrative staff without a date of termination are included.

Focus area:

An attractive study and working environment

Student well-being:

The Danish Ministry of Higher Education and Science conducts the Danish Study Survey biannually. It shows that the overall satisfaction with DTU's study environment is high. The students are particularly satisfied with the academic level and commitment they experience from their lecturers and fellow students, and they rate the social environment well.

However, the survey also shows that many students feel great study pressure on a daily basis, and that some students feel lonely during their studies. The University deals actively with these themes in its well-being work. DTU prepares three-year study environment action plans that prioritize specific focus areas aimed at promoting student well-being. In 2022-2024, the focus is on well-being in the form of social affiliations, inclusion, equal treatment, sense of mastery, strengthened communication, as well as fast and flexible case handling. There is also focus on the learning environment, including AV and streaming, indoor climate, immersion spaces, and user-friendly outdoor environments, as well as well-functioning IT support.

Measures	Baseline 2021	2025 objective
Student well-being		
Creating a study environment that contributes positively to the students' well-being.	The Danish Student Survey: DTU scores 3.9 on a scale from 1 to 5.	DTU scores minimum 4

Employee well-being

DTU focuses on using dialogue as a well-being lever. Well-being dialogues are conducted biannually*. In 2022, the University received a visit from the Danish Working Environment Authority, which approved the dialogue-based approach to working with well-being and as a method for a psychological workplace assessment (PWA). There may be individual, structural, and cultural causes of poor well-being, and DTU therefore implements initiatives at all levels. For example, the University is working to ensure greater employment stability for young researchers. In addition, the University offers a dialogue with the researchers' own manager on flexible work organization, consultations regarding absence from work, and anonymous psychological counselling.

Measures	Baseline 2021	2025 objective
Employee well-being		
DTU has an organizational culture that contributes to an increased dialogue on well-being.	The implementation of well-being dialogues was initiated in 2021. As a supplement to this, the University introduced leadership dialogues in 2022. *) 29 of 30 units have conducted well-being dialogues.	Well-being and leadership dialogues are an integral part of the dialogue and collaboration culture. DTU's management can document the holding of dialogues and ensure follow-up.

Health services and sickness absence

Low rate of sickness absence and ample opportunities for physical and mental well-being are among the elements that characterize a healthy and sustainable working and study life.

DTU therefore offers a wide range of health promoting events for staff and students, so that there is something for everyone. They include annual events such as the 'DTU Stafet' relay race and the cycling campaign 'We cycle to work'. In addition, there are established paths for walking and running, a disc golf course, as well as facilities such as sports hall, climbing walls, and dance hall.

Most sports activities are organized under the DTU Sport association. DTU's biggest sport is dance, with approximately 1,000 members.

Since 2021, DTU has had a psychologist consultation scheme that has a stable number of enquiries—approx. 200 annually. In 2022, the enquiries were grouped around cooperation problems, lack of well-being, and challenges with creating an understanding of special needs. DTU has an ambition to work more preventively through a number of measures such as the well-being and leadership dialogues.

Measures	Baseline 2021/2022	2025 objective
Health services and sickness absence		
DTU offers students and staff activities that promote physical health and support social communities.	DTU Sport has 14 clubs and 3 fitness centres In 2022, there were 4,041 members.	The same number of members of DTU Sport as well as maintenance of the offer of a wide range of health promotion activities for students and staff.
DTU offers psychological counselling and focuses on maintaining good working environments.	Psychologist consultation scheme established in 2021.	Continued great acceptance of serious courses of illness and increased use of the psychologist consultation scheme as needed. Faster follow-up on signs of well-being problems.

Safety and accidents at work

In 2022, DTU established a procedure for preparation of security and safety plans for major events. The procedure must ensure that the security and safety plan complies with the authorities' guidelines and that the events are held in accordance with the University's own security and safety regulations.

DTU has a preventive safety culture with initiatives that support that it must be safe and healthy to work and study. This also includes the University's service suppliers.

The frequency of accidents at work and near-miss incidents dropped from 1.61 in 2021 to 0.96 in 2022—the lowest level in over a decade. Overall, the accident rate has been decreasing over the past five years.

Measures	Baseline 2022	2025 objective
Safety and accidents at work		
Less than 1 accident at work per million working hours (LIFT)	0.96 LTIF	Fewer accidents at work

Historical development	2017-2019 (avg.)	2020	2021	2022
Student well-being Statement from Study Environment Survey: I generally feel very comfortable in my study programme on a scale from 1 to 5".				
DTU	-	4.00	3.93	3.93
Universities in Denmark	-	4.06	3.87	3.87
Employee well-being				
Number of units that have conducted well-being dialogues	-	-	29 of 30	-
Health services and sickness absence				
Average number of sick days per employee, excluding sick child days	6.6	5.5	5.3	5.6
Members of DTU Sport and other club offers	4,229	3,551	2,897	4,041
Safety and accidents at work				
Number of injuries with resulting absence	26	11	18	11
Number of injuries without resulting absence	43	40	35	51
Number of near-miss incidents	32	31	29	47
Number of injuries at work, students	8	7	4	6
Total	109	89	86	115
Total, excl. near-miss incidents	77	58	57	68
Lost Time Injury Frequency (LTIF) (number of accidents at work per million working hours)	2.30	0.98	1.61	0.96

Focus area:

Academic, professional, and social communities

Communities for students

DTU wants to give all students a sense of belonging and access to communities across disciplines, academic competencies, interests, and locations. The aim is for all new students to feel welcome in their new study programme and at the University in general. Regardless of their background and potential challenges, all new students must experience inclusion and integration, both academically and socially. Therefore, the University and Polyteknisk Forening (PF student association) are working to develop a new and inclusive study start, where a larger proportion of the coming students participate.

At DTU, the students have ample opportunities for meeting each other across disciplines, both by virtue of the large freedom of choice offered by their study programmes and courses that bring together students across study programmes, or in the many interdisciplinary activities such as the Green Challenge student competition, Roskilde Festival Powered by DTU students, or projects such as Blue Dot, where students engage in interdisciplinary collaboration to solve specific engineering assignments. The ambition is for the students and graduate engineers to experience that they have gained an academic identity with focus on interdisciplinarity, innovation, and an understanding of the possibilities and limitations of technology. The ambition is described in the DTU Charter 'For the benefit of society', which obligates the University to incorporate sustainability and innovation in all study programmes.

Polyteknisk Forening (PF student association) is a very important part of the students' social life on campus. PF runs 15 student clubs, such as Dorm Cooking, Arktisk Grejbank, Wine Tasting and Keramikklubben, three organized communities (DTU lgbtq+, Feministisk Forum and PF Fællesbunke) and S-huset at Ballerup and Lyngby Campus with associated cafés and student bars. PF has also partnered up with a number of national and international student organizations.

Measures	Baseline	2025 objective
Communities		
DTU wants to strengthen communities among students. This is done through a number of community-creating activities in the study programmes and through voluntary offers, including Green Challenge, Blue Dot, and Roskilde Festival.	In 2024, the activities will be mapped for the purpose of developing activities for target groups that currently do not receive relevant offers.	All students receive a relevant offer of participation in community-creating activities.
DTU and Polyteknisk Forening (PF student association) work for an active club and association life with focus on academic and social development.	In 2021, there were approx. 30 student and alumni-run clubs, for example rocket construction, music, photography, motorcycle club, and SDG ambassadors.	Same level
DTU wants a study start that reflects the University's objective to offer the best engineering education in Europe. Through the study start, all new students are equipped to begin and complete their studies.	In 2023, 54 % of the new students participated in the study start in the form of introductory courses and fresher's trips.	At least 85 % of the new students participate in the study start. The composition of the participants reflects the diversity that the University contains.

Campus environment and art

DTU will create an attractive campus environment that makes students and staff want to be on campus. This is, for example, done by establishing meeting and recreation places on campus. The University invites the outside world to use its outdoor campus environments, such as the running path and the art route on Lyngby Campus or the disc golf course on Ballerup Campus.

Art has always been an important part of the University's campus environment. The art on the campuses helps create life. Lyngby Campus is a publicly accessible university park that invites students, staff, and neighbours inside.

DTU also has a well-functioning art club for people affiliated with the University. The association holds ongoing exhibitions on the various campuses.

Measures	Baseline 2020	2025 objective
Campus environment and art		
The campus environment must support social interaction and create optimal learning and research environments.	DTU's strategic campus plans	Development of green campuses with high biodiversity* and landscape spaces that support interaction, security, and activities between people. Development of communal areas in buildings to strengthen the campus, study environment, and learning environment.
Dissemination of research and technology for people through art.	DTU's art programme contains an action plan for 2020-2025 showing how the University wants to work with art on its campuses.	More art projects that meet the objective for art at DTU.

**Read more about the work with biodiversity on p. 23.*

DTU as host

DTU has many official visits, tours, and communication activities. Therefore, DTU focuses on making its campuses increasingly open and accessible to visitors, students, and staff.

DTU has a number of annually recurring activities, such as the Open House event, where potential students can acquire knowledge of DTU's many study programmes, and Science Day, where the University invites high school students to visit DTU for an inspiring day with focus on diversity in technology and natural sciences.

DTU also offers guided tours of Lyngby Campus for interested citizens. In addition, work is being done to further develop an app that makes it easy to use the possibilities and facilities available on DTU's campuses—for example in architecture and art.

The University also participates in a large number of collaborations with the outside world aimed at supporting general knowledge of and interest in technology and natural sciences. This applies, for example, to the national space mission-themed communication project Rumrejsen, which involves a large number of partners throughout Denmark. The project is linked to the Danish ESA astronaut Andreas Mogensen's second space mission Huginn to the International Space Station, ISS.

Measures	Baseline 2020	2025 objective
DTU as host		
DTU hosts events that strengthen the community at the University.	DTU holds events such as DTU Commemoration Day, DTU Relay Race, Green Challenge, and academic ceremonies.	Same level
Collaboration with the outside world on activities that support the desire to learn about technology and science.	DTU has many official visits, campus tours, and dissemination activities, such as the Open House event.	Same level

Alumni

More than half of DTU's living alumni are members of the University's alumni network, DTU Alumni.

The alumni network is of strategic importance because—with their experience and commitment—the alumni contribute to the development of the study and research environment and create connections between DTU and the outside world.

For example, during 2021, approximately 300 alumni volunteered as mentors for students and employees engaged in establishing start-ups.

Measures	Baseline 2021	2025 objective
Alumni		
Being part of DTU's alumni network is regarded as attractive.	37,370 members of DTU's alumni network.	Increasing membership.

Historical development	2017-2019 (avg.)	2020	2021	2022
Events and academic ceremonies (number of participants physically/virtually)				
DTU Commemoration Day	-	-	0 / 2,512	3,481 / approx. 3,000
Graduate receptions	-	-	815 / 41	942 / 99
PhD graduate reception	-	-	143 / 21	122 / 21
DTU Ørsted Lecture[A]	-	-	139 / 88	-
Professorial inaugural lectures[B]	-	-	8 / 2	10 / 0
DTU Professor dinner	-	-	190	186
President's Alumni Evening	-	-	-	68
Social media (number of followers)				
LinkedIn	-	120,000	140,000	160,000
Twitter	22,000	14,000	15,445	16,900
Facebook	29,833	36,000	38,500	40,300
Instagram	-	11,000	13,700	15,800
Outreach activities				
High-Level Visits and Events (VIP visits) Number of visits	60	15 (COVID-19)	23 (COVID-19)	79
Campus tours (incl. tours for DTU staff)	-	-	8	19
DTU Summer Science				263
Engineering Camp for Girls[C]		50	48	-
Open house[D]		1,650	2,475	2,000
Alumni				
Number of members	-	35,668	37,370	40,388
Proportion of women	-	-	24 %	25 %
Proportion of men	-	-	76 %	75 %
Proportion with other nationality than Danish	-	-	27 %	22 %
Proportion residing in the Capital Region of Denmark	-	-	73 %	70 %
Alumni–Age composition				
Less than 25	-	-	4 %	4 %
25-34	-	-	32 %	33 %
35-44	-	-	21 %	21 %
45-54	-	-	16 %	15 %
55-64	-	-	14 %	14 %
65-74	-	-	7 %	7 %
75 or over	-	-	6 %	6 %

A) 1 lecture held with subsequent 1,142 viewings on YouTube. B) 3 were postponed. C) Not held in 2022 D) Held as online event in 2021.

Governance with accountability and research integrity

The University regards good leadership at all levels as a key element in maintaining DTU's role as an internationally leading technical university. At DTU, good leadership is situational and targeted at individual identification and the establishment of a framework for maximum development of talent and creation of excellent results. There is an ongoing dialogue with the employees on goals, means, and task performance. All employees, including managers, have an annual employee development interview with their immediate manager. It is encouraged that the employee development interview (MUS) is supported by regular 1:1 conversations, so that both parties experience MUS as a natural extension of ongoing dialogues.

In Denmark, there is a consensus to safeguard academic integrity and freedom. The research is based on principles such as honesty, transparency, and accountability, see the Danish Code of Conduct for Research Integrity, and academic freedom is about universities safeguarding free thought and speech.

DTU's work with responsible management and research integrity is grouped by focus areas that concern 'management and organization', 'research practice and research dissemination', as well as 'data use and security'. These focus areas are elaborated on in the following based on the measuring points used by the University to assess the organization's management and compliance with relevant guidelines and standards.

Focus area:

Collaboration across disciplines and cultures

Management and organization

DTU's flat organisational structure enables quick and efficient decisions, as it is not necessary to consult several management levels, but only the immediate manager. It provides a high degree of flexibility and adaptability when decisions can be made closer to the staff and in accordance with specific needs in the university units.

Dialogue, equality, and collaboration are hallmarks of the relationship between employees and managers and are seen as a prerequisite for realizing the University's high academic ambitions. All employees have an annual, dialogue-based employee development intereview with their manager, and the manager and employee regularly hold 1:1 meetings on well-being, task performance, and general performance. DTU has implemented leadership dialogues, which means that all managers invite their own employees to a dialogue focusing on leadership development. The HR partners participate in all leadership dialogues and, together with the manager, listen to the feedback that employees choose to share with their manager. The HR partners also support managers in using the dialogue as a tool in their day-to-day management work.

DTU has its own manager programme, which approximately 600 managers have completed since 2010. The purpose of the manager programme is to make new managers familiar with the DTU Leadership Role and its importance for enabling the University to achieve its strategic goals. In 2022, a joint management day was also held, which focused on DTU as a managed university. One of the themes of the day was "New understanding of the concept of leadership". More than 200 managers were gathered to discuss the leadership role of the future.

Measures	Baseline 2022	2025 objective
Management and organization		
DTU's culture is characterized by dialogue, openness, and trust, where managers act as role models.	Development of a new dialogue-based employee development interview (MUS) concept.	Same level
DTU has developed a concept for well-being and leadership dialogues as a replacement of workplace assessment (WPA).	The dialogue concept was introduced in 2022	The concept has been fully implemented and enables DTU's management to document holding of dialolgues and follow-up.
DTU prioritizes that the collaboration between management and the collegiate bodies is characterized by dialogue.	Seminar held between the Executive Board and the Cooperation and Joint Consultation Committee (HSU).	The seminar has been implemented as an annual tradition.

Ethics and offensive behaviour

DTU focuses on building a culture in which everyone feels psychological secure and where offensive behaviour is not tolerated. The University has several channels for reporting offensive behaviour.
In 2022, an internal campaign, "Talk About It", focused on creating a secure and trusting culture that encourages anyone who has experienced offensive actions to get in touch anonymously or to talk to others about it.

In 2021, a whistleblower scheme was established. Suspected irregularities or unlawful actions can be reported confidentially under this scheme, which can be used by employees as well as external partners.

Measures	Baseline 2021	2025 objective
Ethics and offensive behaviour		
DTU takes preventive action against offensive behaviour and creates awareness of the various channels for reporting such behaviour.		All students and staff are aware of how to report offensive behaviour and get help.
DTU ensures that the University's whistleblower scheme is known and evaluated on an ongoing basis.	Whistleblower scheme established on 1 January 2021.	Everyone who gets in touch experiences fair and correct case handling.

Focus area:

Scientific integrity and research dissemination

Good scientific practice

Honesty, transparency, and accountability are a basic premise for all aspects of DTU's research activities. The requirements from international conventions and legislation on research ethics legislation are implemented and supplemented through competence building and information about good research, management, and dissemination practices.

Since the 2017-2018 academic year, all students have signed an agreement at their study start declaring that they accept DTU's code of honour for exams and other academic activity.

To ensure fair conditions for the students and credible diplomas, all students' written submissions are checked for plagiarism using the antiplagiarism system Ouriginal.

DTU embraces the use of new technologies such as AI and continuously assesses how the applications of technology are used responsibly in relation to both research activities and teaching—including the exam situation.

Measures	Baseline	2025 objective
Good scientific practice		
DTU will increase its focus on ensuring a strong research culture based on principles of good scientific practice.	Requirements for mandatory courses in relation to good scientific practice for PhD students and supervisors.	DTU catches and deals with cases in which scientific misconduct may be suspected. There is transparency in the case handling process and easy access to submit complaints.
All students have knowledge of and are subject to DTU's code of honour for exams and other academic activity.	The code of honour was implemented in 2017.	Continued focus on ensuring that all students are aware of and comply with the code of honour. DTU conducts plagiarism checks of all students' written submissions.

Risk-based approach to international collaboration

DTU has strengthened the collaboration with its alliance partners in Eurotech Universities Alliance and the Nordic Five Tech Alliance on issues relating to good research practice in international collaborations. This is done to ensure that international collaborations are conducted within the framework of responsible research practices.

Since 2020, DTU has had a question guide which must be used prior to the initiation of collaboration with international partners. The purpose of the question guide is to provide researchers and administrative staff with an overview of possible ethical, financial, and security risks that the collaboration may pose. The assessment of high-risk countries follows PET's assessment of the espionage threat to Denmark.

In addition, DTU is in the process of mapping particularly risky project collaborations, including critical research infrastructure and data. In connection with the ongoing mapping of risky projects, the focus is also on new and rapidly developing technologies that may have a high potential for abuse, but that are still only covered by the export control rules to a minor extent.

Measures	Baseline 2020	2025 objective
Risk-based approach to international collaboration		
DTU will strengthen its actions and initiatives in research security, see the Committee on Guidelines for International Cooperation (URIS) under the Ministry of Higher Education and Science.	Since 2020, there has been increased awareness of the area, and there is focus on establishing strengthened and uniform procedures in this area.	DTU will establish a coordinated committee for security in research and innovation activities aimed at clarifying cases of principle, supporting the development of a stronger security culture, and ensuring a clear framework and transparent procedures for handling security, economic, and ethical risks.

Dialogue with the outside world

DTU encourages its researchers to help qualify the public debate and contribute with research-based knowledge that is important to the development of society. At a number of open meetings for DTU's researchers, DTU's President has focused on the importance of participating in the public debate.

Measures	Baseline	2025 objective
Dialogue with the outside world		
Contributes to the public debate with research-based knowledge.	DTU publishes the profile magazine Dynamo four times a year and supports a number of digital platforms that provide information about research results and their importance to society.	DTU ensures that researchers participate with knowledge in the ongoing debates about society. dtu.dk is the knowledge bank of the outside world in terms of understanding the technologies that shape the society of the future.

Historical development	2017-2019 (avg.)	2020	2021	2022
Good scientific practice				
Number of students reported for cheating	131	302	216	132

Focus area:

Open research and information security

FAIR principles and Open Access

DTU's ambition is to conduct and promote open research while protecting the University's knowledge and the rights of its employees and partners. The University meets this ambition through competence development and information about responsible data management, responsible processing of personal data, and IT security procedures, as well as requirements for students and staff. Extensive work has been done to develop material, guides, guidelines, and e-learning on the FAIR principles*. In addition, research data management courses are offered.

To support the credibility and transparency of the conducted research, it is necessary to improve the processes and infrastructure that ensure that the underlying data can be found, understood, and reused by others (the FAIR principles). DTU's handling of research data is based on the FAIR principles that data must be as open as possible and as closed as necessary.

DTU has set up a research data support function aimed at coordinating knowledge, actions, and initiatives regarding research data. The support function must qualify key actions and initiatives regarding research data. This is done in collaboration between the administrative offices and the research environments.

DTU supports the green national Open Access strategy that, from 2025 onwards, there will be unrestricted access for everyone to all peer-reviewed research articles from Danish research institutions. The work with collection, checking of rights, and registration of Open Access publications is supported by DTU Library, while DTU researchers are responsible for submitting their post-prints to the library. At national level, the ability to achieve 100 % Open Access is supported through the negotiation of rights that ensure immediate Open Access. Without action both nationally and at DTU, the ambitious target for 2025 cannot be met.

Measures	Baseline 2021	2025 objective
FAIR principles and Open Access		
DTU wants research data to be processed in accordance with the FAIR principles.	Initiatives taken to ensure that all PhD students and new employees have received training in Responsible Conduct of Research and in Research Data Management.	DTU's departments have an implementation plan for the Policy on Research Data Management.
DTU wants to ensure unrestricted access to all the University's peer-reviewed research articles.	73.43 % of DTU's publications are Open Access publications (national average of 63 %). 17 % of DTU's publications are blocked from Open Access by the publishers.	100 % Open Access for publications where DTU is the contact author in accordance with the national Open Access strategy.

**FAIR stands for Findable, Accessible, Interoperable and Reusable, and these are principles that are internationally recognized and encourage making research data open, transparent, and reproducible. For other information, see the National Strategy for Data Management according to the FAIR principles.*

Data and information security

The threat outlook for data and information security is changing significantly these years, and DTU is working to adapt the University's approach to the field of information security accordingly. We use an information security management system based on ISO standard ISO27001, which will be updated in 2024 to attach more importance to a more specific, nuanced, and especially risk-based approach to this field. The diversity of DTU's activities is best handled in terms of security through a case-by-case assessment rather than blind compliance with general rules.

Although the focus on information security is primarily a managerial responsibility, in practice, the individual employee's actions ultimately determine whether the security of our data and information can be maintained. Information security must therefore be a joint matter across DTU. Better IT technology is not in itself enough to tackle the challenges. Employees who often face specific threats should be supported in handling these.

The field of information security is complex and develops in parallel with the IT field. This means that special expertise is required. To ensure this expertise, DTU is establishing a stronger central organization in this field. This will support DTU's management at all levels in integrating data and information security in their management decisions. At the same time, we are working to improve the guidance and information provided to our employees in order to raise their awareness of information security.

Measures	Baseline 2022	2025 objective
Data and information security		
New management system for information security (Information Security Management System - ISMS).	The Information Security Management System must be updated to achieve a better balance between delegated management responsibilities and a key academic foundation that can support processes more effectively.	2024 is a run-in year. 2025 will be the first full annual cycle.
Improved decentralised process for risk assessment and management.	Through a fact-based dialogue between those responsible in DTU's units and information security experts, relevant risks are identified, and a plan is prepared for how to handle these.	All DTU units have completed the first run-through of the renewed risk assessment and management process.
Implementation of an awareness initiative for DTU employees.	Information security must be made more tangible for the individual employee.	Strengthened awareness of the individual's contribution to good information security, for example documented via phishing campaign test.

Historical development	2017-2019 (avg.)	2020	2021	2022
Open Access				
Share of DTU publications in Open Access	65 %	73 %	74 %	77 %

Approach to reporting and accounting policies

Sustainability is an integral part of DTU's corporate and business strategy and is incorporated in the University's handling of both core tasks and operational tasks. DTU's strategy Technology for people 2020-2025 has constituted an important benchmark for this report, as has the University's sustainability policy.

The focus areas in the report are based on a review of policies, actions, and initiatives which are regarded as relevant in relation to the University's impact on society with a focus on 'keeping our own house in order'.

A number of the data statements in the report coincide with the data contents of the University's Annual Report and other management information. In these cases, the same method of calculation and reporting format are applied.

Work is being done with goals and ambitions towards 2025, which is also a core element in DTU's strategy.

There is no fixed baseline year for all measuring points. Instead, it is stated for each measuring point what the starting point is. In some cases, there is no starting point to use as a basis, and the starting point will therefore be estimated. The reason for this is that it varies whether the relevant baseline dates before or after the COVID-19 pandemic.

The following pages contain a detailed glossary of terms and methodology related to the tables in the report.

Glossary of terms and methods

Accidents at work. An accident at work is a sudden incident occurring in connection with work that results in an employee being physically or mentally injured. Data on accidents at work is gathered in DTU's incident application (Injury).

Age. Age and average ages have been calculated based on the number of persons employed as of December 2022 and their age at that time.

Air travel emissions Flights are primarily booked through DTU's tour operator, and the tour operator provides information about carbon emission factor and kilometres travelled for the individual flights. These figures do not take into account the Radiative Forcing Factor (RF) and the reported emission factors have therefore been multiplied by 1.9 to take the RF into account. This solution is called the DEFRA methodology, and it has been developed by the UK Department for Environment, Food and Rural Affairs. Under DTU's collaboration with Universities Denmark on a joint standard for climate accounts, this method has been chosen for the calculation of air travel carbon emission factor.

Climate accounts and CO_2. Greenhouse gas emissions are measured in CO_2e. CO_2 is the term for carbon dioxide, and it represents the largest proportion of greenhouse gases emitted. The 'e' in 'CO_2e' indicates that other types of greenhouse gases (equivalents) are included in the calculation after conversion to CO_2. In this report, the term CO_2 is used—even though other types of greenhouse gases are also included.

FTE The acronym stands for Full Time Equivalent and covers employees under a full-time employment contract of 160.33 hours per month and students stated according to number of student FTEs and/or number of enrolled students, graduates, etc.

Good scientific practice The term is not reserved for DTU, but is widely and globally recognized in the world of research. In a Danish context, it is defined in the Danish Code of Conduct for Research Integrity, published by the Ministry of Higher Education and Science in 2015.

International staff and students. International students are defined as graduate students who have a qualifying degree from abroad. The reason why the report does not comprise international bachelor students is that all DTU's BEng and BSc programmes are offered in Danish, except for General Engineering. International employees are defined as the proportion of FTEs who do not have Danish nationality.

Key figures for study programmes. All key figures for study programmes have been stated as at 1 October of the given years.

Land inventory. The statement of the land at Lyngby Campus, Ballerup Campus, and Risø Campus is calculated based on where DTU pays real property tax. Land owned by DTU (Lyngby and Ballerup) or where DUT is registered as the official tenant (Risø) is thus included in the area statement for DTU's campuses. No areas for external tenants are deducted when calculating the total campus area (buildings and outdoor areas). The area of buildings on DTU's campuses and at small locations is calculated as gross area less the indoor areas let to external parties.

Lost Time Injury Frequency. The Lost Time Injury Frequency Rate (LTIF) is calculated as the number of accidents at work with absence per 1 million working hours. The LTIF is calculated based on collection of data on accidents with absence in DTU's incident application (Injury) relative to hours worked at DTU.

Managers with HR responsibilities. In connection with statements on gender, reference is made to managers with HR responsibilities. The statement is based on data retrievals from DTU's employee database and includes all employees registered in the personnel system with management responsibility for employee development interviews, recruitments and dismissals, approval of time registrations, etc.


NMARK
POLSKA

People with functional impairment. Students with functional impairment are defined as those students who are eligible for support under the SPS (Special Educational Support) scheme, established by the Danish State and administered by the National Agency for Education and Quality.
Funcitonal impairments may concern dyslexia, mental functional impairment/development disorder, visual impairment, hearing impairment, mobility disability, chronic or serious illness.

Psychological counselling. DTU is working to strengthen the offer of group courses in DTU's psychological counselling, including offers targeted at PhD students. The intention is to work more proactively and to reach a larger target group.

Sickness absence The statement includes the average number of sick days per employee, excluding a sick child.

Staff categories:
Scientific staff: The following positions are included in the category: Professor, professor with special responsibilities/assignments, fellow, associate professor, assistant professor (also called Faculty positions, where there is a teaching obligation of 20-50 % of the working hours), research specialist, senior researcher, senior adviser, researcher, postdoc, research assistant (also called research staff), assistant researcher, visiting professor/associate professor, external lecturer, teaching assistant, assistant lecturer, external examiner, scientific staff employed in social scheme, other scientific staff, PhD (also called Other scientific staff).
Technical/administrative staff: The following positions are included in the category: Deputy heads of department, heads of administration, special consultants and senior executive officers, academics, clerical staff, technicians, trainees/apprentices, student assistants, technical/administrative staff employed in social scheme, other technical/administrative staff.

Waste figures. Figures for waste have been calculated by obtaining annual statements from waste collectors and recipients for all DTU's campuses, and DTU is thus dependent on the waste processing market for better data. Data from invoices is also used for the accounts. This involves gathering many sources, formats, and data types in one set of accounts, which increases the risk of errors and inaccuracies. Work is being done to systematize this, set requirements for data formats, increase the quality of data, and make it possible to calculate data on an ongoing basis.

All figures for waste have basically been calculated as 'delivered to'. The actual processing (i.e. less what is disgarded in the processing) has been included to the extent possible. There are great uncertainties about the exact actual recycling. DTU can document the calculation of the actual processing for all fractions on request.

Whistleblower scheme. DTU's whistleblower scheme is based on EU legislation and the Danish Act on Protection of Whistleblowers and makes it possible to report, in confidentiality, matters and behaviour of a serious nature experienced in relation to DTU.

Working environment. An important aspect of well-being is that studying and working at DTU is experienced as physically and mentally healthy and safe. The focus is on working with prevention, remedial action, and promotion of holistic solutions. DTU will, among other measures, work to establish models for a systematic and structured risk-based approach to ensuring a better working environment.

DTU

Anker Engelunds Vej 1
Building 101A
DK-2800 Kgs. Lyngby

dtu.dk