

Sustainability Monitor 2020

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Sustainability at Utrecht University

1,377 new solar panels, six new chairs dedicated to sustainability research and 18 student living labs; despite the coronavirus pandemic, Utrecht University continued to realise its sustainability ambitions. The 2020 sustainability monitor tells you more about the steps that were taken in the past year.

A better world

In its capacity as a public organisation with a social mission, Utrecht University wishes to contribute to the creation of a better world. The university does this by conducting research on topical societal issues and by educating students in such a way that they can help resolve these issues, now and in the future. In addition, the university naturally seeks to make its own organisation more sustainable: reduced CO2 emissions, reduced energy consumption,

different travel methods and a focus on biodiversity. Utrecht University uses Sustainable Development Goals (SDGs) as an instrument to help identify challenges and potential solutions and as an educational resource.

The campus as a living lab

The combination of research, degree programmes and a self-managed campus presents us with opportunities for increased sustainability. In order to explicitly contribute to a better world, a sustainable society and the attainment of our SDGs, the university has expressed the ambition to use its own scientific knowledge to make the university more sustainable and allow sustainability research to be conducted in its own buildings and on its own grounds.

Why do we publish this monitor?

In order to monitor the progress made on the plans and ambitions as formulated in the [Strategic Plan 2025](#) external link, [the Strategic Sustainability Plan](#) external link and other ambition documents, this sustainability monitor presents a picture of the steps the university has taken in the last year. In addition to a CO₂ footprint, the monitor provides information on four themes: (1) future-proof campus, (2) travelling differently, (3) sustainability in research and degree programmes, and (4) sustainable business operations. For each theme, the document presents an overview of what was achieved in 2020 and what will

be worked on in 2021. Utrecht University uses the GRI method in drawing up this monitor.

2020 at a glance

What did Utrecht University achieve with regard to sustainability last year? This summary will get you up to speed in just a few minutes.

Disclaimer: Many of the figures included in this monitor were affected to a greater or lesser degree by the impact of the lockdown and the coronavirus pandemic. Despite this fact, though, many noteworthy steps were taken towards a sustainable university.

Utrecht University focuses on specific Sustainable Development Goals in its business operations, particularly related to circularity, climate neutrality and biodiversity. The university aims to become climate neutral in 2030 ([Strategic Plan 2020–2025](#)).

So what happened in 2020?

Sustainability is now a core value at Charm-EU, the mobile European university of which Utrecht University is a part. The first Charm-EU Master's degree programme is called 'Global Challenges for Sustainability' and will start in September 2021. In 2020, the Eindhoven-Wageningen-Utrecht knowledge alliance was launched. The three universities are pooling their expertise in order to contribute to social transitions in energy, sustainability, health and nutrition. Led by UGlobe, researchers embarked on a study on the position of scientific research conducted at Utrecht University in relation to the Sustainable Development Goals. In

our degree programmes, we strove to add themes such as sustainability to the courses listed in the course planner in 2020, and sustainability-related courses were given SDG logos. These logos allow students to see which courses cover one or more Sustainable Development Goals (SDGs).

Last year, students and staff were forced to start working differently and travel (much) less than they used to. There was a 72 per cent drop in the number of flights taken for work- and study-related purposes, and many conferences took place online, such as the UU-hosted Science for Life conference. The university increased the allowance for employees wishing to buy a bicycle. As a result, more employees (a 15 per cent increase) purchased a new bike.

2020 saw many energy-saving and energy-generating activities. Utrecht Science Park was equipped with 1,377 additional solar panels and the David de Wied building was connected to the thermal energy storage system.

In real estate and grounds development, eleven buildings were BREEAM certified in 2020. BREEAM In-Use certification serves as a baseline measurement for an existing building and identifies concrete issues that can be improved to make the building more sustainable. Since the university aspires to circular procurement, the possibility of making the university's furniture 100 per cent

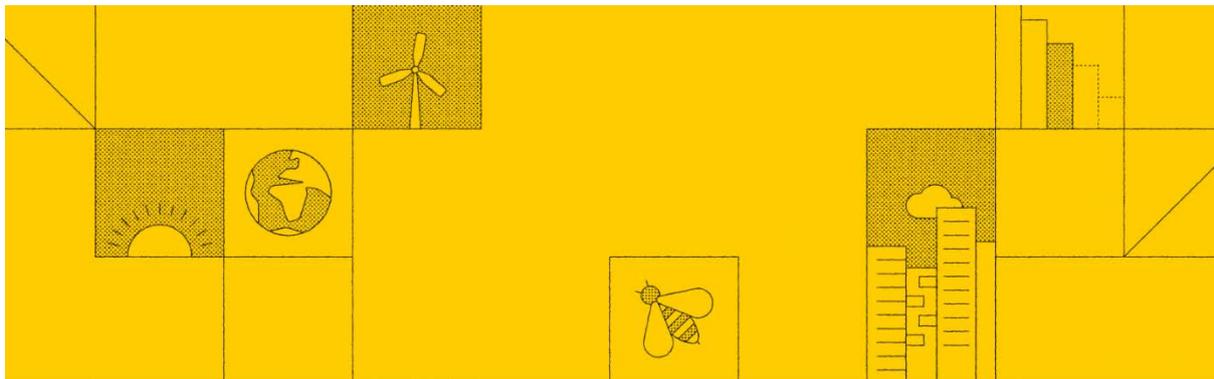
upcycled was included as a criterion in the tender. A new procurement contract will be signed in 2021.

Furthermore, the Dactylis research agency provided the university with a baseline measurement for biodiversity in the meadows at Utrecht Science Park, and 16,000 m² of ecologically managed verges were added. The total amount of residual waste produced by the university decreased by 32 per cent in 2020. In association with the Renewi waste-processing plant, we took important steps in 2020 towards separating waste streams and recycling. In addition to plastics, polystyrene, metal and drink cartons are now collected separately, as well. In addition, the university has entered into a partnership with De Clique. This local processing service collects the coffee grounds from all the university's coffee machines and turns them into compost.

**The Climate Help Desk offers website visitors a science-based answer to their question about climate change.*

***Chairs are posts held by professors. In this case, the research that this professor produces in this chair contributes to sustainability.*

Future-proof campus



Utrecht University is working towards a green campus where science and teaching are paramount. The lion's share of the university's CO₂ emissions consists of energy consumption and building development. By constructing and renovating buildings in a circular manner, effectively greening the campus and obtaining energy from renewable sources, the university is working towards a future-proof campus.

The university is on its way to an energy-generating, circular, functional and healthy building portfolio. The grounds managed by the university will become more biodiverse, car-free and climate-adaptive. The university's energy transition is in full swing. Its objective is to significantly reduce its energy consumption and make the switch to 100 per cent renewable energy by 2030, as outlined in the CO₂ strategy.

In summary

UU buildings

In 2020, eleven buildings in the university's property portfolio were BREEAM-NL certified, which is to say that each of these buildings was subjected to a sustainability baseline measurement. On the basis of this baseline measurement, measurable targets for increased sustainability were defined. The BREEAM certification process is repeated every three years to monitor progress.

Energy

Last year, the university's energy consumption decreased by 15 per cent compared to 2019. To a small extent, this decrease can be attributed to energy-saving measures such as building insulation and the installation of LEDs and energy-efficient system pumps. However, our energy consumption mainly decreased due to the impact of the coronavirus pandemic.

Grounds

In 2020, twenty guide species were designated, based on the Basic Document for Biodiversity. These species in question are animal and plant species that are monitored and for which Utrecht Science Park seeks to create favourable conditions.

What happened in 2020?

Materials passport

As part of its aim of adhering to the principles of the circular economy and reusing materials, the university is drawing up materials passports for its buildings. In 2020, a 'smart demolition tool' was used in the Willem C. van Unnik and Earth Sciences buildings to identify which materials would become available following demolition or renovation and how they could be reused elsewhere. In addition, in 2021 the university will build an energy-generating car park constructed according to circular principles and made of materials that will be included in its own materials passport.

Upcycled furniture

The university aims for 100 per cent circular or climate-neutral procurement by 2030. In 2020, concrete steps were taken in the procurement of upcycled furniture. For example, new tender documents were drawn up this year in which upcycled furniture was included as an absolute requirement. These documents will be used to conclude a new procurement contract in the course of 2021.

#	totaal	aandeel	totaal	aandeel	totaal	aandeel	2030 (doel)
energiegebruik in gigajoules	515600		472939		403107		
hernieuwbaar in NL ingekocht		132400		106057		309958	
hernieuwbaar & lokaal		26500		21511		20060	
energiegebruik 100% hernieuwbaar & lokaal							200000

A baseline measurement for biodiversity

Utrecht Science Park (USP) is largely managed by Utrecht University. As the university aims to strengthen biodiversity on its own grounds, a Biodiversity Baseline Document was drafted by the Dactylus research agency in 2020.

This report maps the current biodiversity situation in the USP and makes recommendations on how biodiversity can be restored in the park.

1,377 new solar panels

Over the course of 2020, more than a thousand new solar panels were installed on the roofs of car parks and university buildings. The Marinus Ruppert and Jeanette Donkervoet buildings, the cattle stables at the Tolakker university farm and the car parks in Sorbonnelaan and Jenalaan were all equipped with solar panels. There are now a total of over 6,000 solar panels on the roofs of the university's buildings and car parks. The yield of these new solar panels will be reflected in the figures in the course of 2021. The panels are expected to deliver 490 kilo Watt peak (kWp)'s worth of additional power on top of the existing 1,308 kWp. This amounts to 3% of the current electricity demand of the university.



Jos de Vries - The textbook example of energy saving

David de Wied building connected to thermal energy storage system

Thermal storage is one of the ways in which Utrecht University uses renewable energy. In 2020, the thermal energy storage system supplied 4.2 per cent of the university's total energy consumption. The thermal energy storage system is an underground water reservoir and grid that stores residual heat

and cold from buildings in the ground and returns it to the grid at other times. Because several buildings are connected to the thermal energy storage system grid, if one building has excess heat or cold, it can pass it on to another building. The David de Wied building was connected to the system in 2020.

Opgewekte hernieuwbare energie (GJ)

#	lokaal	in NL	lokaal	in NL	lokaal	in NL
Zonnepanelen	3800		3771		3411	
WKO koude	9700		8001		8773	
WKO warmte	13000		9739		7876	
Wind		69200		42757		56793
Groen gas		63200		63300		253165

16,000 additional square metres of ecologically managed verges

Proper ecological management of an area contributes greatly to strengthening biodiversity. Therefore, in 2020, some 16,000

square metres' worth of verges were added to Utrecht Science Park, which are managed in an ecologically responsible manner. In these verges, sections are skipped to protect the habitats of various plant and animal species.

Case: The textbook example of energy saving

The fact that Utrecht University's energy consumption fell by 15 per cent in 2020 compared to the previous year was largely due to the coronavirus pandemic. However, energy conservation projects such as better insulation of buildings or using LEDs also made a difference in the transition to an energy-efficient university. The Cambridgelaan car park project has already led to significant energy savings.

[Read more](#)

What will Utrecht University do in 2021?

Energy

- The university's energy conservation programme, SYRUN, will be developed and implemented further in 2021.
- There will be an energy monitor for individual faculties. This monitor will help the various faculties effectively conserve energy.
- A feasibility study on the realisation of windmills on campus will be carried out this year;

- A solar panel test field will be created. At the same time, this field will serve as a meadow for sheep. Research will then be carried out on this test field to determine whether there is an increase or decrease in biodiversity.

Grounds

- A biodiversity strategy is being drawn up that includes Utrecht University's long-term goals and actions for biodiversity restoration.
- A 'grounds strategy' is being drafted, setting out Utrecht University's long-term goals and actions for the development of its grounds. Biodiversity and climate change will feature prominently in this strategy;
- The Botanic Gardens and a working group established by the University Administration Department (UBD) are continuing to draft plans for the Circular Pavilion, a circular-economy-proof building that will serve various functions.

UU buildings

- In the course of 2021, six more buildings at Utrecht Science Park will undergo BREEAM In-Use certification.
- For any building that is to be dismantled or redeveloped, the reuse potential is mapped out by means of a materials inventory and analysis.
- The Future-Proof Buildings KPI Matrix will be developed further, and an integral assessment framework will be

drawn up, which will ensure that results are better safeguarded and more measurable;

- A vision document is being drawn up for the future-proof renovation and restoration of the university's listed buildings.

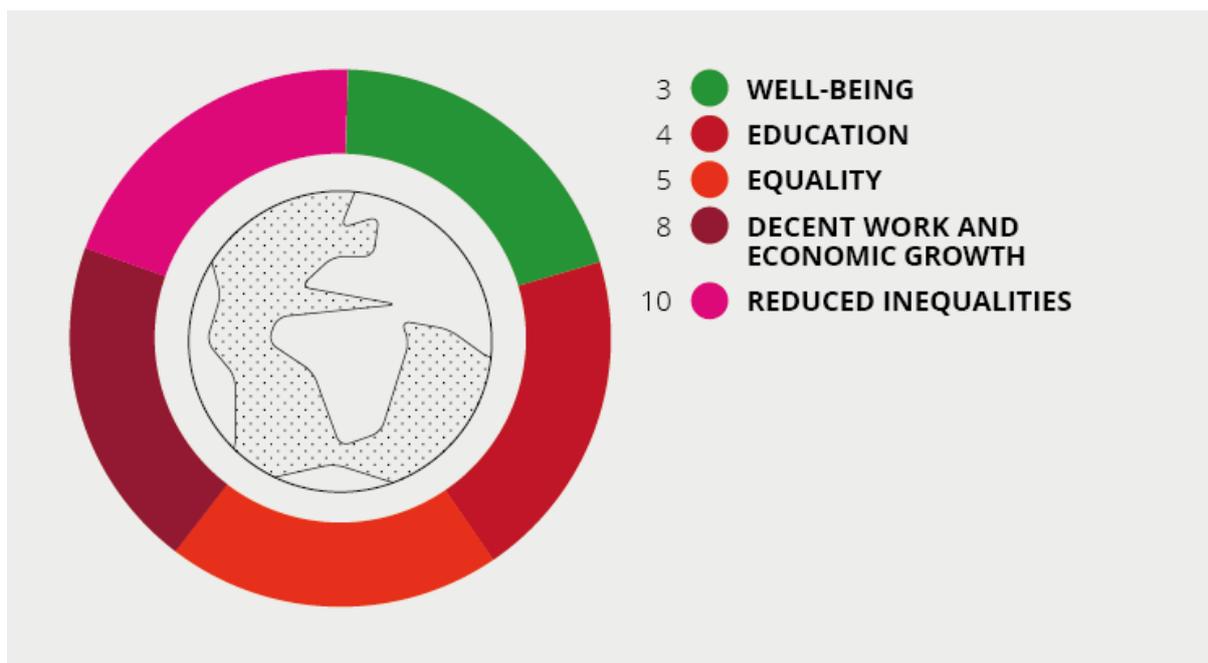
Sustainability in research and education



Utrecht University has a focus on sustainable development. The Sustainable Development Goals (SDGs) will become an integral part of our degree programmes, research projects and business processes ([Strategic Plan 2020–2025](#) external link). In an explicit effort to help create a better world and sustainable society and to contribute specifically to the realisation of the SDGs, the university wants to apply its knowledge of sustainability (as gained through degree programmes and research projects) to its operational management. In order to boost multidisciplinary research, Utrecht University has been concentrating its research activities on four strategic themes for almost ten years: Dynamics of Youth, Institutions for Open Societies, Life Sciences and Pathways to Sustainability. These four themes align with several of the United Nations Sustainable Development Goals (SDGs), such as SDG 3 (good health and well-being), 5 (gender equality), 6 (clean water and

sanitation), 11 (sustainable cities and communities), 13 (climate action) and 16 (peace, justice and strong institutions).

In our degree programmes, every student will encounter the subject of sustainability, regardless of his/her field of study. The university is training this new generation to be leaders and drivers of the transition to more sustainable living. The university does so by incorporating sustainability into its degree programmes and by seeking to raise its students' awareness of sustainability, using the SDGs as a guideline.



Focus SDGs in education - Strategic Plan

Meanwhile, the university continues to work hard on making its research projects and degree programmes more sustainable. The number of students that will encounter the theme of sustainability will grow due to new courses featuring sustainability aspects and also due to the use of the serious game

‘Utrecht 2040’ during the orientation week of the 2021–2022 academic year. In its research projects, the university has a strategic theme called ‘Pathways to Sustainability’, in which researchers seek to find integrated solutions that will contribute to a fairer and more sustainable future for all.

In summary

Research

In 2020, the Eindhoven-Wageningen-Utrecht knowledge alliance was officially launched. The motto of this strategic partnership is: ‘challenging future generations’. The three universities are pooling their expertise in order to contribute to social transitions in energy, sustainability, health and nutrition. The alliance consists of Utrecht University, Wageningen University & Research, Eindhoven University of Technology and the Utrecht University Medical Centre.

Degree programmes

Last year, the university began to assign several themes (including sustainability) to the courses listed in its online course planner. We have sought to provide all the courses that have a bearing on sustainability with an SDG logo, which allows students to see at a glance which courses cover sustainability-related aspects and/or particular SDGs.

Living Labs

In 2020, there were eighteen Green Office Living Lab projects. In addition, the Utrecht Sustainability Institute, in association with several partners, realised Europe's first energy-generating high-rise building (Inside Out) in the Utrecht district of Overvecht. As part of [this Living Lab project](#), Utrecht University assesses the results of energy performance and comfort levels, in association with Utrecht University of Applied Sciences.

What happened in 2020?

Answers to your climate questions: the Climate Help Desk

By how much will I reduce my CO₂ emissions if I turn down the heat a little? What's the difference between the environment and climate? Anyone who poses a climate-related question to the Climate Help Desk will receive an answer from a scientist – fully peer-reviewed, as is customary in academia. In 2020, [Dr Sanli Faez](#), a scientist affiliated with Utrecht University, established the help desk so that everyone can get access to information on climate change, based on scientific data.

IUCA: an international climate network

In 2020, the university became a member of the *International Universities Climate Alliance*. The Alliance is a group of universities

working together to provide world leaders with science-based research on climate change.

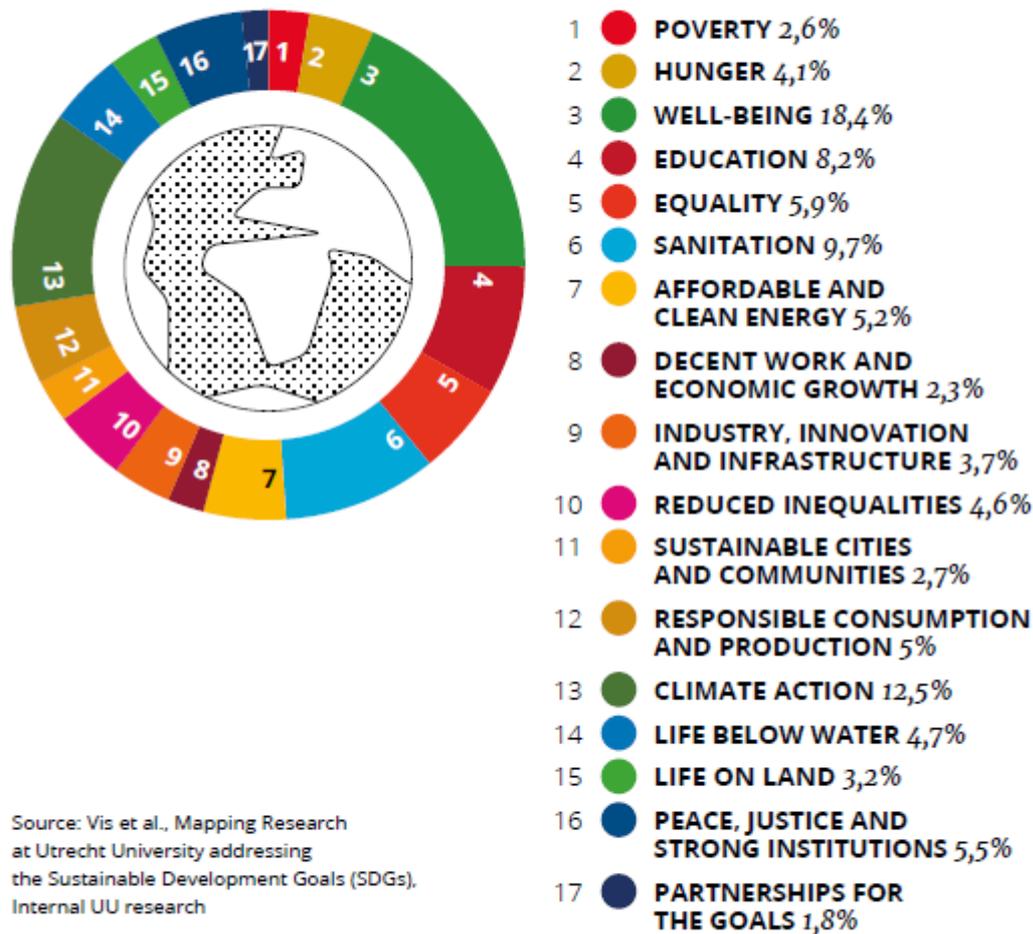
400 bi-directional charging stations in Utrecht

Thanks to the ‘Smart Solar Charging’ Living Lab, 400 bi-directional charging stations for electric cars were installed in the city of Utrecht in 2020. These smart charging stations charge cars with surplus solar energy generated on rooftops. The cars, in turn, can return power to the grid. In this way, peak rates in the energy grid are absorbed on a larger scale. Utrecht University researchers won a Best Paper Award for an academic study that demonstrated the great energy potential of this method.

Start of study on UU’s position with respect to the SDGs

In the autumn of 2020, under the leadership of Prof. Johan Schot (UGlobe), researchers embarked on a study on the position of scientific research conducted at Utrecht University in relation to the Sustainable Development Goals. As Prof. Schot himself put it: ‘We aim to unlock the transformative potential of Utrecht University’s research for the realisation of the Sustainable Development Goals’. The project is expected to be completed in mid-2021. The first research results are presented below:

Met grensverleggend onderzoek draagt de Universiteit Utrecht bij aan de SDG's



Dit figuur toont de verdeling van publicaties van de Universiteit Utrecht per SDG in 2020

Utrecht 2040

The university's ambition, as stated in the previous Strategic Plan (2016–2020), is that all students must encounter the subject of sustainability. UU will use the serious game 'Utrecht 2040' to try and achieve this right in the students' first year. 'Utrecht 2040' was developed under the leadership of Prof. Karin Rebel. The game is based on the SDGs. In 2019, around 800 students played the game in the first week of their degree programme. In 2020, only 295 students played the game. This was due to the

coronavirus pandemic: only a few classes were taught on location, and the game must be played in the Utrecht city centre. The goal is to use the game widely in several faculties in the 2021–2022 academic year, so that many more students will get to play the game.

Charm-EU

Utrecht University is part of Europe's so-called 'mobile university': Charm-EU. This mobile university aims to offer multi-disciplinary, challenge-based degree programmes. In 2020, sustainability was incorporated into Charm-EU as a core value. The first jointly developed Master's degree programme is called 'Global Challenges for Sustainability' and will start in September 2021

Case: Open Science in Daily Practice

Anyone who poses a climate-related question to the Climate Help Desk will receive an answer from a scientist – fully peer-reviewed, as is customary in academia. An interview with the founder of the Help Desk, Dr Sanli Faez, and editor Arfor Houwman, on climate answers in a fake news era and *open science* from the bottom up.

[Read more](#)

Sustainability research chairs

Chairs newly established in 2020 that will contribute to sustainability research:

- **Justice in Global Health Research** at the Faculty of Medicine, Prince Claus Chair, Prof. S. Abimbola
- **Microbial Community Ecology & Environmental Genomics** at the Faculty of Science, Prof. E.E. Kuramae
- Endowed chair in **Sustainability and Environmental Liability** at the Faculty of Law, Economics and Governance, Prof. E.H.P. Brans
- Endowed chair in **Energy System Analysis** at the Faculty of Geosciences (the chair has been established; a professor will be appointed to it in 2021)
- Endowed chair in **Government Aid** at the Faculty of Law, Economics and Governance, Prof. A.D.L. Knook
- **International History and the Environment** at the Faculty of Humanities, Prof. L. van de Grift

Chairs contributing to research on sustainability whose funding was extended in 2020:

- **Plant Biology** at the Faculty of Science, Prof. R. Pierik
- **Refinery Catalysis** at the Faculty of Science, Prof. E.T.C. Vogt
- **Global Environmental Change** at the Faculty of Law, Economics and Governance, Prof. W.J. Botzen

- **International Law of the Sea** at the Faculty of Law, Economics and Governance, Prof. A. Oude Elferink
- Endowed chair in **Dynamics of Climate** at the Faculty of Science, Prof. S.S. Drijfhout
- **Environmental Law** at the Faculty of Law, Economics and Governance, Prof. C.W. Backes
- **Urban Futures** at the Faculty of Geosciences, Prof. M.A. Hajer

What will Utrecht University do in 2021?

Degree programmes

- The serious game 'Utrecht 2040' will be presented at this year's Education Parade. It will be further developed for students in Years 2 and 3 of their Bachelor's programmes. In addition, the game will be widely used during the orientation week for the 2021–2022 academic year.
- The new Master's degree in Business and Social Impact (Faculty of Law, Economics and Governance), the course and minor Futuring for Sustainability (Faculty of Geosciences) and the Charm-EU Master's degree programme in Global Challenges for Sustainability will be taught for the first time.
- In the CHARM-EU Winter School, twenty students attending different universities will collaborate in 2021 to solve SDG-related challenges.

Research

- In mid-2021, Prof. J.W. Schot will publish research on the position of the university in relation to the SDGs. The results will be used to further integrate the SDGs into research.
- The university is participating for the first time in the 2021 Impact Ranking. This global ranking by Times Higher Education ranks knowledge institutions according to their contributions to the Sustainable Development Goals.

Living Labs

- This year, a university-wide platform will be established to boost and support 'living labs' on campus.
- ROBUST, a new 'living lab' collaboration between the university, the Utrecht Sustainability Institute and several social partners will kick off to scale up the Smart Solar Charging project.

Sustainable operations



Utrecht University is seeking to incorporate science into its business processes (Strategic Plan 2025). In this way, the university seeks to make sure that its own campus may serve as an example of what a transition to a sustainable society might look like. Researchers and administrators are already cooperating on things such as restoring biodiversity on the campus, the university's solar park and smart charging stations for electric cars.

Meanwhile, the university is using its Strategic Sustainability Plan to make its business operations more sustainable. The goals include a completely meat-free selection of banqueting options* in 2021, completely recyclable catering packaging by 2022, 50 per cent less banqueting food waste by 2024 and CO₂-neutral logistics, a residual-waste-free campus and 100 per cent circular or climate-neutral procurement of goods by 2030.

In summary

Waste

Last year, the university produced 32 per cent less residual waste than in 2019. This means that the amount of residual waste per employee or student was reduced from 22 to 14 kilograms. Since most of the university's buildings were closed this year due to the coronavirus pandemic, this figure says little about the efforts made to reduce waste.

Catering

In 2020, our catering activities virtually came to a standstill due to the coronavirus pandemic. We therefore decided not to keep track of catering figures this year.

Logistics

The university's fleet of vehicles was not expanded with new electric cars in 2020. Like last year, six of the 37 cars in the university's fleet were electric.

What happened in 2020?

More waste used as fuel – less waste incinerated

The waste-processing plant Renewi, which processes much of Utrecht University's waste, uses separated waste streams as fuel. The more waste is separated, the less residual waste needs to be incinerated. In 2020, the following measures were taken to reduce the university's residual waste:

- In addition to plastics, polystyrene, metal and drink cartons were also collected separately in many buildings;
- As part of a pilot study conducted in a particular part of the campus, building materials and old furniture left over after removals were no longer taken to a skip but rather were sorted in a recycling centre. As a result, more material was recycled;
- In 2020, the first results of the zero-waste coaching** programme were evaluated. With proper coaching, the amount of residual waste produced by staff and students can be reduced. In a pilot study conducted in the Androclus building, residual waste was reduced by more than 20 per cent with easy-to-achieve methods.

Categorieën afval (kg)

#	2014	2015	2016	2017	2018	2019	2020
Restafval	957394	966919	997007	839274	1024113	844886	572350
Papier-, karton-, archiefafval	367890	379240	359559	336727	343555	236390	136731
GFT + Swill	37409	43866	51002	47547	113208	133473	66566

#	2014	2015	2016	2017	2018	2019	2020
Plastic	14281	41057	79368	115447	101368	60621	42688
Glas	54217	52441	51077	44052	38307	36423	36718

Coffee grounds and local biomass-processing plant

In late 2020, Utrecht University established a partnership with De Clique. This local waste-processing service collects coffee grounds from all UU coffee machines and turns them into compost. As a result, coffee grounds no longer end up in the biodegradable waste bin. The idea is that the company will also start collecting other natural residual waste streams down the track.

A new catering service

While most of the catering venues on campus were closed in 2020 due to the coronavirus pandemic, Eurest started as the university's new caterer in early 2020. As laid down in the Strategic Sustainability Plan, sustainability was one of the key criteria used in the tender for the catering company.

The new banqueting menu provided by Eurest for meetings and gatherings is entirely vegetarian. The catering service also invested in a system to measure and weigh food waste. After the

pandemic, this system will allow the university to quantify the greening of the catering service by using indicators. In 2020, due to the coronavirus pandemic, we did not keep track of catering figures.

‘Living labs’ in the canteen

Eurest is continuing its collaboration with Utrecht-based academics in the canteen. In addition, Eurest and UU students conducted research on the packaging of baguettes with toppings in a ‘living lab’ setting. As a result of this project, the baguettes sold at the Educatorium restaurant will from now on be wrapped in paper without a transparent plastic window. The pilot study will continue until the canteen is back to its normal capacity, when the impact of the study will be better able to be measured.

Evelyn Maurer van het Facilitair Service Centrum

Sustainable logistics

Internal mail will be delivered by a bicycle messenger service called Cycloon for the next four years. Furthermore, all catering and banqueting orders were transported in electric cars exclusively, starting in 2020. Moreover, in 2020, Fleetkennis was contracted to manage UU’s fleet of vehicles. By collaborating with fleetkennis, the university will garner more data, which will help it make better decisions on sustainable vehicles.



Case: How Utrecht University is becoming more sustainable with every tender

Under normal circumstances, Utrecht University is like a small town where tens of thousands of people work, study and live. It takes many things and services to make this possible. These things and services are procured by Utrecht University by means of tender procedures. 'So if you want to make your business processes more sustainable, you must start by awarding the tender to the right company,' says Evelyn Maurer, contract and supplier manager at the UU's Facility Service Centre.

[Read more](#)

What will Utrecht University do in 2021?

Waste

- Increase the share of recycled and upcycled plastics, e.g. by means of separate collection of high-quality plastics;
- The 'Furniture Vision Document' will be implemented further. As part of this project, the university seeks to reuse as much furniture as possible and refrain from purchasing new furniture where possible.
- In 2021, the first upcycled Green Office planter will be made from local plastic waste at Utrecht Science Park.

Catering

- At the university's cafeterias, where guests can eat meals of their own choosing, vegetarian options are available in each product group. 30 per cent of these options are vegan.
- Eurest wants to incorporate the Future Food Lab concept into all its outlets.
- Utrecht University's research departments will provide support in several projects that Eurest will set up as part of its sustainability plan.
- Eurest will continue to work on initiatives such as minimising packaging materials (sandwich and coffee packaging) and examining food waste (during food production).
- In 2021, the university and Eurest will deliver a sustainability roadmap in which they will outline which measures they will jointly implement to achieve particular SDGs and how the university and Eurest can help each other do so.

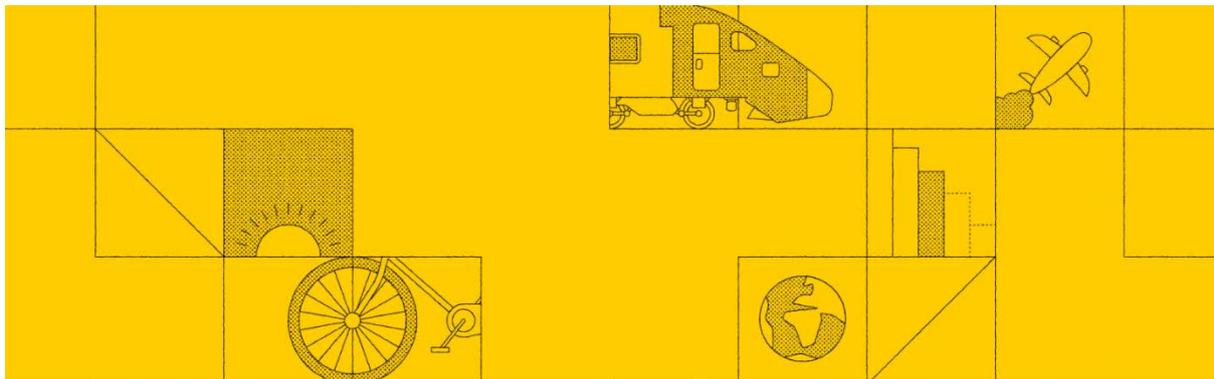
Logistics

- From 2021, the university will report on CO₂ emissions from rented cars and buses;
- In 2021, the university will start discussing with the faculties how to make UU's entire fleet of vehicles more sustainable. At present, only the cars used by the Facility Service Centre are electric. The university wishes to determine whether the other cars can be replaced by electric vehicles, as well.

** The university's banqueting options are food and beverages served during meetings and gatherings.*

*** With its zero-waste coaching, the Renewi waste processing plant supports the correct separation of incoming waste on the work floor. The aim is to reduce the amount of residual waste produced at the university.*

Travelling differently



In recent years, commuting and air travel have accounted for a quarter of the university's CO₂ footprint. The university would like to reduce this percentage considerably. This can be done, for example, by encouraging a reduction in air travel for work and study, working remotely more often, organising hybrid events and switching to sustainable commuting modes.

For example, we aim to reduce our emissions caused by air travel by 50 per cent by 2030, compared to 2019. The university also wants to move towards a car-free Utrecht Science Park (USP). It encourages staff and students to travel to work by bicycle or public transport wherever possible.

In summary

Air travel

In 2020, the number of flights taken by employees was reduced by 72 per cent. This reduction was due to the coronavirus pandemic and the resulting lockdown.

Commuting

In 2020, the number of cars parked in the university's car parks fell by 42 per cent. This reduction, too, was largely due to the fact that employees were required to work from home for most of the year due to the coronavirus pandemic.

What happened in 2020?

Less travel, more sustainable travel, more time spent online

The coronavirus pandemic had a significant impact on the amount of travelling done by staff and students. Many plans to make transport more sustainable had to be postponed because work- or study-related travel virtually came to a standstill. Many of these plans involved the Travelling Differently campaign, which encourages students and staff to commute in an environment-friendly manner. Due to the coronavirus pandemic, work-related travel was significantly reduced and the campaign was temporarily put on hold in March 2020.

One great thing that happened in 2020 was the fact that eleven organisations, including the LUMC, the University of Bristol, Amsterdam University of Applied Sciences and ProRail, adopted the [Rail Zone Map](#) developed by Utrecht University in 2019. The rail zone map provides an overview of destinations in Europe and compares air and rail travel options. By using the rail zone map,

an employee can quickly determine whether travelling to a particular destination by train is doable, meaning the employee does not have to travel by plane.

In 2020, the university also made significant investments in hardware and support for online collaboration. Furthermore, many people experimented with organising online conferences. The coronavirus pandemic had a positive impact on the digitisation of remote work and remote meetings.

Vliegreizen

#	2014	2015	2016	2017	2018	2019	2020		Doel 2030
Vliegreizen medewerkers	5959	6543	6822	6667	6664	6873	1924		
Vliegreizen exchange-students	2351	2351	2351	2352	2710	2905	117		
Vliegreizen									4889

Working from home now considered the norm

The coronavirus pandemic has had an indelible effect on the way people work. Before 2020, the university’s work culture did allow for some working from home, but working in an office was the norm. In 2020, this changed completely, and almost all university employees worked from home for most of the year. Many inaugural lectures were taught online. This has had a huge effect on the extent to which staff commute and travel for work -- an effect that is expected to linger somewhat even after the end of the pandemic. After the coronavirus pandemic, hybrid work will become the norm. This means that fewer people will have to come to the office every day, and large events that many of us used to fly to will be given a more hybrid nature, as well. We will see this reflected in the figures recorded in 2021 and 2022.

Bicycle procurement allowance

In 2020, the tax-free amount awarded to employees who wished to purchase a bicycle was raised. This resulted in a 15 per cent increase in the number of bikes bought. In other words, more employees took advantage of the bicycle procurement scheme and bought a bicycle.

2020 Transport Indicators			
	2018	2019	2020

2020 Transport Indicators			
Car users at Utrecht Science Park, based on car park data	20%	22%	15%
<i>According to transport survey (for comparison)</i>	20%	20%	20%
Charging stations for electric cars at Utrecht Science Park	2	66	72
<i>Universiteit Utrecht</i>	2	34	43
<i>Utrecht Park & Ride</i>		28	28
<i>University Medical Centre Utrecht (public)</i>		4	4

Energy-neutral car park

In November 2020, Utrecht University announced its intention to build an energy-neutral car park in 2021. This car park, to be erected next to the Olympos Sports Park, will be clad with solar panels and the building materials used will be recorded in the car park's materials passport. These measures will cause the building to generate energy and will allow the used materials to be reused after demolition.

Case: The academic conference in 2020

Attending international conferences constitutes an important part of being an academic. Due to the coronavirus pandemic, many conference organisers experimented with online conferences in 2020. What useful lessons for 2021 did we learn?

[Read more](#)

What will Utrecht University do in 2021?

- As soon as more travel is allowed, the Travelling Differently campaign and the [Travel Green Grant](#) external link will kick off again. The latter initiative is an allowance that students may receive for travelling to their minor or work placement location abroad in a more environment-friendly manner;
- The energy-neutral car park near Olympos Sports Park is being constructed. The building is scheduled for completion in November 2021.

CO₂ footprint

Utrecht University aims to be **climate-neutral by 2030**. Since 2014, the university has published the greenhouse gas emissions caused by its activities every year. **In 2020, the total CO₂ emissions amounted to 37,306 tonnes.** That is much less (-41 per cent) than in 2019, particularly because of the **coronavirus pandemic**. **This measurement year is not representative**, and no policy conclusions can be drawn from it. The effects of the coronavirus crisis will also be felt in our emissions in the year 2021. Utrecht University's low emissions in 2020 are in themselves good news: it is well known that climate change is ultimately about the cumulative amount of CO₂ in the atmosphere. Therefore, simply put, the fewer emissions, the better.

Our main categories of CO₂ emissions are natural gas consumption (45.3 per cent), commuting (7.5 per cent), agriculture (7.8 per cent) and air travel (5.5 per cent). In addition, emissions from fuel production (especially the extraction of natural gas) account for 29.6 per cent of the total. Our emissions from **transport fell by more than 70 per cent in 2020 compared to 2019**, whereas our natural gas consumption fell by a much **smaller percentage (15 per cent)**. Many of the university's buildings and those of its partners on campus remained open – and thus heated.

CO2-footprint (ton)

#	2014	2015	2016	2017	2018	2019	2020
Aardgas	32823	35621	35081	37000	32650	33310	16899
Landbouw	1961	1961	2740	2579	3384	3167	2904
Warmte	1415	1505	1152	1062	1045	1145	1104
Elektriciteit	12175						
Mobiliteit	20847	23537	19183	15815	16483	17061	4822
Opwekking energie	9125	4748	4748	5016	7625	7398	11040
Overig	1647	1649	1957	1371	1407	1073	537

In 2020, the university's own renewable energy sources accounted for **5 per cent** of the energy consumed. Combined with wind energy and green gas certificates we purchased, renewable energy accounted for **62.3 per cent** of the total energy consumption mix. In 2021, the amount of locally generated renewable energy will increase, as 1,377 solar panels

were installed on rooftops in 2020 and the thermal energy storage system grid will be expanded in 2020 and 2021.

Key activities that we undertook to reduce emissions included more solar panels on roofs, an expansion of the thermal energy storage system grid, building insulation, four times more money spent on green gas, and the promotion of remote working and sustainable travel. However, the effect of these interventions does not outweigh the impact of the coronavirus pandemic. In the long run, though, these measures will reduce the university's emissions.

Continued attention to timely property renovation (which will reduce our natural gas consumption), the generation of more sustainable energy and other measures (especially in terms of agriculture and air travel) will be crucial to minimising CO₂ emissions in the next ten years. Ultimately, if we wish to successfully combat climate change, we will have to reduce the emissions that accumulate in the atmosphere. Obviously, the sooner Utrecht University sharply reduces its emissions, the less significant these **cumulative emissions** will be by 2030.

About this monitor

This is the third edition of UU's sustainability monitor. In drawing up its monitor, the university adheres to the Global Reporting Initiative (GRI) standard. GRI is a globally accepted and widely used method for organisations to report on their sustainability efforts. The university applies GRI to report on Utrecht University's economic, social and environmental impact in a reliable, uniform and professional manner.

This sustainability monitor was prepared in accordance with GRI Core. The following detailed GRI information on this document can be found below:

GRI Content Index [external link](#)

This index is a compulsory component of GRI reports and indicates for each GRI item whereabouts in the document the information can be found.

Material topics and indicators [external link](#)

An important component of GRI reports is the materiality analysis. This is a way of asking stakeholders which topics are most relevant ('material') to report on. By using the GRI standard, we translated our ambitions into specific performance indicators. Many of these can be found in the relevant chapters in the document. This is where you will find the complete overview of all indicators.

Materiality analysis, governance, indicators overview

GRI material topics

An important component of GRI reports is the materiality analysis. This is a way of asking stakeholders which topics are most relevant ('material') to report on.

In 2018, the university performed a materiality analysis in line with GRI standards to select the themes on which it was going to report. After conducting 11 interviews with stakeholders active in teaching, research and business processes, a survey was sent out to 350 stakeholders, both within the university and elsewhere. The results of the analysis are shown in the matrix below:

From this list of themes, the university then selected the most important ones, which are shown on the left in the table below. The names of the themes used in this report are different from the theme names used in the materiality analysis (right column) to make sure they are more in line with existing names within the organisation:

Theme in materiality analysis	Theme in current monitor
Educating socially engaged citizens	

Combining teaching, research and business processes	Sustainability in research and de programmes
Generation of sustainable energy	Future-proof campus
Sustainable renovation of buildings	
Green Campus	
Sustainable transport	Travelling differently
Conscious catering	Sustainable and innovative busin operations
Awareness of sustainability	Covering all the aforementioned themes

Diversity and inclusiveness emerged as relevant topics in the analysis, but were not included in this report. UU's Equality, Diversity and Inclusion Task Force issues its own annual internal report. In addition, diversity and inclusiveness are included in UU's general Annual Report.

A materiality analysis is generally performed once every two or three years. In 2019 and 2020, the university did not perform a

new analysis.

Sustainability: governance

Within Utrecht University, it is the Sustainability Programme Team's duty to realise the University's sustainability ambitions. This includes the drafting of the present annual sustainability monitor. The Sustainability Programme Team operates university-wide from the University Administration Office. The programme is the responsibility of the Sustainability Programme Director, who reports to the sustainability portfolio holder on the university's Executive Board.

Indicator overview

This table contains all the key performance indicators monitored by the University for the purpose of drawing up the sustainability monitor:

Overall trends

	Total score	2018	2019	2020
	Improvement over baseline year (1)	4	15	18
	Unchanged or first time measured (0)	15	6	1

	Deterioration from baseline year (-1)	3	5	3
	No data available / No measurement performed (999)	6	2	6
No	Indicator	2018	2019	2020
1.1	# graduates in sustainability-related degree programmes	0	1	1
1.2	# first-year students who played the Utrecht 2040 game	999	0	-1
3.1	# completed Green Office Living Lab projects	0	-1	1
3.2	# other Living Lab projects	999	1	1
4.2.1	Energy saving compared to baseline year (2017) (%)	-1	1	1
4.2.2	Energy saving compared to preceding year (%)	-1	1	1
4.4.1	Renewable energy	0	0	1

4.4.2	Renewable energy including energy procured	0	-1	1
4.4.3	Energy generated by solar panels (kWp)	0	1	1
4.5	Efficient use of fossil fuel	0	-1	-1
5.1	BREEAM certificates	1	1	1
5.2	Energy labels	0	0	1
5.3	Water consumption	1	0	1
6.1	Surface water storage (m ²)	999	0	999
6.2.1	Biodiversity – # guide species habitats	999	-1	999
6.2.2	Biodiversity – # insect hotels	0	1	999
6.2.3	Biodiversity – ecological verges (m ²)	0	1	1
7.1	Car usage by employees	0	0	1
7.2	Charging stations for USP electric cars	0	1	1
7.3	Flight kilometres	0	-1	1

8.1	Waste – residual waste	-1	1	1
8.2	Waste – plastic	1	1	1
9.1	Emission-free cars UU FSC	0	1	0
10.1	Food waste	999	999	999
10.2	Meat v vegetarian	0	1	999
10.3	Packaging	999	999	999
11.1	Green Office Utrecht social media reach	1	1	1
11.2	# Green Office volunteers	0	1	-1

Trends in numbers

No	Indicator	2018	2019	2020
1.1	# graduates in sustainability-related degree programmes	377	481	555
1.2	# first-year students who played the Utrecht 2040 game	?	800	295
3.1	# completed Green Office Living Lab projects	16	16	18
3.2	# other Living Lab projects	?	7	9

4.2.1	Energy saving compared to baseline year (2017) (%)	1.48%	-6.9%	-20.7%
4.2.2	Energy saving compared to preceding year (%)	1.48%	-8.3%	-14.8%
4.4.1	Renewable energy	3.96%	3.35%	4.84%
4.4.2	Renewable energy including energy procured	29.64%	25.01%	62.27%
4.4.3	Energy generated by solar panels (kWp)	1279	1307.8	1797.8
4.5	Efficient use of fossil fuel	85.2%	83.8%	82.0%
5.1	BREEAM certificates	3	5	16
5.2	Energy labels	7	7	11
5.3	Water consumption	217000	217000	175000
6.1	Surface water storage (m ²)	?	119102	?
6.2.1	Biodiversity – # guide species habitats	?	9	?
6.2.2	Biodiversity – # insect hotels	3	9	?
6.2.3	Biodiversity – ecological verges (m ²)	77500	81300	97300

7.1	Car usage by employees	20%	22%	15%
7.2	Charging stations for USP electric cars	2	34	43
7.3	Flight kilometres	60.3	63.0	12.7
8.1	Waste – residual waste	1024113	844886	572350
8.2	Waste – plastic	101368	60621	42688
9.1	Emission-free cars UU FSC	8%	50%	50%
10.1	Food waste	?	?	?
10.2	Meat v vegetarian	20000	16000	?
10.3	Packaging	?	?	?
11.1	Green Office Utrecht social media reach	3322	3899	3900
11.2	# Green Office volunteers	59	85	40