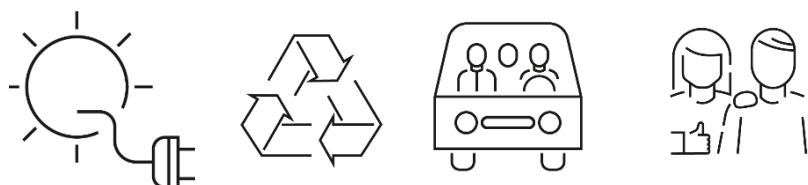


Annual status on SDU's 2030 climate plan



2022

Summary

In December 2021, the Board of SDU adopted a climate plan for SDU seeking to reduce the University's greenhouse gas emissions by 57% by 2030 compared to 2018. As part of the implementation of the climate plan, the Board is presented annually with a status of the work. This status consists of three parts:

- SDU's climate account for 2018 and 2021
- Status of initiated climate initiatives at SDU
- Statement from SDU's Climate Panel

Although the numbers show a significant reduction of the total emissions from 2018 to 2021, one should keep in mind that 2021 (and 2020) were years characterised by lockdowns and, among other things, restrictions in air travel due to the COVID-19 pandemic. SDU will therefore only get an indication of how much of the reduction is due to factors other than COVID-19 once the climate account for 2022 is ready.

A number of efforts were launched during 2022 that will not only directly affect SDU's emissions, but also have a more indirect impact through influencing behaviour and involvement. Among the former efforts, it is worth highlighting the expansion of SDU's transformer stations. In addition to increased security of power supply, it will allow the University to expand its own production of renewable energy. Furthermore, a consumption programme will be launched that will accelerate the circular economy at SDU.

Statement from SDU's Climate Panel

SDU's Climate Panel was established in 2022 as part of SDU's climate plan. Consisting of employees and students from SDU, the role of the Climate Panel is to advise the university management on the work with the climate plan.

In its statement, the Climate Panel recognises SDU's commitment to reducing greenhouse gas emissions from the University and that significant action has been taken in this area within a short period of time during 2022. The Climate Panel also finds it positive that SDU is aware that involvement and ownership among staff and students in the climate initiatives are crucial prerequisites for achieving the objective.

However, although the implementation of the Climate Plan has got off to a good start, the Climate Panel points out that if the climate target is to be met, further work and future implementation waves call for a stronger holistic approach integrating technology, structure, behaviour and culture. The Climate Panel also stresses the importance of courage and willingness to make the necessary investments and priorities – also in relation to creating an organisational framework that promotes climate considerations.

The Climate Panel also points out that the current level of detail of the climate account for SDU makes it difficult for the Panel to fulfil its tasks completely. Consequently, it is not possible to assess the expected impact of specific interventions and therefore not possible to assess whether the right initiatives have been prioritised. However, the Panel also understands that action to reduce emissions cannot wait for a fully developed data set.

I. Climate account for 2018 and 2021

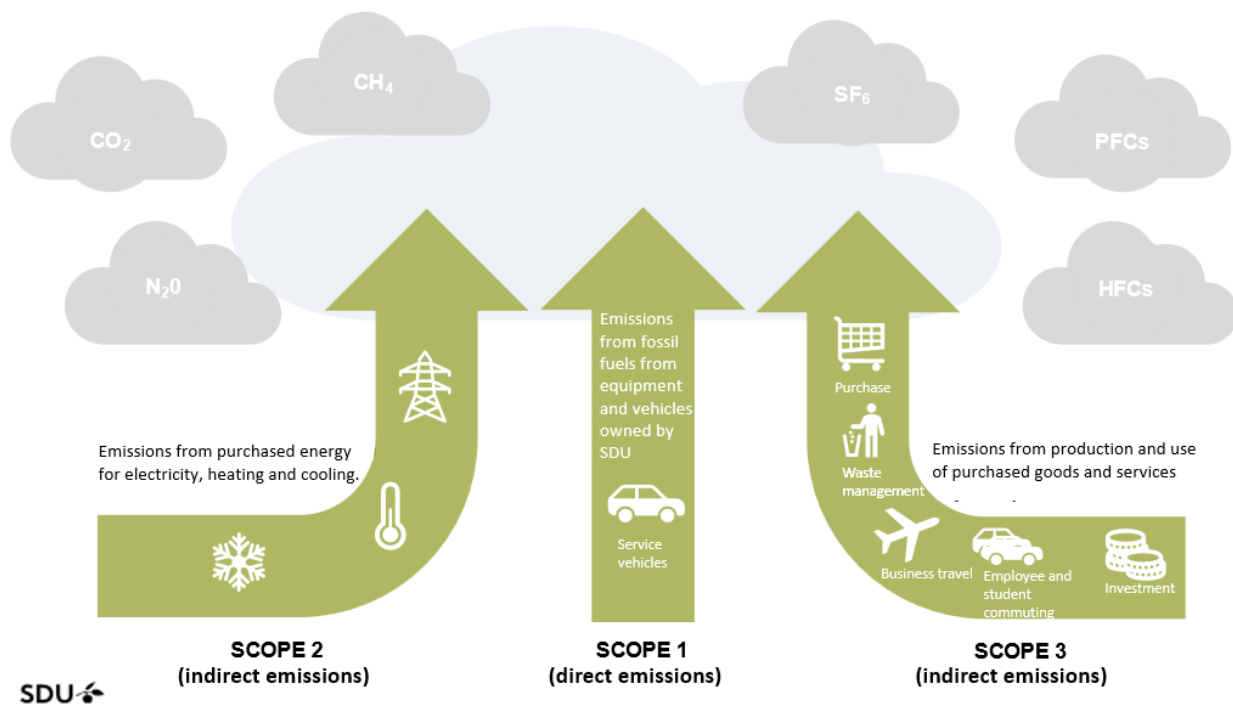
SDU prepares annual climate accounts to track the development in relation to the University's goal of a reduction of its greenhouse gas emissions by at least 57% in 2030 compared to 2018. The target corresponds to a reduction of 70% compared to 1990, and thus matches the target set out in the Danish Climate Act.

Method

SDU follows the GHG protocol when preparing climate accounts. The protocol is a recognised standard for calculating and reporting greenhouse gas emissions. The protocol divides greenhouse gas emissions into three scopes, as illustrated in the figure.

Scope 1 is the emissions from the burning of fossil fuels from equipment and vehicles owned by the organisation. Scope 2 is the emissions from purchased energy for electricity, heating and cooling. Scope 3 is the emissions from the production and use of purchased goods and services.

The three scopes of the GHG protocol



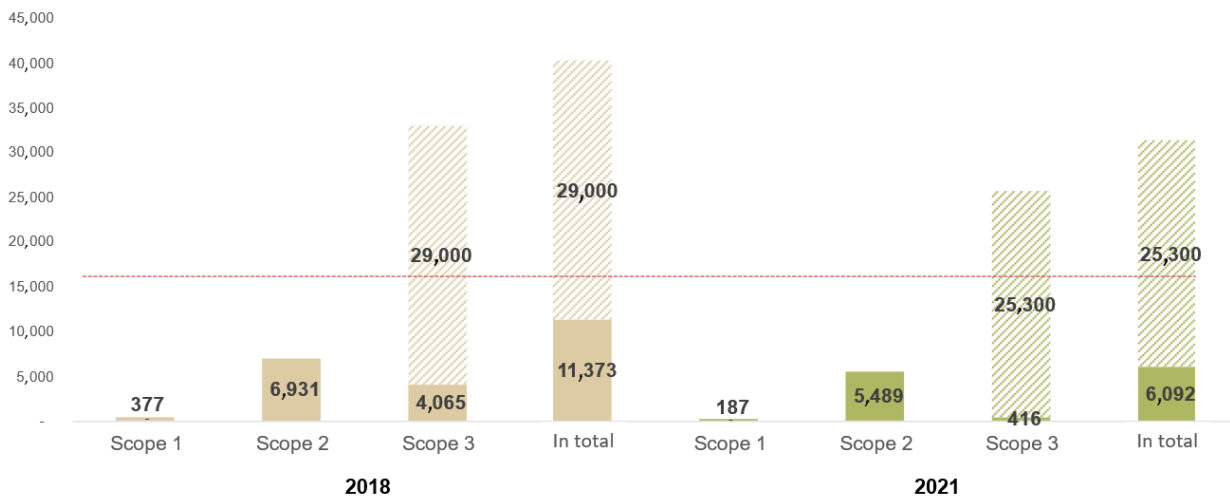
Climate accounting

The figure below illustrates SDU's emission of greenhouse gases in 2018 (baseline) and 2021. Scope 1 and 2 are included in full in SDU's current climate account, while Scope 3 only includes emissions from work-related trips by plane, rail or taxi.

SDU is part of a sector collaboration with the other Danish universities with a view to developing methods to uncover emissions from other sources under Scope 3. The shaded fields are therefore an estimate of the emissions that have not yet been mapped. The estimate has been made on the basis of Danish universities, which have uncovered multiple sources in Scope 3.

In the following, the term CO₂ equivalent is used. The CO₂ equivalent is a conversion factor for comparing the impact of different greenhouse gases on the greenhouse effect. In this way, it has been calculated how many tonnes of CO₂ it takes to create the same effect as one tonne of another gas. This number is then the CO₂ equivalent of the gas.

SDU's climate account for 2018 and 2021 in tonnes of CO₂ equivalents



The graph shows that SDU's total emissions in 2018 are estimated total 40,373 tonnes of CO₂ equivalents. For 2021, the estimated emissions total 31,392 tonnes of CO₂ equivalents. The red line represents the target of a 57% reduction in total estimated emissions.

The emissions from Scope 1 include official driving in one's own car or SDU's official vehicles. Scope 2 is the emission from purchased energy used for electricity, heating and cooling. The part of the emission mapped in Scope 3 stems from work-related trips, of which air travel accounts for around 95% of the emissions.



Although the numbers show a significant reduction of the total emissions, one should keep in mind that 2021 (and 2020) were years characterised by lockdowns and, among other things, restrictions in air travel due to the COVID-19 pandemic. SDU will therefore only get an indication of how much of the reduction is due to factors other than COVID-19 once the climate account for 2022 is ready.

II. Status of launched initiatives

As mentioned, the Board of SDU adopted a climate plan for SDU in December 2021, which contained a number of initiatives seeking to reduce SDU's greenhouse gas emissions. The initiatives are categorised into four packages:

- Campus, buildings and operations
- Circular resource consumption
- Transport
- Behaviour, involvement and communication

This version of the Climate Plan contains the initiatives that will initially be prioritised in a three-year implementation wave running from 2022 to 2024. The table below provides an overview of the initiatives launched in 2022 as part of the first wave of implementation from 2022 – 2024. Additional efforts will be initiated in 2023 and 2024. It should be noted that the global challenge of long lead times has meant longer implementation horizons for some of the efforts than expected.

<p>Campus, buildings and operations</p> 
<p><i>Expansion of SDU's supply network and security</i></p> <p>In the period 2022–2024, the energy supplier's transformer stations will be phased in, thereby giving SDU overall responsibility for them. This extension of SDU's supply network will increase the possibility for sending electricity from SDU's solar park to its own buildings, rather than sending surplus power to the national grid. In the longer term, the extension will also create opportunities for expanding SDU's solar park and installing superchargers for electric cars.</p>
<p><i>Sustainability certification of laboratories</i></p> <p>In 2021, SDU laboratories were the first in Denmark to receive sustainability certification from Green Lab, as employees have significantly reduced energy consumption. The certification was given to laboratories at IMM and BMB. In 2022, it was decided to initiate a process that will lead to certification of other laboratories at SDU.</p>
<p><i>Mapping the sustainability of buildings</i></p> <p>In the autumn of 2022, the first steps towards a mapping of operational buildings were taken to investigate in which aspects of sustainability the buildings and building operations are doing well and also to make improvement opportunities visible. The results of this mapping are expected to be released on an ongoing basis during 2023.</p>
<p>Circular resource consumption</p> 
<p><i>Consumption programme</i></p> <p>From 1 January 2023, a consumption programme will be implemented, which will apply until 2026. This will strengthen the circular economy at SDU in relation to the procurement and use of goods and services. This will be done through increasing requirements for suppliers upon entering contracts, for example, in terms of 'take back', lifetime extension, certifications, etc. and the follow-up of contracts to ensure supplier compliance with sustainability requirements. There will also be more consumption analyses, standardisations and common goods, as well as an expansion and greater use of SDU's used goods exchange. Finally, a disposal strategy will be developed.</p>
<p><i>Installation of waste sorting stations</i></p>

Waste sorting stations with five compartments will be installed on the Odense campus during January 2023. Waste sorting stations on campuses outside Odense will subsequently be installed during 2023 in accordance with municipal schemes.

Recycling of plastic from laboratories

Laboratories have a high consumption of plastic in connection with the purchase of disposable laboratory products and plastic packaging. At the same time, plastic from laboratories is of a high quality and is in demand in terms of plastic recycling. To this end, the work on further sustainability certification of laboratories at SDU will both reduce consumption and increase the recycling of plastic. As part of the recycling process, it has been decided to purchase a granulator that can granulate the used plastic for sale to external stakeholders.

Transport



Travel policy

A new travel policy for SDU employees will enter into force on 1 January 2023, in which climate considerations are incorporated. The travel policy will be included in SDU's travel rules. The travel policy will be supported by initiatives to create visibility around climate-conscious travel choices and transparency about travel behaviour across SDU (report with travel data).

Digital and hybrid meetings

In 2022, the fitting out of meeting rooms with equipment enabling high-quality digital and hybrid meetings began. Initially, a meeting room will be set up on each campus to gain experience with the meeting forms. This initiative will be supplemented in 2023 by skills development for staff on digital and hybrid meeting formats, as well as an initiative to raise awareness of this option.

Installation of charging stations

As mentioned, the extension of SDU's supply network will allow the installation of superchargers for electric cars. Due to long lead times for components for this extension, installation of superchargers is not expected to start until late 2024 at the earliest. It has therefore been decided that in the meantime a small number of regular charging stations will be installed on the campus in Odense. It is expected that this will be completed by mid-2023.

Behaviour, involvement and communication



Establishment of the SDU Climate Panel

In June 2022, the SDU Climate Panel was established with the participation of three academic staff members, three technical/administrative staff members and three students. Chaired by the University Director, the panel will advise University management on the University's work with the climate plan. Since its establishment, the Climate Panel has held four meetings.

Newsletter about the work with SDU's Climate Plan

Two newsletters have been issued to staff, students and external stakeholders about the work with SDU's Climate Plan. The newsletter currently has around 300 subscribers. The newsletter supplements pages on SDU's websites with news and information about the University's climate and sustainability work.

Climate Ambassadors

28 employees completed the climate ambassador training course in September 2022. The climate ambassadors will contribute to promoting climate-friendly behaviour at SDU through local experiments, actions and dissemination. Since the training course, a total of three network meetings have been held.

III. Statement from SDU's Climate Panel

Terms of reference for the Climate Panel

The Climate Panel shall:

- Assess the status of fulfilment of the overall objective as well as the goals and sub-goals in the climate area as set out in SDU's Climate Plan for 2030.
- Assess the need for adaptation of the current portfolio of efforts in the ongoing implementation wave, including the need for further efforts.
- Prepare recommendations for technological solutions and behavioural initiatives that can contribute to the realisation of goals for reducing SDU's emissions of greenhouse gases by 2030.
- Consult and involve relevant parties in its work, as appropriate.

The Climate Panel shall submit and publish its recommendations on an annual basis in connection with the Board meeting in December.

Statement

The Climate Panel recognises SDU's commitment to reducing greenhouse gas emissions from the University and that significant action has been taken in this area in a short period of time during 2022. The Climate Panel also finds it positive that SDU is aware that involvement and ownership among staff and students in the climate initiatives are crucial prerequisites for achieving the objective. In this respect, the Climate Panel highlights the establishment of the Panel and the training of staff members as Climate Ambassadors.

However, in spite of the good start to the implementation of the Climate Plan, the Climate Panel points out that if the climate target is to be met, further work and future implementation waves call for a stronger holistic approach, integrating technology, structure, behaviour and culture.

The Climate Panel also stresses the importance of courage and willingness to make the necessary investments and priorities – also in relation to creating an organisational framework that promotes climate considerations. And according to the Panel, climate considerations should be included in all decisions at SDU.

The Climate Panel also points out that the current data basis and level of detail of the climate account for SDU make it difficult for the Panel to fulfil its tasks completely. As a result, it is not possible to assess the expected impact and costs of specific interventions and therefore not possible to assess whether the right initiatives have been prioritised.

This is particularly true for Scope 3 initiatives. Therefore, according to the Climate Panel, there is a need to strengthen the data. However, the Panel also understands that action to reduce emissions cannot wait for a fully developed data set.

In terms of actions that could strengthen SDU's efforts to achieve a 57% reduction in the University's greenhouse gas emissions, the Climate Panel points to the following:

Openness and transparency of data in the climate and environmental area

- Make more data available that show trends in consumption and impacts in relation to greenhouse gas emissions – for example, by creating a dashboard.
- Allow independent external experts to provide a second opinion on the prioritised initiatives.

Varied and clear communication about climate work

- Do not limit communication about climate work to SDU's websites only. Use visual, available and inclusive tools where the staff and students are.

More platforms for mobilising staff and students

- Allow staff and students to anonymously contact the Climate Panel if they experience problems relating to the climate at SDU's campuses.
- Create campaigns, competitions, etc. to mobilise more staff and students in the climate work.

Organisational frameworks that support implementation of the Climate Plan

- Create the time and frameworks for those involved in Climate Plan initiatives to carry out these tasks.

Draw attention to ongoing or planned initiatives

- SDU's travel policy should balance climate considerations with the University's values and tasks.
- Be aware of SDU's digital climate footprint when choosing digitalisation as an approach to increased sustainability.

Members

Meetings of the Climate Panel are chaired by University Director Thomas Buchvald Vind. Members of the Panel in 2022 are:

- Professor Bo Nørregaard Jørgensen, The Maersk Mc-Kinney Moller Institute, TEK
- Assistant Professor Kristof Tomej, Department of Design and Communication, HUM
- Associate Professor Knud Sinding, Department of Sociology, Environmental and Business Economics, SAMF
- Head of Division Anne Kathrine Overgaard, Dean's Office, SUND
- Specialist Consultant Marianne Due, Department of Biochemistry and Molecular Biology, NAT
- Head of Division Christina Brun Levinsen, Department for the Study of Culture, HUM
- Student Julie Groth, Biology, NAT (resigned 14 November 2022)
- Student Jens Vormslev Lennert, Construction Engineer, TEK
- Student Mikkel Stampe Nielsen, Global Management and Manufacturing, TEK