

Climate Action Ranking 2021

Climate Students' ranking of Swedish HEIs

Background and purpose

Climate change is the greatest crisis in human history and requires urgent measures identified by scientists to prevent it. Sweden has committed itself to meeting the targets of the Paris Agreement, and set as its own national climate target to achieve net zero emissions of greenhouse gases by 2045, followed by negative emissions. At present, there is no indication that Sweden will achieve any of these targets in terms of emissions reductions and contributions to limiting global warming¹. Moreover, the mitigation ambitions of Sweden is less than half of what is the absolute minimum necessary to deliver on the Paris Agreement. If one applies the precautionary principle regarding the deployment of planetary scale negative emissions technologies, developed countries are required to deliver double-digit annual mitigation rates, from 2020, if they are to align their policies with the Paris Agreement's temperature commitments and principles of equity². The movement and association Climate Students argue that Swedish universities have an opportunity to take a leading role in the climate transition and that Sweden's higher education institutions (HEIs) therefore must strive for near zero emissions by 2030.

The universities have a unique role to play in realising the climate transition of society, both symbolically and practically. Practically - as politically independent institutions with a high level of expertise and competence, driven by the production of knowledge, and with the mission to research, educate and collaborate with the rest of society. Symbolically - by using the research they produce as a starting point for action, by practising what they teach.

In 2019, the Swedish government sharpened the requirements for the universities' efforts to promote sustainable development and to reduce its own direct, negative impact on the environment, including greenhouse gas (GHG) emissions. In the same year, 37 HEIs adopted the Climate Framework for Higher Education Institutions , which states that the emissions of HEIs in 2030 should be in line with the Paris agreement's 1.5-degree target of the Paris Agreement. However, there is no official body that will monitor the universities' compliance

¹ <https://www.klimatpolitiskaradet.se/en/rapport-2020/>

² <https://www.tandfonline.com/doi/full/10.1080/14693062.2020.1728209>



with their obligations under the Climate Framework. The Climate Action Ranking is intended to fill this gap.

Two things that motivate HEIs are rankings and application numbers. With this ranking, we want to get the HEIs to understand that future student applications can be affected by how they work with their own direct emissions, by making a ranking based on exactly that. 'Generation Greta' which has taken to the streets since 2018 will in the coming years apply to universities. Tens of thousands of students have signed the French student manifesto and declared that they will not work for companies that do not take the climate crisis seriously. We want to let the universities know that future students will not apply to institutions that do not practice what they teach and reduce their emissions according to the climate science and Paris Agreement. Therefore, the ranking is published on March 15, the same date as applications for the autumn semester opens, so that future students can make an informed decision when choosing university.

In this context, the National Committee for Climate Students has carried out a ranking of the work done by Swedish universities to reduce their own direct emissions. We want to show which universities are making the most and least progress in the fight against climate change.

Method

Ideally, this ranking would position the universities according to their total GHG emissions. Unfortunately, none of the universities knew their total emissions, so that a different method had to be applied. For the ranking in the coming years, Climate Students hope and expect that universities will calculate their total CO_{2e} emissions so that they can monitor their measures to reduce these emissions.

The Climate Action Ranking consists of four categories. In the first category, low CO_{2e} from aviation during 2020 per full-time employee is premiated. In the second category, large reductions in CO_{2e} from aviation between 2019 and 2020 are premiated. The third category premieres sharp goals and action plans for emission reductions, and lastly, in the fourth category thorough methods for measurement of total GHG emissions are premiated. The maximum in each category is 25 points, hence the four categories are of equal weight. The first two categories are based on statistics that the HEIs report to the Swedish Environmental Protection Agency, and the other two categories are based on a survey conducted by Climate Students. The survey was sent out to all HEIs in Sweden and received 25 responses. We have only been able to rank the HEIs that answered our survey. A survey was chosen as a method to ensure that universities could contribute with, according to them, all relevant information, whereas a research by Climate Students would not

necessarily have included all relevant data. However, a survey assumes that all respondents answered truthfully and that they all understood the questions in roughly the same way

Categories based on statistics

The first two categories are 1) CO₂e from aviation per full-time employee during 2019, and 2) change in CO₂e from aviation between 2019 and 2020. We chose to focus on flight emissions since these statistics are most reliable and most comparable. It is mandatory for all public HEIs, which includes most of the Swedish HEIs, to annually submit their statistics for CO₂e from aviation to the Swedish Environmental Protection Agency. In order to also cover the private HEIs, we asked them to provide us with the corresponding data.

CO₂ equivalent emissions from aviation

In the first category points were awarded for low emissions - the lower the emissions the higher the points. Although numbers on flight emissions is the most reliable and most comparable emissions statistic available, it is still not completely straightforward. The HEIs measure in slightly different ways. For example, some take into account the altitude effect and others do not. During the covid-19 pandemic the emission statistics are particularly unreliable, since some of the cancelled flights still remain in the emission data. We recognize the weaknesses in the statistics we have used for the Climate Action Ranking. However we have in consultation with the Swedish Environmental Protection Agency decided that it is the best available foundation for ranking the HEIs emissions.

Another problem with comparing the aviation statistics between the HEIs is that the different focus and other distinguishing features of each HEI result in different dependency on aviation. To put it more simply: Scientists in some research areas tend to fly more than others. Similarly, some universities conduct more international research than others, and moreover the different HEIs are located in various areas in the country. This gives the HEIs with low demand for aviation a better position in the category CO₂e from aviation during 2020 per full-time employee. Climate Students appreciate international cooperation and research and believe that it is of decisive importance to stop the climate crisis. Nevertheless, it remains highly important to reduce emissions even for this type of research and it is possible to carry out successful and effective research with low emissions. Eminent researchers, such as Kevin Anderson, have managed to conduct research without flying since 2004³ and the experiences gained during the ongoing covid-19 pandemic have paved the way for more research without flying.

³ <https://noflyclimatesci.org/biographies/kevin-anderson>

Changes in CO₂ equivalents from aviation between 2019 and 2020

In the second category, HEIs who reduced their CO₂ emissions by 16 per cent or more between 2019 and 2020 received the highest score (25 points). According to our method, HEIs with unchanged emissions receive zero points and universities that increased their emissions from aviation between 2019 and 2020 receive negative points. However, this year all universities received the highest score, since the covid-19 pandemic caused the universities to reduce their flights by more than 16 per cent.

Categories based on survey responses

The categories 1) Emission targets and action plans, and 2) Measurement of total GHG emissions are based on a survey sent out to all Swedish universities and colleges, with 25 responses. A survey was chosen as a method to ensure that universities can contribute all relevant data and targets collected, whereas a research through Climate Students would not necessarily have included all relevant data. However, a survey assumes that all respondents answered truthfully and that they all understood the questions in roughly the same way.

Emission targets and action plans

In this category we asked the HEIs about their goals and action plans for emission reductions in nine areas, inspired by the categories in the Climate Framework. For five of these nine emission areas; total GHG emissions; business trips; commuting; energy consumption, and; waste we first asked the HEIs if they had a goal/target. If the HEI answered that they had a target for the area, they got to answer the following questions:

- Is the emission target for x quantifiable and time bound?
 - Yes
 - No
- Is there an action plan on how to reach the target?
 - Yes
 - No
- Are there employees with clear ownership over the work towards the target?
 - Yes
 - No
- Do you follow up the work towards the target?
 - Yes, regularly and frequently
 - Yes, but seldomly
 - No
- How is the target for emissions from x formulated?

Points were rewarded for each question where the HEI answered yes. The question regarding how the target is formulated was assessed qualitatively, where large and rapid emission reductions were scored higher.

After the last ranking we got the feedback that it did not take into account whether a university worked with lowering their emissions in a certain area, even if they don't have a goal for it. Therefore we included the following follow up questions even if the university answered that they **did not** have a target for the area:

- Is there an action plan to work with emissions from this area?
 - Yes
 - No
- Are there employees with clear ownership over the work to reduce emissions from this area?
 - Yes
 - Partially
 - No

In regards to emissions from food, purchase of goods and services, and building investments we asked the following questions:

- Is there an action plan to work with emissions from this area?
 - Yes
 - No
- Are there employees with clear ownership over the work to reduce emissions from this area?
 - Yes
 - Partially
 - No

In regards to financial investments we asked for action plans or policies that we reviewed qualitatively. In addition we also asked about employees with clear ownership, and regular and frequent follow ups.

We chose to include the category of emission targets and action plans in the ranking to encourage the HEIs to adopt ambitious targets in line with the Paris Agreement. Many HEIs are in the process of developing new emission targets and new methods for measuring their total GHG emissions. New targets and action plans have been adopted since the deadline of the survey, at the end of February, that have not been taken into consideration for this year's ranking. It's great that the HEIs continue to update and sharpen their climate

targets and their measurement of emissions. As the HEIs continue to improve, they will score better in each year's Climate Action Ranking.

Methods for measurement of total greenhouse gas emissions

In this category we asked the HEIs about how they measure their total emissions. The questions for this category are based on the method of the total carbon footprint of the Norwegian University of Science and Technology.⁴ We ask the question "To what extent do you measure emissions from the following areas?" The areas we asked about were travel; energy; investments; waste; and other kinds of purchases. Thorough methods for measuring emissions were given high points.

The category of how well each HEI measures their total GHG emissions was included in the ranking to encourage the HEIs to start, or refine the measurement of their emissions, which is needed to follow up their targets. Another reason for including this category is to avoid penalising universities for using more thorough measurement methods. We cannot change the statistics according to the answers, but by including this category, universities with more thorough measurement methods will receive a higher score in the ranking than those that barely measure their emissions. Furthermore, this category can reveal when enough HEIs measure their emissions from a specific area, so the emission data can be included in the next ranking.

⁴ <https://www.ntnu.no/miljo/miljoambisjon>

Results

Climate Action Ranking 2021



Flygutsläpp per
årsarbetskraft



Mätning av
totala utsläpp



Minskning av
flygutsläpp



Mål och
handlingsplaner

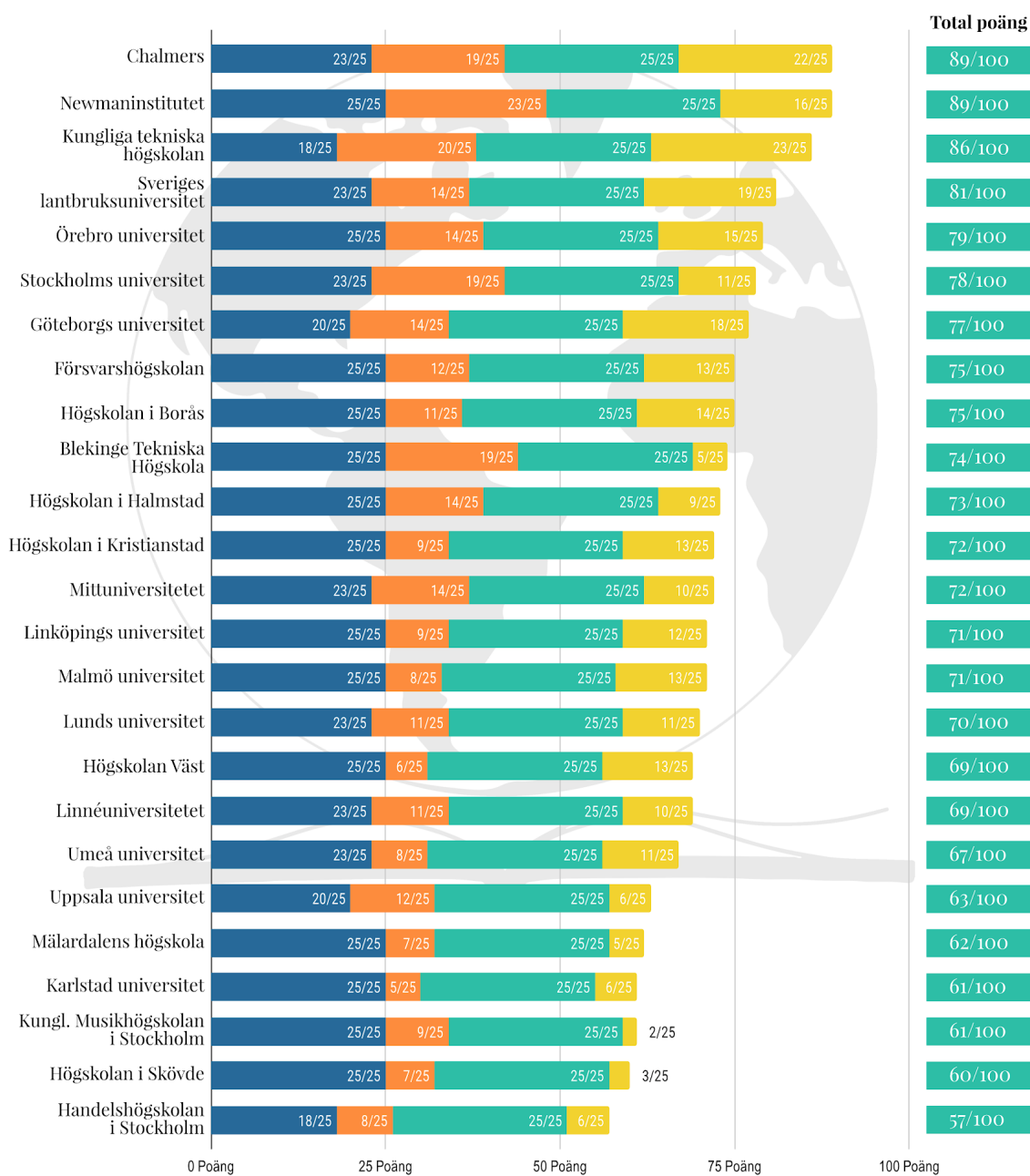


Figure 1. Results of the Climate Action Ranking 2021.

Discussion

In the ranking it is evident that no HEI managed to score full points in all of the categories. It is also evident that the covid-19 pandemic has had influence on the HEIs' emissions from aviation. This year, all HEIs scored the highest point in the category for reductions in emissions from aviation. Similarly, most HEIs scored the highest or second highest point in the category for emissions from aviation. Regardless of this, the HEIs still have much work to do when it comes to climate targets and action plans as well as methods for measuring their total carbon footprints.

Although the emission reductions last year have not mainly been a part of the HEIs' strategies to take climate action, we argue the reductions are relevant to the ranking. This is also to keep the continuity of the ranking from year to year. Climate Students urge universities to continue to act on global crises, no matter if they are the covid-19 pandemic or the climate crisis.

As a result of the pandemic's effects on aviation, the 2021 ranking has to a larger extent than intended been decided on the basis of the HEI's targets and action plans for emission reduction, and how thorough they measure their total carbon footprint. However, in the top three it is clear that also the aviation emissions have influenced the final results. The university with the highest score for both targets action plans and methods for measuring emissions had

One feedback that Climate Students has received on the ranking is that if the focus is only on the climate, wider aspects of sustainability are missed. The argument is that by focusing solely on the climate, HEIs could be encouraged to reduce their emissions at the expense of other sustainability aspects. Climate Students argue that the climate transition must be fair and safe. However, considering how urgent the climate crisis has become due to its neglect, rapid reductions in CO₂ emissions are necessary to achieve any other long-term sustainable development goal. Furthermore, Climate Students has a narrow focus on the HEIs' direct climate impact and hence this is what we have ranked.