

Climate Action Ranking

Climate Students' ranking of Swedish HEIs

Background

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 Convention and has set its own national climate targets 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, a recently published study finds that 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. Climate Students argue that universities have a unique potential to take a leading role in the climate transition and must therefore strive for zero emissions by 2030 as a role model for the rest of society.

The movement and association Climate Students argue that Sweden's higher education institutions (HEIs) have a unique role to play in realising the climate transition of society, both symbolically and practically. Practically - because they are perceived as independent knowledge institutions with a high level of expertise and competence in society, educating the next generation to deal with the climate crisis. 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 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

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

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



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 2018³ 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 universities that do not practice what they teach and reduce their emissions according to climate science.

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.

Purpose

By monitoring HEIs compliance with their emissions and climate commitments, Climate Students hope to encourage them to meet even tougher targets. We want to show which universities are making the most and least progress in the fight against climate change. It is also shown that even those that perform best compared to other universities are still not doing enough, according to Climate Students' interpretation of the Climate Framework.

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 CO₂ 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 CO₂e from aviation during 2019 per full-time employee is premiered. In the second category, large reductions in CO₂e from aviation between 2018 and 2019 are premiered. The third category premiers sharp goals and action plans for emission reductions, and lastly, in the fourth category thorough methods for measurement of total GHG emissions are premiered. The maximum in each category is 25 points, hence the four categories are of equal weight. The first two categories are based on statistics from the Swedish Environmental Protection Agency, and the other two categories are based on a survey conducted by Climate Students.

Categories based on statistics from the Swedish Environmental Protection Agency

The first two categories are 1) CO₂e from aviation per full-time employee during 2019, and 2) change in CO₂e from aviation between 2018 and 2019. These categories are based on

³ <https://www.expressen.se/nyheter/gretas-kliv-fran-okand-tonaring-till-klimatprofil/>

statistics from the Swedish Environmental Protection Agency. We chose to focus on flight emissions since this statistic is 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 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 statistics for aviation are the most reliable and comparable, they are still not completely straightforward. The HEIs measure in slightly different ways. For example, some take into account the altitude effect and others do not. 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. Some universities perform 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 2019 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 undertaking 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 2004⁴ and the experiences gained during the ongoing COVID-19 pandemic have paved the way for more research without flying.

Changes in CO₂ equivalents from aviation between 2018 and 2019

In the second category, the HEIs with the largest emission reductions received the highest score, while HEIs with unchanged emissions received zero points. Universities that had increased their emissions from aviation between 2018 and 2019 received negative points. Two universities reported that they had changed their method of calculating their CO₂e from aviation from 2018 to 2019. To be able to compare the CO₂e from these two years, the statistics for 2019 were provided based on the 2018 methodology.

Categories based on survey responses

The categories 1) Emission targets and action plans, and 2) Measurement of total GHG are based on a survey sent out to all Swedish universities and colleges, with 16 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

⁴ <https://noflyclimatesci.org/biographies/kevin-anderson>

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 for emission reductions in seven areas, inspired by the categories in the Climate Framework. These categories are: Total GHG emissions; business trips; commuting; food; energy consumption; purchase of goods and services, and; building investments. 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.

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 GHG emissions. New targets and action plans have been adopted since the deadline of the survey, at the end of July, 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 is based on the measurement of the total carbon footprint of the Norwegian University of Science and Technology.⁵ The overarching categories were:

⁵ <https://www.ntnu.no/miljo/miljoambisjon>



business trips; energy and; other kinds of purchases. Some questions were of more specific character and others followed the format below:

To what extent do you measure emissions from x?

- 1 - Not at all
- 2
- 3
- 4 - More or less to a full extent

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.

Results

The results of the ranking are presented in figure 1.

Climate Action Ranking 2020

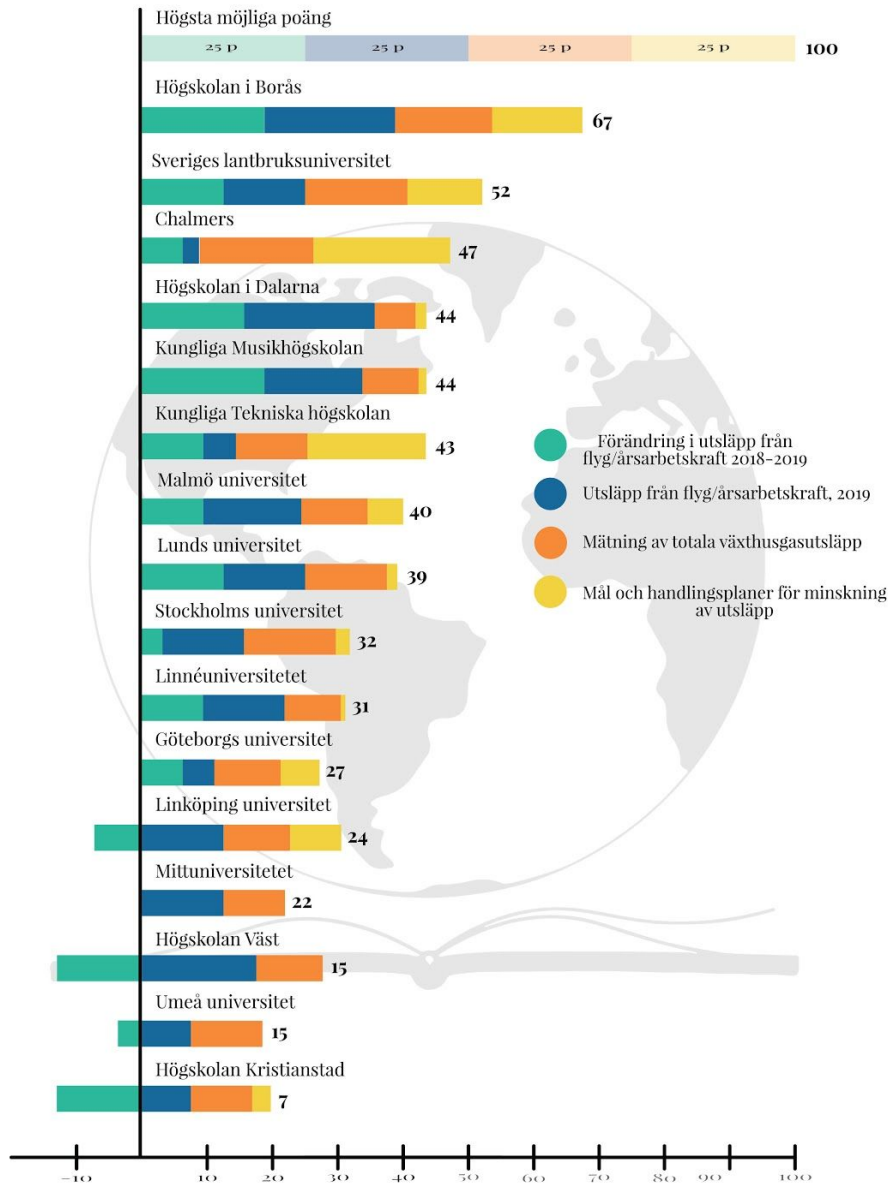


Figure 1. Results of the Climate Action Ranking.

Discussion

In the ranking it is evident that no HEI managed to score full points in all of the categories. It becomes clear that the different HEIs have various strengths and weaknesses in their climate actions. Some report relatively low emissions, but do not have a thorough method for measuring them. Others have sharp climate targets and comprehensive action plans, but still very high emissions and/or low reductions in emissions.

One response to the survey is that it doesn't take into account measures that HEIs have taken to lower their emissions in areas outside of aviation, but for which they don't have targets for. For example, a HEI can have reduced its emissions from food, without setting an emissions reduction target for food. Climate Students support all measures that lower emissions (in a fair and secure way), with or without measurement or targets. Climate Students recognize that the climate doesn't take into consideration whether a target is set or not, or whether an emission is measured or not. However, it is difficult to take unmeasured emissions into considerations in this ranking.

Another feedback Climate Students received for the ranking is that if the focus is only on the climate, the whole sustainability aspect is being 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 factors. Climate Students argue that the climate transition should be fair and safe. However, considering how urgent the climate crisis has become due to its neglect, rapid reduction in CO₂ emissions is necessary to achieve any 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.