

Summary

Since the outbreak of the covid-19 pandemic, our daily life has been overwhelmed by Corona-related news, conversations, and actions. Everything else was left in the shadow of that crisis. Video meetings have been part of the solution and helped us maintain social interactions in the midst of a pandemic and should continue to be used in high frequency to solve another crisis - the climate crisis. The IPCC report that was released in August again highlights the urgency of action to tackle the effects of climate change. Swedish universities can- and must lead the way in the societal mitigation process to halter climate change, not the least because they are responsible for emissions of significant size. The most effective way to do this is by reducing the amount of air travel that arises in connection with conferences, field work and other travel for research purposes. The pandemic has shown us that when a crisis is palpable, there is room for change and that this change can take place quickly.

A transition to an increasingly digital research collaboration need not be either far away or something negative. There is research that shows that video meetings have many benefits, and not solely for the climate and environment. Online meetings are a more inclusive form of meeting that increases the amount of people that can participate. It also frees up time for researchers and university employees, saves money when accommodation and transport costs are absent, and improves the quality of research through better analytical capacity of e.g., interviews.

Swedish universities cannot continue to disregard research by going back to "normal life" when the pandemic restrictions now are revoked. We demand that they seize the opportunity and start taking responsibility!

Letter

Climate students is a national movement that aims to make Swedish universities and colleges live as they preach and take their responsibility for the climate crisis. With the large amount of climate research that Swedish universities produce, there is a moral responsibility to live up to its findings. The research shows that we must drastically reduce emissions in all sectors, not least transport and especially air travel. We believe that higher education institutions need to have reduced emissions to almost zero by 2030; for this the emissions should be halved by 2022 compared to 2019 levels. If universities do not take their own research seriously, then who should?

In addition, the pandemic has shown us that it is entirely possible to fly considerably less, while digital meetings are a simple solution that does not have to jeopardize quality of research.

There are several reasons why this petition focuses mainly on aviation emissions. Air travel is the single largest source of emission for higher education institutions. The universities and remaining authorities under the Ministry of Education account for more than half of the 100,000 tons of carbon dioxide emissions that Swedish authorities reported 2017 [1]. Furthermore, the pandemic has shown us that it is entirely possible to fly considerably less, whilst video meetings are a simple solution that does not need to jeopardize the quality of research.

Video Meetings have replaced the majority of physical meetings in 2020. The advantages of this transition have not received as much attention as its disadvantages. Researchers and research participants experience video meetings as an almost full-fledged substitute for physical meetings [2,3,4,5,6,7,8]. Video meetings have, among other things: (1) freed up time; (2) saved money; (3) made conferences and meetings available to more people, and (4) simplified the management of collected research data. Aspects that also in the following ways improve the quality of research and the health of employees:

1. Time-saving features have been observed in many respects. Conferences have been coordinated in less time than before [9]. The reduced travel means significant time savings [3,8,10], more of the working hours can hence be used for the actual work tasks [8] and increase quality time with family [5].
2. Significant financial resources in Swedish research and higher education can be redistributed and put to better use [2,5].
3. The number of participants in research meetings, research studies and not the least at conferences has increased drastically. An increase in the proportion of non-Europeans, participants from low-income countries and people at an early stage in their careers (e.g., students and doctoral students) has given conferences greater diversity [9].
4. Digitization has generated a greater analysis capacity. For example, a recorded interview over video call can be transcribed and analyzed by computers, body language included [2,5].

The few obstacles that research has identified can be overcome by human innovation, creativity, and the spread of more stable technology to the places where it is lacking today. The perceived concern and investment costs for the technology needed to tackle the climate crisis can be seen as negligible in relation to the crisis's devastating consequences.

To create the best possible conditions for video meetings, active efforts are required.[11] As travel within the academy has great individual benefits, it is seen as unlikely that individuals would choose to sacrifice these on their own [12]. Several studies suggest that coercive measures such as a ban on

(certain) air travel or a special travel budget will be needed. [13,14] In these cases, video meetings are a reasonable alternative. If the research society wants to switch to a more sustainable professional practice, it is entirely possible.

Today, our planet is 1.1°C warmer than in pre-industrial times, according to the latest report from the IPCC, which was released in August. In the Nordic countries, warming is twice as fast compared to the global average.[15] IPCC reports an increased occurrence of various types of extreme weather, something that was present in many news reports by the media during this summer (2021). New heat records paralyzed North America [16] and forest fires ravaged Greece, Spain, and France [17]. Heavy rains caused severe flooding in Germany, Belgium, and Switzerland [18] – a course of events that was repeated in Sweden during the month of August [19].

In Sweden, the continued warming will generate hotter, drier summers and milder winters with more precipitation, among other things.[20] These changes in our climate system have- and will trigger a chain reaction of effects:

- loss of ecosystem services, such as pollination, clean water, clean air and fertile soil, [21]
- more frequent and intensified storms and torrential rains,
- life-threatening and financially expensive wildfires, [20]
- disappearance of archipelagos due to sea level rise, such as parts of the Stockholm archipelago [22] and the entire Falsterbo-Skanör Peninsula, [23]
- more severe and frequent floods linked to torrential rains and high water flows, leading to washed away roads and more accidents linked to landslides and erosion,
- more cases of illness and deaths linked to heatstroke, air pollution, contaminated drinking water (bacteria, viruses) and an increased occurrence of insect-borne diseases such as Borrelia and TBE, even Malaria and West Nile Fever will become domestic diseases in Sweden [24],
- higher frequency of pandemics [25].

Climate scientists are worried that the transition is going far too slow and in the wrong direction – emissions are increasing.[26] What we do today is absolutely crucial. According to the UN, we are the first generation with the opportunity to eradicate poverty, but we are also the last generation to combat climate change.[27]

It is about time to stop ignoring the science and start taking the climate threat seriously.

It is not possible to continue as usual, to do so is purely self-destructive behavior. Therefore, we demand that the emission level after the pandemic (2022) does not exceed half of the 2019 emission levels. In the best of worlds, the level would remain at 2020 emission levels or decrease further.

If universities want to be taken seriously and not lose their credibility, they must start acting as role models!

If everyone waits for others to take the lead, no one will.

Action always speaks louder than words.

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