ETHzürich

Stay grounded, keep connected: ETH Zurich's Air Travel Project

ETH Zurich is committed to sustainability – in teaching and research as well as in our daily working practices. A priority here is reducing greenhouse gas (GHG) emissions generated by ETH Zurich (cf. ETH annual report). Business trips account for over half of ETH Zurich's GHG emissions, with 93% of that due to air travel. Car travel (less than 5%) and rail travel (around 2%) are much less of a concern. As there are no technical developments on the horizon that will significantly reduce GHG emissions by air travel, we must achieve this by a change in our travel behaviour. In order to quantitatively assess the evolution of the GHG footprint, ETH Zurich has recorded GHG emissions since 2006. Figure 1 shows emissions from air, car and rail travel. The increase in air travel since 2006 is primarily due to the increase in staff. Air travel by students as part of their curriculum has doubled and corresponds to around 10 and 14% respectively of emissions caused by ETH staff.

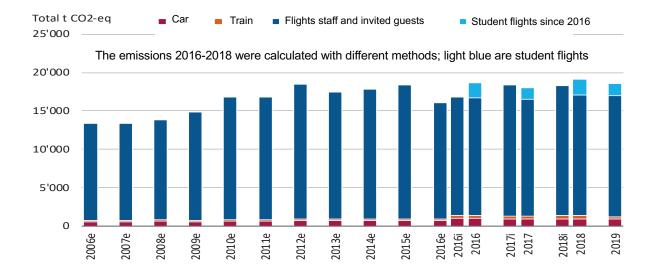


Figure 1:

Annual comparison of GHG emissions from ETH Zurich business trips in t CO₂-eq. From 2016 onwards the method was adjusted by INFRAS; therefore values calculated by both EarthEffect and INFRAS are listed for 2016. Graphic: INFRAS / EarthEffect

ETH Zurich mobility platform

On the basis of a framework concept, the ETH Zurich Executive Board launched 2017 the project "Stay grounded, keep connected" to reduce the flight emissions of ETH Zurich. The departments worked in a participatory process to set reduction targets and define the measures required to meet them. All departments, the Executive Board and administrative units committed themselves to reducing flight emissions by an average of 11% until 2025, taken against the average for 2016 – 2018.

Our air travel project goes beyond a direct contribution to climate protection. The goal here is to reconcile worldclass research and teaching with more sustainable travel behaviour without compromising the carrier chances of young scientists. The measures defined by the departments embrace a range of options: Air travel is to be reduced by consciously selecting and combining destinations, switching to trains for shorter journeys and using video conferencing equipment. Six departments have decided to introduce an internal carbon tax as a steering charge. The revenue here will be invested in teaching, research and fostering young talent – with a focus on CO2-reducing themes. A new monitoring system will assist professors in pursuing their individual reduction targets as efficiently as possible. The Federal Office for the Environment (FOEN) will compensate for unavoidable flight emissions, not as a substitute but as a supplementary transitional measure.

An interim evaluation will be carried out three years after the start of the project in 2022. In addition, a doctoral student from the ETH Zurich Transdisciplinarity Lab is conducting a scientific case study of the project.

The project director is Professor Ulrich Weidmann, Vice President for Infrastructure; the project manager is Dr. Susann Görlinger, Co-lead of the Mobility Platform at ETH Zurich. You can find further information and documents on the website: www.ethz.ch/airtravel →

> ETH Zurich Mobility Platform HG F 43 Raemistrasse 101 8092 Zurich

mobilitaetsplattform@ethz.ch https://www.ethz.ch/airtravel \rightarrow

Contact: Dr. Susann Gorlinger E-Mail: susann.goerlinger@sl.ethz.ch

October 2020/26198

