

## *Stay Grounded, keep connected*

# ETH Zurich flight emissions: Reduction targets and corresponding measures

### Point of departure

Business trips are responsible for over half the greenhouse gas emissions produced by ETH Zurich; of this amount, approximately 93 percent is caused by flights. Seeking to reduce emissions due to flights, the ETH Zurich Executive Board launched a programme in April 2017, led by Ulrich Weidmann, Vice President Human Resources and Infrastructure and conducted by Susann Görlinger, Co-Lead Mobility platform ETH Zurich. The aim is to embark on a real reduction path that is compatible with excellence in science and the best possible career opportunities for researchers.

### Reduction target

Within a participatory process, the departments, Executive Board and administrative units at ETH Zurich committed themselves to an average per capita reduction of 11% by 2025, taken against the average for 2016-2018. There will be an interim evaluation in 2022.

### Implementation

The departments have developed a wide range of concrete and innovative measures to achieve the reduction target. All departments are in favour of using and organising video conferencing more frequently. Several departments have also decided to introduce an internal carbon tax as a steering charge. The revenue will be invested in teaching, research, and promoting young scientists, with a focus on themes that lead to a reduction in CO<sub>2</sub>.

In addition, the majority of departments now offset flight emissions, with ETH Zurich, together with many other federal agencies, through the Federal Office for the Environment (FOEN). This compensation is not a substitute for the real reduction, but an additional measure and a temporary solution.

From 2019 onwards, the flights of all organisational units will be recorded in the ETH finance system, listing flight number, travel class and date. Departments and administrative units will receive a monthly summary of their flight-related CO<sub>2</sub> emissions.

### Measures planned by the departments

#### General

Expanding **video conferencing** and the corresponding infrastructure

**Bundling** and combining activities (e.g. conference and project meeting)

Introducing a **carbon tax** (some departments)

**Compensating** emissions from unavoidable flights through FOEN (most departments)

**Specific measures** (a selection, not in order of importance)

Raise visibility and awareness in teaching and research; gain and motivate **trendsetters** by

- factsheets on flight emissions and alternatives to air travel
- information events on flight emissions and alternatives to air travel
- encouraging and giving visibility to role models
- awarding an Excellence Award for Sustainable Travel
- holding courses and colloquia on flight reduction, compensation etc.

**Promote virtual conferences by**

- making them more attractive and offering options
- providing training on virtual presentation techniques
- using online platforms for discussion and exchange of documents (web/video calling)
- setting up a reward system for the staging and intelligent design of virtual conferences and on-site cooperation.

**Plan sustainable travel**

- Favour train over plane for journeys of less than 6-8 hours; first class train tickets for journeys longer than 4 hours only
- Reduce number of business class flights: business class as an exception for intercontinental flights
- Encourage direct flights
- Book flights on fuel-efficient aircraft
- Reduce number of staff per working group per congress (without jeopardising the career prospects of young scientists)
- Encourage project meetings and conferences in Europe

**Innovations within ETH Zurich**

- Introduction of an airline travel decision tool
- Annual communication of (anonymised) emission values per professorship within the department
- Review ETH Zurich regulations for ecological impact and adjust as necessary
- Real-time monitoring of CO<sub>2</sub> emissions for each professorship
- Make the CO<sub>2</sub> footprint visible as “costs” in evaluations
- Establish guidelines for flights: 1-2 intercontinental flights per doctoral student; conferences in Europe where possible; flights for major presentations not poster presentations
- Doctorate exams: European co-referees or video preferred
- Consider flight emissions when developing the curriculum; encourage local excursions

**Innovations in the international science community**

- Encourage ranking agencies to apply university CO<sub>2</sub> emissions as one of the ranking factors
- Join forces with other leading universities worldwide to develop and implement a concept for cutting down on flights