



Info event

«CO₂ reduction and air travel at ETH Zurich»

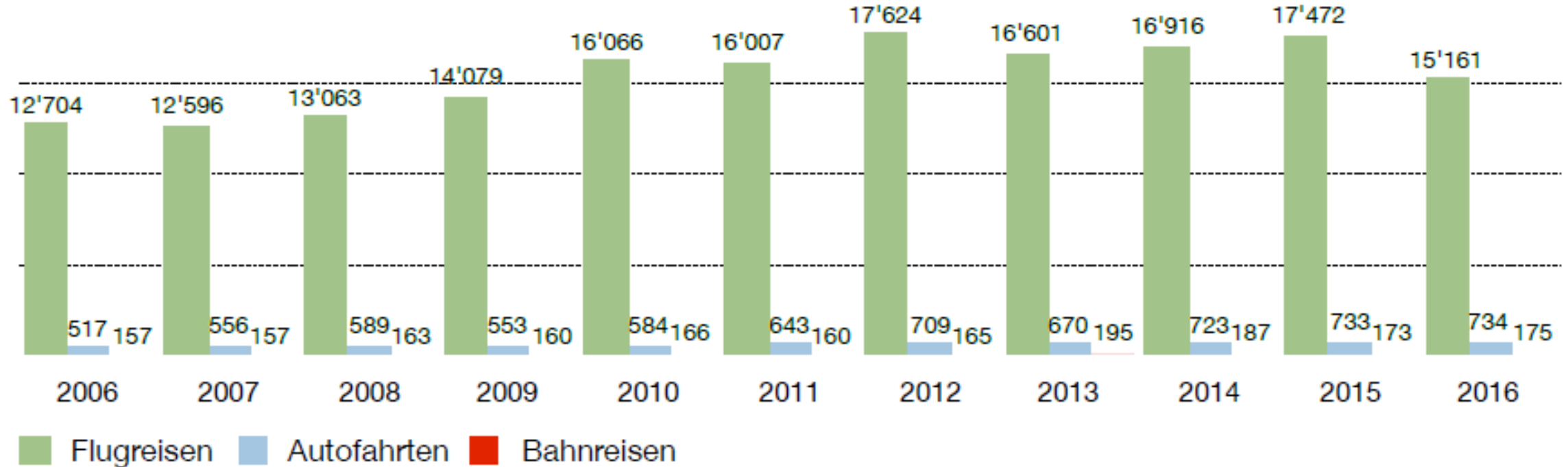
25 October 2017

U. Weidmann

Why is ETH Zurich targeting flight emissions?

- About 60% of ETH's total CO₂ emissions are from business travel (of which 96% are from flights, mainly intercontinental flights)
- ETH is measuring its CO₂ emissions of staff business travel since 2006
- Total flight emissions between 2006 - 2015 increased by 37% due to the growth of ETH
- Flight emissions per FTE are constant
- Pilot project to evaluate flight emissions of student travel: doubling of CO₂ emissions from 2006 to 2015
- Until 2015, different measures have not resulted in any reduction
- 2016: reduction of flight emissions (unknown cause)

Yearly CO₂ emissions from staff business travel



CO₂ emissions in t CO₂ eq as a result of business travel by employees (2006-2016)
Dienstreisenreport ETH Zürich, 2016

Benchmarking

- **Greenhouse gas emission targets for Switzerland:**
 - Minus 20% until 2020
 - Minus 50% until 2030
- **Flight reduction targets of other universities and institutions:**
 - Cambridge wants to reduce by 2020 its per capita flight emissions by 25%
 - Tyndall Center: voluntary reduction targets (<http://www.tyndall.ac.uk/travel-strategy>)
 - Initiative «Flying less, reducing academics footprint» (<https://academicflyingblog.wordpress.com>)
 - ETH should be a worldwide leader in tackling this complex problem

Media attention

TagesAnzeiger

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Jährlich 5000-mal um die Welt fliegen ist der ETH zu viel

Die ETH Zürich steckt in einem Dilemma. Für die Mitarbeiter sind Konferenzen im Ausland wichtig, Fliegen schadet aber dem Klima.



Interview VPPR ETH Life and Polykum, Okt 2017

Sternstunde Philosophie: „Dürfen wir noch fliegen“? 22. Oktober 2017

Heute Paris, morgen Boston: Wie viel Fliegen für die Forschung darf es sein?

Die Hochschulen tun sich schwer mit einer Reduktion ihrer CO₂-Emissionen

NZZ 19 Okt 2009

Anfrage NZZ vom 12. Juli

Umwelt: Prosit Klima! | Die Weltwoche, Ausgabe 3/2014 | Mittwoch, 7. Juni 20

DIE WELTWOCHEN

Umwelt
Prosit Klima!
 Thomas Stocker und Bertrand Piccard sorgen für mehr CO₂ in der Luft

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Du sollst nicht fliegen

Es ist fast egal, wie man lebt: Ob man Abfall trennt, Bäume streichelt, bio isst. Was zählt, ist vor allem der Verzicht auf ein Transportmittel: Das Flugzeug.

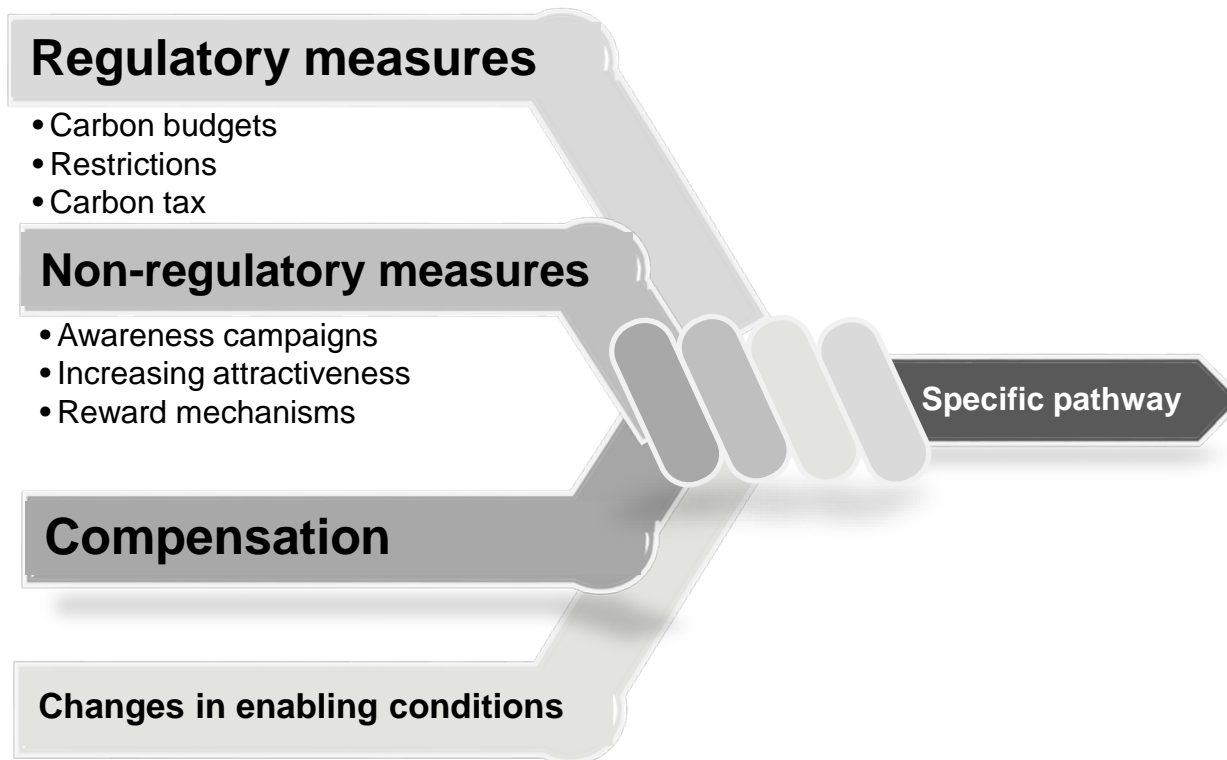
ETH Governing Board Decision (April 2017)

- Each department should
 - decide on 3 reduction scenarios (low, medium, high) with respective measures
 - exchange reduction scenarios with other departments (January 2018)
 - choose a departmental reduction target with respective measures (March 2018)
- Test phase (from summer 2018)
- Implementation and monitoring 2019-2025
- Evaluation after 3 and 6 years, i.e., in 2022 und 2025

Important points

- Bottom-up initiative: the departments differ, they know best where they have reduction potential
- Quality of research and teaching should not suffer, career chances of (young) scientists should not be impeded
- Technical measures have been very successful in reducing direct CO₂ emissions from infrastructure, but technology will not cause a reduction in flight emissions in the near future
- It needs a cultural change to reduce CO₂ emissions from flights

Potential measures



Principle

Unit of decision making is the professorship

Measures need to correspond to reasons for travel

Consequences

→ *Discussion needs to take place within each group*

→ *Each department/group needs to gather information about reasons for travel*

from C. Robledo, adapted by M. Mazzotti und N. Gruber

Ideas that are discussed within the departments

- Departmental working groups suggested diverse reduction scenarios and potential measures
- Exchange of ideas between departments are very welcome!
- Potential measures:
 - **Internal Carbon Pricing:** funding can be used for research, infrastructure such as VC technology, start up support for climate relevant projects, compensation, first class train tickets, etc.
 - **Carbon Budget:** like a financial or time budget
 - **Recommendations:** 1 intercontinental conference per PhD, recommend train travel within certain distance, more video conferences (e.g. for job interviews, PhD defences, project meetings, etc.), combine different activities (conference, meetings)
 - Organisation of conferences in **Europe**

