

12 RESPONSIBLE
CONSUMPTION
AND PRODUCTION



13 CLIMATE
ACTION



UiB



TRANSFLIGHT

SHAPING THE FUTURE OF AIR TRAVEL

Status Quo Presentation

Klimatag 2023, ACRP Session 2

13.04.2023, 09:30 – 12:25 Uhr

Project consortium

Members of the scientific advisory board (SAB):

- [Prof. Alice Larkin](#) (University of Manchester)
- [Dr. Susann Görlinger](#) (IFEU, project lead of Flyingless)
- [Prof. Günter Getzinger](#) (Technical University Graz)

Institute of Environmental Systems Sciences,
University of Graz, Austria

Centre for Climate and Energy Transformation
(CET), University of Bergen, Norway

Members of the stakeholder board:

- ABTA (Roman Neumeister, Wilfried Kropp, Sabine Toplak)
- ÖBB (Philipp Hlavac)
- WKO – Fachverbände (Viktoria Geyer, Christian Vanik, Johannes Adensamer, Manfred Katzenschlager, Daniel Frings, Klaudia Cymbor)

Core project team: Alfred Posch, Romana Rauter, Marie Kogler, Annina Thaller, Anna Schreuer, Eva Fleiß, Jakob Grandin, Jesse Schrage, Lydia Lienhart, Holger Hoff

PhD projects: Lydia Lienhart (in progress)

Master projects: Kathrin Winkler (completed), David Baldauf (completed), Adarsh Mishra (completed), Petra Kusternik (in progress)

Student assistants: Alina Delitz, Lisa Gruber, Eva Nenninger, Maximilian Rau

Research questions

- What experiences/challenges/chances has the COVID-19 **pandemic** brought about in relation to the reorganisation of long-distance travel practices?
- How have travel preferences and **behavioural intentions** in the domains of leisure, business and academic travel changed?
- Which role can **digitalisation** and virtual mobility play as an alternative to physical travel, and which potential other courses for actions exist?
- How will **emission pathways** evolve based on a range of scenarios including different levels of behaviour change?
- Which **strategies and policy implications** for working towards low emission travel practices do result from these findings and what are preconditions for successful implementation?



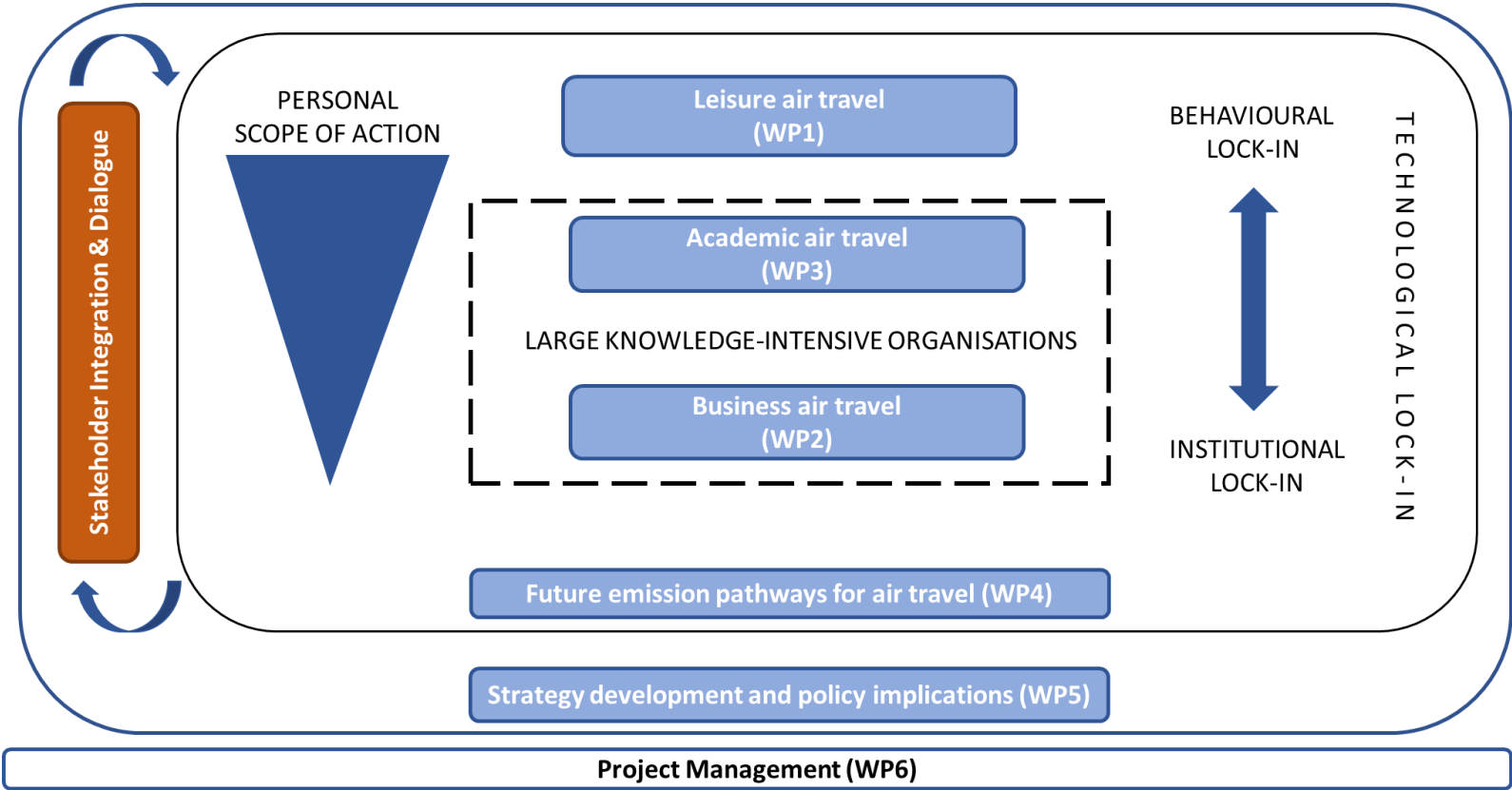
UiB



Project overview



UiB



First results



UiB



- *Leisure (WP1)*
 - Lock-in factors differ for avoid-, shift- and improve-behaviour; **perceived behaviour control** plays a key role for escaping lock-in for all three behaviour types.
- *Business (WP2)*
 - Pandemic has acted as important **accelerator of digitization**, leading to effective online collaboration and efficiency gains in terms of cost, time and productivity; **external pressure** from customers and partner companies are also forcing companies to act sustainably and reduce emissions.
- *Academic (WP3)*
 - **Considerable support** among university staff in principle for implementing policies to reduce academic flying, but also **serious concerns concerning certain policies**, such as carbon travel budgets or a university internal carbon tax.
- *Modelling (WP4)*
 - 2012 – 2019 emissions have **positive trend for leisure air travel**, and declining trend for business travel; drops caused by COVID-19 are particularly strong for leisure travel, with a **drop of about 75% from the summer peak in 2020** and about 25% in 2021, which indicates a **fast recovery rate to business as usual** in leisure travel activities.
- *Strategy and policy (WP5)*
 - **Difficulties perceived** for organisations to successfully reduce emissions from air travel.

Project progress, challenges and adaptations



UiB



- Leisure (WP1): 75% progress
- Business (WP2): 75% progress; challenge: low response rate empirical survey
- Academic (WP3): 70% progress; challenge: commitment and participation in empirical surveys
- Modelling (WP4): 75% progress; challenge: data sets for modelling
- Strategy and policy (WP5): 65% progress; challenge: commitment and participation in online workshops
- Project management (WP6): 55% progress
- **Adaptations:** systematic literature review WP overarching and still ongoing; secondary data use for WP4

Presentations



UiB



■ Presentation at ABTA events

- November 2022 and June 2023
- Alfred Posch, Romana Rauter, Annina Thaller

■ Sustainable Conference Design of the Future

- 26-27 January 2023
- Schreuer, A. (2023). *Why virtual conferencing matters and what needs to be improved: Some insights from a recent survey*

■ STS Conference

- May 2023, Graz
- Conference session abstract accepted: *A mobility transition in air travel? Behavioural and institutional change in the face of the climate crisis and the pandemic*
- Abstract accepted for oral presentation: Schreuer et al.(2023). *Stay grounded, go virtual? Potentials and challenges of virtual solutions as a replacement for professional air travel in academia and business*

■ SCP Conference

- July 2023, Wageningen (Netherlands)
- Abstracts accepted for oral presentation
- Thaller et al. (2023). *From behavioral to institutional lock-in – Identifying and operationalizing different forms of carbon lock-in in three air travel domains*
- Lienhart et al. (2023). *Individual, social and contextual factors contributing to behavioural lock-in in leisure air travel*

Planned publications (*excerpt*)




UiB



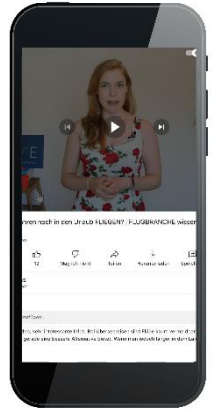
- Summer 2023
 - Lienhart et al. (2023). *Individual, social and contextual factors contributing to behavioural lock-in in leisure air travel*, data analysis completed
 - Rauter et al. (2023). *Business air travel strategies and their implications on behavioral (organisational) change*, data collection completed
- Fall 2023
 - Thaller et al. (2023). *From behavioral to institutional lock-in – Identifying and operationalizing different forms of carbon lock-in in three air travel domains*, data collection ongoing
- Winter 2023
 - Gruber et al. (2023). *Identifying and engaging key supply-side stakeholders to avoid, shift and improve air travel for a low-carbon mobility transition*, data collection ongoing
 - Kogler et al. (2023). *Future emission pathways for leisure and business travel and the window of opportunity after COVID-19*, data analysis ongoing
 - Scheuer et al. (2023). *Implementing policies to reduce emissions from academic flying at universities: Looking beyond recommendations and awareness rising*, data collection and analysis ongoing in parallel
 - Grandin et al. (2023). *Mapping policy preferences to reduce air travel emissions: moving beyond lock-ins*, data collection ongoing

Dissemination

- [Project website](#)
- [Twitter account](#) 
- Social media
 - PhD student Lydia Lienhart with the Science Communication Professor Helmut Jungwirth [on Instagram](#)
- Participation in events and scientific conferences
- Exchange with ACRP project Transfair
- Building on previous projects: QUALITY



UiB



SCAN ME

Outlook for second project year



UiB



- **WP1:** Focus groups and second survey
- **WP2:** Completion of survey
- **WP3:** Policy delphi
- **WP4:** Completion of modelling
- **WP5:** Synthesis WP1-4; aggregation of workshop results
- **Overall:** Completion of systematic literature review on carbon lock-ins
- **WP6:** Ongoing SAB and stakeholder meetings, planned presentations and submission of papers, dissemination workshop