

## **CLE guidelines for low emission science**

### **Preamble (1/2)**

Scientific work and research in Landscape Ecology and related fields requires travelling. First because one needs to access research sites, second because science requires communication with people, to develop new ideas, to organize the work and the critically discuss and review findings. With the UFZ ambition to be world leading in environmental research, it follows that our research needs have an international outreach, with respect to investigation sites but also with respect to world-leading colleagues we collaborate with, which most likely will not all be located in Germany.

Reducing emissions of travelling is though a crucial issue, that can - but should not - substantially affect our productivity and shall not hamper the envisioned international excellence.

### **Preamble (2/2)**

Having establish a dense and robust network of international collaboration and global distributed research activities till end 2019 by CLE, the global COVID-19 pandemic has forced us to learn how to continue these international activities remotely, using a variety of tools. This still lacks a further analysis of how productive and efficient this period has been. However, the pandemic has taught us with an unexpected suite of experiences that will help to transition to a low-emission mode of operation for CLE.

### **Mission**

CLE is committed to substantially reduce CO<sub>2</sub> emissions that arise from travelling. Our strategy to achieve this, builds on three pillars. (1) Reducing travel, (2) Reducing carbon emissions from travelling (3) Learning from others experiences.

### **(1) Reducing travel**

We critically select one (max. two) key international conference(s) per year for necessary scientific exchange and for presenting results.

- As international conferences of societies are usually organized on different continents in turn, we focus on international conferences in Europe, whenever the personal planning and goals (e.g. need to present during a PhD, networking, looking for a new position) allows.
- Online availability/Stream-Casting of international scientific conference will increase in the next years. To learn about the recent state of the art, we on the other hand, have the ability to join more than just one or two international conferences. We are able to pick the best from different conference using virtual participation.
- A decision to travel to a conference should depend on answers to the following questions: Who will I be able to meet? Which contact can I establish for my future career, my network? Who else from the department is travelling?
- Visitation of international conference will be coordinated in the working groups and in the department. More than two people from the Department travelling to the same conference will not be granted by head of department, without making this high-importance clear for all participants.

We combine business trips, e.g. to plan project meetings before or after relevant conferences, combine field trips with stakeholder visits, or combine research stays with a conference visit.

For meetings of international projects, especially in the initial phase (kick-off), we meet once a year (maximum) in person to enable personal exchange, socializing and maintain contact and trust between team members. We select easily accessible locations that allow for emission-minimal travel (Berlin, Brussels) and use ground-based transport (see below). Additional meetings should be organized online.

### **(2) Reducing carbon emissions from travelling**

Ground transportation is the preferred means of transport for business trips in Europe. Even long-distance trips should be organized with minimum emissions.

Night train usage is encouraged, and potentially higher costs are weighed against saved costs for hotel overnight stays. If overnight stays in hotels are needed to enable travelling by train (e.g. during the way or the night before an early train), these are reimbursed – in accordance to “Bundesreisekostengesetz” and UFZ travel regulation (add link).

All travel to destinations that can be reached in less than 6 hours by train, will to be done by train, and flights are not reimbursed in these cases.

We encourage to use a privately owned Bahncard and regularly informs its employees on the possibilities to reimburse these when their annual costs are saved.

If an international flight is needed to reach the destination, we choose direct flights. We check the CO<sub>2</sub> efficiency of the airline. Higher CO<sub>2</sub> efficiency classes are preferred. The [atmosfair Airline Index](#) contains information on the airlines.

We organize meetings at locations that are easily reachable for all participants of the meeting (by train or direct flight), e.g. at the Helmholtz Association's Head Office in Berlin, Bonn, Brussels.

### **(3) Learning from others' experiences**

We are in a transition process, where learning is key. We organize a regular (annual) exchange on the process and collect helpful guidelines and personal experience on the implementation of this strategy:

- How to organize online workshops in a productive, efficient and enjoyable way.
- We exchange and continuously improve technical competences on video-conferencing software and hardware and provide feedback to WKDV.
- We discuss further options and alternatives on decision-making with respect to international travel, such as
  - Introducing a fixed annual carbon budget per person. Everybody can freely decide how (in terms of travelling) to use it, one might have a carbon intensive long-distance trip or several less carbon intensive trips. (If you do need more, buy extra budget from other colleagues).
  - Simple limitation of budgets for travels.

We develop a “how-to guide” on online events with a collection of what works and what does not work.

This document itself will be updated on an annual base.