

Environmental Information for Aviation Passengers

Task for a Bachelor Thesis

Background

The airline Flybe was probably the first to present a label to show the environmental impact of an aircraft. However, this first label had major deficiencies. Tim Hass supervised by Prof. Scholz created in 2015 another proposal for an ecolabel for aircraft. Several other students further improved the label and the calculation method. Work went on to life cycle assessment (LCA) of aircraft. Several airlines offer offsetting schemes for flight emissions. These schemes also estimate equivalent CO₂ as a basis to calculate the offsetting price.

Task

Task of this thesis is to provide passengers with information on the environmental impact of their flight compared with other means of transportation. The detailed tasks are:

- Analyze how different means of transport pollute. Understand which phases of the life of a vehicle have to be taken into consideration when studying their environmental impacts.
- Study how the environmental awareness in the aviation passenger sector has evolved over the years. Look at the scientific community, on governmental institutions, airline passengers, and the general public.
- Examine currently existing norms related to aviation pollution. Check, which parameters are limited.
- Analyze aviation emissions offsetting schemes. Look at different agents, countries, and companies.
- Review ecolabels schemes from other industrial sectors.
- Create a method that allows not only to compare aircraft and flights with each other but also to compare travel options including other means of transportation.
- Make a survey to check how environmental initiatives of airlines are perceived. Accomplish this also by reviewing articles on the topic.

The report has to be written in English based on German or international standards on report writing.