



Towards Climate-optimized Aviation Introduction

J. Szodruch



Towards Climate-optimized Aviation - The Challenge

- **There is no doubt that air transport is necessary and will grow**
- **Global warming is a reality (IPCC, 2007)**
- **Climate protection requires considerable reductions in greenhouse gas emissions from all sources within a few decades.**
- **Climate impact of aviation becomes increasingly important for further aviation development (e.g. EU-Mission Trading System)**
- **Uncertainties remain, however: There is enough information to enhance activities to reduce aviation's climate impact now**
- **Aviation and Climate are part of the DLR aviation research strategy**
- **Sustainability of growing air traffic requires:**
 - **Understand and quantify climate impact**
 - **Identify, assess and optimize climate impact of various aviation variants**
 - **Consider the aviation system as a whole (aircraft, routes, operation)**



Lectures and Speakers

➤ **Global Climate Change and Aviation - The Challenge**

David Lee, Centre for Air Transport and the Environment at
Manchester Metropolitan University

Ulrike Lohmann, Institute for Atmospheric and Climate Science at
ETH Zurich

Ulrich Schumann, DLR-Institute of Atmospheric Physics
Oberpfaffenhofen

➤ **Growing Air traffic and Climate - The Response**

Norbert Arndt, Rolls Royce Germany, Berlin-Dahlewitz

Regina Egelhofer, TU Munich

Cord Rossow, DLR-Institute of Aerodynamics and Flow Technology,
Braunschweig