

Aviation and its impact on the environment



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Foreword

Over the past few years, few issues have been debated with such controversy as that concerning aviation and the environment. The controversy relates to all aspects of the industry, with arguments ranging from climate and ozone destroyer to no impacts at all, growth sector to demise of the airlines, or whispering jet to infernal noise. However, which of these catchwords actually stand up to critical examination?

Regardless of all the controversy, it must be emphasised that neither fuel tax nor VAT is levied in the aviation sector. Furthermore, airports receive substantial public funding support for their infrastructure. It is, therefore, not surprising that the aviation sector is experiencing enormous growth by virtue of the unrivalled low prices this facilitates. The negative effects, from local noise problems experienced by those living close to airports to global environmental repercussions, are, however, increasing constantly.

In contrast to other industrial sectors, the aviation industry seems unable to come to terms with the concept of sustainable development. The statements made by those responsible in the aviation industry are often reminiscent of those customary in other sectors of industry around 20 years ago. Maximisation of growth, combined with the highly emotional argument about jobs, is used to counter the call to act responsibly with regard to environmental and climatic consequences; and to justify the numerous privileges as well as the direct and indirect subsidies still enjoyed by the aviation sector. An obvious example is that if the targets the developed countries set themselves for reducing greenhouse gas emissions are to be taken seriously, the aviation sector also has to make an appropriate contribution.

Following an OECD definition of sustainability in the transport sector, the question arises repeatedly as to whether the benefits of an additional transport mode are in justifiable proportion to the additional consumption of resources, and harm to the environment entailed. It is partly with these questions in mind that this report has been written.

This publication conveys the reasons for and extent to which aviation represents a danger to the environment and climate - something that frequently slips the minds of many concerned about environmental matters - based on the knowledge currently available. It also attempts to establish what the most important influencing factors are and what options may be available for the future to deal with the environmental impacts of aviation.

This publication started as an attempt to update the VCS-VCD-VCÖ report, "*Flugverkehr - Wachstum auf Kosten der Umwelt.*" However, in light of the significant scientific and regulatory developments in the aviation and environment question since the original publication of the report in December 1997, the report at hand has integrated several new chapters, while also leaving out some of the original chapters, and gives a somewhat different perspective than the original report. One of the most important developments in the area studied was the publication in mid-1999 of the Special Report "Aviation and the Global Atmosphere" by the Intergovernmental Panel on Climate Change.

The aim of this new report is to provide comprehensive and easy-to-read state-of-the-art information on the environmental impacts of aviation for the turn of the century. This report is aimed at policy-makers but also at the multitude of stake-holders, from aviation professionals, through academics and scientists to other environmental organisations who will use this information in their daily work, thus enabling informed decisions for sustainable aviation.

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