



## Aviation in times of Climate Change

### Agrofuels – boon or bane for future mobility?

On a summer vacation, for a business meeting, or on a short trip – air traffic is increasing in our global society. Therefore, it is crucial to strengthen alternative and fair mobility concepts and to demand policies for emission reductions and energy efficiency. With regard to alternative types of fuel, it is essential to address the origin of feedstock and the conditions under which the fuel used was actually produced. High and transparent sustainability standards must be applied, which are based on human rights, social and ecological criteria. Furthermore, existing economic, mobility, and life style concepts must be reviewed and changed in a future-oriented manner. This requires the will for joint and coordinated efforts and strategies of all stakeholders – in the industry, by politicians and consumers.

#### Aviation & Climate Change

With unprecedented certainty, the Fifth Assessment Report by the Intergovernmental Panel on climate change (IPCC 2013, Working Group I report) shows that human beings are the crucial factor causing climate change. The aviation sector with its emissions also contributes to man-made

climate change. At high altitudes, there are emissions of other substances apart from CO<sub>2</sub> which also affect the climate, such as nitrogen oxides, sooty particles, and water vapour. They lead to a contribution of global aviation to man-made climate change of about five percent (IPCC 2007); critical sources even speak of 14 percent (Lee et al. 2009).

The big challenge lies in the enormous growth forecasts for the aviation sector. Aviation is said to be the fastest growing source of emissions that have adverse effects on the climate. In its “Luftverkehrsbericht” (the German annual report on the air transport market) published in 2013, the Institute of Air Transport and Airport Research shows the development of air traffic from 2009 to 2012. According to this report, passenger traffic in Europe has increased by ten percent to 746 million and globally by 21 percent to 3.1 billion passengers. Intercontinental air freight and air mail traffic grows at similar rates, increasing by 20 percent to 1.5 million tons of cargo between 2008 and 2012 (DLR 2014).