

## Carbon dioxide emissions

# The environmental debate

The airfreight industry is alarmed. It is suddenly being subjected to the same pressure as the road transport sector, which many citizens consider to be an abhorrent polluter of the environment. Airlines and aircraft manufacturers are turning primarily to new technologies and enhanced efficiency to demonstrate that they are engaged in protecting the environment. However, they should know from the experience of the road haulage sector that their adversaries cannot be won over by relatively emotionless argumentation, even if it is accompanied by strong facts.

Flying is cheaper than ever, and business in both the passenger and the freight segments is growing faster than in any other form of transport. The down side is the harm to the environment caused by each flight, although experts estimate that air traffic is responsible for only about 3% of the planet's greenhouse gas emissions.

Airlines such as Air France-KLM, British Airways and Lufthansa have been trying for years to increase the energy efficiency of their fleets and reduce carbon dioxide emissions and noise levels (by 50% over the last five years), by continually renewing their fleets and selecting the most suitable types of aircraft. They employ in-house teams to monitor and reduce the weight on board, which diminishes the amount of fuel required, and devise fuel-saving methods of landing and taking off.

## Many measures to attain the goal

In addition, airlines keep working to get government authorities to do a better job of managing flight paths and airport air traffic worldwide. Holding patterns cost enormous amounts of money and pollute the air. Trade in carbon dioxide certificates has been expressly welcomed by leading European airlines as part of a general strategy to reduce carbon dioxide emissions. Nevertheless, they also insist that emissions dealing must not be allowed to become a one-sided burden for European companies alone. They do not want an isolated solution only applicable to the EU.

Lufthansa Cargo director Carsten Spohr, during the recent Air Cargo Europe conference in Munich (Germany), spoke out again in favour of creating a central European air traffic control system. Such a centre would be able to di-



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Brouhaha around the pollutants emitted by aircraft. Airlines have to rethink their approach.

rect all flights and ensure that they always take the path which consumes the least amount of fuel, he said. He was critical of the fact that this major European climate protection project has been on the EU member states' agenda for years, but is not progressing. A single European sky would cut 8–12% off the region's carbon dioxide emissions.

Air France-KLM has been advocating research and implementation of so-called green routes over the Atlantic, postulating particularly environment-friendly connections between Amsterdam (Netherlands) or Paris (France) and the USA.

## New ideas are imperative

Stefan Krauter, the managing shareholder of the Cargo Partner Group, argues for the deployment of a new generation of

high speed turbo props (HSTPs). He said that they are more economical than jets, particularly on short-haul flights, as they are more efficient than other steel propulsion units at slower speeds, and they consume 20% less fuel. One application of turbo prop technology has been in the A400M military transport aircraft, which reaches velocities of Mach 0.68 to 0.72. Airbus Industries has said that the units require 20% less fuel than the best turbofan motor and they also boast a higher payload and longer operating range. Construction of the first prototype is to start at the end of 2007, with serial production beginning in 2008.

However, kerosene consumption could be reduced by up to 15% more than

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