

Carbon emissions from aviation growing rapidly

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Aviation will account for 5% of the world's carbon emissions by 2050, according to the latest climate change study by UK scientists.

In 2000, air traffic contributed 2% of global carbon emissions, but that figure will grow to 5% by 2050, according to climate modellers at Manchester Metropolitan University.

Scientists at MMU's Centre for Air Transport and the Environment calculated CO₂ emissions based on traffic predictions from sources including the International Civil Aviation Organisation.

Their study produced two broad baseline scenarios representing an increase in total emissions between of four and six-fold on 2000 levels.

The forecasts account for improvements in technology and air traffic management as total air traffic is predicted to increase by six-eight times 200 levels by 2050.

But they say technological solutions to increased pollution lag well behind growth of the industry.

Preliminary results will be presented to the Transport, Atmosphere and Climate conference jointly staged by CATE and the German Aerospace Center (DLR) at Oxford University on June 26-29, in the presence of Minister for Transport Douglas Alexander.

CATE's David Lee, Professor of Atmospheric Science at MMU, said:
"This research confirms the message from the Aviation White Paper that the aviation sector is forecast to make up a considerable proportion of global emissions in the future.

"The results highlight that the rate of growth of aviation is far outstripping the rate of technological progress and improvements in efficiency, he said.

The results are part of a huge EC audit of emissions called QUANTIFY which is looking at the relative effects of different modes of transport – road, rail, air and sea –on the climate.

The study also indicates that shipping could have a stronger effect than aviation from its CO₂.

Professor Lee said much more research was needed into the non CO₂ effects of aviation emissions –ozone, contrails, cirrus clouds – which have been described as "potentially more worrying".

Source: Manchester Metropolitan University

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