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### Nature Reports Climate Change

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The Macmillan Building, 4 Crinan St

London N1 9XW, UK

Tel: +44 (0) 20 7833 4000

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# nature REPORTS climate change

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## TIME TO BUCKLE UP ON AVIATION EMISSIONS

As plans to open up the market in transatlantic aviation between the EU and the US reach cruising altitude, the chances of the EU reaching its own targets for reducing greenhouse gas emissions are vanishing into thin air.

Due to launch on March 31, the 'Open Skies' deal will lift restrictions on the number of commercial airlines that can operate between the US and EU, and is expected to contribute to the European Commission's projections of a 50% increase in transatlantic air travel and significant savings on fares by 2013.

But the anticipated price dip is hiding the real costs of cheaper air travel — as the fastest-growing source of greenhouse gas emissions worldwide, the aviation industry will account for up to five percent of global warming by 2050, according to experts, yet it is glaringly exempt from the Kyoto Protocol.

And while the EU is boasting cheaper airfares under the 'Open Skies' deal among its top ten achievements for 2007, it is simultaneously staking a claim to leadership in fighting climate change. The magic bullet that will facilitate the coexistence of these seemingly incongruous policies is the EU Emissions Trading Scheme (ETS), the world's largest system for trading in emissions of carbon dioxide, which will bring aviation under its wing in 2012.

As the first effort to reign in the burgeoning emissions from this energy-hungry industry, the proposal by the EU to include aviation in the ETS is exemplary, with California and a host of other states now petitioning the Environmental Protection Agency for a similar scheme in the US.

But the EU's record on emissions is far from flawless, and this new deal doesn't go nearly far enough in helping to achieve the EU's target of reducing emissions 20 to 30 percent below 1990 levels by 2020.

Industries currently in the ETS, such as refineries and steel plants, are working to bring their emissions to eight percent below 1990 levels by 2012, yet the deal that was struck last December in Brussels allows airlines to emit 90 percent above 1990 levels when they enter the scheme, based on stabilizing at average levels for 2004–2006.

Another shortfall of the deal is its inherent inability to account for significant sources of warming other than greenhouse gases, such as condensation trails from aircraft, which increase the formation of cirrus clouds.

If the EU is going to claim leadership in tackling climate change, it needs to buckle up on reducing emissions from aviation. This would ultimately require setting a price for emissions credits that reflects the aviation industry's real contribution to global warming — whether through a tax on kerosene or a multiplier on emissions to account for other warming sources. The snag would be a hike in ticket prices, putting the EU in the awkward position of having to reassess its claim to making air travel increasingly affordable while leading on emissions reductions. The alternative is to watch Europe's emissions soar along with its new transatlantic air fleet.

OLIVE HEFFERNAN, EDITOR

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