The impact of aviation emissions may be two to four times greater than that from CO₂ alone. Air travel emissions are also growing fast, with, for example, the Aviation White Paper predicting that UK air travel will double or treble by 2030. Meanwhile, in social equity terms, air travel is primarily the preserve of rich, developed countries. Direct measures to reduce air travel would therefore impinge (fairly) on countries which are currently responsible for the greatest share of CO₂ emissions, and could address one of the most significant sectors of emissions production.

Hence, for those who believe that the threat of climate change is real, addressing air travel surely has to be a priority. However, the reality is that aircraft emissions are not included in the Kyoto commitments. In stark contrast to petrol, aviation fuel is subject to neither duty nor VAT in most countries (although the USA has some taxes on fuel for domestic aviation). And, in the UK, instead of increasing airport taxes (passenger service charges) or air passenger duty to try to reduce demand, we’re planning to build new runways and improve the efficiency of airport operations to accommodate (and, according to some analysts, stimulate) increasing growth.

In theory, at least, the need for increased charges is also recognised by the UK Government, the European Union (EU), and the International Civil Aviation Organisation. However, it is unclear whether this ‘recognition’ will ever translate into meaningful action.
According to research by Dargay and Hanly, there is little hope that emissions will decline. Preference (and non-acceptable) excuse: they may be right, but that does not stop it being true. The reality is that the structure of airline pricing does affect demand. When ‘London to Rome’ (currently advertised on Ryanair at £5.99) is cheaper than ‘London to Brighton’ (a standard day single on Southern trains is currently £15.90), it becomes a rational economic decision (not even necessarily a preference) to travel further and further, and there is little hope that emissions will decline. According to research by Dargay and Hanly, real reductions in the price of air tickets were probably responsible for about 40 per cent of the growth in leisure air travel by UK residents between 1989 and 1998.

It is not obvious why curbing air travel is so far off the UK political agenda. Budget airlines hardly represent the mainstay of the British economy. According to the Civil Aviation Authority, in 2002, UK airlines worldwide employed 87,433 people, representing about 0.3 per cent of those in employment in Britain. The Department for Transport (DFT) website claims that the UK aviation industry employs considerably more than this (200,000 direct jobs, 600,000 indirect), representing 2.9 per cent of jobs in total. This is, of course, much more significant, but by no means the overwhelming proportion of all employment.

Tourism does bring in significant cash, but, on the other hand, British tourists spend large amounts of money abroad. Consequently, if air travel was made more expensive, presumably some of the lost tourist income would be offset by greater domestic spending. Given that, according to the Aviation White Paper, there are 25 million foreign visitors to the UK each year, while UK residents make about 60 million visits overseas, and given that Dargay and Hanly’s work shows that air trips abroad by UK residents are increasing faster than air trips to the UK by foreign residents, there could actually be significant economic gains.

In terms of social acceptability, of course no-one is going to like it if prices increase. However, until recently, air travel was much more expensive and going abroad for your holiday was seen as a luxury anyone. Consequently, making air travel more expensive will probably be much less controversial than, say, hikes in petrol prices, since, rightly or wrongly, petrol is seen as a more essential commodity.

In terms of world development, the role of tourism in helping developing countries to become richer is important, and significant reductions in such activity would undoubtedly hit hard. However, where the price of incoming ‘hard currency’ is increasing heat-waves, sea level rises, floods, droughts, forest fires, species extinction, and the spread of infectious disease, many developing countries may feel that it is not a good long-term bargain.

According to a recent World Health Organisation report, over 150,000 people in developing countries are now dying each year from the effects of global warming, including the spread of malaria, malnutrition, extremes of heat and cold, and flooding. (Problems are, of course, occurring in the developed world too, with, for example, 15,000 deaths in France attributed to last summer’s heat-wave – a potential outcome of climate change.)

After tourism, business meetings represent another major category of air travel. However, technological advances have increased the alternatives to actually travelling. Forthcoming research for the Department for Transport examines the potential for teleconferencing, and highlights that companies which have chosen to adopt it as mainstream practice have already reduced business travel by between 10 per cent and 30 per cent. According to Roy and Filatotchi, assessments of the feasibility of teleconferencing in the mid-1990s led to the cancellation of plans for a second Boston airport (although it is unclear whether, subsequently, sufficient measures were put in place to actually stimulate and support teleconferencing development).

With all kinds of tele-options, it is probably unfeasible and undesirable to think of replacing all face-to-face meetings, but it must be possible to replace a considerable number. Moreover, many business travellers might welcome the change, given recurrent complaints about the ennui of spending time away from home in a succession of faceless, forgettable airport terminals and hotels.

The transportation of goods, the third main sector of air travel, generates different challenges. However, it is very unclear that many products need to travel by air (rather than less energy-intensive modes on land or sea), or that, in some cases, they could not be substituted with more local goods. As highlighted in the February edition of Town & Country Planning recent research on food has emphasised that ‘seasonal and indigenous’ food should be prioritised, and that, for example, Government health campaigning promoting ‘Vitamin C rich air-freighted blueberries’ in place of locally grown produce ‘does not represent joined-up thinking’.

In some cases, the speed of air transportation is used to try to grab market share – as demonstrated by Amazon.com’s decision to charter 100 planes to transport Harry Potter and the Goblet of Fire so that it could promise delivery seven days after the book was released. Apart, perhaps, for some shareholders of Amazon.com, would anyone’s quality of life really have suffered if this had not been an option? And if, as a result of costlier air freight, Britain does suffer some loss of world trade, this might at least be partially compensated by increasing internal demand for British goods.

However, as yet, it is unclear that there are any future prospects of national or international action to increase air transport costs. At Kyoto, aircraft emissions were excluded from national inventories because there was disagreement on how they should be allocated. At EU level, one of the most hyped measures in the European Climate Change Programme is an ‘emissions trading scheme’, due to start in 2005, where over 12,000 energy-producing and energy-intensive organisations will be allocated an ‘emissions allowance’ by member states, and will be able to trade with each other, buying or selling ‘emissions credits’. However, air transport is not included in the scheme.

Meanwhile, the UK Government’s view is that the best way to tackle air transport emissions is to argue for the inclusion of the aviation industry in the second round of the emissions trading scheme from 2008.

In theory, this might represent a good solution to the problem. However, there are various problems, as highlighted by the Environmental Audit Committee. First, it is unclear whether it will happen. The DFT has reported that it is ‘ploughing a pretty lonely furrow’ in advocating this solution, and there is significant opposition from some important players. Moreover, even if the principle were accepted, agreeing emissions allocations is likely to be highly controversial, given the problems at Kyoto. The Environmental Audit Committee further highlights that, even if implemented, the price of carbon could then ‘go through the roof’, meaning that there would be no incentive to embrace teleconferencing.
would need to be substantial political will to maintain targets and enforce penalties for non-compliance with allowance limits.

In contrast, introducing an aviation emissions charge, auctioning airport slots, or increasing the taxes on air tickets, airports, and/or aviation fuel seem like much simpler solutions, and, given the imminence and importance of the global climate change threat, we are missing a trick if we fail to try the simple things now.

The UK should make a clear change in its own policies, and seek European action as a minimum. So what if America initially refuses to co-operate? Increased pricing across Europe would be sufficient to start making a difference. According to Dargay and Hanly’s work, over two-thirds of plane trips to and from the UK start or end in Europe anyway. (Moreover, given that the USA already has some taxes on domestic aviation fuel, in some ways it would simply bring us in line.)

The UK Government’s Chief Scientist, Professor David King, has stated that ‘climate change is the most severe problem that we are facing today – more serious even than the threat of terrorism’. The Pentagon has recently advised George Bush that ‘because of the potentially dire consequences, the risk of abrupt climate change… should be elevated beyond a scientific debate to a US national security concern’. There is general consensus that air travel is a significant contribution to the problem. If flying really is costing the earth so dearly, it is madness not to be taxing the sky. Increasing the cost of air travel is a viable, short-term policy that could make a big different fast. As a nation of explorers, we should have the courage to boldly go into difficult territory. If Tony Blair wants to be remembered well by our children’s children, this is one issue he should fight for.

Dr Sally Cairns is a Senior Research Fellow at the ESRC Transport Studies Unit at University College London. She wishes to express grateful thanks to Marcus Enoch and Graham Parkhurst.

Notes
6 The Environmental Effects of Civil Aircraft in Flight. Royal Commission on Environmental Pollution, London, 2002
16 D. King: ‘Climate change science: adapt, mitigate or ignore?’ Science 302, 9 Jan. 2004, pp.176-177