

February 2012



Written Evidence to the Enterprise and Business Committee Inquiry into International Connectivity through Welsh Ports and Airports

**Cyfeillion
y Ddaear
Cymru**
**Friends of
the Earth
Cymru**

"I learnt two things. First, that the demands of the aviation industry are insatiable. Second, those successive governments have usually given way to them. Although nowadays the industry pays lip-service to the notion of sustainability, its demands are essentially unchanged. It wants more of everything... airports, runways, terminals."
Chris Mullin, former minister responsible for aviation

Friends of the Earth Cymru works to inspire the local and national action needed to protect the environment for current and future generations.

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- **is dedicated to protecting the environment and promoting a sustainable future for Wales**
- **is part of the UK's most influential environmental campaigning organisation**
- **is part of the most extensive environmental network in the world with more than 60 participating national organisations**
- **supports a unique network of campaigning local groups working in communities right across Wales**
- **is dependent upon individuals for 90 per cent of its income**

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Introduction

With its international trading links stretching back millennia, not just centuries, connectivity is important for Wales. But the days of unbridled enthusiasm for air travel in particular have been tempered over recent decades by a growing awareness that greenhouse gas emissions associated with international travel are having an increasing impact on the planet's atmosphere. A return flight from Cardiff to Malaga¹ for one person causes more carbon dioxide emissions than the average emissions per person in Bangladesh in a year².

Aircraft emissions

As far back as 2006, fatal incoherence was established between the absolute necessity to reduce climate-changing gases in line with humanity's desire to avoid cataclysmic climate change, and UK transport policy that facilitates a major expansion in air passenger movements³. Put simply, any policy that promotes large-scale expansion of aviation⁴ is incompatible with the UK's target⁵ to reduce greenhouse gas emissions by 80% by 2050.

The Tyndall Centre for Climate Change Research has published research⁶ that is particularly scathing about the UK Government's lack of action on aviation emissions. Although written at a time of year-on-year increases in air traffic, the research indicated that if aviation growth up to 2050 was just half the rate of that experienced up to 2004, aviation would consume almost the entire carbon budget of the UK⁷. The report concluded that without swift action to curtail aviation growth, the entire remainder of the UK economy would have to be zero-carbon in order to accommodate aviation emissions.

In January 2009 the UK Government set a target that carbon dioxide emissions from aviation should be no greater in 2050 than they were in 2005. If this target were achieved, aviation would be responsible for 25% of UK emissions. The remainder of the economy would have to decarbonise by 90% in order for aviation to maintain its emissions profile at the 2005 level⁸.

The non-CO2 effects of aircraft emissions (otherwise known as 'radiative forcing') are "highly likely" to be significant⁹. The Committee on Climate Change estimates these additional impacts to be "up to two times greater than from CO2 emission alone". The Committee on Climate Change recommends that aviation emissions targets be modified accordingly. The Department for Transport has effectively ignored this recommendation¹⁰.

¹ The Carbon Neutral Company, [Carbon neutral flights](#)

² Wikipedia, [List of countries by carbon dioxide emissions per capita](#)

³ Environmental Change Institute (University of Oxford), September 2006, [Predict and decide: Aviation, climate change and UK policy](#)

⁴ Set out in the [Air transport White Paper progress report 2006](#)

⁵ Department of Energy and Climate Change, [Climate Change Act 2008](#)

⁶ Tyndall Centre, February 2006, [Contraction and convergence: UK carbon emissions and the implications for UK air traffic](#)

⁷ In a 450ppmv scenario; 50% of the UK's carbon budget under a 550ppmv scenario

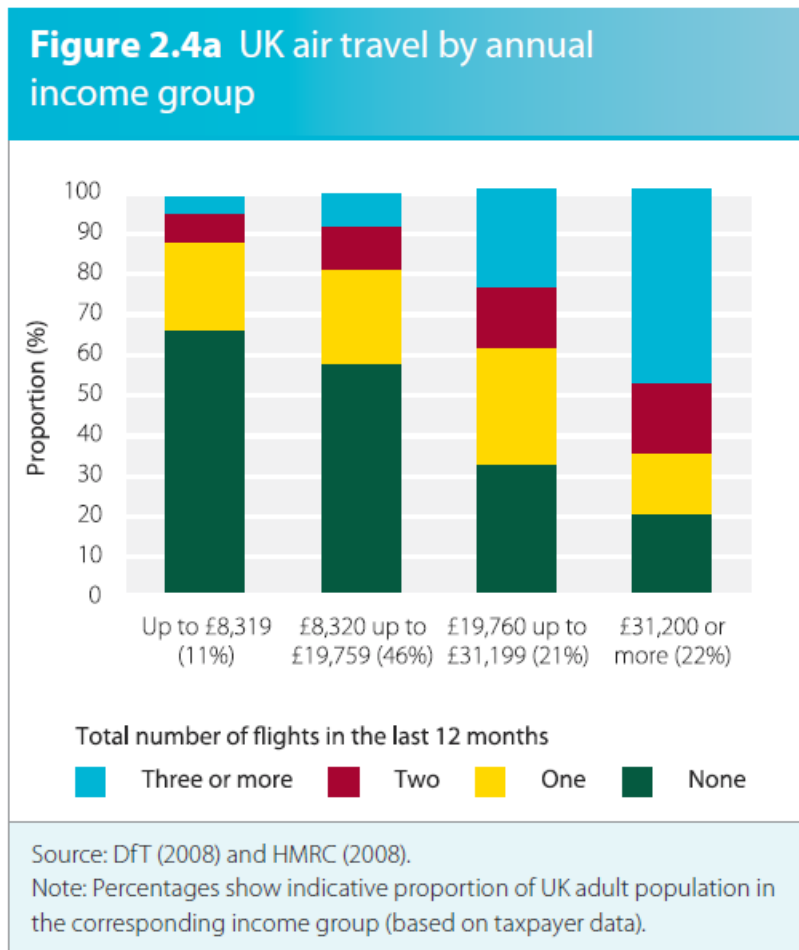
⁸ Committee on Climate Change, December 2009, [Meeting the UK aviation target – options for reducing emissions to 2050, Chapter 6](#)

⁹ Committee on Climate Change, December 2009, [Meeting the UK aviation target – options for reducing emissions to 2050](#)

¹⁰ Department for Transport, August 2011, [UK aviation forecasts](#), p. 67

Social and economic factors

There is no evidence to indicate that growth in aviation is the result of new (low-income) customers increasing their mobility¹¹. Indeed, most of the expansion in aviation through the 2000s was because wealthier people are flying much more frequently¹². The likelihood of people using planes is closely related to income, and among those who fly, those who fly most frequently are the wealthiest¹³. Income elasticity is high, which means that **people who have more disposable income fly much more frequently**. Figure 2.4a, drawn from the Committee on Climate Change's report¹⁴, provides graphical evidence of this effect.



Data from both the Civil Aviation Authority and the British Social Attitudes surveys back this finding, with more than three-quarters of 62,000 leisure passengers at Heathrow, Gatwick, Luton, Manchester and Stansted coming from socio-economic groups A, B and C1, with less than a quarter from groups C2, D and

¹¹ Civil Aviation Authority, January 2008, [Recent trends in growth of UK air passenger demand](#), p. 9

¹² Environmental Change Institute (University of Oxford), September 2006, [Predict and decide: Aviation, climate change and UK policy](#)

¹³ Committee on Climate Change, December 2009, [Meeting the UK aviation target – options for reducing emissions to 2050](#)

¹⁴ Committee on Climate Change, December 2009, [Meeting the UK aviation target – options for reducing emissions to 2050, Chapter 2](#)

E¹⁵. In fact, there has been a decrease over time in poorer households using aviation transport in both relative and absolute terms¹⁶.

We also note that the high growth in aviation over the past few decades corresponds to a major reduction in ticket pricing. Until 1986, the average fare paid for a short haul leisure journey was £150; by 2004, this figure was £63. Over the same timescale long haul leisure fares fell from £600 to £260¹⁷.

Furthermore¹⁸:

“The Government recognises there is a £17 billion tourism deficit resulting from UK residents spending more money abroad than overseas visitors bring in: for every £1 an overseas visitor spends in the UK, a UK resident spends £2.32 abroad. In 2003, spending by domestic tourists accounted for four-fifths of the UK’s £74 billion tourism earnings. New analysis for this report shows that in the six months after the 2001 terrorist attacks, people’s reluctance to fly meant that the money lost from overseas tourism was outweighed by an increase in domestic spending by UK residents. Together, this evidence indicates:

- The majority of spending at UK tourist destinations is not reliant on international aviation, since it is actually coming from UK residents;
- **If air travel becomes less desirable, there could be a significant increase in expenditure in the UK by UK residents, to the benefit of the wider economy”**

Polling by Ipsos MORI between 2002 and 2006 indicates that just 22% of people would oppose a policy to constrain growth in air traffic, and 60% of people are in favour of airlines paying higher taxes to reflect environmental damage even if it resulted in increased fares¹⁹.

Reducing emissions

Emissions will be reduced in several ways. Improvements in technology and efficiency gains will make important reductions in relative emissions. One study concluded that 14% savings in carbon emissions could be made at negative or zero cost to the airline industry²⁰. The Committee on Climate Change estimates that these improvements will result in a 35% reduction in carbon intensity by 2050²¹. Even this level of technological innovation means that passenger numbers will increase by a maximum of 60% on 2005 numbers if the UK Government target is to be met²².

The Committee on Climate Change came to the conclusion that without additional measures to restrain aviation growth the 60% figure would be overshoot twice over. The Committee considered that the ‘likely scenario’ to meet the target would necessitate both “demand reductions and carbon intensity reductions”. Additional measures to make sure that demand is managed down include a carbon price increasing to £200/tonne by 2050, along with:

¹⁵ Data quoted in Environmental Change Institute (University of Oxford), September 2006, [Predict and decide: Aviation, climate change and UK policy](#), p. 27

¹⁶ Environmental Change Institute (University of Oxford), September 2006, [Predict and decide: Aviation, climate change and UK policy](#), p. 27

¹⁷ Environmental Change Institute (University of Oxford), September 2006, [Predict and decide: Aviation, climate change and UK policy](#), p. 25

¹⁸ Environmental Change Institute (University of Oxford), September 2006, [Predict and decide: Aviation, climate change and UK policy](#)

¹⁹ Environmental Change Institute (University of Oxford), September 2006, [Predict and decide: Aviation, climate change and UK policy](#)

²⁰ Manchester Metropolitan University and Cranfield University, July 2009, [UK aviation: Carbon reduction futures](#)

²¹ Committee on Climate Change, December 2009, [Meeting the UK aviation target – options for reducing emissions to 2050](#)

²² Committee on Climate Change, December 2009, [Meeting the UK aviation target – options for reducing emissions to 2050](#)

“a carbon tax on top of the forecast carbon price, limits to further airport expansion, and restrictions on the allocation of take-off and landing slots even where airports have the theoretical capacity available”²³.

Put simply, this means that Cardiff airport should consider a hard limit of no more than 60% additional passenger movements over and above the 2005 number by 2050, and then only on a basis of incremental increase over that period (approximately 1% or so per year).

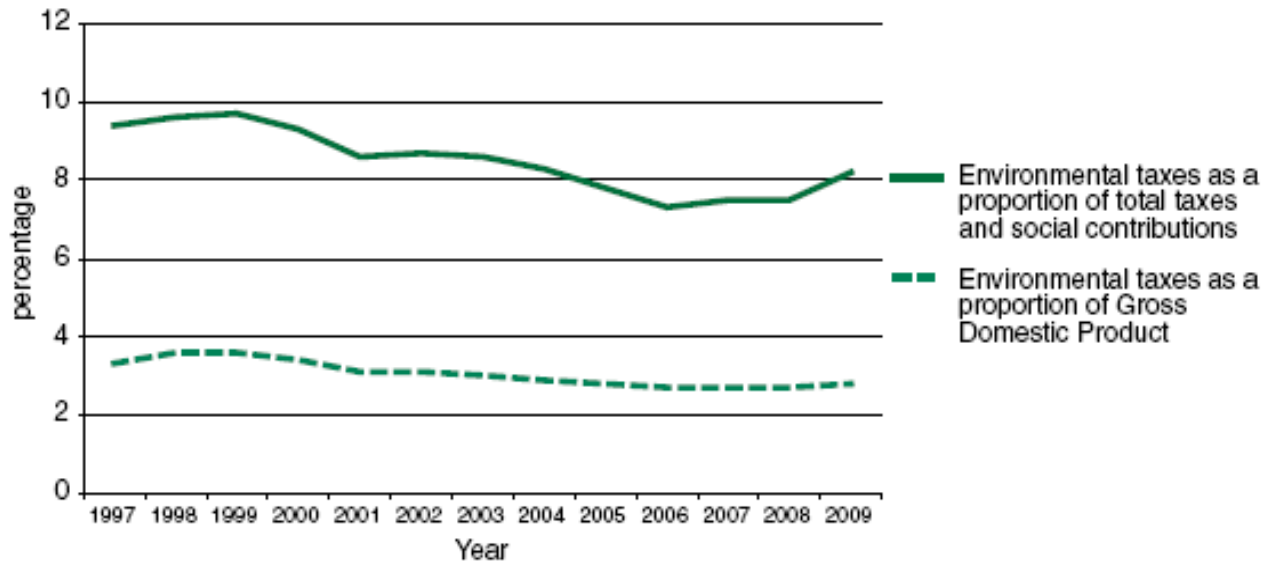
Worryingly, the Department for Transport’s aviation forecast in 2011²⁴ indicated that even in the most optimistic scenario CO2 emissions would be greater in 2050 be the same as 2005, although caution has to be applied to any projection that relies on oil prices “rising back to \$90 per barrel in 2013”²⁵.

Measures need to be applied because **there is no sign of voluntary demand reduction**, with “little indication that concerns over the environment are yet a factor in passengers taking fewer flights”²⁶.

Air Passenger Duty

Air Passenger Duty (APD) is one of a suite of taxes that are classed as ‘environmental taxes’²⁷. The proportion of both taxes and of GDP that is derived from environmental taxes has decreased over the period 1997-2009 (see Figure 1²⁸).

Figure 1: Environmental taxes as a proportion of total taxes and ‘social contributions’, and as a proportion of Gross Domestic Product



Source: UK Environmental Accounts, ONS

²³ Committee on Climate Change, December 2009, [Meeting the UK aviation target – options for reducing emissions to 2050](#)

²⁴ Department for Transport, August 2011, [UK aviation forecasts](#)

²⁵ Department for Transport, August 2011, [UK aviation forecasts](#), p. 23

²⁶ Civil Aviation Authority, January 2008, [Recent trends in growth of UK air passenger demand](#)

²⁷ Others include landfill tax, aggregates duty and fuel duty

²⁸ House of Commons Environmental Audit Committee, 29 June 2011, [Budget 2011 and environmental taxes](#)

An increase in APD would be the most obvious means of dampening demand for aviation because:

- At least 40% of recent growth in air travel has been the result of real-terms decreases in fares²⁹
- Raising APD is legally straightforward and does not require international coordination, unlike, for example taxing aviation fuel (a taxation anomaly that means that air travel is in receipt of an effective public subsidy)
- It would be applied in lieu of the additional 'carbon tax' mooted by the Committee for Climate Change until that tax were applied
- Its devolution to Wales is being actively discussed

The primary aviation impact of an increase in APD would be to reduce the number of flights taken by relatively wealthy people. The income raised could be spent in more socially inclusive ways, or could be used to reduce other taxation.

The Civil Aviation Authority has determined that all other factors being equal, an increase in air fares for outbound leisure passengers of 1% would result in a depression of demand by 0.8%³⁰. This indicates that raising APD would raise extra revenue, while the converse would also be true. That is, **reducing Air Passenger Duty would be revenue-negative and would require other taxes to be raised to compensate.**

Because of the climate and social implications of changes in APD, **Friends of the Earth Cymru would strongly oppose devolution of Air Passenger Duty if the primary envisaged purpose of such devolution – as others have suggested – were to be to increase demand through reduction of the Duty in Wales.** Such demand support would be both contradictory to Welsh and UK governments' policy on climate change and deeply regressive because it would increase the tax burden on non-flyers (poorer people) and reduce it on people who fly (richer people).

We should reiterate that **travel by air is already effectively subsidised by taxpayers** because there is no tax levied on jet fuel, nor VAT on flight tickets³¹. In 2003 it was estimated that these tax breaks resulted in a net loss to the UK Treasury of £9.2 billion³². The VAT exemption is particularly puzzling, since the UK is one of only four EU Member States that do not charge VAT³³, and zero-rating of VAT is applied by and large to social 'goods' such as health, education, welfare, charities and physical education/sports activities³⁴.

²⁹ Environmental Change Institute (University of Oxford), September 2006, [Predict and decide: Aviation, climate change and UK policy](#)

³⁰ Civil Aviation Authority, 2005, *Outbound leisure air travel and its drivers*, Chapter 5, quoted in Civil Aviation Authority, January 2008, [Recent trends in growth of UK air passenger demand](#)

³¹ HMRC, [Breakdown of taxes charged on flights from the UK \(as at September 2009\)](#)

³² Aviation Environment Federation, February 2003, *The hidden cost of flying*

³³ Environmental Change Institute (University of Oxford), September 2006, [Predict and decide: Aviation, climate change and UK policy](#), p. 82

³⁴ HMRC, [Rates of VAT on different goods and services](#)