# Aviation and Climate Change: Public Opinion and the Scope for Action

Report for **enoughsenough** 

Mark Gill James Humphreys **Woodnewton Associates** December 2007 **Woodnewton Associates** is an independent consultancy specialising in research, analysis and strategic advice. Its clients include government departments, agencies, businesses and not-for-profit organisations.

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# **Executive Summary**

#### The Context

Aviation activity in the UK is increasing rapidly, nearly doubling in the last ten years, mainly due to leisure flights taken by UK residents on above-average earnings. This increase is projected to continue beyond 2030.

Carbon emissions are changing the climate and are predicted to cause sea level rises, more frequent and severe storms, droughts, floods, famine, extinctions and disease epidemics. The Government's aim is to reduce carbon emissions by 20% by 2010 and 60% by 2050.

Aviation emissions currently form between 13% and 20% of the UK's total climate change impact and are predicted to rise along with passenger numbers, if less steeply. Mid-range predictions are that aviation will constitute between one quarter and one half of the UK's target emissions by 2050.

#### **Public Opinion**

The public overwhelmingly thinks that climate change is a major threat and wants the government to take the lead in tackling it. People understand that they can make an individual contribution, but are more likely to do so if others do the same: persuasion balanced with compulsion to ensure fairness.

The public recognises that aviation contributes to climate change. A majority favours subsidies for greener alternatives and new technologies over restrictions on behaviour. The public is generally distrustful of new taxes but say that they would support a tax that was fair and where the revenue raised was dedicated to environmental projects. New research suggests only minimal support for the current high levels of subsidies for the aviation industry.

Many people believe that aviation makes a major contribution to the national and local economy. Despite this, a majority of the public is opposed to airport expansion when they consider the environmental impact.

Support for action on aviation emissions depends on perceptions of fairness. Increases in taxes on aviation would only have a marginal impact on those on lower incomes, who fly infrequently, if at all. The current subsidy to the airline industry disproportionately favours the better-off.

Many people want to know more about the solutions for climate change and may be open to persuasion about curbing aviation growth. There is support for restricting flights where viable alternatives exist, such as between Heathrow and Manchester. The prospects for a successful government information campaign to build support for curbs on aviation growth are very promising. In particular, a majority of the public already support the option of maintaining airport capacity at present levels, as opposed to increasing or decreasing it.

#### Conclusions

Tackling climate change takes political leadership. It involves difficult decisions that will impact on people's lives and behaviours. The evidence is clear that the public expects and demands this from their leaders. There is no evidence that the public thinks that aviation should be exempt or made a special case.

Politicians should not see themselves as prisoners of public opinion. Governments have successfully challenged preconceptions and built a favourable consensus on issues from civil partnerships to smoking in public places. In the case of aviation, the starting point is, if anything, more favourable.



### Introduction

The United Nation's Intergovernmental Panel on Climate Change (IPCC) has concluded that most of the changes to the climate in recent decades are the result of human activity, and above all the rise in concentrations of carbon dioxide and other 'greenhouse' gases. These changes are predicted to include sea level rises, more frequent and severe storms, droughts, floods, famine, extinctions and disease epidemics. Climate change has been described by the UK Government's Chief Scientist as the greatest threat now facing the country.

In response, the Government has set a target of reducing emissions of carbon by 20% from 1990 levels by the year 2010 and by 60% by 2050. This implies very considerable reductions in carbon emissions across different sectors – domestic, transport, industry, and so on – which in turn implies major changes in behaviour, even allowing for improvements in energy efficiency and other technological innovations. In other words, tackling climate change and so securing the UK's future will mean people changing the way they live.

On the Government's own estimates, aviation currently accounts for around 6.5% of UK carbon emissions and, because emissions at high altitude have a much greater impact on the world's climate, around 13% of the UK's overall contribution to climate change. Other estimates place the overall impact of aviation as high as 20%<sup>1</sup>. It is therefore a significant contributor, and that contribution is rising fast. Between 1990 and 2000, carbon emissions from UK aviation nearly doubled, while in most other sectors, carbon emissions are falling.

The Government predicts that aviation will continue to grow by at least 4% a year until 2030. Even allowing for very significant improvements in fuel efficiency and other energy-saving measures, this would mean that aviation would be responsible for more and more of the UK's overall carbon emissions: the

most credible estimates vary between 50% and 70% of the Government's 2050 target. In other words, if aviation continues to increase as predicted, the UK will have to make the most dramatic reductions imaginable in carbon emissions from the rest of the economy, including individual use; or fail to meet its targets.

One obvious approach would be for the state to curb the growth in aviation, so that it made its contribution to reducing carbon emissions alongside the rest of the economy. This could be achieved through restricting the capacity of the industry to grow; by taxing aviation to include the full costs to the environment; by providing better and cheaper alternatives; or by informing people about the harm caused by aviation and dissuading them from flying. As with parallels such as the campaign to reduce smoking, the state might use a mix of these different approaches.

At present, the Government has no firm plans to curb the growth in aviation in this way, beyond the modest Aviation Passenger Duty. Indeed, the Government's stated policy is to facilitate the expansion in air travel, for example through supporting the airline industry in building additional runway and terminal capacity. The mismatch between the Government's policies on aviation and on climate change is striking: it has, for example, led the Tyndall Centre for Climate Change Research to speak of a '...stark disjunction between aviation growth trends and effective, long term climate change policy...'. <sup>2</sup>

The aviation industry would argue that in several ways it is a special case: the difficulty of regulating an international industry such as aviation; the importance of aviation to the UK economy; the right of people to choose to fly; and the unfairness to the poor of increasing the cost of flying. It is also claimed that the public is so committed to flying that any attempt to

curtail this freedom would generate such resistance amongst the public as to amount to 'political suicide'.

The purpose of this report is to examine the available research on public attitudes to aviation and climate change to establish to what extent, if at all, this last claim holds true. How do people see flying, and to what extent is the growing acceptance of the threat posed by climate change affecting people's attitudes and behaviour? How would the public react to the different potential interventions outlined above, from reductions in subsidies to aviation to restrictions on additional capacity? And are politicians prisoners of public opinion, or could they lead the public in a different direction?

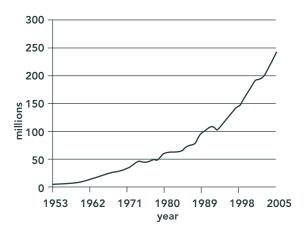
The report begins by examining the *context*: aviation, climate change, and the impact of the former on the latter. The second section surveys the available data on *public opinion*, looking first at attitudes to the environment, to climate change, and then to aviation and climate change, focusing in particular on taxation, capacity and fairness. It *concludes* with our assessment of the scope for effective interventions through taxation, restricting capacity and social marketing.

# **Section One – The Context**

The UK Government's aim is to reduce carbon emissions by 20% by 2010 and 60% by 2050 to avoid the worst effects of climate change. Meanwhile aviation emissions currently form around 13% of total UK climate change impact and are predicted to rise along with passenger numbers, if less steeply. Mid-range predictions are that aviation will constitute 50% of the UK's target emissions by 2050.

#### **Aviation**

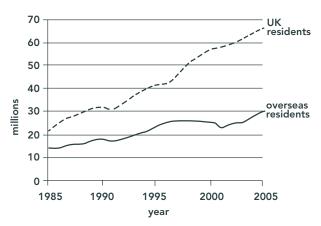
The aviation industry contributes around £11 billion to UK GDP per annum and directly supports around 186,000 jobs in the UK.3 It pays around £1 billion per annum in Aviation Passenger Duty and over £1 billion more in other taxes, such as corporation tax and employer national insurance contributions. Aviation does not pay duty on aviation fuel and in 2002 the Treasury estimated that if it did this would raise £5.7 billion per year<sup>4</sup>. Aviation is also exempt from VAT which one estimate has calculated this to be worth around £4 billion a year. <sup>5</sup> In 2006, over 200 million passengers arrived or departed from airports in the United Kingdom, up from 160 million in 1998. Around 17% of flights are within the UK, 58% are within Europe and 25% are intercontinental.6



Terminal passengers at civil airports, United Kingdom

Around 45% of the public flew in the last year (excluding business flights). Just under 20% of the public flew only once. Around 4% flew more than five times.<sup>7</sup>

In 2005, overseas residents made 30 million visits to the UK and spent £14bn. UK residents made 66 million visits abroad and spent £32bn.8 In other words, aviation is related to a net loss to the UK of consumer spending of £18 billion per year, which needs to be set against the invisible earnings to the UK generated by aviation.



Visits made by UK residents and overseas residents

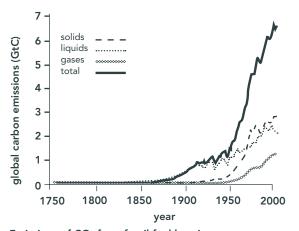
The increase in passenger numbers is not constant across all aviation sectors. For example, domestic scheduled airline traffic fell from 31.6 million passengers in 1998 to 28.1 million in 2002, while domestic 'no-frills' airline traffic rose from 2.0 million to 13.0 million over the same period.<sup>9</sup> If demand is unconstrained, annual passenger numbers are predicted to

rise from 200 million in 2003 to between 400 and 600 million by 2030.<sup>10</sup>

On some routes, such as those within the UK, there are credible alternatives to flying. In one survey of passengers on domestic flights, the main reasons given for choosing air travel over the alternatives were that flying was 'quicker' (58%), 'cheaper' (28%) and 'easier' (27%) than the alternatives. Only 7% said there was no alternative.<sup>11</sup>

#### **Climate Change**

Before the Industrial Revolution, concentrations of Carbon Dioxide ( $CO_2$ ) in the atmosphere were around 220 parts per million (ppm). They have since risen to 380ppm, with the main rise accruing since 1950.



Emissions of  ${\rm CO_2}$  from fossil-fuel burning Source: Met Office Hadley Centre for Climate Prediction and Research

Over the same period, global average temperatures have risen and while other 'natural' factors make a contribution to climate fluctuation, only the build-up of carbon dioxide and other 'greenhouse' gases in the atmosphere explains this change. In other

words, it is beyond reasonable doubt that climate change is already happening and that this is due to carbon dioxide and other gases being released by human activity.

This rise in temperature is predicted to bring about serious and widespread changes to the climate, including rises in sea levels, more intense and frequent storms, changes in rainfall, droughts, and floods. Changes in climate are predicted to bring benefits as well, notably in crop yields in colder parts of the globe: but these benefits are marginal compared with the disbenefits and risks.

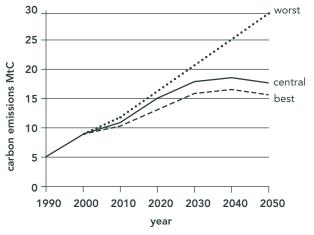
Although climate change is underway, its worst effects can still be avoided by stabilising emissions of CO<sub>2</sub> and other greenhouse gases. There is uncertainty about the impact of different levels of CO<sub>2</sub> in the atmosphere, and so different levels of risk. The UK Government is aiming to reduce CO<sub>2</sub> emissions to 60% of the 1990 level by the year 2050, 12 and this equates to a CO<sub>2</sub> concentration of around 550ppm and an annual emission of about 65m tonnes of Carbon or 65MtC.<sup>13</sup> However, the Tyndall Centre maintains that the scientific consensus is for a reduction to 450ppm, which equates to a target of 31.1MtC. This has led the Tyndall Centre and others to advocate an 80% reduction in emissions<sup>14</sup>. The UK Government have now indicated that it too is considering an 80% target.

# Aviation's Contribution to Climate Change

In 2004, the Government's White Paper *The Future of Transport* stated that aviation contributed 5.5% of UK CO<sub>2</sub> emissions and, because of 'radiative forcing' (the greater impact of emissions at high altitude), contributed 11% of total UK climate change impact<sup>15</sup>. With aviation emissions on a rising trend, this equates to a current share of 13%.

Aviation is only one sector contributing to climate change, alongside industry, agriculture, the rest of transport, and residential sources. But unlike most of agriculture or industry, it is discretionary: that is, people can choose whether to fly or not, just as they might choose whether to switch on their heating or use their car. This is in contrast to emissions over which the public have little or no direct control or influence, such as whether street lights use renewable energy, or the fuel efficiency of military vehicles. One estimate puts aviation as 34% of these 'discretionary' emissions.<sup>16</sup>

The Department for Transport estimates that  $CO_2$  emissions from aviation rose from 4.6MtC in 1990 to 8.8MtC in 2000,<sup>17</sup> as aviation itself increased. The DfT predicts that aviation will continue to increase in response to growing demand and that aviation emissions will



Aviation: carbon emissions forecasts
Source: DfT Aviation and Global Warming report January 2004

continue to rise as well. It has offered three scenarios: worst case, best case and central.

Reasons for the predictions of lower rates of increase in the central and best case scenarios include more fuel-efficient planes and engines; better fleet management; and better air traffic control and routing. There is some justification for these assumptions: Rolls Royce, for example, estimates that the fuel burn per passenger-kilometre for UK carriers was reduced by 21% between 1990 and 2000. The Advisory Council for Aeronautics Research in Europe has the aspiration to reduce CO<sub>2</sub> emissions by 50% through a combination of improvements to airframes (20-25%), engines (15-20%) and air traffic management (5-10%), though it admits that achieving this depends on the successful development of nonconventional solutions and higher-risk technologies.<sup>18</sup>

The Government's target of 98.7MtC emissions in 2030 and 65.8MtC in 2050 (i.e. a 60% reduction on 1990 emissions) does not include emissions from international aviation.<sup>19</sup> (The same is essentially true of the Kyoto targets.) Also, aviation contributes to climate change through a range of emissions, not just CO<sub>2</sub>, and its impact is multiplied by between one and four times by radiative forcing. This means that direct comparisons between the aviation and non-aviation targets are problematic. In 2003, the Royal Commission on Environmental Pollution predicted that aviation's share of greenhouse gas emissions, including radiative forcing, would be 35% in 2030 and 70% in 2050. The DfT view is that if aviation CO<sub>2</sub> is added to the 1990 baseline against which targets are calculated, then the 'true' figure for 2030 would be 28% in 2030 (not 35%) and 36% in 2050 (not 70%).<sup>20</sup> The most straightforward approach is therefore to consider aviation's share of target emissions, not percentage reductions. This allows comparisons to be made between the respective burdens placed on different sectors of the economy, and so

offers the potential for making economic and social trade-offs. For example, if curbing the predicted expansion in aviation could allow the UK to reduce overall carbon emissions so as to contribute fully to stabilising CO<sub>2</sub> concentrations, while at the same time reducing the economic impact on industry or agriculture or the need for individuals to make adjustments to their lifestyles, this may affect the public's attitudes to aviation growth. In other words, if people felt that instead of extra flights they could keep down the cost of domestic energy or road transport, they might prioritise the latter. DfT's central scenario is for aviation emissions of 17.4MtC in 2050, which would equate to 27% of the UK's target emissions for 2050 of 65.8MtC. The worst-case scenario figure is 29.1MtC, which is close to the Tyndall Centre's prediction of 32MtC. This would mean aviation potentially forming 50% of UK CO<sub>2</sub> emissions in 2050.<sup>21</sup>

Finally, there is debate over the method used to calculate the UK's share of carbon emitted by UK aviation. The DfT allocates to the UK only half of emissions arising from flights to and from the UK. In fact, 70% of flights taking off or landing within the UK are undertaken by UK citizens. This suggests that UK emissions from aviation are consistently under-estimated in official targets and projections.

# **Section Two – Public Opinion**

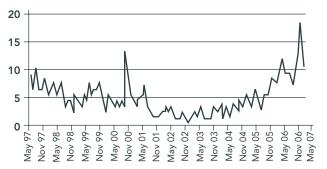
The public thinks climate change is a major threat, wants the government to take the lead in tackling it, is open to persuasion and will accept some element of compulsion. There is support for taxes that are fair and where the revenue raised is dedicated to environmental projects; but little awareness of or support for aviation subsidies. Overall, the public is opposed to airport expansion.

#### The Environment

The public has always had a strong commitment to the environment, as shown for example by the very high membership of conservation charities such as the National Trust and the RSPB. The extent to which the public sees the environment as a political issue is more fluid and is in part affected by the saliency of other issues. However, as the chart below shows, the proportion of the public telling the pollsters Ipsos MORI that it is one of the most important issues facing the country has increased over the past few years.

Q What do you see as the main/other important issues facing Britain today?

– pollution/environment



Source: c.1000 British Adults 18+ Ipsos MORI

Other research has also shown levels of environmental concern are relatively high:

• In one recent poll, by ICM for The Guardian, the environment was rated the fifth most important issue by the public (out of nine issues), with 78% saying it would be 'most important' in their decision on how to vote at the next general election.<sup>22</sup>

- In another ICM poll for The Sunday Mirror, the environment was the third highest rated issue that people were worried about (out of a list of six issues).<sup>23</sup>
- In a survey for Defra by BMRB, one in five people said without prompting that the environment was the most important issue the government should be dealing with. This was lower than the proportion saying crime, health/social services or education; but more than for pensions/benefits, immigration, housing, taxes, unemployment, economy or the European Union.<sup>24</sup>

It is true that political research has consistently shown that more voters are concerned about other political issues when they come to vote at a General Election: crime, hospitals, schools and competence on the economy will invariably be seen as more important than policies to tackle climate change for many voters. But this does not mean the public are dismissive of the environment or think their politicians should ignore it. The image and the perceived values of parties and leaders are determined by more than the sum of their policy positions. At the last General Election, MORI found that the British electorate rated Iraq as the 14th out of 16 most important issues for them to vote on at the election - yet Iraq was probably the issue that most defined Tony Blair's second and third terms as Prime Minister.<sup>25</sup> It is evident that the three main political parties believe that their electoral appeal will be affected by their environmental reputation.

No one party 'owns' or has a significantly higher standing on the environment: according to research conducted by ICM between January and June 2007, a two-point advantage to the Conservatives swung to a seven-point advantage to Labour, but this is due almost entirely to the respective standing of the two parties overall and their two leaders. <sup>26</sup>

One of the most distinctive aspects of the environment as a political issue is the extent to which none of the three main parties is trusted. According to the Guardian's ICM poll in June 2007, approaching half the public (44%) did not think any of the main three parties were putting forward the best policies. Perhaps a more difficult issue for all political parties is that the public are often distrustful and sceptical about politicians' motives for being concerned about climate change or environmental issues. A poll by Populus for The Daily Politics showed that 76% of the public agreed that "politicians are only talking about climate change because they think they can win votes by appearing to be green".27

This is part of a wider public distrust of ministers and politicians generally. The latest Ipsos MORI research shows one in five people saying they trust these two groups to tell the truth - substantially lower than, for example, scientists (72%).<sup>28</sup> The Government is amongst the least trusted to provide information on climate change. In a survey by ONS in 2006, 14% of the public said they trusted government sources as accurate, compared to 46% trusting environmental groups and 68% trusting independent scientists (e.g. university research centres). The Government was on par with trust in the media as a source of information (13%) and ahead of business and industry (4%).<sup>29</sup>

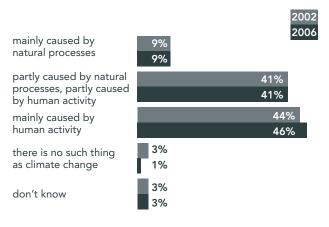
This has important implications for understanding the public's response to policies put forward by any political party, and particularly by the government of the day.

Many policies, potentially including those intended to tackle climate change, will tend to be treated with suspicion, resentment or outright hostility by a significant section of the public. This is even more the case where that policy involves interventions such as taxation that are themselves often unpopular and associated with deception (as with so-called 'stealth' taxes). It is important to distinguish the public's response to the objective of the policy from the means used to achieve it or the reputation of those proposing the means.

#### Climate Change

Over ninety per cent of British people believe that climate change is a serious problem.<sup>30</sup> Nearly nine in ten believe that the climate is changing (88%) and believe that it is wholly or partially the result of human activity (87%).<sup>31</sup>

#### Q Do you think that climate change is...?



**Source:** Ipsos MORI Tipping Point or Turning Point? **Base:** 1,002 British adults August 2006

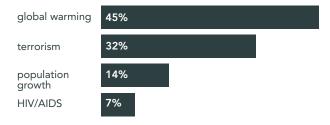
Most people (68%) believe that they have personally seen evidence of climate change.<sup>32</sup> But uncertainty remains: just over half the public (56%) believes that many leading experts still question whether human activity is contributing to climate change,<sup>33</sup> while

approaching two thirds (63%) want more information to form a clear opinion about climate change.<sup>34</sup>

The public generally rejects the notion that too much fuss is made about climate change: three quarters say that this is not the case, including almost half (48%) who strongly reject this notion. Only one in eleven people (9%) strongly agree too much fuss is made.<sup>35</sup>

Climate change has overtaken terrorism to be seen as the most important threat facing the world:

Q I am now going to read out four issues facing the world today. Can you tell me which, if any, of these is the most serious threat to the future well being of the world?



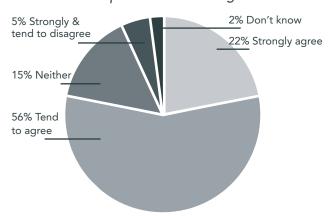
**Source:** Ipsos MORI Turning Point or Tipping Point? **Base:** 1,002 GB adults 16+ August 2006

Even five years ago, a substantial majority of the public (70%) believed that if there is no change in the world, we will soon experience a major environmental crisis. These views were held before several major environmental catastrophes internationally (such as Hurricane Katrina) and a series of dramatic events in the UK (such as record summer temperatures, record low rainfall and serious flooding).

The public, then, believes that action is needed. But who should be responsible?

Encouragingly, a high proportion of the public tends to agree (56%) or strongly agree (22%) that they are prepared to change their behaviour to help limit climate change.<sup>36</sup>

Q How strongly do you agree or disagree with the following: "I would be prepared to change my behaviour to help limit climate change?"



**Source:** Ipsos MORI Turning Point or Tipping Point? **Base:** 1,002 GB adults 16 + August 2006

It is evident that the public also wants the government to take the lead in tackling climate change and take the decisions necessary to change people's behaviour. They also believe that action by the UK can have an impact:

- 70% say that the government should take the lead in combating climate change, even if it means using the law to change people's behaviour.<sup>37</sup>
- 66% agree that the UK could make a real difference in stopping global climate change.<sup>38</sup>
- 64% disagree "that there's not much point doing my bit for the environment because Britain accounts for only 2% of the world's carbon dioxide emissions".<sup>39</sup>
- 55% believe that national government is the most appropriate level to take decisions, rather than European or local.<sup>40</sup>
- 71% of the public believe that they can help to reduce climate change and 53% say they would do more to help stop climate change if other people did too.<sup>41</sup>

#### **Aviation and Climate Change**

The public generally sees aviation as the most polluting form of transport for an individual journey.

Which form of transport do you think would make the most contribution to climate change for a journey from London to Edinburgh?

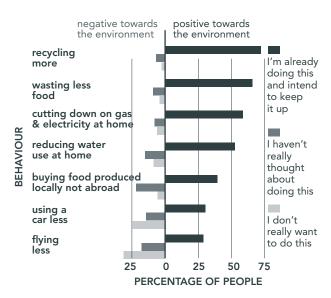


Source: ONS Omnibus May 2005

Base: 1,203 GB adults

When the question is broadened to which form of transport makes the greatest overall contribution to climate change, aviation falls to third. Perhaps reflecting this, the greatest public support is for policies that would reduce road traffic. Overall, the public also prefers the idea of additional spending on alternatives to increasing taxes or other costs.

The public also tends to prioritise other ways to help the environment, such as recycling and saving energy. For instance, a high proportion of those who have not reduced the amount that they fly say that this is because they have thought about and rejected the option, rather than not having thought about it at all (unlike using locally sourced produce, where the reverse is true).



Proportion of people engaging in environmentally friendly behaviours

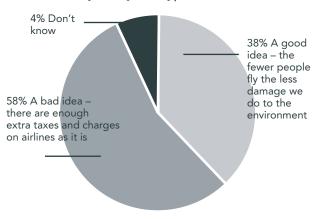
Source: Defra 2007

Evidence points to the public initially rejecting proposals that appear to restrict their freedoms or rights. However, when asked to think about the environmental consequences, attitudes can shift. Data provided by DfT in 2006 found that over 90% of the public agreed that "people should be able to travel by plane as much as they liked"; but when the phrase "even if this harms the environment" was added, support fell to just over 40%. 42 More strikingly, those who strongly agreed with the first statement fell from around 50% of the public to less than 10% when prompted about the environmental consequences.

#### **Taxation**

The research shows that the public is as suspicious of new taxes on anything, including aviation. They are also unhappy with the idea of being punished or stopped from doing something, and a new tax presented in this way will inevitably meet opposition.

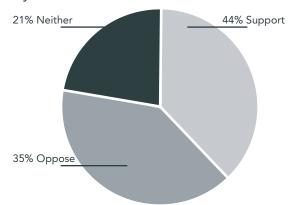
Q One idea the Government is looking at introducing is an extra "green" tax on airline tickets – eg £10 per flight to deter people from flying too often. Would you say this type of tax is...



Source: 1,010 GB adults 16+, 7-8 March 2007, ICM/Sunday Mirror

This said, the public accepts the case for aviation paying the costs of the harm that it does to the environment and to the climate, even if this is specifically linked to paying fuel duty or a levy on tickets.

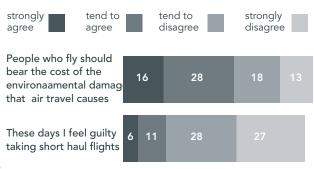
Q How much do you support or oppose a change to airline passengers for the environmental damage caused by air travel through measures such as a levy on tickets or taxes on fuel?



**Source:** 5,346 adults 16+, 5 EU Countries: Financial Times/ Harris Poll (2–10 Nov 2006)

This reflects other research showing that "fairness" is a better basis for support for taxation than "guilt". Fewer than 20% of the public say they feel guilty about taking shorthaul flights; but nearly 50% agree that people who fly should bear the cost of the environmental damage that air travel causes, with less than 30% disagreeing. The importance of "fairness" in taxation may make it even more important to distinguish between imposing new taxes and withdrawing existing subsidies or tax breaks so that aviation pays its "fair share".

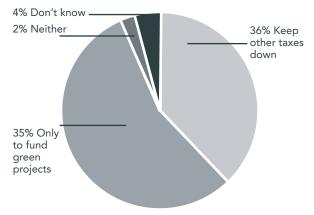
# Q To what extent do you agree with the following statement?



**Source:** Defra Survey of Public Attitudes and Opinion 2007 **Base:** 1,700 adults in England

The acceptability of taxation is also linked closely to the reason it is being raised and the use to which revenue is to be put. For example, the public were supportive of Gordon Brown's 1p rise in National Insurance contributions in 2000 which was 'hypothecated' or explicitly linked to greater funding for the NHS. In short, the public likes to know where its money is going. The same is true of environmental taxes.

Q If extra taxes are raised to help protect the environment do you think the extra funds should be used to...



Source: 1,011 GB adults 18+, 16–18 March 2007, ICM/

Part of the reason for the public's liking for hypothecation may be that the clarity about the destination of the revenue overcomes their low level of trust in government. This is evidenced by a Populus poll for The Daily Politics which found that by a ratio of two to one, the public agreed that green taxes are not really about helping the environment - they are just designed to provide more revenue for the Government.<sup>43</sup> By extension, a tax specifically aimed at reducing activities that contributed to climate change that was also dedicated to supporting beneficial activities or mitigating the negative effects associated with climate change - for example, funding flood defences, supporting home insulation or expanding woodland cover - may command the greatest support.

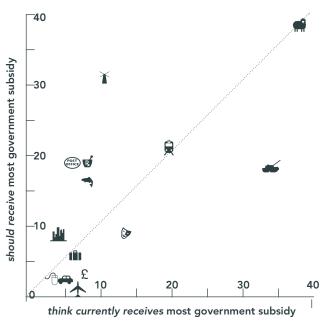
#### **Subsidies**

Most polling on attitudes towards the fiscal treatment of aviation has referred to "taxes" or "additional taxes", whereas an alternative policy would be to reduce subsidies to the aviation industry, such as exemptions from VAT and fuel duty.

Research commissioned for this report shows that public awareness of and support for aviation subsidies is very low. When asked which two or three industries received the greatest level of subsidy from the Government, the top three chosen were agriculture (38%), defence equipment (33%) and rail transport (21%). Aviation was only chosen by 7% of respondents, behind financial services, fisheries and pharmaceuticals (all on 8%).

**Q** The Government subsidises some UK industries, for example through tax breaks or grants. Which two or three of these industries do you think currently receives the most amount of Government subsidy?

**Q** And which two or three do you think should receive the most amount of Government subsidy?





Source: 1,014 GB adults 15+, 20-26 September 2007; Ipsos MORI

In contrast, when asked which two or three industries should receive the most subsidy, support was greatest for agriculture (38%), renewable energy (34%) and rail transport (21%). Several other industries received significant support – notably pharmaceuticals and the post office (both 19%) and fishing (16%). Support for making subsidy for aviation a priority was only 2%.

Actual levels of subsidy received by each industry are difficult to establish and compare, given different possible methodologies: for example, comparing absolute levels of subsidy, or the level of subsidy compared to the size of the industry. But in terms of judging public opinion, the combination of widespread ignorance of the levels of aviation subsidy and the relatively high amount of subsidy revealed compared to the low level of priority assigned to the industry by the public is a potentially powerful combination. On the face of it, the research suggests that if the public were aware of the extent to which the aviation industry is subsidised relative to other industries, they would not approve.

#### **Capacity**

The research suggests that one of the main reasons for public support for aviation and for airport expansion is belief in the prospect of economic growth or development, or specifically the creation of local jobs. (In fact, the evidence for the economic benefits of aviation is surprisingly thin; and what evidence there is has often been presented in a misleading way, particularly by failing to take account of displacement effects. It might be that if the public had a more informed understanding of the economics of aviation, levels of support for the industry, particularly in less prosperous areas, might fall.)

In an ONS survey, of those supporting expansion of their local airport, 36% mentioned increased job opportunities and 29% improvements to the local economy. The same survey also showed that environmental concerns can outweigh perceived economic benefits. In one question, 49% of respondents supported the building of new terminals and runways for economic reasons; in a separate question, half as many again (62%) believed that airport expansion should be limited in order to protect the local environment 44.

As the data below shows, three in every five people think it is a bad idea to increase capacity at UK airports: even those people who have flown in the past 12 months are, on balance, against airport expansion. And the latest data shows that only 18% of the public support expanding Britain's airports, with a clear majority (52%) supporting a standstill on new capacity.

Q Most experts predict demand for air travel to grow and that aviation will have a greater impact on the environment over the next 10 to 15 years. Do you think the Government should encourage airports to expand their capacity even if this means building new runways; reduce their capacity even if this means the cost of flying increases; or keep their capacity at about the same levels as present?

#### I) ALL PUBLIC

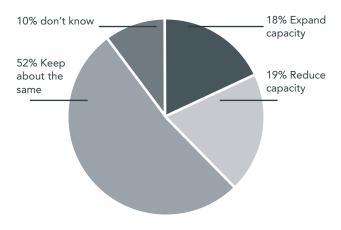
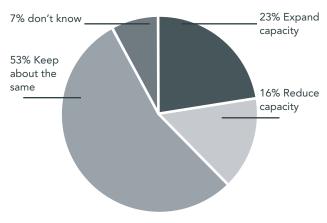


chart continues overleaf

#### II) THOSE WHO HAVE FLOWN IN LAST 12 MONTHS



Source: Ipsos MORI

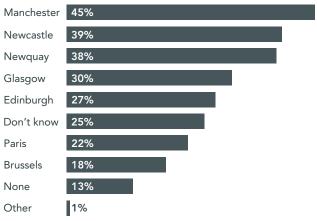
**Base:** 1,014 GB adults 15+, 20-26 September 2007

People's unease about airport expansion is growing. In 2003, half the public (52%) agreed with the statement that "people should be able to travel by plane as much as they like, even if new terminal or runways are needed to meet demand". In 2004, this had fallen to 43%.<sup>45</sup>

Further, according to an Ipsos MORI poll in 2006, where people were reminded about the impact of aviation and about climate change generally, support for "a policy aimed at slowing down the growth in air travel" rises from 37% to 57%.

New research for this report suggests that the public would favour a different approach to the management of existing airport capacity. When asked about reducing the number of short-haul flights from Heathrow where real alternatives existed to free up capacity for long-haul flights, only 13% were against cutting back any short-haul flights, with another 25% undecided. 62% supported cutting back flights to at least one destination, while 52% did so for at least 2 destinations.

Q London's Heathrow Airport has almost reached capacity. One solution the airport might consider is to cut the number of short-haul flights where there are rail alternatives, so that capacity can be used for longer haul flights. To which of these destinations, if any, do you think the number of flights should be cut back?



Source: Ipsos MORI

Base: 1,014 GB adults 15+, 20-26 September 2007

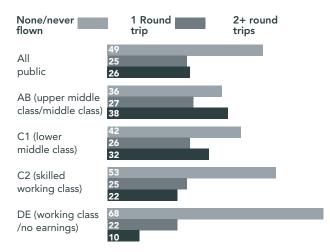
The public may also be prepared to contemplate other approaches to capacity management, such as restrictions on the use of business and private jets or flights with higher CO<sub>2</sub> emissions per passenger.

#### **Fairness**

Intuitively, any increase in the cost of aviation might be assumed to have the greatest impact on those on the lowest incomes and it seems that most of the public has accepted this argument. A Populus poll for The Daily Politics showed 69% of the public agreed that green taxes will unfairly hit poorer people, while rich people will be able to continue to drive and fly just as much as before.<sup>46</sup>

Modelling the impact of fare rises is outside the scope of this report, but the research can cast some interesting light on the subject. It shows that flying is already skewed substantially towards those in higher social categories: those in the highest band, for example, are nearly four times as likely to have taken two or more round trip flights in the last year than those in the lowest band.

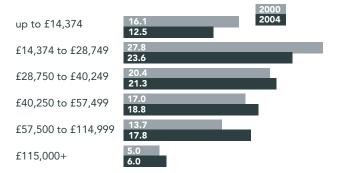
Q How many times have you taken a flight in the last 12 months? Please count each journey to an end destination but not any changes of flights en route to that destination. A return flight would count as 2 flights.



**Source:** 1,012 GB adults 18+, 1–3 June 2007

The spread of very cheap fares in recent years has also not resulted in a major increase in flying amongst those on the lowest incomes. Instead, the main increase has tended to be amongst those on above-average earnings. One survey even suggests that flying has decreased proportionately amongst the lowest two income bands, with the highest increase amongst those in households earning between £57,500 and £114,999 a year.

#### INTERNATIONAL LEISURE TRIPS BY UK RESIDENTS



Proportion of international leisure trips made by UK residents in different household bands at Manchester, Gatwick, Heathrow, Stanstead and Luton: 2000 vs. 2004 Source: Oxford Environmental Institute, 2006

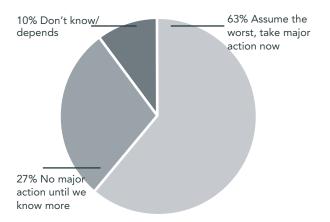
The Department for Transport, as part of its modelling of future demand for aviation, assumes that, all else being equal, air fares will continue to fall. Therefore, a reduction in aviation subsidies would not automatically mean that fares would rise proportionately, or even at all. Although the existing research does not directly address this point, it is likely that any public concern about the fairness or otherwise of aviation taxation and subsidy would be reduced if the overall cost of flying remained comparatively low.

Finally, as the effects of climate change become clearer, it may also be that the disproportionate impact of climate change on the poorest both in the UK and world-wide will come to influence perceptions of fairness.

#### Persuasion

People feel that they are not fully informed about climate change and want to know more. But according to a Eurobarometer survey, two-thirds of the British public would rather know more about environmental solutions than environmental problems.<sup>47</sup> This interest in solutions suggests that the public has already moved towards a desire to act: this backs up other research showing that the public want the government to assume the worst and act now on climate change, rather than wait for scientists to reduce uncertainty.

**Q** As you may know, scientists are uncertain how much impact human activites have on the world's climate. Some people say we should not take major action to reduce human impacts on climate until we know more, because of the great economic costs involved. Other peopls say we should assume the worst and take major action now to reduce human impacts on climate, even if there are major costs. Which of these points of view reflects your own?



20. Take major action now Base: Ipsos MORI

**Source:** 2,020 GB adults (15<sup>+)</sup>, 7–12 October 2004

The appetite for action runs counter to the notion that action to curb aviation growth substantially would be impossible in the face of public opposition – or more colourfully, that it would be 'political suicide.' This view was expressed thus by former Prime Minister Tony Blair in 2006 when speaking about using economic instruments to reduce demand for flying: "I cannot see myself that we would be in a position to say to the British consumer...'this is worth your while because of the impact on climate change'".

The idea that governments can be imprisoned by public opinion is also subject to challenge. Often, initiatives are taken even when there is no consensus in favour.

For example, the proposal to relax opening hours for pubs and bars to allow them to serve

alcohol later than 11pm was supported by 39% of the public and opposed by 38%, according to a poll carried out by MORI in February to March 2000. Despite this, the Government legislated to relax closing time in 2002.

Similarly, a MORI poll in January 2000 of public attitudes to allowing gay couples to marry showed that 45% were in favour and 46% against. Again, the Government introduced civil partnerships in 2005.

Even when public opinion is hostile, politicians are prepared to over-ride it. Opposition in London to running the Underground as a Public Private Partnership was 53% in November 2000, with only 23% in support. But the Government introduced the PPP in 2003<sup>48</sup>. And while 54% supported the retention of 'Clause 28', banning the promotion of homosexuality in schools, Clause 28 was repealed in 2000<sup>49</sup>.

Where politicians do act in defiance of majority public opinion (as with the congestion charge), or where they set out a policy objective and support it with a social marketing campaign (as with the ban on smoking in public places), that opinion can soon come around. Only 39% of Londoners supported the congestion charge when it was introduced; within four months, this had risen to 58%.<sup>50</sup> And support for restrictions on smoking in pubs rose from 49% in 1996 to 66% in 2006.<sup>51</sup>

These precedents, taken together with the current broadly favourable state of public opinion, suggests that if government mounted a sustained public information campaign along the lines of those for smoking or drink driving, then the public would respond with substantially increased support for more radical measures on aviation.

## **Conclusions**

The public wants action on climate change, even where knowledge is uncertain and even if this means making personal sacrifices. There is no evidence that the public believes that aviation should be treated as a special case. The Government could therefore intervene to ensure that the aviation industry makes a fair contribution to tackling climate change, without losing public support.

Even three years ago, when the public was less certain about climate change, their strong view was that the Government should assume the worst and act accordingly. We would expect this 'call for leadership' to be stronger today. The public is anxious about emissions from aviation and wants the Government to act, for example by requiring aviation to pay the environmental costs of its impact, and by dropping plans for new runways and terminals.

Also, attitudes are continuing to shift in the direction of government action to curb aviation growth. This is despite the fact that the debate on aviation is 'framed' in particular ways: for example, the option of reducing subsidies or tax breaks for the aviation industry is usually put to the public as "tax increases", and the option of restricting the growth in aviation as "stopping people from flying".

The public's main concerns about intervention are not specific to aviation, but reflect wider views, such as fairness, and perceptions of the untrustworthiness of government over taxation. But even here, the research suggests that people are open to persuasion.

#### **Taxation**

Some people will never welcome new taxes and a larger proportion will be sceptical. The key is fairness. If the public believes that the right people are paying, the taxes will have the impact that is claimed for them and the revenue raised will be used to reduce other taxes or to fund a clear need (through hypothecation), then it is likely that a majority will accept them. Similarly, people believe

aviation should pay for the environmental damage it causes.

#### Capacity

The debate so far has been framed so as to equate restrictions on aviation growth with stopping people from flying. In fact, even quite dramatic interventions would allow modest levels of aviation growth, so that all else being equal, those currently flying could continue to do so. It is likely, therefore, that research conducted on this basis would show a much higher level of public acceptance of interventions to limit aviation growth.

#### **Fairness**

People naturally assume that fare increases will hit the poor disproportionately. But with the cost of aviation predicted to continue to fall, and with those on above-average incomes dominating the aviation market (and increasingly so), it may be that the impact on the poor would be marginal.

#### Leadership

The evidence is that the public is open to persuasion on aviation. Comparison to other policy areas, notably smoking in public places, suggests that it is well within the ability of government to engage the public and persuade them to accept fairly radical measures on taxation and capacity. Even without this, there is sufficient public support for action to lay to rest the notion that the government is the prisoner of public opinion on this issue.

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