



**Friends of
the Earth**

REDUCING CARBON EMISSIONS FROM TRANSPORT

Submission from Friends of the Earth England, Wales & Northern Ireland

Friends of the Earth welcomes the Environmental Audit Committee's inquiry into this vitally important subject.

Climate change is the greatest threat the world faces. Friends of the Earth believes that annual cuts of 3% in the UK's total emissions of carbon dioxide are necessary, as the UK's contribution to keeping global temperature increases below 2⁰C. We are leading a campaign for a Climate Change Bill which would:

- require the Government to put policies in place to deliver 3% year-on-year cuts in emissions
- require annual reports to Parliament
- provide for corrective action if annual targets were not met

This clear leadership role and clarity over what will be achieved would provide industry and individuals with the certainty they need to take action.

Reductions are required from the UK economy as a whole and, as a key sector, reductions are required from transport. However with current policies emissions have risen, and are set to rise further. The Government's Climate Change Programme review forecasts end-user transport emissions rising by 22% from 1990 to 2020 and by almost 19% from 2000 – 2020¹. This is just one of several forecasts from different Government departments. However two common factors of all the forecasts are that transport makes a major contribution to total UK emissions, and that emissions from the sector will rise in the future.

This means that major changes in transport policies will be vital for achieving the Government's short- and long-term emissions targets, and for making the 3% year-on-year cuts that Friends of the Earth believes are necessary.

The key points we make in our submission are:

- There is little evidence to date of a coherent department-wide strategy to reduce emissions
- The Department for Transport (DfT) is falling well short of the targets it has set for reducing emissions
- Big cuts in carbon emissions from transport are possible by 2020 – 2030 provided that action is taken now to put us on the right path. Major policy change is needed now so that by 2010, the Government should have both started to cut emissions and also be on the right path for the longer term.

¹ DEFRA (2004) 'Review of the UK Climate Change Programme – consultation paper' section 3 table 6

IS THE DFT'S CARBON REDUCTION TARGET UNDERPINNED BY A COHERENT STRATEGY STRETCHING ACROSS THE DEPARTMENT'S ENTIRE RANGE OF ACTIVITIES?

The first point to clarify is that we do not believe that the DfT has a specific carbon reduction target, and it should be given one. The DfT has joint responsibility for the Government's Public Service Agreement on reducing carbon emissions but, like other Whitehall departments, has no department-wide target to indicate the share of reductions it is expected to deliver. It is critical that this target should include emissions from aviation.

The now overdue publication of the Government's Climate Change Programme Review will give the DfT the opportunity to demonstrate that it does have a coherent department-wide strategy to reduce emissions. However at the moment we do not see much evidence of such a strategy. Three examples of this lack of a joined-up strategy are:

- the continuing road-building programme
- viewing road-pricing simply as a tool to tackle congestion
- the support for aviation expansion

These are examples either of policies that are leading to increases in carbon emissions, or of key policies that are not acting to reduce carbon emissions.

▪ Road building

Despite many statements from the Government, from the Prime Minister down, that we cannot build our way out of congestion, the Government is still persisting with a large-scale road building programme.

Road-building often leads to large increases in traffic levels, locking us in to a carbon-intensive pattern of development. Answers to Parliamentary questions last year revealed that roads in the Government's Targeted Programme of Improvements (TPI) would result in traffic increases of 23%. However information on traffic increases was not available for over one-third of schemes². Traffic increases on this scale will make it much harder to cut emissions in the future.

The Government seems to have very little information on the carbon impacts of these schemes: no data on forecast CO₂ increases was available for less than half of schemes³.

There is also strong pressure for road-building coming from the English regions. At the end of January, the regions submitted to the DfT proposals for spending their Regional Funding Allocation (RFA) for the period 2006 - 2016. Analysis of the submissions has revealed a very heavy bias towards road-building, with 72% of the budget earmarked for roads, and only 24% for public transport. Two regions – the South East and the East Midlands – want to spend 95% of their budget on roads.

▪ Road pricing

The Secretary of State has made clear on many occasions his belief in the need to move towards a nationwide system of road pricing and to make significant progress in the course of this Parliament. However despite the clear importance accorded to road pricing, the DfT seems to regard it as a measure to be used simply to tackle congestion.

Achieving environmental benefits is regarded as almost a by-product. However research has shown that a revenue-raising road pricing system could reduce carbon emissions from road transport by 8% whereas a revenue-neutral system, under which road pricing charges would be offset by reductions in fuel tax or VED, would increase emissions by

² Hansard 13th July 2005

³ Hansard 13th July 2005

5%⁴. Clearly design is crucial and so any road-pricing system should be designed to cut carbon emissions as well as tackle congestion. The fact that this is not currently the case is further evidence of the lack of a coherent department-wide strategy to cut emissions.

- Support for aviation expansion

Aviation is a rogue sector even within the context of transport. DfT is pressing ahead with an expansion strategy which would again lock us into a carbon-intensive pattern of development and result in huge increases in emissions. As your Committee has previously noted *"if aviation emissions increase on the scale predicted by the DfT, the UK's 60% carbon emission reduction target ... will become meaningless and unachievable"*⁵. The scale of the problem was further thrown into relief by research for Friends of the Earth by the respected Tyndall Centre for Climate Change Research, published last year. This concluded that, if the UK was to put itself on a contraction-and-convergence path to stabilise global carbon dioxide levels at 450 parts per million by volume (the level currently believed to be necessary to avoid the worst impacts of climate change) then continuing aviation growth could see the sector taking up the entire UK carbon budget by 2037, with all other sectors of the economy having to be carbon-neutral⁶.

The Government's aviation policy is out-of-line with its climate change policy. The two must be reconciled. When it published its Air Transport White Paper in December 2003, the Government stated that it *"will monitor and evaluate the effectiveness and impact of the policies set out in this White Paper [and] will report in 2006 on progress"*⁷. Friends of the Earth believes that the Government should conduct and publish an aviation policy review, rather than simply a progress report. However, the Department for Transport is sticking firmly to the latter.

A distinct flaw of the policy process leading up to the publication of the White Paper was the failure to adequately integrate air transport/airport development and climate change policy into a single coherent approach.

Friends of the Earth is concerned about the Government's preferred policy approach for responding to aviation emissions: inclusion within the EU Emissions Trading Scheme (ETS), and about its impact on policy making. The aviation industry advocates ETS as its favoured measure because it believes that ETS of all the possible measures is the one least likely to mean they have to change. It is already advocating large allocations of emissions for their own sector, in contradiction with Government policy that the polluter should pay. There are also considerable uncertainties surrounding ETS and its potential impact, such as the choice of base year, the level of the emissions cap, how permits will be allocated, which flights to and from EU airports should be included.

This uncertainty means that there is a distinct possibility that the problems of the policy process leading up to the 2003 White Paper will be repeated this year. That is, the uncertainty surrounding the actual outcome of its preferred mechanism to respond to aviation emissions growth (inclusion in the EU ETS) will be allowed to continue without resolution until after the White Paper progress report / policy review. It is, of course, much more likely that the White Paper review will continue to support the very substantial expansion of air transport and its emissions if it is not required to identify, and then integrate, the adequacy or not of the 'emissions trading' solution over the same timescale - to 2030.

⁴ IPPR (2003) 'Putting the brakes on climate change'

⁵ Environmental Audit Committee (2004) 'Pre-Budget Report 2003: aviation follow-up' para 50

⁶ Tyndall Centre for Friends of the Earth Trust (2005) 'Growth scenarios for EU and UK aviation: contradictions with climate policy'

⁷ Department for Transport (2003) 'The Future of Air Transport' para 12.28

Consequently, Friends of the Earth suggests that the Government be pressed to adequately integrate these two policy streams within the White Paper review, and that in particular the government be required, from the various forecasting models now available to them, to identify what will be the outcome in terms of direct aviation emissions in 2030 of pursuing their approach to forecast air passenger demand - in the context of the wider requirement on the UK to reduce its overall carbon dioxide emissions.

WHAT PROGRESS IS THE DEPARTMENT FOR TRANSPORT MAKING AGAINST KEY CARBON REDUCTION TARGETS OR FORECASTS?

The Department for Transport (DfT) does have policies in place to reduce carbon emissions. However, as is explained below, these are performing less well than expected, and are in any case swamped by policies or lack of policies elsewhere – the net effect being carbon increases. The overall impact of this is that DfT is falling well short of its targets and forecasts for reducing emissions.

The key predictions and forecasts are:

- 10 Year Plan for Transport
 - greener cars: the Government anticipated cuts of 4MtC from the voluntary agreement between the EU and car manufacturers⁸
 - behavioural change: the Government anticipated cuts of 1.6MtC from measures in the 10 Year Plan
- Powering Future Vehicles – that by 2012, 10% of new cars sold will have emissions of less than 100 grammes of carbon dioxide per kilometre (g/km CO₂)

• 10 Year Plan forecast for greener cars

The Government anticipated emissions cuts of 4MtC from the voluntary agreement reached between the EU and car manufacturers. However the then Transport Minister David Jamieson MP told the Transport Committee in 2004 that this was now regarded as over-ambitious and that actual emissions cuts were now more likely to be around 2.6MtC⁹. He blamed the shortfall on the UK consumer's preference for larger cars compared to other EU countries.

The target agreed by the EU and car manufacturers in the late 1990s was that by 2008, new cars sold in Member States should on average emit no more than 140 grammes of carbon dioxide per kilometre. Average emissions of new cars sold in the UK have fallen from 189.8 g/km CO₂ in 1997 to 171.4 g/km CO₂ in 2004¹⁰. It is now widely accepted that the voluntary target will not be achieved: in the UK we are two-thirds of the way through the target period, we have made one-third of the progress needed, and the rate of progress is slowing down.

The failure to reduce emissions reflects in part the advertising policy of car makers. Analysis carried out by Friends of the Earth last year showed that over half of the adverts in national newspapers for the first two weeks of the new '55' registration in September were for cars in Vehicle Excise Duty (VED) bands E and F - the most polluting cars on the road. By contrast, only 3% of the adverts were cars in VED bands A and B - the least polluting cars on the road¹¹.

⁸ DETR (2000) 'Transport 2010: the 10 year plan' para 8.9

⁹ Transport Committee (2004) 'Cars of the future' para 26

¹⁰ SMMT (2005) 'UK new car registrations by CO₂ performance – 2005 edition'

¹¹ See Friends of the Earth press release 10th November 2005 'Government and industry must do more on greener cars'

However the Government could do much more to influence consumer choice. The current VED bands provide very little incentive for buyers to choose a less polluting car. The difference between VED paid for the most and least polluting cars is £95 for diesels, £100 for petrol cars and £105 for alternative-fuelled cars, with a maximum gap between bands of £30. In our submission to the 2005 Pre-Budget, Friends of the Earth recommended cutting VED for the least-polluting cars to zero immediately, and raising it for the most-polluting cars to £600 by March 2008¹². Changes to VED along these lines are gaining wide support: the RAC Foundation has recently called for higher tax on gas guzzlers. The gaps between the bands in March 2008 would be £100. Evidence from research for the DfT shows that a gap between VED bands of £100 would persuade 47% of new car buyers to choose a less-polluting vehicle¹³.

Buying a more fuel-efficient car would save drivers a great deal in fuel costs. Last year, when fuel prices reached £1 a litre, Friends of the Earth calculated that, on the basis of driving 12,000 miles per year:

- a driver wanting a small car could save up to £460 a year in fuel costs by choosing a Citroen C2 rather than a Ford Fiesta
- a driver wanting a family car could save up to £630 a year in fuel costs by choosing a Toyota Prius rather than a Ford Mondeo
- a driver wanting a 4x4 could save over £1500 a year in fuel costs by choosing a Toyota RAV4 rather than a Land Rover Discovery

▪ **10 Year Plan forecast for behavioural change**

The Government estimated that measures in its 10 Year Plan would reduce carbon emissions by around 1.6 MtC by 2010. The then Transport Minister David Jamieson estimated in 2004 that this target would be missed by around 25%, with cuts of around 1.2 MtC expected¹⁴.

The main reason for this expected shortfall is the continuing rise in traffic levels. Despite the Deputy Prime Minister saying in 1997 that he would have failed if the number of journeys by car had not fallen within 5 years, traffic levels have risen by over 10% since the current Government came to power. The most recent Government forecasts show continuing traffic growth: 23-29% higher than 2000 levels by 2010; 29-38% higher by 2015 and 38-53% higher by 2025¹⁵. Continuing traffic growth will make achieving medium- to long-term carbon emissions targets very difficult.

Friends of the Earth believes that two key reasons for this continuing traffic growth are:

- the failure to invest adequately in reducing the need to travel and in providing high quality alternatives to car use
- continuing trends in the cost of motoring and public transport use: motoring is still cheaper in real terms than when the current government came to power, but bus and train travel is more expensive

Until action is taken to increase investment in reducing the need to travel and in improving alternatives to car use, with funding shifting from road-building which tends to lead to increased car use, then traffic levels and carbon emissions will continue to rise. Details of the measures needed are given below.

¹² Friends of the Earth (2005) 'Tackling climate change through the Budget'

¹³ DfT (2004) 'Assessing the impact of graduated Vehicle Excise Duty – quantitative research' figure 17

¹⁴ Transport Committee (2004) 'Cars of the future' para 22

¹⁵ DfT (2005) 'The Future of Transport: Modelling and Analysis' Note that the figures are for England only.

- **Powering Future Vehicles target**

In its 2004 Powering Future Vehicles strategy, the Government set the target that by 2012, 10% of new cars sold will have emissions of less than 100g CO₂/km. It is too early to assess progress, but the scale of the challenge is shown by the figures for 2004: a total of 481 vehicles sold had emissions of less than 100 g CO₂/km out of total sales of over 2.5 million – less than 0.02%¹⁶. Friends of the Earth believes that tough action will be needed if the target is to be met including mandatory new EU emissions targets to force the pace of technological development by car manufacturers; and greater fiscal incentives for the purchase of greener cars, as outlined above.

WHAT REALISTICALLY COULD THE DfT ACHIEVE BY 2010 AND 2020 IN TERMS OF REDUCING TRANSPORT-RELATED CARBON EMISSIONS, AND WHAT ROLE SHOULD DEMAND MANAGEMENT PLAY IN DOING SO?

WHAT SPECIFIC STEPS SHOULD THE DEPARTMENT NOW TAKE TO REDUCE TRANSPORT CARBON EMISSIONS AND CONGESTION OVER THE NEXT DECADE?

The DfT's ambitions for 2010 and 2020 must be set within the context of the need for 3% year-on-year cuts in overall carbon emissions. As explained above, the DfT must play a key role in delivering these cuts. This must be the department's priority over the next decade. The measures we advocate to achieve this will also help cut congestion.

Recent research for the DfT shows the scale of ambition possible. 'Looking over the horizon' produced by the Bartlett School for Planning and Halcrow Group shows that carbon emissions from transport can be cut to 60% below 1990 levels by 2030¹⁷.

Friends of the Earth believes that the Government must push to get all the emissions cuts possible from technology, such as greener cars and improved or alternative fuels. However this will not be enough on its own, and demand management measures to change how and how much people travel are also essential. This is echoed by the 'Looking over the horizon' report which concluded that *"the 60% CO₂ reduction target in 2030 can be achieved by a combination of strong behavioural change and strong technological innovation. But it is in travel behaviour that the real change must take place, and this should be implemented at the earliest possible occasion"*¹⁸. This sets a very clear agenda for the Government, and for DfT in particular, although action will be needed from other departments as well (notably the Treasury and the Office of the Deputy Prime Minister). Friends of the Earth believes that the issue is now whether the Government has the political will to put in place the measures needed. The Government seems willing to put in place the technological measures needed, but not to take the action necessary to get the changes needed in people's travel behaviour.

By 2010 DfT should have put policies in place which will be:

- firstly, already delivering emissions reductions; and
- secondly putting us on a path to make the emissions reductions possible in the longer-term.

Over the next decade, the Department for Transport must:

- Fully embrace the need for tough action to reduce carbon emissions, and make this the key determinant of policy
- Agree a sectoral target for reductions to be made from transport

¹⁶ DfT (2005) 'Powering Future Vehicles strategy: third annual report' para 2.1

¹⁷ Bartlett School for Planning and Halcrow Group for DfT (2006) 'Looking over the horizon'

¹⁸ Bartlett School for Planning and Halcrow Group for DfT (2006) 'Looking over the horizon' Executive Summary section 7

- Accept that technology alone will not be enough to deliver the cuts needed, and that measures to change people's travel behaviour are also needed
- Work proactively to build public acceptability of the need for cuts in transport emissions and of the measures needed
- Work with other Government departments, notably the Treasury and ODPM, to ensure that policies to cut transport emissions are integrated and effective.

Specific measures the DfT should take include:

- Use next year's Comprehensive Spending Review to ensure that spending on measures to cut carbon emissions is prioritised. This should focus on measures to reduce the need to travel, and to provide high-quality alternatives to private car use. Examples of measures needed are given in the report 'Paying for Better Transport' produced by the Way to Go campaign for the 2004 Spending Review¹⁹. These include:
 - A cycle friendly road network and cycle training for all
 - Networks of bus lanes
 - Safe routes to schools
 - Lower speed limits: 20mph default in residential streets
 - Increased funding for public transport, particularly in rural areas.
 - Streets, lanes and paths in good condition and pleasant for walking
 - Quality standards for bus and rail services
 - National railcard
 - Purchase incentives for smaller, cleaner vehicles
 - Funding for rail freight projects
 - Services and facilities close to people so that they don't need to drive.
 - Pay-as-you-go road pricing

The Comprehensive Spending Review should also identify cuts in expenditure on road-building. 'Paying for Better Transport' identified possible cuts of over £8 billion that could be made.

- Ensure that any national road pricing scheme that is implemented is designed to cut carbon emissions rather than simply to tackle congestion. Road pricing should increase the cost of motoring, with additional revenue ring-fenced for spending on reducing the need to travel or on improving alternatives to the car.
- Push for a tough follow-up EU emissions standard for new vehicles to replace the current voluntary agreement. Friends of the Earth believes that new cars should emit no more than an average of 120 g/km CO₂ by 2012. This should be a mandatory target rather than a voluntary agreement, and should be met entirely by action from the car industry: emissions cuts from fuel-related measures, such as greater use of biofuels, should be seen as additional to this, rather than contributing to it. Figures from the European Federation for Transport & Environment show that the costs of meeting such a standard would be outweighed by the savings made by drivers from using less fuel. Meeting the 120 g/km CO₂ standard would cost less than 600 Euros per vehicle, whereas pre-tax fuel savings would be between 625 and 940 Euros per vehicle, depending on the cost of fuel. The savings to the consumer would be much greater when taxes are taken into account²⁰.

¹⁹ Way to Go campaign (2004) 'Paying for Better Transport' available at http://www.foe.co.uk/resource/reports/paying_for_better_transport.pdf

²⁰ European Federation for Transport & Environment (T&E) (2005) 'No regrets: the cost-effectiveness of achieving 120g/km average CO₂ emissions from new cars in Europe by 2012'

- Continue to promote the use of biofuels but ensure that a tough accreditation scheme is put in place to ensure that biofuel producers do not damage the countryside by intensifying production at the expense of wildlife, destroy rainforests through imports of palm oil or harm wildlife overseas by using oils derived from GM-crops.
- Put in place the measures needed to tackle aviation emissions. The policy changes needed include:
 - revision of the Air Transport White Paper to put a moratorium on new airport capacity
 - the use of fiscal measures to reduce the growth in demand for flying. As an initial step, Air Passenger Duty should be increased.
 - Ensure that the inclusion of aviation in ETS is environmentally effective. However this should not be seen as a substitute for fiscal measures

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