

Shrinking carbon, improving lives - A plan for reaching our climate change goals

The Government faces a big challenge: Reduce greenhouse gas emissions by a quarter by 2022 and by 80% by 2050.

We know how the Government can meet the challenge.

We recommend a comprehensive package of transport policies¹, mostly extensions of current practices building on past successes. These would help the Government to reach the targets in the Climate Change Act and could form the basis of its first carbon budgets. The policies would also boost the green economy, increase energy security, support healthier lifestyles and create stronger communities.

¹A *Low Carbon Transport Policy for the UK* has been prepared by Keith Buchan of Metropolitan Transport Research Unit (MTRU) and sponsored by Campaign for Better Transport. It includes a wide-ranging policy package to tackle CO₂ emissions from transport and reduce them by 26% by 2020. This briefing draws on this research and on the Government's own statistics. The full research is available from Campaign for Better Transport or from MTRU.

The policy package: realistic, achievable, necessary – and it'll work

Reductions in emissions from transport are achievable and can and should include changes in travel behaviour as well as greener vehicles and fuel technology because:

- Current policies will not bring the necessary emission reductions: Extending current policies, including intensive improvements to vehicle efficiency, will achieve less than 5% reduction on 1990 levels by 2020
- People do change: In three “sustainable travel towns” (Darlington, Worcester and Peterborough), car use fell by an average of 12% between 2004 and 2006 as a result of a suite of transport measures including travel plans and household marketing of the alternatives to car travel
- There are other benefits. The measures proposed here will overall save businesses and individuals money, reduce congestion and improve people's health

The bulk of the policy measures here do not need new legislation – they can be brought in using, for example, the powers in the Local Transport Act and the Climate Change Act, and also the local authority performance indicators within Local Area Agreements. Action can therefore start now – and it needs to. The later action on transport starts, the greater the difficulty and the higher the cost in achieving cuts – and the more other sectors, like energy and industry, will have to do.

Overall reductions

- CO₂ emissions from transport down by 26% by 2020 on 2006 figures
- Reductions in passenger travel emissions of 32%
- Freight emissions reduced by up to 19%
- Cars 25% more fuel efficient
- Car traffic reduced by 15%
- Domestic aviation emissions down 30%

These reductions would be in line with those required for the UK generally to achieve 80% reduction in emissions by 2050.

Charges to encourage change in transport use should not be used for raising general revenue; instead any income should be returned to businesses and individuals by reductions in other taxes, or through direct transport spending such as a national travel card and workplace travel tax concessions. For example, parking charges should fund reductions in business rates and income from fuel and aviation taxes should be paid back to households as an “eco-bonus” annual tax-free lump sum.

Action 1: Reduce work-related car travel

Opportunity: Making big cuts in car commuting would have a big impact. Work-related travel accounts for over a third (37%) of total CO₂ emissions from passenger transport – 24% from commuting and 13% from travel in the course of business. People are taking long journeys by themselves – 91% of car commuting and 87% of business car trips are single occupancy journeys. Change this reality and you'll be on the way to meeting climate targets as well as saving businesses and commuters money.

It can be done: There is good evidence that reducing car-based work travel is possible, especially through workplace travel plans, which many companies have adopted. A study [*Making Travel Plans Work*, DfT 2003] found that travel plans had on average reduced car use for commuting by 18%: car sharing, increased public transport use, car park management and increased cycling have all played their part and some commuting and work journeys are being replaced altogether by home-working and videoconferencing.

Quick wins:

- Promote travel plans to businesses, building on the existing National Business Travel Network; create a “super league” of companies committed to reducing workplace travel emissions
- Alter the tax treatment of business use of private cars, to reward low-carbon vehicles and reduce incentives for high business mileage
- Make road journeys more reliable and smooth out traffic flow by extending rollout of “active traffic management” schemes on motorways

Longer term: The Government can help change business travel in two ways. First it can use the tax system, building on existing tax breaks for low-carbon commuting and business travel to promote cashback and green bonus schemes that reward people for not driving to work. Secondly, it can set an example: the Government as employer (including the NHS) can make it easier and cheaper for its employees to commute and travel for business by low-carbon modes than by single-occupancy car.

The result: Even modest changes in commuting and business travel – for example increased car sharing – would have a big impact on carbon emissions and would help businesses and individuals save money too.

Action 2: Cut freight emissions by a fifth

The opportunity: The environmental impact of moving goods by road is huge: Freight transport accounts for over one-third of UK transport CO₂ emissions: some 23% for lorries and 12% for vans (rail freight is 1%). This is an area where the Government can make some big reductions in CO₂ emissions.

These emissions are also growing faster than for cars, even though the number of vehicles involved is tiny by comparison. The efficiency of lorries (in terms of how full they are) has been static or falling, despite a series of increases in maximum permitted size and weight designed to improve it.

It can be done: Businesses are already finding ways of reducing their freight emissions and increasing efficiencies. Increasingly, supermarkets are sharing loads and transport. Many businesses are now using rail and water for freight; even the iconic road haulier Eddie Stobart now runs trains too. One train can remove 50 lorries from the road and rail freight produces as little as 20% the CO₂ that trucks do.

Quick Wins:

- Support HGV operators, especially small ones, to improve maintenance and training
- Increase grants for rail and water freight and make small-scale investment to tackle rail bottlenecks

Longer term:

- Introduce road charging for lorries, with incentives for greater efficiency and reductions in vehicle duty. A previous scheme was dropped as too complex; introduce a simpler system as used in Switzerland and New Zealand, charging by weight and distance and based on “odometers” installed in lorry wheel hubs, which could be used to level the playing field for UK operators against foreign lorries
- Increase rail freight by increasing capacity on the rail network and using the planning system to locate new freight warehousing next to rail lines
- Increase water freight and reduce its emissions by promoting the use of more local ports, use of biofuels and more efficient ship designs
- Reduce van emissions through encouraging cleaner vehicles and fuels through tax breaks and regulation, as now applied to cars, and also driver training and vehicle maintenance

The result: Up to 19% reduction in CO₂ emissions from freight.

Action 3: Reduce journey lengths and transfer short car journeys to walking and cycling

The opportunity: One main reason transport emissions are growing is because we're travelling longer distances. For example, between 1985 and 2005 average annual mileage per head (excluding foreign travel) increased by 35%, though the number of trips was broadly unchanged. This is the result of the interaction of transport policies with land use planning. Tackling small journeys will bring big rewards. Car journeys under five miles account for 20% of passenger transport CO₂ – shifting some of these to walking and cycling will help cut congestion and obesity and improve health too.

It can be done: Many European cities have low levels of car use: in Vienna, Amsterdam, Frankfurt, Munich and Brussels, cars account for 40% or less of journeys, due to planning and transport policies and support for cycling and walking.

Quick wins:

- Introduce a “smarter choices” fund to help change travel behaviour, including specific initiatives on school travel (walking, cycling, school safety zones and school buses), shopping (home delivery, local collection and local sourcing) and leisure (entrance/public transport tickets for sporting/music events, support for local parks), as well as more “car clubs” and better information and marketing of travel choices
- Make walking and cycling a real option for short journeys: introduce a new “walkable streets” fund, create cycle priority networks and bike hire schemes in major towns and cities, reform street priorities and street design to increase safety
- Better planning policies: use planning policy statements now being issued or revised to promote planning policies that reduce the need to travel and support higher density development around high-frequency public transport. Policy statements on economic development and shopping should include a stronger focus on developments in rather than outside town centres.

Longer term:

- New parking policies, including maximum parking levels in new commercial developments, reducing over time, and charges for car parking over these limits, with the revenue going to reductions in business rates
- Better local services and shops in new developments: housing developers should give endowments rather than one-off planning gain deals to fund these
- Use eco-towns and eco-developments to show it's possible to create developments where people can choose not to own a car
- Expose real transport costs of other decisions: Government decisions on the location/centralisation of health, education, leisure and other facilities (like post offices) should take full account of increased transport costs and emissions and the results of such analysis should be made public

The result: Average journey length down by 7% while keeping the same number of journeys and journey times as now. Cycling trebles and walking journeys increase 30%.

Action 4: Cut aviation emissions

The opportunity: Aviation accounts for around 13% of the UK's overall climate change impact and, if recent rates of growth continue, aviation emissions will account for half the UK's carbon budget by 2050. In addition, through “radiative forcing”, the impact of aviation emissions in the upper atmosphere is 2-4 times the impact at ground level. The reduction of emissions within aviation is therefore highly desirable.

It can be done: in 2006 BT's videoconferencing technology saved it £45m, by reducing the need to travel. 89% of companies expect to reduce their business flying in the next 10 years. Rail upgrades have seen rail's share on the London-Manchester corridor rise from 40% to 60%

Quick wins:

- The Government can promote videoconferencing as part of business travel initiatives
- Air Passenger Duty should be replaced by a charge per aircraft, adjusted by weight and distance, as already proposed by the Treasury

Longer term:

- Further rail enhancements including high speed lines should be planned as an alternative to short distance flights
- Make aviation pay its fair share: domestic aviation should pay fuel duty and VAT with money raised used to cut other taxes and charges and invest in rail

The result: A 30% reduction in CO₂ emissions from domestic aviation

Action 5: Increase public transport trips

The opportunity: Improving public transport in association with the other policies already mentioned would produce a "total sustainable travel offer" to allow households to replace second and third cars and to target other journeys producing large CO₂ emissions, such as "chauffeur" trips where parents act as unpaid taxi drivers (15% of passenger transport CO₂).

It can be done: Rail use is increasing significantly and is now at record levels; bus use is rising in some towns and cities and surveys show increasing numbers of people choosing to use public transport rather than cars

Quick wins:

- Improve and integrate bus services: build on powers in new Local Transport Act
- Door-to-door ticketing: spread smart ticketing technology through rail franchises and concessionary fares
- Relieve overcrowding on trains: bring in extra trains as promised and make small-scale upgrades for extra services

Longer term:

- Link public transport with wider planning: create minimum "public transport accessibility standards", linked to planning for new developments and covering evening as well as daytime services and rural as well as urban areas
- National door-to-door travel: introduce a national travel card, building on the Oystercard in London and the travel cards in other cities
- Increase bus funding for local authorities, especially to bring major cities nearer to London standards of services and funding
- Create new types of public transport including taxibuses, community transport, improved coaches and ultra-light rail, all aimed at supplementing conventional buses and railways
- More trams/rapid transit and new/ reopened rail lines and services

The result: Rail travel up by 50%, bus travel by 25% and tram/rapid transit use by 300%. If passenger and freight mileage on railways was doubled, this could reduce UK transport CO₂ emissions by 9%.

Action 6: Reduce car emissions

The opportunity: Cars can be much more fuel efficient and produce much less CO₂. But car users need incentives to buy them and manufacturers need incentives to make them. The way cars are driven matters too: getting rid of very high speeding will save lives as well as CO₂.

It can be done: Companies have reduced CO₂ emissions as a result of tax incentives around company cars.

The package:

- Incentivise low-carbon cars: first-year charges on cars related to their level of emissions as proposed by the Treasury, increasing annually to 2020
- Incentivise fuel efficiency: Fuel duty to rise in line with predicted improvements in efficiency
- Help drivers cut emissions: In-vehicle information for speed and fuel use
- Cut emissions from speeding: Enforcement of speed limits within the existing and proposed "active traffic management" schemes on motorways
- Help motorists: target traffic and parking enforcement at dangerous, deliberate and persistent offenders not occasional and minor offenders

The result: Cars 25% more efficient by 2020.

Greenhouse gas emissions from transport need to be cut if the UK is to meet its targets on tackling climate change. The research this document summarises shows that urgent action is needed, and where to start; it also suggests that the measures needed to cut greenhouse gas emissions will help the economy, health and communities and make life easier for people and businesses too.

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Campaign for Better Transport

bettertransport.org.uk

12-18 Hoxton Street, London N1 6NG
020 7613 7720, info@bettertransport.org.uk

Registered charity: 1101929