



Low Carbon Transport

This briefing paper focuses on the 'Low Carbon Transport: A Greener Future' strategy proposed by the Department of Transport. It applies to England and will be provided to Wales, Northern Ireland and Scotland to follow in accordance with their separate administrations.

Key Issues

This briefing paper contains:

- The shift to lower carbon emitting technologies in vehicles
- How to promote lower carbon choices
- What steps National Government and Local Government have to take to tackle climate change

1. Introduction

The Climate Change Act has set targets for the UK to reduce its carbon emissions by 80 per cent by 2050. Carbon budgets have been agreed as part of the Act to facilitate the UK in its role on cutting down its greenhouse gas emissions.

The Department of Transport has issued a new strategy which focuses on how greenhouse gas emissions can be reduced from transport, since currently it represents 21 per cent of total UK domestic emissions. The aim of the strategy is to increase the selection of low carbon transport available to Councils and the public, particularly public transport.

This briefing outlines the key proposals put forward by the Transport Department in reducing carbon emissions for public transport.

2. A shift to new technologies and fuels

The strategy looks at new alternatives available which allow vehicles to be more fuel efficient by shifting to cleaner fuels and greener technology. The key modes of transport focused on in this briefing are cars, vans, road freight and buses. The Department of Transport has also placed emphasis on the use of sustainable biofuels in trying to meet their carbon emissions targets.

The strategy indicates focus on making more low carbon emission cars available, at a lower and more affordable price to consumers. It states that the National Government needs to set the standards of using environmentally friendly vehicles within their own departments. This is demonstrated by their aim to operate vehicles that *"average 130gCO₂/km by 2011"*. Similar targets are being set for vans, which will mean there will be new lower carbon emitting vans available to purchase on the market.

The strategy also states:

- Key research being undertaken to look at improvements that can be made to the design and efficiency of engines;
- The Government's efforts to promote the expansion of low carbon cars in the mass consumer market;
- New programmes being set up to support certain cities adopting electric vehicle infrastructure projects;
- The department's focus on helping Local Authorities by investing in *"new Intelligent Transport Systems Technologies"*, which can help improve factors like congestion management.

With regard to road freight the Department of Transport have stated their aims to shift to technologies that emit lower carbon in order to meet their targets in 2022. Findings of recent research show how much carbon can be saved by using more eco-friendly technologies in HGV's. Therefore from these findings, suggestions can be made on which type of technology is the best to use, in terms of reducing the most carbon and saving the most money.

It is proposed in the strategy that a new scheme will be set up, which will give grants to promote companies to use bus technology which will produce lower carbon emissions. The department focuses on two areas with regards to making public transport buses greener. First there is the target of making current bus operations more fuel efficient and providing incentives for companies to reduce their carbon emissions. The second area seeks to encourage the bus industry to start using vehicles that are designed to emit low carbon like hybrid buses. Research shows that hybrid

buses can *“reduce CO₂ emissions by 30-40 percent compared to conventional buses.”*

Use of sustainable biofuels is another criterion that must be taken into consideration as part of reducing carbon emissions in the transport system. The Department of Transport aims to encourage the use of biofuels for the transport system as it is a greener option. The Government has set a target, which needs to be met by 2020, to;

“Ensure that 10 per cent of transport’s energy comes from renewable sources”

Extensive research has also been conducted into new biofuels possibly available to the UK.

3. Promoting lower carbon choices

The strategy states that it is significant to encourage the use of greener forms of transport to the public and businesses. Whilst some may already be supportive about the use of low carbon modes of transport, others may find it difficult to change as it is unsuitable in accordance to their lifestyle. The emphasis is to promote the wide variety of alternatives available which are more environmentally friendly. There are many ways in which this can be done:

- A key way to promote low carbon forms of transport is to educate the public and provide them with information on climate change.
- The Government has started a new campaign called *“ACT ON CO₂”*
- It focuses on drivers and gives them advice on buying fuel-efficient vehicles and methods of reducing their carbon footprint with their current vehicle

As well as informing the public on ways they can reduce carbon emissions from their cars, the strategy also seeks to promote other forms of transport that can be used. There is a significant focus on promoting the public to cycle for short trips. The department will be investing in projects that promote cycling in certain cities across England in order to encourage other Local Authorities to take up the scheme.

The Government is also acting on the prices of public transport in order to promote it. The Local Transport Act allows Local Authorities to have more significant power in terms of pricing for bus services. This means that public is less likely to be discouraged from using public transport because it is too expensive.

The strategy states another incentive that will make public transport more convenient and therefore more appealing to the public is the idea of smart ticketing. The Government is currently trying to devise a strategy that will allow the public to use one ticket for different modes of transport, using the success of the 'Oyster Card' in London as an example.

The issue of reducing carbon emissions from freight is also addressed. Programmes are being undertaken to promote efficient driving of HGV's vans and buses. Research from the strategy has shown that emissions of 3 million tonnes of CO₂, over a five year period, could be avoided if 90 per cent of HGV drivers had been given training on fuel efficient driving. The Department has stated the development of a new working group, which intends to establish a

"carbon measurement and reporting method and standard for the logistics supply chain"

It is proposed that a new incentives scheme may be implemented from this.

The department has stated their commitment to working with Local Authorities to improve carbon emissions in their regions. Guidance will be issued for Local Authorities to assist them. There will also be a focus on regions, to assist them in meeting their specific individual carbon reduction targets. The Department of Transport is also in the process of developing an assessment tool to measure the reduction in carbon at local levels.

4. How the strategy will work

National Government;

- Will set the performance framework and incentives for lower carbon transport technology and fuels
- Will continue to promote the use of low carbon emitting vehicles and renewable fuels within the transport system;
- Will proceed with research on new greener technologies that can be used in order to meet targets;
- Will continue to work alongside European and International partners to address the issue of greener transport within different industries;
- Will work alongside other departments to promote carbon reduction overall to meet the 2050 targets;
- Through their campaign will continue to inform the public on how they can reduce their carbon footprint.

Local Authorities;

- Should promote schemes to reduce carbon emissions in their transport services and provide incentives;

- Can also be responsible for encouraging new technologies and the use of renewable fuels in their transport system;
- Can take decisions made in a wide range of issues including spatial planning and where housing and economic development takes place, which can affect where and how people travel.

5. APSE Comment

APSE acknowledges climate change is a key issue for National and Local Government and therefore encourages measures that aim to reduce greenhouse gas emissions. Local Authorities have a key role in developing relations with local partners to reduce carbon emissions of public transport, whilst ensuring it is convenient for the public and the pricing is affordable. APSE agrees that a transport plan needs to build in measures that support healthy living. In order for the public to uptake these ideas they must be informed about the impact of their actions on climate change and the steps they can take in order to reduce their carbon footprint.

With regards to shifting to new technologies and having lower carbon emitting vehicles new initiatives need to be practical for Local Authorities. Simple measures such as effective driver training, replacement programmes and limiting the maximum speed of vehicles can be cost effective and practical ways of reducing carbon emissions. In addition during this economic climate Local Authorities may find it more challenging to finance the replacement of existing vehicles with more environmentally friendly vehicles.

There are many different approaches Local Authorities can take in order to meet individual targets of reducing greenhouse gases in their transport system. Gateshead Council has implemented an efficient driver training scheme which provides training to drivers on how to reduce carbon emissions and be more fuel efficient. As part of their policy to tackle climate change the Council has also set a maximum speed limit of 56mph.

Bath and North East Somerset Council worked alongside the Carbon Trust to identify their key concerns and develop new projects to reduce the emission of greenhouse gases. The Council have used a fuel additive in all fleet vehicles in order to reduce fuel consumption. They also intend to implement 'efficient trainer driving' for all employees who drive council vehicles.

This strategy will be debated further at APSE's forthcoming environmental services seminar on 15th-16th October 2009. For more information email djohns@apse.org.uk

Debbie Johns

Principal Advisor