

<p style="text-align: center;">Department for Transport: Low Carbon Transport Innovation Strategy May 2007</p>
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Introduction

The DfT “Low Carbon Transport Innovation Strategy” was published alongside the Energy White Paper 2007. It forms the basis of the transport element of the White Paper. This briefing note is intended to advise members of the areas of Government policy for road transport in the UK.

In more detail...

The 2006 Energy Review committed to develop a low carbon innovation transport strategy (LCTIS) and this strategy is the starting point for this work. Although the LCTIS deals with all elements of transport, this briefing note deals solely with the road transport element. The road sector is identified as being responsible for the largest amount of carbon emissions from transport in the UK.

Technology is the principle focus for reducing carbon emissions from road transport. In the near term, this means improvements to petrol/diesel fuels, use of a range of new and emerging lightweight materials and first generation biofuels. In the longer term, the focus will shift to plug-in hybrids, full electric vehicles and second generation biofuels. The strategy recognises that although reliance on oil cannot continue, it will remain the predominant energy source for the foreseeable future.

There is a range of measures to reduce the carbon intensity of vehicles already in place: Vehicle Excise Duty, the Renewable Transport Fuels Obligation and an awareness-raising campaign, “Act on CO2”. At EU level, the proposal to legislate against tailpipe CO2 emissions in cars and light commercial vehicles will ensure that reductions are achieved across EU member states.

The paper states several times the Government’s commitment to maintaining a buoyant UK automotive sector.

The scope of the strategy

The strategy does not set individual carbon reduction targets for different sectors of the economy. The aim is to focus emissions reductions on where they will be most cost-effective.

The strategy will be technically focused but importance is also given to:

- Modal shift
- Zero carbon options of walking and cycling
- Changing behaviour
- Reducing the need to travel (eg: through tele-working etc)

The role of Government in innovation in the area of road transport has traditionally been involved because of two major elements:

- The external cost of carbon
- The “public good” nature of innovation



Factors that may impede the role of Government and simultaneously, the development of low carbon technologies, are:

- Low carbon technologies: immature from both a technological and commercial perspective
- Carbon pricing uncertainty for investors
- A level of infrastructure “lock-in” because of established infrastructure, which has emerged over a number of years
- Most relevant transport technology is highly capital intensive and therefore exhibits slow replacement rates

The barriers to growth are considerable. To aim to prevent these, the Government proposes intervention in the following areas:

- Possible inclusion of aviation in the EU ETS to bolster the carbon price signal
- market based and regulatory approaches (eg: Commission Communication to legislate on CO2 emissions from cars and light commercial vehicles)
- R&D&D (Research, Development and Demonstration)
- Better information provision

Types of funding available to encourage low-carbon road transport in the UK

- Raise the RTFO above 5% subject to certain provisions
- £5 million per annum for industry-led low carbon R&D
- £0.5 million per annum for the trialling and demonstration of infrastructure for alternative fuels
- £20 million public procurement funding to encourage greater market penetration of low-carbon vehicles (for government fleet).
- The EU also has other funding streams in its FP7 programme, which will run until 2013.
- Low Carbon Vehicle Innovation Platform will provide £30 million funding from 2008/9 to develop and bring together relevant stakeholders.
- The Energy Technologies Institute will be set up to bring together private and public sector R&D across all relevant industries, with a budget of £600 million over the next decade.

Technologies that can make a difference in the nearer-term and long term have been identified above. Clear and long-term policy signals to support lower carbon road transport, and even zero-carbon road transport, are needed to encourage all stages of the innovation cycle.

The focus on carbon reduction in passenger cars has broadened to commercial vehicles. DfT plays a key role in freight and logistics to promote more sustainable ways of distributing goods around the country through the Mode Shift Programme (direct support of rail or water to transport goods where appropriate) and the Logistics Efficiency Programs (to reduce impact of road-based logistics).

For buses, there is a subsidy called the Bus Service Operators Grant, currently worth £400 million in England in 2006/7. The payments are currently linked to fuel consumption, so do not encourage better service from patronage, punctuality or



quality perspective. Subsidising fuel consumption runs counter to the Government's environmental objectives. The objective of this funding is likely to change.

The Government is committed to Intelligent Transport Systems to reduce congestion and improve traffic flows.

There is recognition and policy analysis of the likely required infrastructure change if hydrogen and electric vehicles become more popular.

Government's intentions and policy measures have the potential to impact on market deployment, and are important, but cannot be the only way to deliver rapid and successful innovation. The King/Stern Review as announced at Budget 2007, will also contribute to this work.

The three relevant Government departments, DEFRA, DfT and DTI will closely monitor funding streams and any R&D&D undertaken to ensure no overlap occurs.

Conclusion

The uncertainty of technology development, security of energy supply etc going forwards gives a strong case for government to remain technology neutral, and it backs this up by identifying a number of options for future development to reduce emissions from road transport. Their aim is also to make the UK an attractive place for investment.

The full document can be accessed at:

<http://www.dft.gov.uk/pgr/scienceresearch/technology/lctis/lowcarbontis>

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