

GREATER MANCHESTER INTEGRATED TRANSPORT AUTHORITY
REPORT FOR RESOLUTION / INFORMATION

COMMITTEE: POLICY AND RESOURCES
DATE: 11 SEPTEMBER 2009
SUBJECT: LOW CARBON TRANSPORT: A GREENER FUTURE
REPORT OF: CLERK OF THE AUTHORITY AND INTERIM CHIEF
EXECUTIVE OF THE GMPTA

PURPOSE OF REPORT

To summarise and draw out the key implications for the Authority stemming from the recent Department for Transport publication of A Carbon Reduction Strategy for Transport, entitled Low Carbon Transport: A Greener Future.

RECOMMENDATIONS

Members are recommended to:

- 1) Note and comment as appropriate on the report;
- 2) Note that the Local Transport Act 2009 places ITAs under a duty to take account of government policies with respect to the environment and climate change;
- 3) Agree the proposed approach for officers to engage with operators, other PTEs and vehicle suppliers to investigate the potential of the Green Bus Fund as outlined in Appendix 2; and
- 4) Request that a further progress report be prepared for the Authority meeting in October.

BACKGROUND DOCUMENTS

Low Carbon Transport: A Greener Future – A Carbon Reduction Strategy for Transport, Department for Transport, July 2009 and background documents can be found on file in Room 308.

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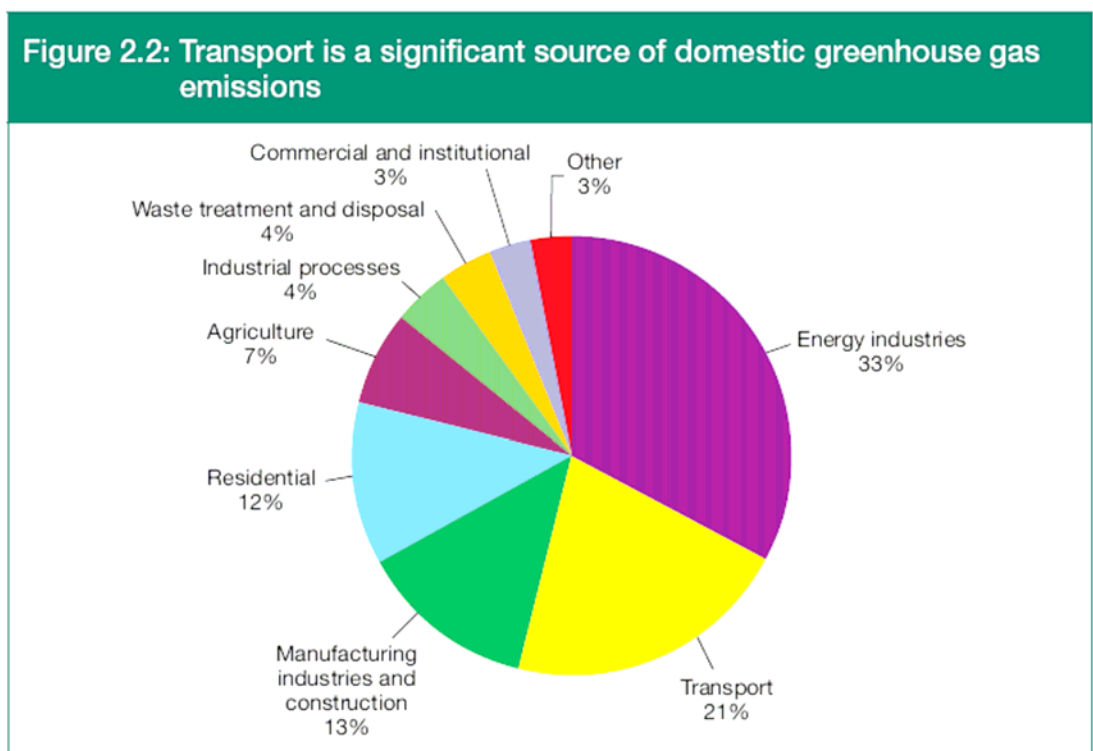
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1. Introduction

- 1.1 There is an overwhelming body of scientific evidence highlighting the serious and urgent nature of climate change, largely due to emissions of greenhouse gases (ie CO₂) as a result of human activities, such as the combustion of fossil fuels and changing patterns of land use. The Stern Review concluded that the cost of inaction on climate change massively outweighs the cost of co-ordinated global action.
- 1.2 The scientific consensus suggests that by 2050, greenhouse gas emissions globally must reduce by at least 50% to avoid the worst impacts of climate change. Government has therefore committed to reduce UK greenhouse gas emissions by 80% by 2050, over a series of 5 yearly carbon 'budgets' and has enshrined this goal within the Climate Change Act 2008.
- 1.3 Published in July, Low Carbon Transport: A Greener Future is the Department for Transport's (DfT) contribution to the Government's overall carbon reduction strategy, the UK Carbon Transition Plan.

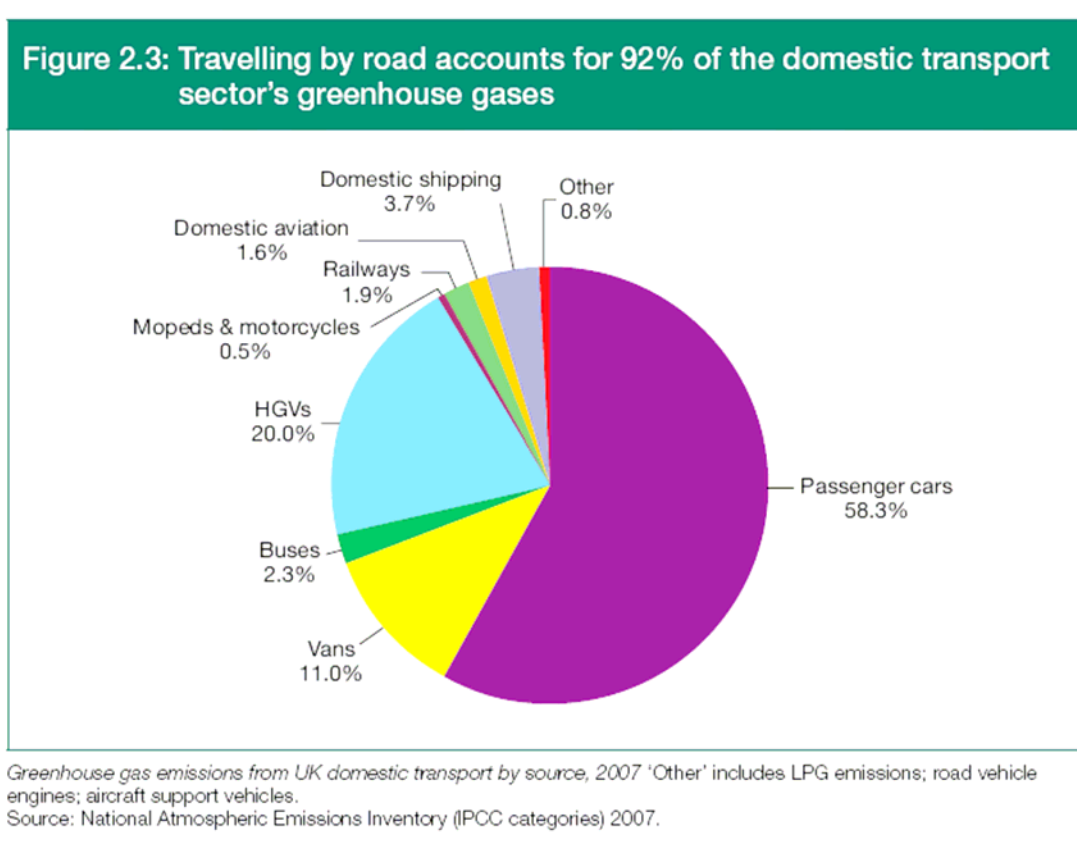
2. Evidence base and analysis

- 2.1 Figure 2.2 within the Strategy reveals that greenhouse gas emissions from transport account for 21% of the total UK domestic emissions, and that this proportion has increased by 12% since 1990.



UK domestic greenhouse gas emissions by source category, 2007 'Other' includes: fugitive emissions from fuels, agriculture and forestry fuel use, military aircraft and shipping, land use, land-use change and forestry (LULUCF).
Source: National Atmospheric Emissions Inventory (IPCC categories) 2007.

- 2.2 Given the Government's climate change commitments, the challenge addressed by the Strategy is the need to radically reduce greenhouse gas emissions stemming from domestic transport in the UK. International flight and shipping agreements are not expressly dealt with in this Strategy, but do form part of EU and global negotiations on emissions, for example those scheduled later this year in Copenhagen.
- 2.3 Figure 2.3 identifies the key sources producing the most transport related CO2 emissions. Further analysis of the emissions resulting from passenger cars reveals that 21% of CO2 emissions arise from journeys of less than 5 miles, and 64% from those of less than 25 miles (see Appendix 1, Fig 2.6). In this context, enabling greater numbers to travel by the more CO2 efficient modes of public transport will clearly have a beneficial impact, especially for shorter journeys, whilst improvements in fuel efficiency and levels of occupancy of cars would also deliver significant benefits across all distances.



- 2.4 There are also marked differences in travel patterns between different groups in society. In general terms for example, women make slightly more trips per person, but travel much shorter distances. And analysis reveals that people working in public administration, education and health account for the largest proportion of commuting and business trips and distance travelled, suggesting that the public sector has a key role to play in reducing emissions (see Appendix 1, Fig 2.8). However, there is still more work to be done by DfT to develop analytical tools for Transport Authorities to determine which policy initiatives would result

in the most reduced carbon emissions. Guidance and advice on best practice for addressing carbon reduction strategies within the forthcoming third Local Transport Plan, including such analytical tools, are expected to be published in the autumn.

3. Shifting Transport toward a Low Carbon basis

3.1 In light of this analysis, the direction of the Strategy is to ‘decarbonise’ transport; not reducing transport per se. Transport and personal mobility underpin the productiveness of the local and national economy as well as individuals’ quality of life, so the Strategy aims to move toward a radically decarbonised transport system that allows for a similar capacity for mobility to today, but does so on a basis that is environmentally sustainable.

3.2 To secure this ambition the Strategy advocates a mix of policies, relevant to each mode and form of transport, that together can reduce transport’s overall contribution to emissions. This policy mix includes:

- a greater role for public transport whilst continuing to increase its carbon efficiency, and promoting sustainable modes (eg walking and cycling)
- promotion and investment in new technologies and cleaner fuels
- shifts in fiscal policy and the use of trading systems to reduce emission in aviation and shipping

The next sections examine each of these in a little more detail.

3.3 The Strategy highlights a significant role for all modes of public transport in reducing emissions, particularly when load factors are high.

3.4 In addition, the DfT is keen to stimulate further improvements in the carbon efficiency of bus vehicles, and has launched a £30 million Green Bus Fund from which bus companies, PTEs and local authorities in England can compete for funds to help them buy new low carbon buses. A Green Bus is a low carbon bus that is capable of achieving at least a 30% reduction in greenhouse gas emissions (compared to a similar size standard diesel Euro III) and also meets Euro V or better emissions standards. This could include very low carbon and electric buses. The Fund will just provide capital to cover the difference between the cost of a low carbon bus and the cost of its standard equivalent, so there may be some capital implications for the Authority. More information is provided at Appendix 2.

3.5 The Strategy also boosts the case for High Speed Rail plus the further electrification of the rail network, insofar as this permits lighter vehicles, the use of more efficient engines drawing power from carbon neutral sources of electricity and regenerative braking. All of which further enhance the environmental credentials of rail – be it local, intercity or

high speed. It is estimated that electric trains emit 20 to 35% less carbon per seat kilometre compared with diesels.

- 3.6 Also promoted within the Strategy is the critical importance of the better co-ordination and integration of public transport, particularly in conurbations like Greater Manchester, alongside initiatives such as smart ticketing and promoting sustainable modes.
- 3.7 With regard to technological innovations, the Strategy is aimed at radically decarbonising road transport by 2020 primarily by maximising the potential of technology to substantially reduce emissions from cars, vans and HGVs by:
- Tightening vehicle standards at EU level in terms of CO2 emissions
 - Leading research and development on low carbon vehicles
 - Supporting development of ultra-low carbon vehicles, eg electric vehicles
 - Exploring the potential of biofuels
- 3.8 Finally, the Strategy advocates using fiscal measures, such as fuel duty, company car tax, vehicle exercise duty and air passenger duty to provide price signals to businesses and consumers that encourage a move to lower carbon forms of transport. The basic principle at work here is to begin to factor in carbon costs, given that the climatic changes that result from increasing concentrations of greenhouse gases will impose costs on society. At the moment however, the full cost of these emissions is not borne by the emitter, meaning that firms and individuals do not account for the cost of emissions when making their production and consumption choices. Without Government intervention there is therefore little economic incentive for firms or individuals to alter their behaviour, and greenhouse gas emissions are unlikely to be reduced to levels consistent with avoiding the serious consequences of climate change.

4. Implications for the Authority

- 4.1 The implications for the Authority will be profound, many and varied. Given that the GMITA is now under an explicit statutory duty to take account of government policies with respect to the environment and climate change, the overall task for the Authority will be to embed the objective of decarbonising transport within the next Local Transport Plan (LTP 3). Over the coming months, this Committee will receive further information on the proposed processes for LTP 3 development, so as to provide a framework for these policy frameworks.
- 4.2 In addition, given the emphasis the Strategy places on providing individuals and businesses with advice and information on choosing lower carbon transport options, there is likely to be an enhanced role

for Smarter Choices within LTP 3, such as travel planning and public transport marketing campaigns, etc.

- 4.3 More immediately however, the officers are now investigating the potential offered by the Green Bus Fund, and working with bus operators and other PTEs in developing proposals, notwithstanding the challenging timescales.
- 4.4 The GMPTE is also in the process of reviewing and developing its strategic approaches to climate change. Further information on this will be brought to members of the Authority in due course.
- 4.5 At the Greater Manchester level, AGMA has agreed that a full response to climate change is part of a wider analysis about economic prosperity, as well as environmental protection, such as positioning the city region globally as a low-carbon investment location of choice for businesses in all major growth sectors. This Strategy assists in setting out a national framework for developing the role of transport within the wider climate change agenda. Officers will seek to build upon this framework in local co-ordinated efforts, for example, working with the AGMA Environment Commission and the proposed GM Climate Change Agency, which is charged to manage Greater Manchester's response to the challenge of climate change. Further outcomes and proposals emerging from this work will be brought to this Committee in due course as part of its consideration of future LTP 3 policies.

5. Recommendations

- 5.1 A full set of recommendations can be found on the front page.

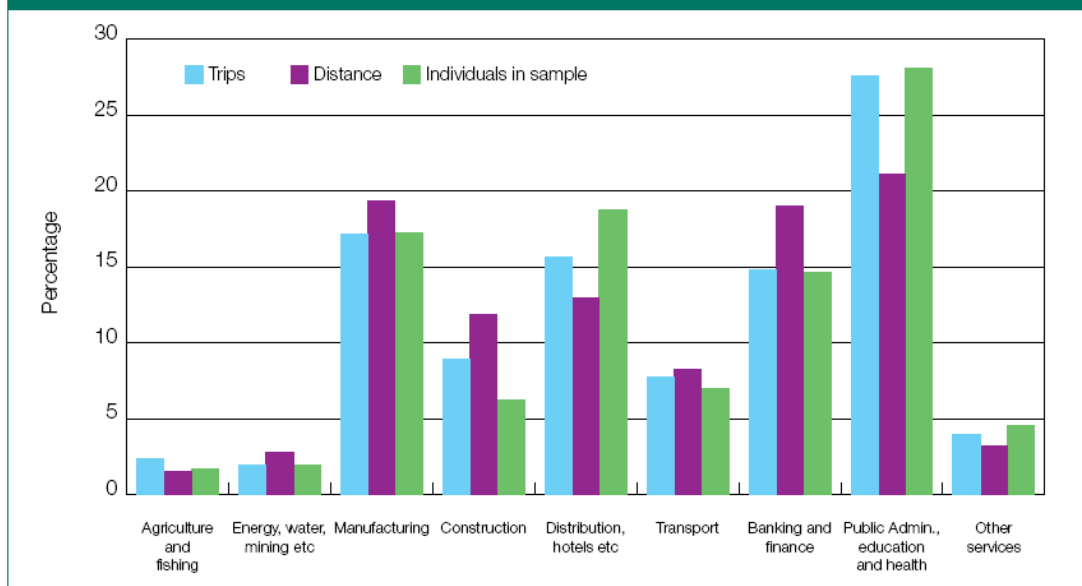
Appendix 1

Figure 2.6: Commuting and business trips generate over a third of car emissions



Estimated CO₂ emissions from household cars by journey purpose and journey length, GB, 2002/2006 average.
Source: DfT Analysis, 2009

Figure 2.8: Workers in the public sector account for the greatest proportion of commuting/business trips



Car driver trips and distance travelled for commuting/business by industry worked in, GB, 2002-2006.
Source: National Travel Survey 2002-2006

Appendix 2

Green Bus Fund

- 1 Key features of the Green Bus Fund include:
 - £30 million to support just the *additional* costs of buying low carbon buses in 2009/10 and 2010/11. Bid values can be no more than the difference between the cost of a low carbon bus and the cost of its standard equivalent, albeit those bids seeking a lower amount of grant per bus are likely to be more successful.
 - The competition is open to bus operators, local authorities, PTEs and Transport for London
 - Joint bids between multiple operators, multiple authorities or a combination are encouraged to generate economies of scale.

- 2 Officers propose that the following options be investigated:
 - Operators be encouraged to consider using the Green Bus Fund to increase the number of green vehicles in their fleet, and where necessary, GMPTE provide assistance in submitting individual and/or joint operator bids.
 - The potential for GMPTE to directly procure its own vehicles (such as Metroshuttle or Yellow School Bus) and submit an individual bid. This option may have wider capital implications.
 - The potential for GMPTE to submit a joint bid with other PTEs or neighbouring local authorities, in order to gain economies of scale through the higher volume of vehicles involved

- 3 The timescales for bidding to the Green Bus Fund are very challenging, and the fact that it funds just the additional 'low carbon' element of bus costs will entail a complicated procurement process, possibly involving several parties. The closing date is 4 November, with the DfT keen to announce winners by December; hence officers suggest bringing an update report to the 16 October Authority meeting.