

Reducing road transport emissions

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Efficient use of transport is critical..and has far reaching benefits for the UK

Support jobs, innovation and growth



Investment in new technologies in the motor industry will enable the UK to become a world leader in this sector and create significant job opportunities.

Increase energy security



Diversifying public and private transport can increase UK self reliance, and improves energy security.

Increase business efficiency



More efficient driving reduces fuel costs and emissions. **Business and public fleets can save thousands of pounds** per year.

Improve public health



Cutting harmful tailpipe emissions will lead to **health benefits** due to improved air quality.

Reduce the cost of living



Greater fuel efficiency of new cars saved consumers equivalent of **14p per litre** compared to a new car sold in 2009.

The environmental impacts of transport are significant

100% 90%

Greenhouse Gases (GHG)

- In 2015, domestic transport GHG emissions were
 24% of total UK GHG emissions
- Future CO₂ reductions will focus increasingly on transport.

Air Quality

- Poor air quality linked to around 40, 000 premature deaths a year
- Annual impact on productivity estimated at up to £2.7bn.
- NO₂ limits have been breached with 80% NO_x concentrations at roadside from road transport







Department for Transport The long term solution is electrification

- The UK has ambitious long term goals and has committed significant funding to support this
- £290m at 2016 Autumn Statement 2016 to support low emission vehicles:
 - o Cleaner buses and taxis
 - Charging infrastructure and grants for electric vehicles
 - $_{\odot}\,$ Research and development



2050 2040 2020 Nearly all cars and vans to be All new cars and vans to be 3-7% new cars to be ultra zero emission vehicles zero emission vehicles low emission vehicles £270m £600m+ **Office for Low Emission Vehicles** c.£400m Autumn Statement 2016 **Spending Review 2015** Dedicated DfT/BEIS policy and delivery unit 2010-2015

Separtment for Transport For cars and vans (and buses) the pathway is clear

- Over 100,000 ultra low emission vehicles (ULEVs) now registered in the UK – the EU's leading market
- The Plug In Car Grant has proved very effective, driving increased ULEV uptake.
- Tougher global regulations will reduce average car and van emissions and encourage ULEVs



Europe's largest network of rapid public chargepoints, and over 75,000 domestic chargepoints



Nissan's electric LEAF built for Europe in Sunderland, and Geely's new electric black cab in Coventry





We need a clear pathway for how we are Department for Transport We need a clear pathway for how we are going to get there for <u>all</u> vehicles

- Investing more in stimulating production of advanced low carbon fuels
 - Will remain a vital part of the UK's existing and future transport energy mix
 - O Up to £40m funding to support demonstration projects and competition

 How can we support the freight and logistics industry to a future where a mixture of electric – and most likely hydrogen are the primary power sources?





Reducing HGV emissions is challenging but vitally important

DfT's 2017 Freight Carbon Review:

- improved vehicle, driver and operational efficiency,
- alternative fuels and,
- in the longer term, electrification and probably hydrogen.

Key questions remain:

- Can more be done in the short term to improve efficiency across the sector?
- How can we support efforts across the industry to do this?
- What does the specific fuel pathway for freight look like?



Department for Transport Road Transport Energy Strategy: key drivers



What are the short, medium term and longterm energy pathways for road transport?



HGV emissions - diesel vs methane

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And there are still key challenges to getting the full vehicle road fleet using electric and hydrogen

- What infrastructure is needed for the mass market transition to electric vehicles (including alternative fuels), and what should the Government's role be in this?
- How can we maximise the opportunities and minimise the risks for our energy system?
- What is the best approach to regulation of vehicle manufacturers to achieve our goals as Britain leaves the EU?









Department for Transport We want your thoughts

- On infrastructure
- On roll-out of alternative fuels and vehicles
- On regulation

Comments and views welcome!



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