



www.eti.co.uk

Vehicle electrification impacts

Wednesday 11th October 2017

Andy Eastlake - LowCVP

Liam Lidstone - ETI



© 2017 Energy Technologies Institute LLP

The information in this document is the property of Energy Technologies Institute LLP and may not be copied or communicated to a third party, or used for any purpose other than that for which it is supplied without the express written consent of Energy Technologies Institute LLP.

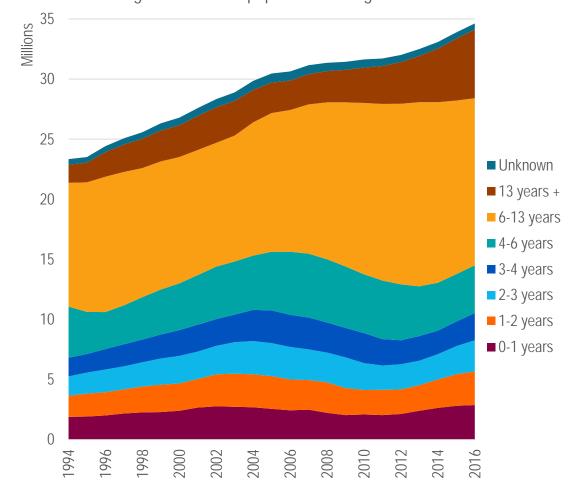
This information is given in good faith based upon the latest information available to Energy Technologies Institute LLP, no warranty or representation is given concerning such information, which must not be taken as establishing any contractual or other commitment binding upon Energy Technologies Institute LLP or any of its subsidiary or associated companies.



Light Vehicles in the UK



Light vehicle fleet population and age distribution



30m

There is a total parc of over 30m cars

4.6m↑

Between 2003 and 2016 the overall parc grew by 4.6 million cars

42.6% \(\)

There was a 42.6% increase in the number of vans in the parc (2003 – 2016)

13.9yrs*

The average life of a car on the road has now exceeded 13 years

Based on DfT vehicle statistics (2017)

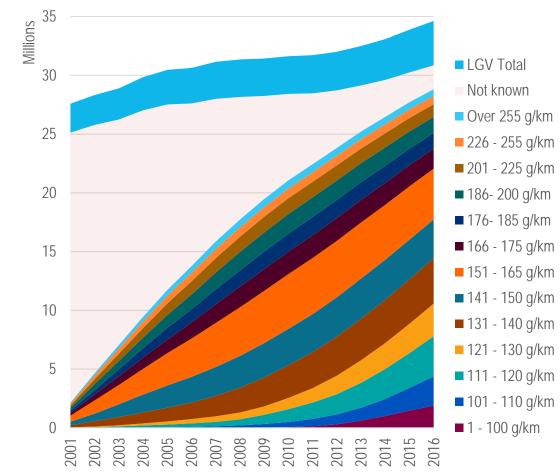
*average car scrappage age in 2015 (SMMT, 2017)



Light Vehicles in the UK







16%

Light vehicles contribute around 16% of CO₂ emissions

5%

The cost in 2050 for a low carbon vehicle system is only about 5% more expensive than a do nothing approach – but transition costs are significant

1/3

Only around a third of UK car mileage is in urban areas. Over two thirds of UK mileage is on motorways and major "A" roads

400bn

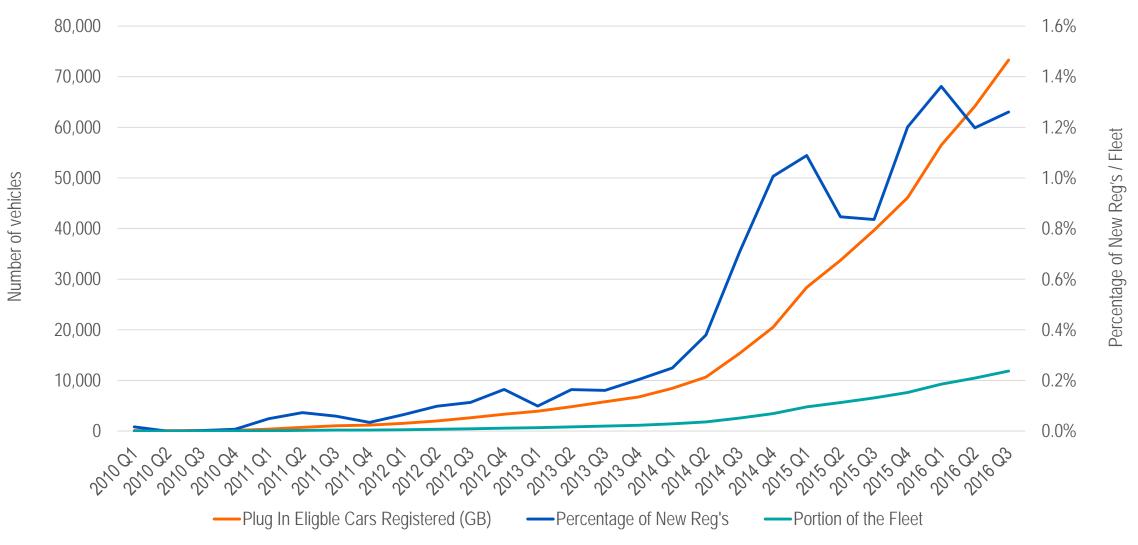
400 billion person-miles are travelled by car each year – 10x more than rail and 20x more than bus/coach

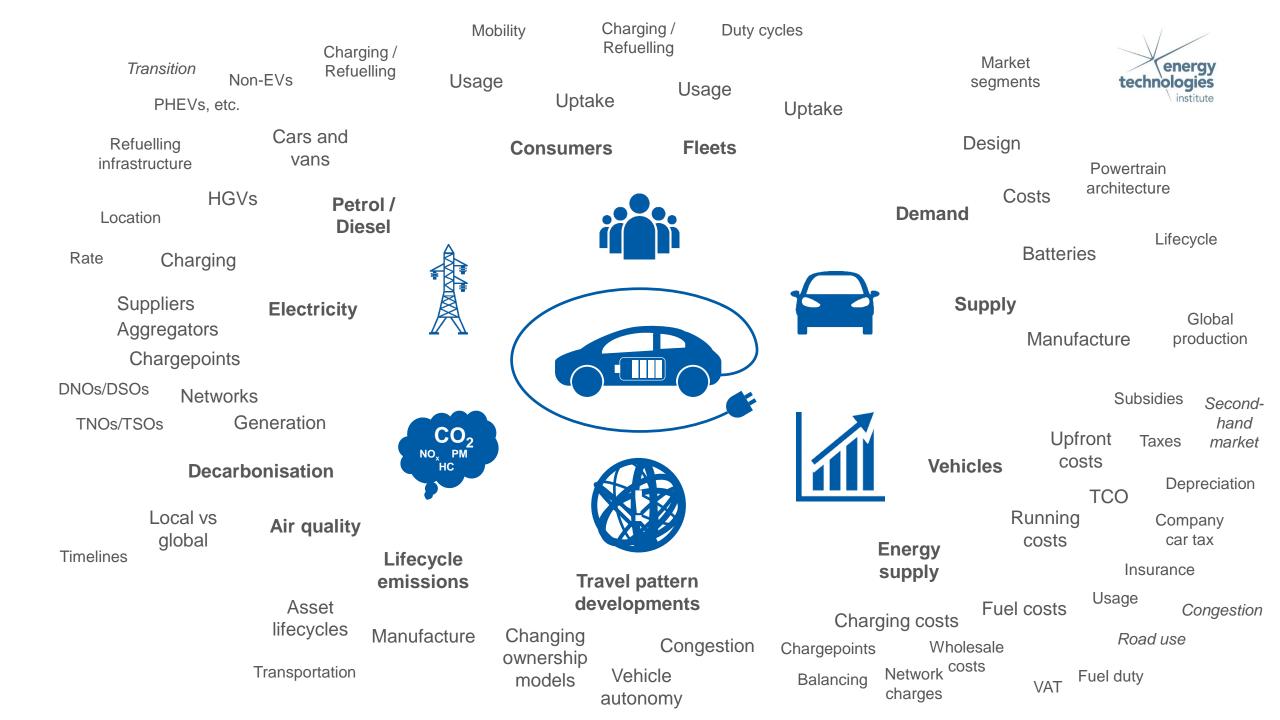
Based on DfT vehicle statistics (2017)



Plug-in vehicle sales



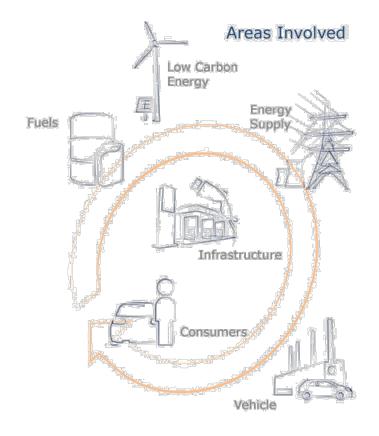






Consumers, Vehicles and Energy Integration (CVEI) project





- £5m, 2.5 year project to address the challenges involved in transitioning to a secure and sustainable low carbon vehicle fleet
- Aims to understand changes to market structures and energy supply systems to support high deployment of plug-in vehicles, the technical implications of any changes and how people might respond to them
- It will examine how tighter *integration* of vehicles with the energy supply system can benefit:
 - vehicle users
 - vehicle manufacturers
 - organisations throughout the energy supply chain
- The outputs are being made available to:
 - help inform UK and European government policy
 - help shape energy and automotive industry products













THE BEHAVIOURAL INSIGHTS TEAM.







Join us at our event

10 Years of Innovation A showcase of a decade of research



County Hall, London 21st and 22nd November

Register online at - www.eti.co.uk/10Years







Registered Office
Energy Technologies Institute
Holywell Building
Holywell Park
Loughborough
LE11 3UZ



For all general enquiries telephone the ETI on 01509 202020.



For more information about the ETI visit www.eti.co.uk



For the latest ETI news and announcements email info@eti.co.uk



The ETI can also be followed on Twitter @the_ETI