

Connect Collaborate Influence

Encouraging the take-up of low emission vehicles



EPUK Conference Thursday, 10th November 2016 Gloria Esposito, Head of Projects, LowCVP

Low Carbon Vehicle Partnership



LowCVP is a public-private partnership that exists to accelerate the shift to low carbon vehicles and fuels whilst protecting air quality

Buses	Commercial vehicles	Fuels Passeng	ger cars	
Creating Com	munities			
Gathering	Building Under	standing		
multiple stakeholders to	Researching market barriers,	Influencing Policy		
challenges/	evidence to inform policy,	Defining measurement processes, designing	Accelerate the Marke	et
	other measures to increase market take up	incentive schemes, create policy guidance, input into consultations	Promotion of common policies, fleet operator guidance, outreach to delivery partners	

Over the last decade LowCVP has influenced policy and created the market for clean & green buses



Where are different vehicle sectors in their transition to low/ultra low emission mass market take-up



ULEV and Conventional vehicle parc transition





Currently 4,301 'green' buses current in service

Operating in 35 areas of the UK – London to Oxford to York and Aberdeen



40% of new bus sales in 2015 qualified as low carbon buses & 50% Euro VI

How do we qualify different bus technologies and w Carbon Vehicle Partnership fuels as a 'Low Emission Bus'?

A Low Emission Bus (LEB) "produces more than 15% Well-to-Wheel (WTW) GHG emissions saving compared with an equivalent Euro V diesel bus and meets the Euro VI engine standard."



operation plus air pollution emissions

Low Emission Bus **Accreditation Scheme**

Measurement technique based on whole vehicle emission testing – compliance with LEB definition. Uses a real world bus test cycle - New LUB cycle







Performance of Euro VI buses

Euro 6 HDV engines in buses (and trucks) are delivering very low NOx levels



Source: LEB accreditation scheme test data.

Note: Euro VI passenger car NOx limit – 80g/km



Creating independent and accessible information on LEB technologies and fuels to help accelerate the market



Aimed at local authority & bus fleet operators

Covers 9 bus technologies and fuels & associated infrastructure

Outlines Technical, Operational, Financial, Environmental Performance



Aimed at bus operators & policy makers

Covers 20 UK case studies

Raise confidence in operation & benefits of different technologies/fuels



Influencing local policy to encourage take-up of low emission vehicles



Italv

Estonia



12 Topic Areas Covering 52 Measures





Low Carbon Vehicle Partnership

Recommendations from the Good Practice Guide

- Consistent standards and definitions for LEVs are required across the UK should combine CO2 emission standards and EURO standards for air quality
- Avoid picking winners variety of low emission technologies/fuels set a performance standard
- Embed requirements for low emission vehicles across Council policies and strategies
- Incentives & deterrents are important for accelerating low emission vehicle take up fiscal and non-fiscal
- Influential areas: Planning, Procurement, Parking, Taxis Licensing
- Collaboration and knowledge sharing important for implementation of measures

Huge variability in standards for low emission vehicle prescribed in local authority policy

LowCVP interested in creating definitions of low emission vehicle for trucks, vans and cars





Designing a Clean Vehicle Retrofit Accreditation Scheme - Work-in-Progress

NO₂ Action Plan States – 'The Department of Transport has commissioned the Low Carbon Vehicle Partnership to develop a new Clean Vehicle Retrofit Accreditation Scheme. This will ensure there is a robust system in place providing independent evidence that any future vehicle retrofit technology scheme will deliver significant NOx emission reductions and air quality benefits ..'

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Department		
for Environment		
Food & Rural Affairs	3	
Improving air quality in the	UK	
Tackling nitrogen dioxide	in our towns and cities	
List of UK and national me	asures	
December 2015		
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Overarching Design Objectives



Overarching Objectives

• To set emission based performance criteria for retrofit technologies which can reduce NOx emissions for **Buses**, **Coaches**, **Trucks**, **Mini-buses**, **Vans and Taxis**.

Recommending a two tier approach

- 1) For potential use with Clean Air Zones targets aligned to Euro VI/6
- 2) For optional clean vehicle retrofit funding schemes with less onerous targets to be adopted in non-CAZ cities.
- To ensure **no negative impacts on other air pollutants and greenhouse gas emissions** set appropriate emission standards.
- To prepare a set of **vehicle emission test procedures** to qualify retrofit equipment performance against proposed emission standards
- To maximise the use of existing and established processes and tests
- To ensure consideration is given to measures to ensure technology durability



What's next...LOTS over next 12 months

LOWC^{VP} Low Carbon Vehicle Partnership

- CAZ framework consultation
- Low Emission Bus regional workshops
- Creating a Low Emission Taxi Guide and representative test cycle
- Integration of WLTP into consumer information
- Defining a ULEV
- Definition of Low Emission Truck & Incentives
- Policies require to kick start L-Category vehicle market



Interested in collaborating and joining the Partnership?

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