# CO2 from vans, van selection and future regulation from Europe

Clean Air through Green Fleets 26<sup>th</sup> March 2009

Jonathan Murray Low Carbon Vehicle Partnership



### *Low Carbon Vehicle Partnership*

Accelerating a sustainable shift to low carbon vehicles and fuels in the UK

Stimulating opportunities for UK businesses





### Agenda

- Why action is required to reduce CO2 emissions from light commercial vehicles.
- Government regulation relating to van CO2 emissions at a European and UK level.
- Impact of mandatory targets for van CO2 emissions on the UK market?
- Sources of information available in the UK to make more informed choices on van selection.
- The scope for reducing fuel consumption and saving money through better van selection.



# Vans are an important and growing source of greenhouse gases

UK committed to reducing CO2 emissions;

- Kyoto target of a 12.5% reduction in CO2 emissions, compared to 1990 levels, by 2012 is legally binding.
- UK Govt's own target of 20% reduction by 2010.

Road transport accounts for 22% of UK carbon dioxide emissions

Light goods vehicles account for approximately;

- 14% of road transport CO2 emissions
- 3% of UK total CO2 emissions.



Source: DfT 2008



# Van usage is out growing other forms of road transport, and is predicted to continue





Source: DfT 2008

### *European Commission planning to introduce compulsory CO2 emission targets for LGVs*

■EC has proposed targets to improve average fuel consumption and reduce CO2 emissions for vans.

 Baseline 2002 average fuel consumption 33mpg and average CO2 emissions 203 g/km

Short term target 2012 37.4mpg and 175 g/km by 2012.

■ Medium term target 2015 40.9 mpg and 160 g/km by 2015.

The EC is expected to finalise legally-binding CO2 emission and fuel consumption targets for vans by the end of 2009.



Source: AEA 2008



# The target will challenge a number of van manufacturers, initially through sales mix



low carbon vehicle partnership

Source: AEA 2008

#### To achieve reductions in CO2 emissions will require fleets of all sizes to reduce fuel consumption



LOWC

Source: ACFO

# Fuel consumption has not been an important factor in determining vehicle selection

LowCVP conducted a workshop on van procurement with a variety of van fleet operators in conjunction with the FTA. In order of importance the key attributes influencing vehicle selection where;

□ Fit for purpose

- GVW, ULW, Payload, GTW (towing)
- □ Wheelbase
- Load dimensions length, width, height
- Load cubic capacity
- Access door height and width, loading height
- Driver acceptance
- Fuel consumption



# Van CO2 data will be published on the internet from April 2008

■ Since the beginning of 2008, van manufacturers have been required to provide CO2 emissions figures to governments - although not to the public.

The Government in conjunction with the SMMT has agreed to publish light commercial vehicle CO2 data – expected April 2008

The data will be published by the Vehicle Certification Agency at; www.vca.gov.uk

The SMMT have published a guide to van selection downloadable from: www.smmt.co.uk





#### NEDC test cycle is highly stylised and was developed for cars, is it appropriate for vans?

New European Drive Cycle (NEDC)





### Collection and delivery is a key area where driving patterns differ from cars



low carbon vehicle partnership

#### Company vans, reason for trips

# Would a real life test cycle be more appropriate for vans?

Comparison of NEDC, FIGE, Artemis 130 and UDDC Drive Cycles



### NEDC is not a good predictor of real life fuel consumption or CO2 but is useful for ranking vans

Comparison of Carbon Dioxide over different cycles for a each test vehicle



LowC<sup>VP</sup> low carbon vehicle partnership Source: Millbrook

# NEDC tests vans with a 25kg payload, does loading the van have an impact?





### NEDC remains a good ranking tool.

Comparison of Carbon Dioxide over the NEDC cycle at different test inertias for each vehicle



LowC<sup>VP</sup> low carbon vehicle partnership Source: Millbrook

### Summary

- Light commercial vehicles are a significant and growing source of CO2 emissions and will be subject increasingly to Government regulation in the future.
  - The VCA will publish van CO2 data from the end of April 2009
- Changes in the sales mix will be the primary means of achieving EC proposed targets for van CO2 in the short term.
  - In the medium term technology will deliver greater reductions
- Evidence that the provision of CO2 and fuel consumption data will allow improved vehicle selection and fuel savings
  - It's cheaper to run a small van fully loaded than a large van half loaded
  - If your mainly driving on motorways and dual carriageways then a larger engine with overdrive will be a good option
  - If you operate in urban areas choose a smaller engine and consider stopstart options if available



### **Any Questions?**

### 020 3178 7860 The Low Carbon Vehicle Partnership

secretariat@lowcvp.org.uk

www.lowcvp.org.uk



