### Encouraging local, low carbon, transport solutions

National Association of Councillors Tackling Climate Change - Protecting our Environment York Conference

22<sup>nd</sup> January 2010

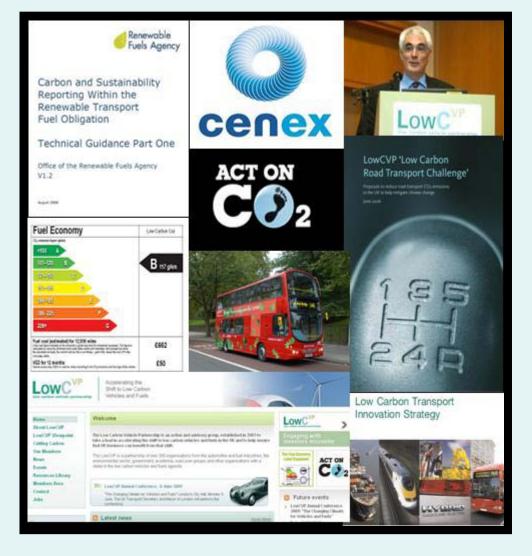
Greg Archer Managing Director, Low Carbon Vehicle Partnership



### Low Carbon Vehicle Partnership

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

Stimulating opportunities for UK businesses





### Scope

- The contribution of transport to greenhouse emissions
- Emissions reductions approaches for local authorities
- Technology options
- Local action to promote, procure and support low carbon options
  - Available support
  - Local case studies
- LowCVP local authority network
- Key messages

Delivering Sustainable Low Carbon Travel: An Essential Guide for Local Authorities



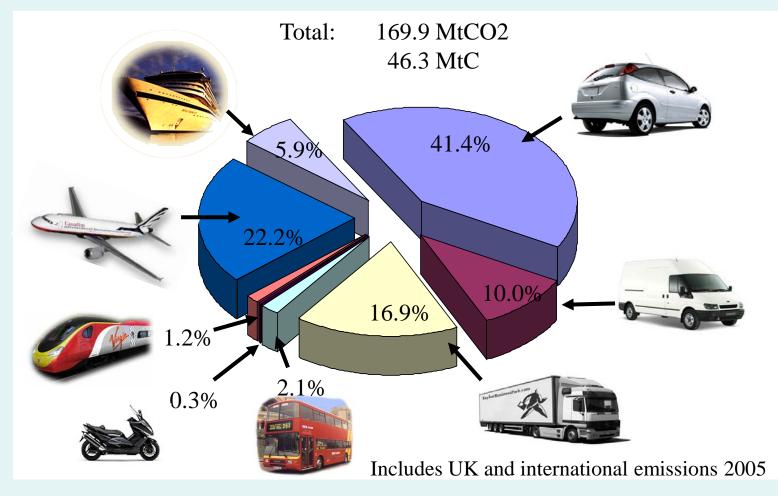


November 2009

Department for Transport



# *CO<sub>2</sub> from transport contributes about a quarter of the UK's emissions*





# There are a wide range of approaches and audiences for local, low carbon transport initiatives



Lower carbon models are now available in every market segment - but consumer demand remains weak

### Local authorities can make a valuable contribution to promoting low carbon options



Smart for two 88g/km



Prius 3 89g/km



VW Passat 118g/km



Volvo S80 104g/km



Volvo V50 104g/km



Lexus RH450 148g/km

LowC<sup>VP</sup> low carbon vehicle partnership

# There are a range of options available for local authorities to promote lower carbon models

- Strengthen authority fleet management and policies
  - Greenfleet advice EST
  - Carbon footprinting
- Require high standards of fleet management from major / relevant suppliers
  - Motorvate
- Eco-driving training for staff
- Differential charging for residents parking
  - Richmond, Edinburgh, York, Brighton
- Differential parking charges





# *New incentives and powers for local authorities have created new opportunities for deployment of carbon buses*

### Local authorities can:

- Make use of the new low carbon bus supplement of 6p/km
  - Natural gas (biomethane) buses receive 100% duty exemption (19.26p/ kg)
- Encourage LC buses through their PTE's
- Specify LC buses on Controlled Routes
- Buy or specify LC buses for own use e.g., ride and drive, school buses
- Use strengthened powers in Local Transport Act for Integrated Local Transport Authorities & Quality Contracts





## There are more & less sustainable ways of producing biofuels

#### **Fully sustainable**



Algal biofuel production >90% GHG-saving No indirect effects

British Sugar Wissingham Ethanol from sugar beat c60% GHG-saving Indirect effects possible

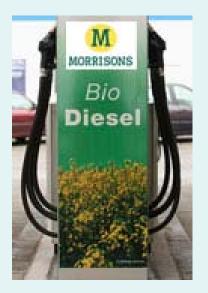
US Corn Minimal GHG-benefits Significant indirect effects

Matto Grosso – Brazil Deforestation for soy GHG-emissions **Totally unsustainable** 

# There are a range of approaches through which local authorities can promote biofuels

- Examine fuels use of biomethane for refuse trucks
  - Infrastructure grants available
- Deploy higher blend biofuels in own-fleet
  - But duty incentives being removed
  - Specify sustainability requirements
  - Check warranties
- Offer incentives for low carbon vehicles to those operating high blend biofuels
- Consider bioethanol, biodiesel or biomethane in buses







### *There is global momentum towards electrification of transport*

EVs address key geopolitical concerns:

- Climate
- Energy security
- Peak oil
- Early consumer interest as sustainable, cool, high technology products
- Substantial public funding of RD&D
- Investment & commitment from global OEMs

But ... early visionary vehicles do not create a mass market





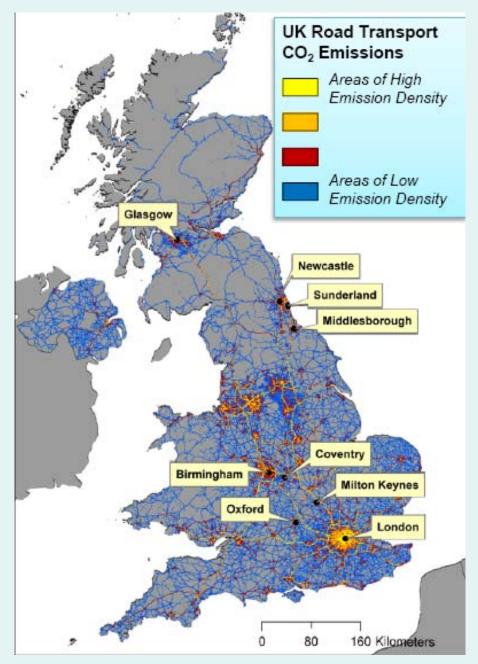




#### There are a range of ways local authorities can support the shift to EV:

- Participate in the Plugged-in-Places scheme
- Install recharging points in public car parks
  - Infrastructure grants available
- Offer free parking for EVs
- Procure vehicles for own-fleet use
- Participate in the £20M low carbon vehicle Public Procurement Programme
  - Not just EVs
- Look for to participate in future demonstration programmes
  - TSB





ETI 2009

### Join the LowCVP - Local Authority Network

- Advice on govt. initiatives that can benefit LAs
- Co-ordinate and communicate innovative solutions eg. biofuels, EVs, road pricing, procurement
- Develop new programmes with and for LAs
- Catalyse action between business and government tiers
- Join us and join up to low carbon vehicles!

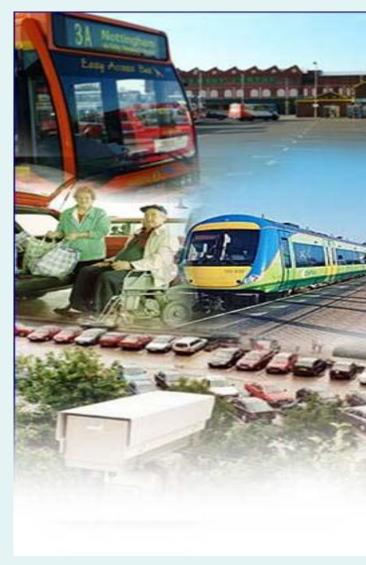




# Summary – local action can make a significant contribution to decarbonising transport

- Examine the options to support LCtechnologies
  - Greening own-fleet
  - Requiring green options from suppliers
  - Supporting green innovation
  - Promoting LC-options to local communities
  - Deploying biofuels and electric recharging points
- LC technologies complement other LCtransport solutions:
  - Smarter choices
  - Planning
  - Supporting car-clubs, car-sharing
- Join the LowCVP Local Authority Network





Thank you for your attention

### **Any Questions?**

020 3178 7860 The Low Carbon Vehicle Partnership

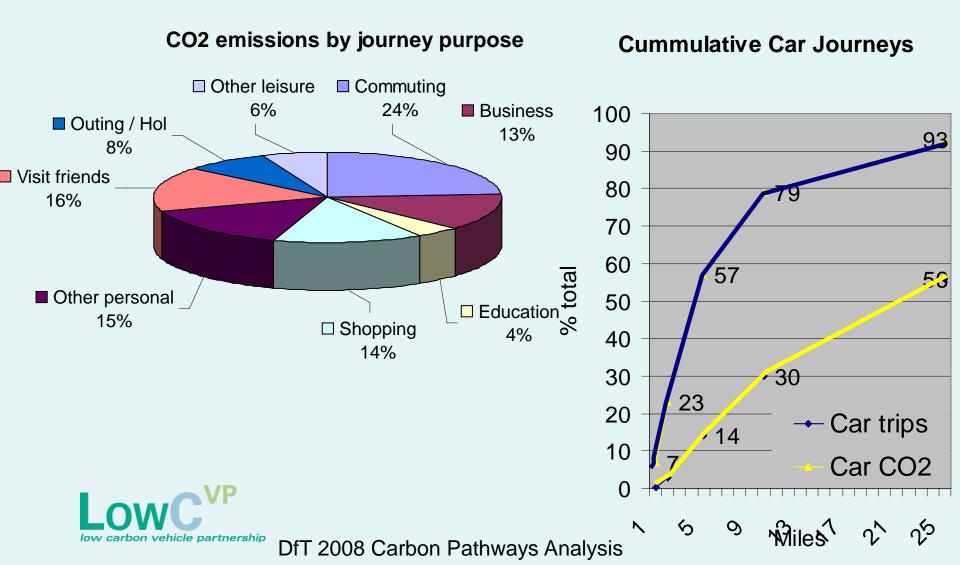
secretariat@lowcvp.org.uk

www.lowcvp.org.uk





### Multiple short journeys contribute relatively little to CO2 emissions



### Hydrogen fuel cell vehicles offer significant but still distant prospects

#### Key challenges:

- Higher costs per unit of energy
  - Adequate price of carbon mitigation
- Supply of renewable hydrogen
- Development of refuelling infrastructure and practical storage
  - Chicken and egg supply problem
- □ Supply of a range of affordable vehicles
  - Fuel cell costs, durability and reliability
- Improving public acceptability
- Alternative LC-options
- RD&D funding









### Green Fleet Advice







### Recent DfT guide provides local authorities with advice on delivering sustainable low carbon travel

- Details the policy and planning context
- Menu of sustainable travel initiatives
- Getting started advice
- □ Effective delivery
- Programme evaluation
- Case studies
- Limited guidance on opportunities for low carbon vehicles and fuels



# Biomethane buses receive additional support under new UK subsidy arrangements

- Natural gas buses receive 100% duty exemption (19.26p/ kg)
- From 2010-13 the duty differential on NG will be retained
- Biogas buses now receive additional 6p/km payment as a low carbon emission bus

c£3k pa



