

# Drivers and barriers to the use of biomethane in transport

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# LowCVP 's mission is to accelerate a sustainable shift to low carbon vehicles and fuels & stimulate opportunities for UK businesses

## LowCVP delivers its mission by:

- ❑ Working with Government (and other policy makers) to enable the development and deployment of more effective market transformation policies and programmes
- ❑ Engaging industry, stimulating and leading voluntary industry-wide initiatives
- ❑ Ensures consumers are informed about the opportunities and benefits of lower carbon options promoting their uptake
- ❑ Helping UK business, especially SMEs, to benefit from the new market opportunities
- ❑ Encouraging action and building a consensus for sustainable change through enhancing stakeholder knowledge and understanding.

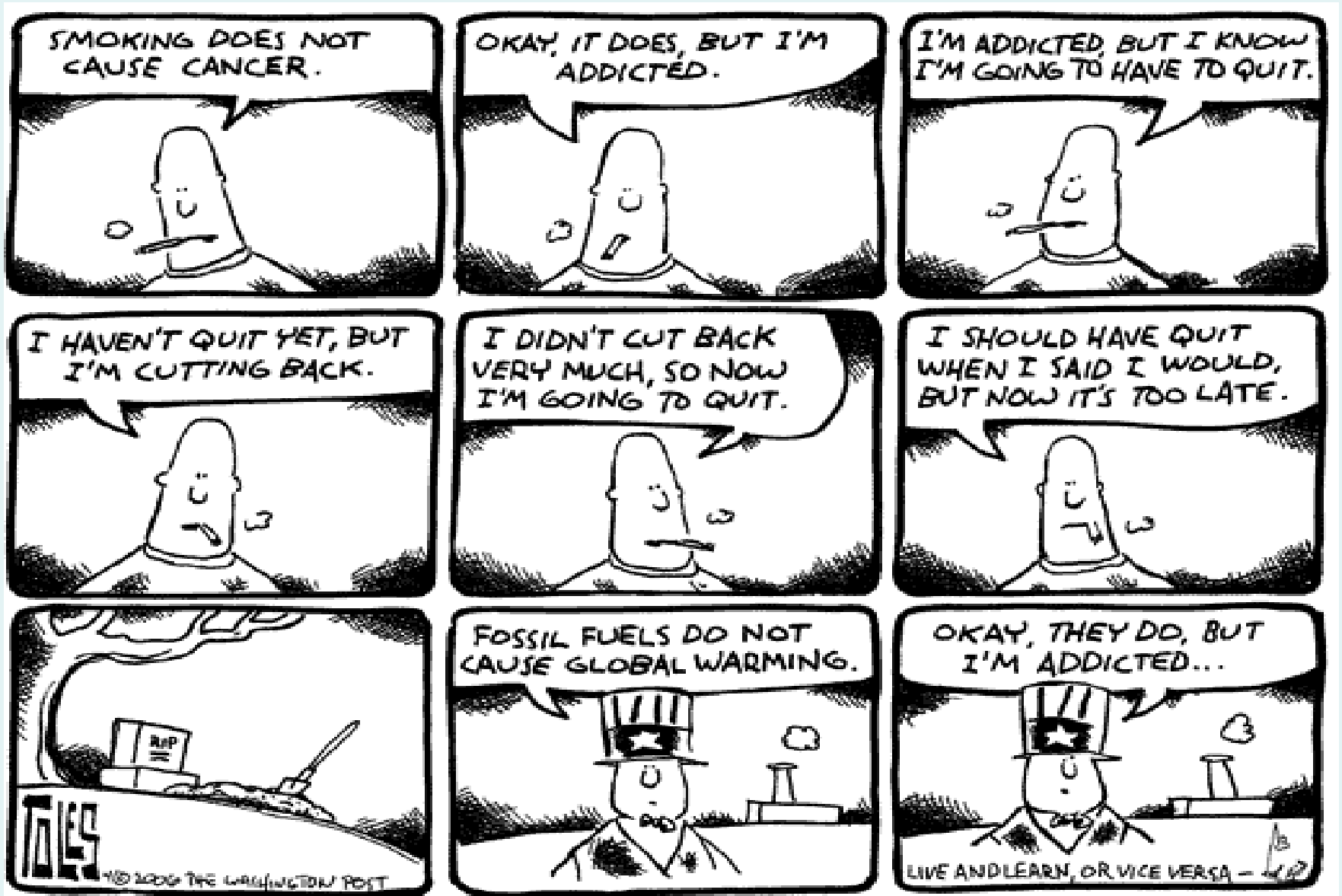


Low Carbon Transport  
Innovation Strategy



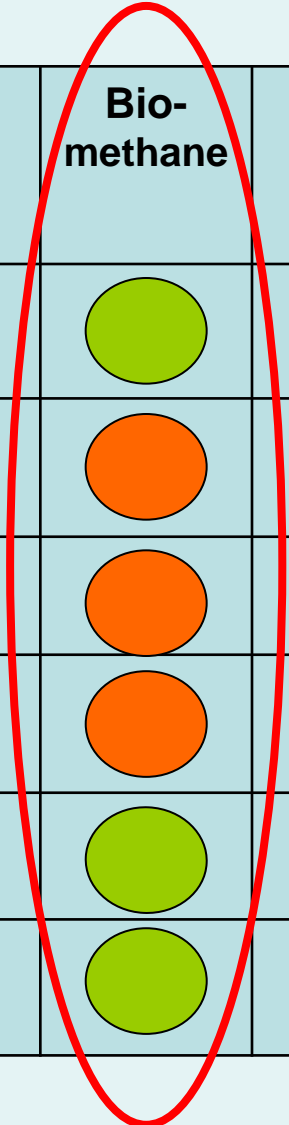
**LowC<sup>VP</sup>**  
low carbon vehicle partnership

Petroleum accounts for 99% of transport fuel use with widely recognised future climate, security of supply and price risks



Renewable transport fuels will become increasingly important .  
 No fuel meets all criteria ... but opportunities already exist in specific niche sectors

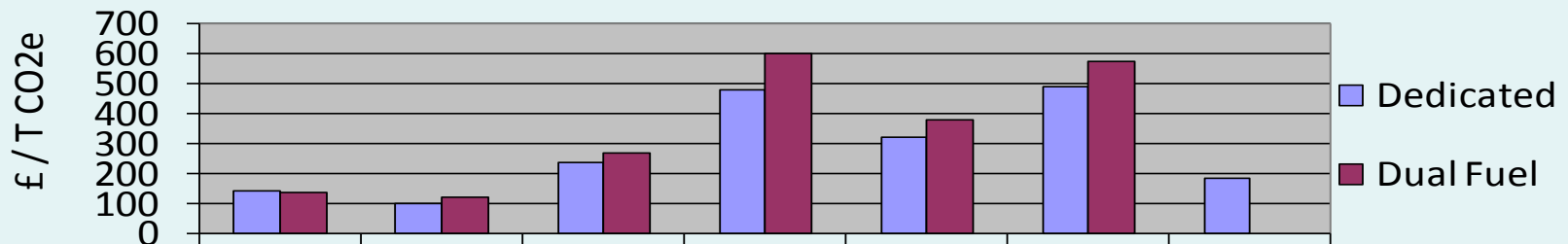
	Current Biofuel	Adv. Biofuel	H2-ICE	H2-FCV	Bio-methane	EV
Technology readiness	Green	Orange	Orange	Red	Green	Orange
Cost competitiveness	Green	Orange	Orange	Red	Orange	Orange
Vehicle availability	Green	Green	Red	Red	Orange	Orange
Infrastructure deployment	Green	Green	Red	Red	Orange	Orange
Driver acceptability	Green	Green	Orange	Orange	Green	Red
Sustainability	Red	Orange	Orange	Green	Green	Green



## Trucks, buses and refuse trucks are the most promising sectors for using biomethane in transport – 20%+ market penetration is achievable

- ❑ Mature technology – 12M natural gas vehicles worldwide, 10%pa growth
- ❑ Limited other low carbon options – none that can provide ultra-low carbon vehicles
- ❑ High emission and mileage vehicles – maximises benefit of low carbon fuels
- ❑ Large fleets with low ownership fragmentation
- ❑ Bunkered fuel at depots – manageable refuelling infrastructure
- ❑ Cost-competitive with diesel – with duty and bus incentives – in large fleets
- ❑ “Blend wall” prevents 10% Renewable Energy Directive target for transport energy being met

### Biomethane cost effectiveness



## There are a number of key market barriers in the UK the forthcoming biomethane strategy must address

- ❑ High capital cost and limited range of vehicles
  - Incentivise early market
- ❑ Poor vehicle residual (resale) values
  - Establish 2<sup>nd</sup> hand market
- ❑ Absence of public refuelling infrastructure
  - Subsidise or incentivise
- ❑ Industry conservatism and poor past experience
  - Demonstrate new technologies
- ❑ Uncertain future duty regime –
  - Extend 3 year foresight
- ❑ High costs and poor returns for biogas gas suppliers compared to other sectors
  - Balance incentives between sectors
- ❑ Absence of political leadership
  - Biomethane in transport strategy
- ❑ Relatively high distribution costs
  - Green gas certificate scheme



# Further Information?

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The Low Carbon Vehicle  
Partnership

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