

Environmental Bus Procurement

Sustainable Mobility Platform

LowCVP

Jonathan Murray

15 February 2007

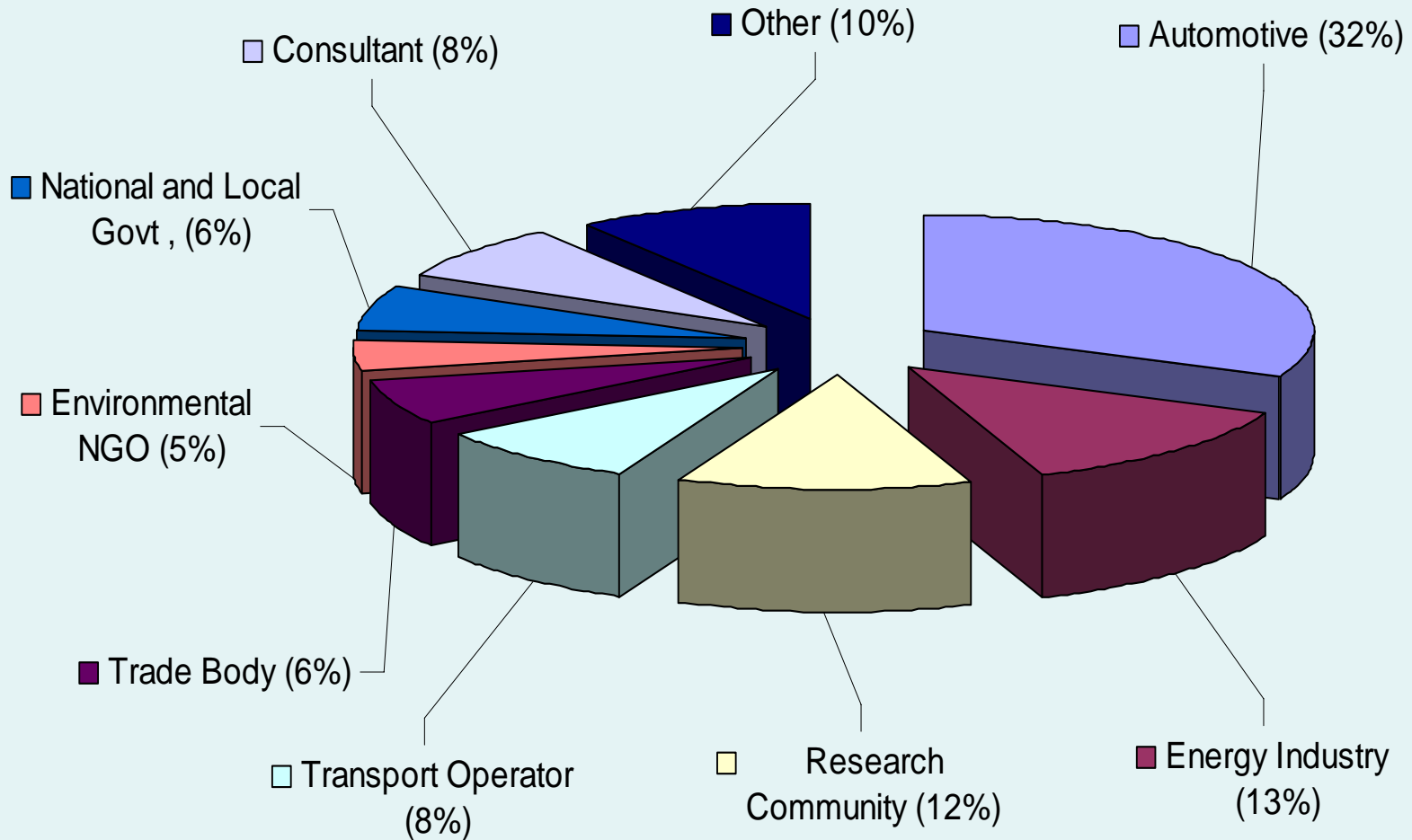
Low Carbon Vehicle Partnership

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

Stimulating opportunities for UK businesses



The LowCVP: 235 Members ... and growing



Powering Future Vehicles Scope

- ❑ Published by the UK Government in July 2002

“The Government’s objective for the UK is clear that this country should lead the global shift to clean, low-carbon transport”

- ❑ Objectives of the PFV strategy are:
 - To promote the development, introduction and take-up of new vehicle technologies and fuels.
 - To ensure the full involvement of the UK automotive industry in the new technologies.
- ❑ The Powering Future Vehicles Strategy is under review
 - Complete summer 2007

Powering Future Vehicle strategy review

Encourage R, D&D in low carbon buses

- Establish a low carbon transport innovation platform
- Greater support for demonstration
- Make use of **Public Procurement** to procure innovation

Support the introduction of low carbon buses

- National demonstration of low carbon buses
- Reform or supplement of bus subsidies in the UK
- Empowerment of Local Authorities

Stimulate the market for low carbon buses

- Taxation system amended to provide meaningful incentives
- Encourage public sector bodies to purchase low carbon buses

Environmental buses (Ecobus)

- ❑ Low carbon
 - 30% less carbon dioxide on a standard urban duty cycle

- ❑ Air quality
 - Euro 5 or better

- ❑ Noise
 - Reduce noise to meet the EU Environmental Noise Directive

- ❑ Passenger friendly environment
 - Smooth acceleration
 - Internal noise and vibration

LowCVP proposed amendments to low carbon bus targets

Milestone for demonstration

- ❑ 100 or more low carbon buses demonstrated in the UK by 2009.

Shifting to low carbon buses

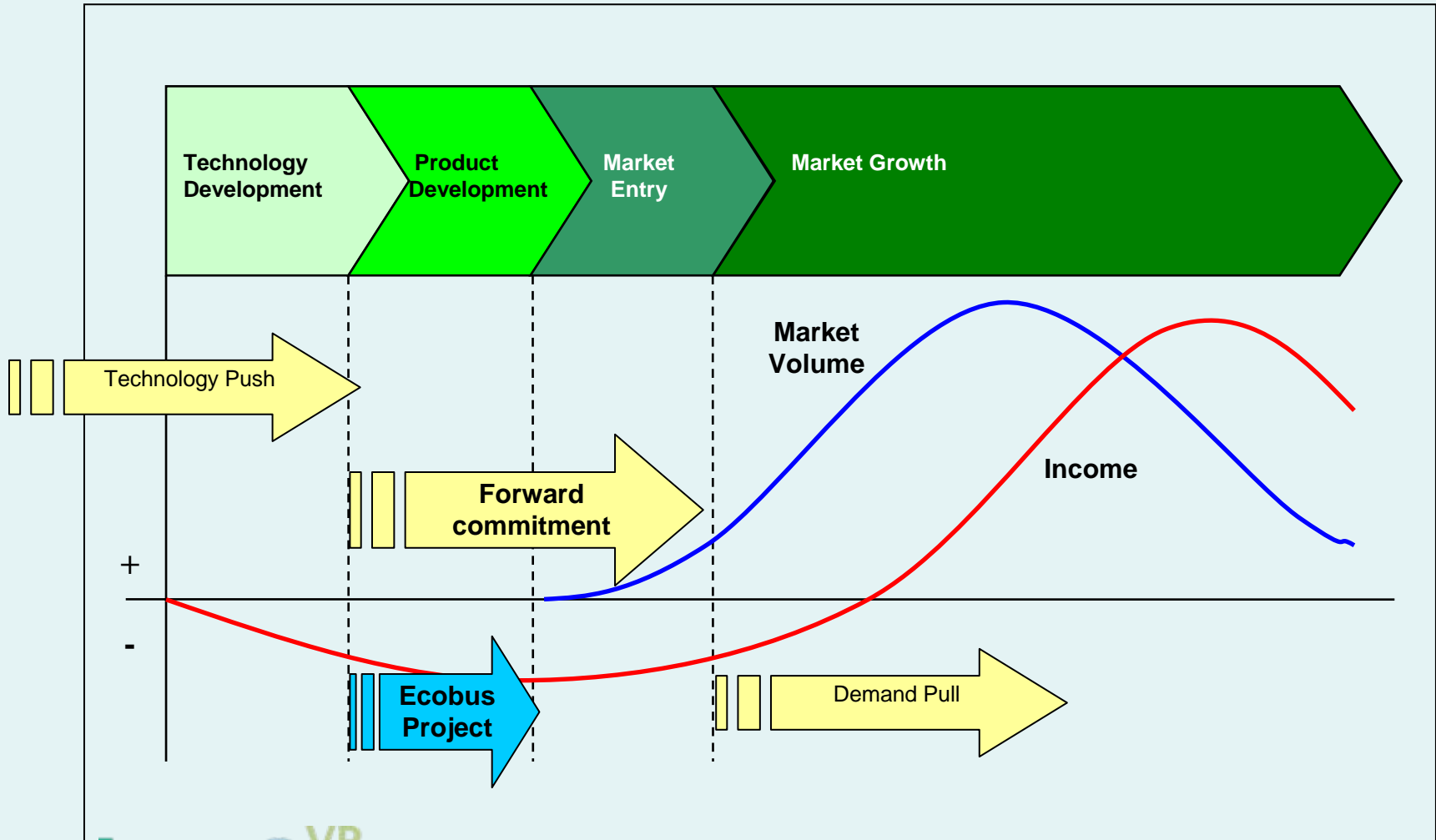
- ❑ 600 or more low carbon buses coming into operation per year by 2012.

Motivating future improvements

- ❑ X% of buses coming into operation per year by 2020 will be ultra low carbon buses.



Role of the Public Procurement in achieving market entry



Forward Commitment Proposition

- ❑ An organisation/s commits to purchase a pre-defined quantity of a product\technology currently under development but not yet available as a commercial offering
- ❑ The commitment is for a future date and is based on a specified product performance being achieved
- ❑ The supply of a product meeting this performance specification within the agreed timeframes and framework triggers the Forward Commitment
- ❑ The Forward Commitment is for a quantity of product sufficient to encourage supplier investment to ensure economies-of-scale
- ❑ The Forward Commitment is enacted within the usual framework of best practice public procurement

Low Carbon Bus procurement timetable

	2007				2008				...				2012				
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4					Q1	Q2	Q3	Q4	
Feasibility Study	█	█															
Stakeholder Engagement		█	█														
Consortium Development			█	█													
Ecobus Proposal	←→																
Forward Commitment			←→														
Forward Commitment Contract			█	█													
Phase 1: prototype development				█	█	█	█										
Phase 2: batch production							█	█	█	█	█						
Phase 3: volume production														█	█	█	█

Cenex - Centre of Excellence for Low Carbon and Fuel Cell Technologies



- ❑ Established April 2005, by 10 leading companies
- ❑ £6.5M Government funding matched by industry
- ❑ Knowledge Transfer Network
- ❑ Leverage public procurement to create new markets



Holywell Campus,
University of Loughborough

Feasibility study

- ❑ Establish customer interest in low carbon bus procurement
 - Establish if there is an unmet need

- ❑ Establish contractual structure backing LCB Forward Commitment
 - Back to back contracts relating to bus services and bus procurement

- ❑ Low carbon bus specification
 - Develop draft specification
 - Potential for common **European low carbon bus driveline specification**

- ❑ Supplier feedback
 - Specification, volumes required

- ❑ Identify potential sources of financing
 - Central Government funding, local authority controlled funds, other sources.

Next steps

- ❑ Forward Commitment feasibility study
 - UK progressing
 - Seeking European partners
 - Participants should represent all aspects of the bus industry

- ❑ Ecobus
 - Drafting proposal and submission by 3 May 2007

- ❑ Formation of consortium
 - Identify interested parties
 - Public authority commitment
 - Commitment of bus operators
 - Engage with bus suppliers