

#### BWG-P-05-19

### Opportunities and barriers to the market introduction of low carbon buses

Below is a note of the brainstorm session at the last sub-group meeting. The WG is asked to consider any changes or corrections, additions or linkages to other work already done. The WG is also asked to consider the opportunities that might exist with the identified barriers. It is proposed that the next step for this list is to develop it into the main section of the Routemap, using existing material.

#### **Barriers**

# 1. Cost

- a. Capital investment
- b. Whole life costs unknown and available data limited and not easily accessible
  - i. Training and implementation

### 2. Market incentives

a. Current lack of market incentives such as grant programmes

# 3. Technology

- a. Unproven
  - i. Market knowledge low, alternative fuels experience and implications mixed
  - ii. Reliability
  - iii. Test cycle and Low Carbon Bus standard –v- market expectations and real world experience.
  - iv. Suitability of application of new technologies to general or specific services or routes
  - v. Conventional –v- new needs what are the additional or unique technical/maintenance in-service requirements of new technology?

#### 4. Availability

- a. HSE requirements and any additional implications unknown
- b. Alternative fuels availability.
- c. New technology implications, whole vehicle, parts and more generally, a lack of established knowledge of operational, technical and commercial information or experience.

### 5. BSOG

a. Issues are well known but a summary of the main features and operational effect is needed.

## 6. Government policy

- a. Govt. policy and commitment
- b. EU policy and regulation
- c. National -v- local policy focus for carbon and roles to delivering low emissions

### 7. Joined-up planning

a. Lack of this in terms of policy, initiatives and roles of various organisations including DfT, DTI, DEFRA, local Government.

### 8. Infrastructure

- a. Alternative fuels
- b. Other capital investments

# 9. Mixed awareness in the UK of issues and solutions

a. Carbon related issues are not widely understood and so neither is the possible solutions in terms of the bus industry.

# 10. Bus market dynamics

a. See minutes of 02 September meeting for more details.

# **Opportunities**

### 1. Quality Contracts

- a. Local quality partnerships
- b. Role of Road Traffic Commissioners and others to be developed

### 2. Local air quality planning

a. Meeting low emissions zones' requirements.

## 3. "Get ahead" opportunity

a. for early adopters of low carbon technology, as per Mayor of London's aspirations

### 4. Established Govt. targets

a. Target-setting is first step towards a plan and activity

- 5. Congestion and road pricing
- 6. Olympics