

# ***Environmental Opportunities for the UK Motor Industry***

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and**

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## ***Motoring and the Environment: The 'Big Picture'***

***Climate change – “Greater threat than terrorism”***

**Prof Sir David King, UK Govt Chief Scientific Adviser**

- **Energy White Paper 2003: 60% cut in CO<sub>2</sub> by 2050**
- **Road transport = 23% of UK's emissions**
- **UK low carbon targets for road transport:**
  - **10% of new cars to be <100g CO<sub>2</sub>/km by 2010**
  - **600 or more new buses to be 'low carbon' by 2010**

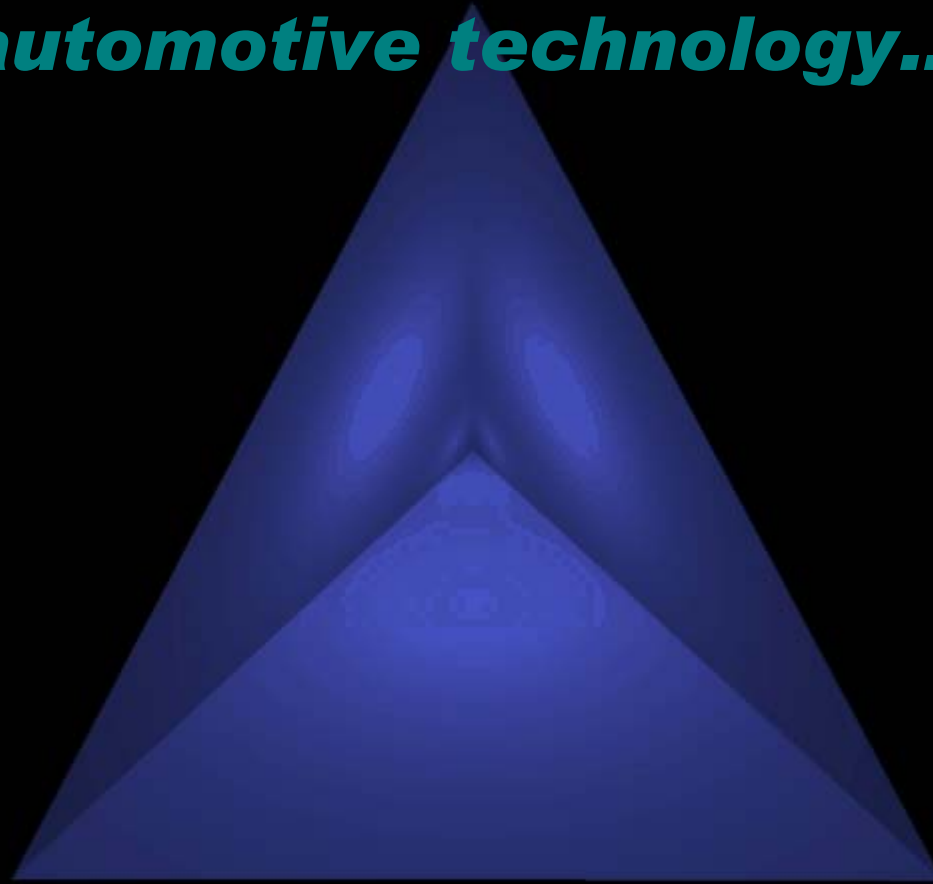
## ***Motoring and the Environment: The Opportunity***



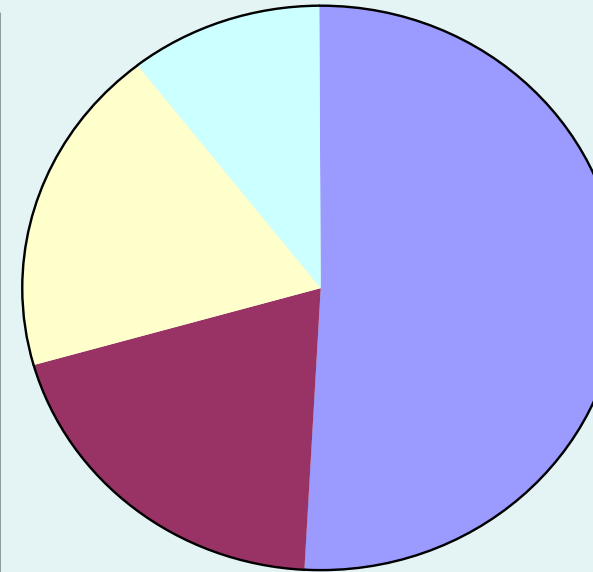
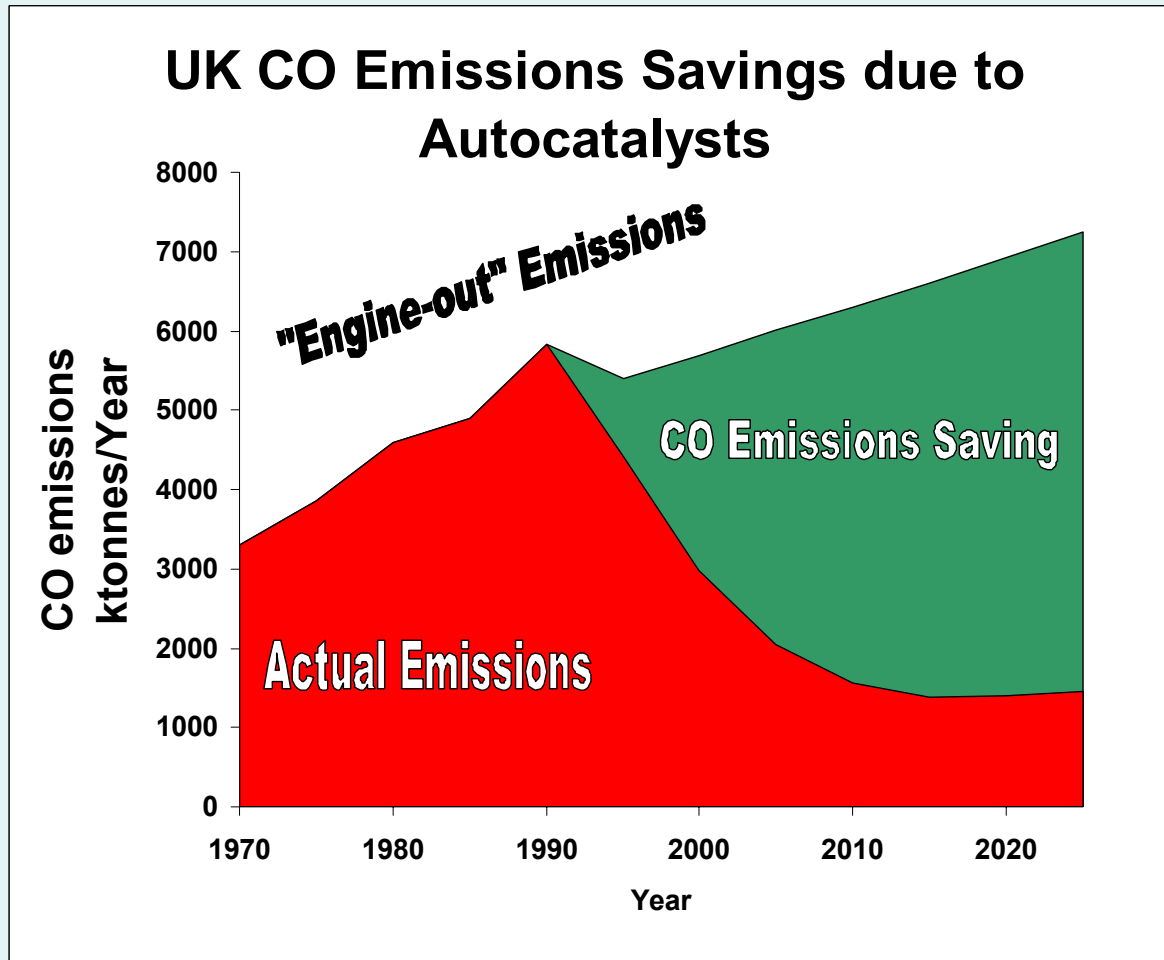
*“And as we move to a new, low carbon economy, there are major opportunities for our businesses to become world leaders in technologies we will need for the future...”*

**The Prime Minister, Energy White Paper  
2003**

***An opportunity in environmental  
automotive technology...***



***...that meets environmental demands  
and makes money !***



**Operating Profit  
1 H 2003 £103 m**

# ***Is the UK grasping these opportunities ?***

## ***- Hybrid cars case study***



- Specific development begun 1988
- Launched in 1998
- Sales > 150 000 sold so far
- Accumulated drivetrain knowhow valuable for further iterations

- One off demonstrator
- Great difficulty in sourcing drivetrain elements in UK
- Difficulty in locating the supply chain
- Needed partners (MIRA)

***...helping with this is what the  
LCVP is all about !***



## ***The Low Carbon Vehicle Partnership***

- **Powering Future Vehicles Strategy**  
(DEFRA, DfT, HM Treasury, DTI), July 2002
- **Automotive Innovation and Growth Team**  
(AIGT), May 2002

### **LED TO :**

→ **LowCVP** - established in January 2003 to:

→ ***“promote the UK’s shift to clean low carbon vehicles and fuels...and maximise the potential to create competitive advantage for the UK from the shift.”***

## ***The Low Carbon Vehicle Partnership***

- **Promote collaboration**
- **Create supportive infrastructure (policy/business)**
- **Advise & access Government**
- **Coordinate UK low carbon vehicle R&D activities:**
  - **provide a 'single portal' for potential participants**
- **Network of Expert Working Groups defines opportunities for and in the UK**



## **LowCVP Membership**

- **Automotive industry**
- **Fuel and energy industries**
- **Technology providers**
- **Motoring and consumer groups**
- **Transport operators**
- **Environmental organisations**
- **R&D and academic institutions**
- **Local government & regulatory/  
policy delivery organisations**
- **Finance and investment bodies**



## ***LowCVP – early initiatives (1)***

- **Financial support**

  - £3m Low Carbon Bus Programme

  - £10m Ultra-Low Carbon Car Challenge

    - Programmes run by Energy Saving Trust

- **RD&D**

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

- **Supply Chain development**

  - Development of supplier network for low carbon product and services

## ***LowCVP – early initiatives (2)***

- **Future fuels**

**Advice to Government on biofuels and H2 potential**

- **Better consumer information**

**Moving the agenda on car CO2 label and fuel accreditation**

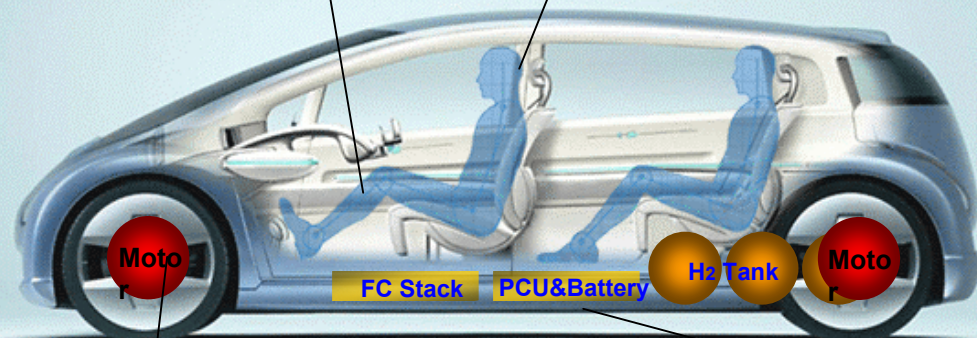
- **[www.lowcvp.org.uk](http://www.lowcvp.org.uk)**

**A central reference point for low carbon collaboration and developments**

# ***Fuel Cell vehicles – an opportunity for the UK supply chain***

Energy management systems

Automotive design,  
Lightweight materials



Electric  
Drivetrains

Fuel Cell  
components  
& systems

Source : Toyota

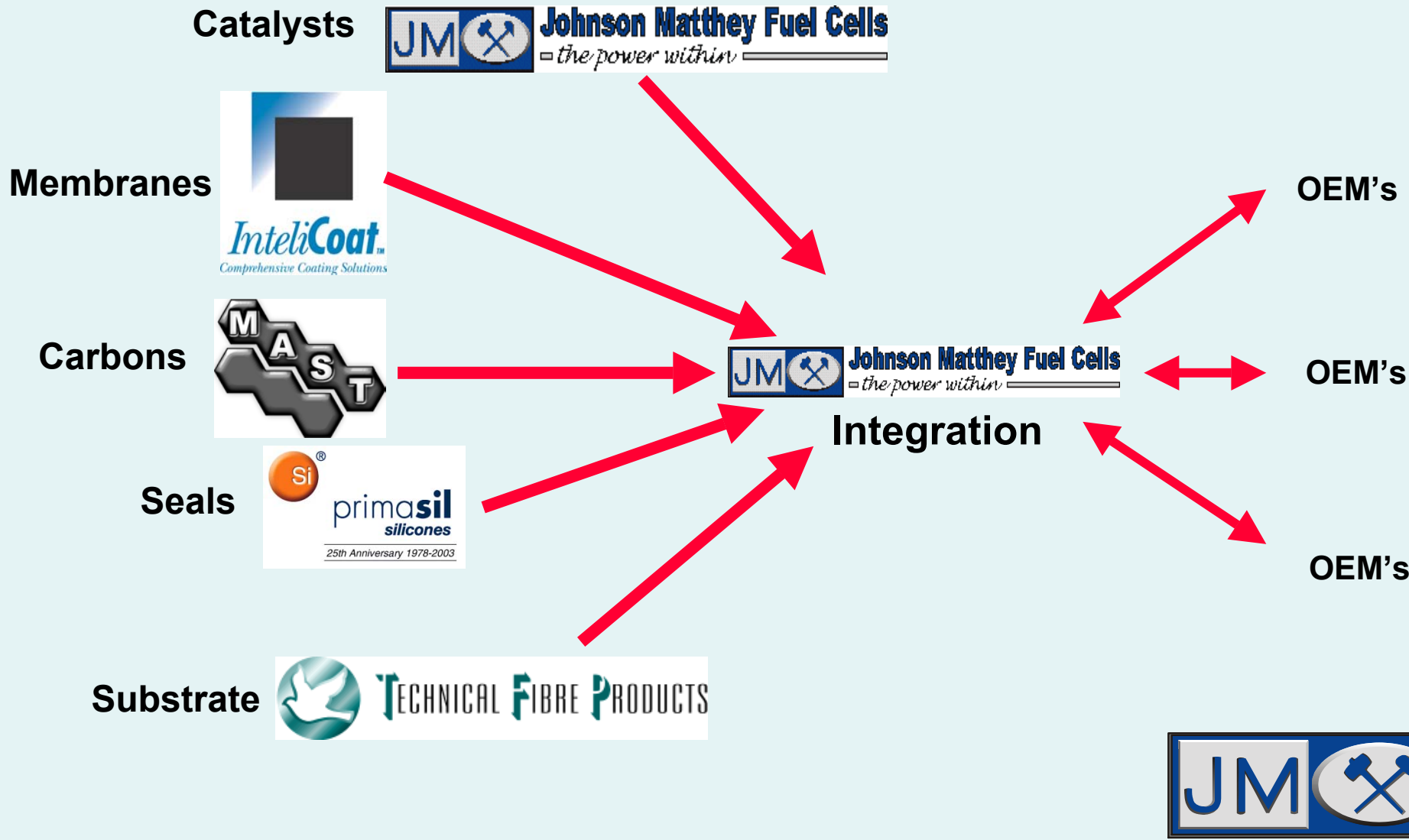
## ***Fuel Cell vehicles – supply chain issues***

- **Critical to the success of fuel cell vehicles**
- **Potential suppliers may be in different industries or lack resources**
- **Long term nature of development may deter some suppliers**
- **Market uncertainty is very high**
- **Opportunity cost**

***Johnson Matthey formed a group of UK companies with complementary expertise to co-develop and manufacture Fuel Cell components***



# Structure of DTI supported Fuel Cell supply chain development





***“...maximise the potential to create competitive advantage for the UK...”***

