

The Society of Motor Manufacturers and Traders Limited

LowCVP Conference

10 February 2005



Tod Evans
President, SMMT

Introduction

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- Progress towards low carbon cars
- Beyond technology - the integrated approach toward low carbon road transport
- Developments in technology
- The fiscal and political environment
- Developments and direction

Towards lower carbon cars

The voluntary agreement with car manufacturing groups towards an average CO₂ for new car sales of 140 g/km

ACEA

European manufacturers, 2008

JAMA

Japanese manufacturers, 2009

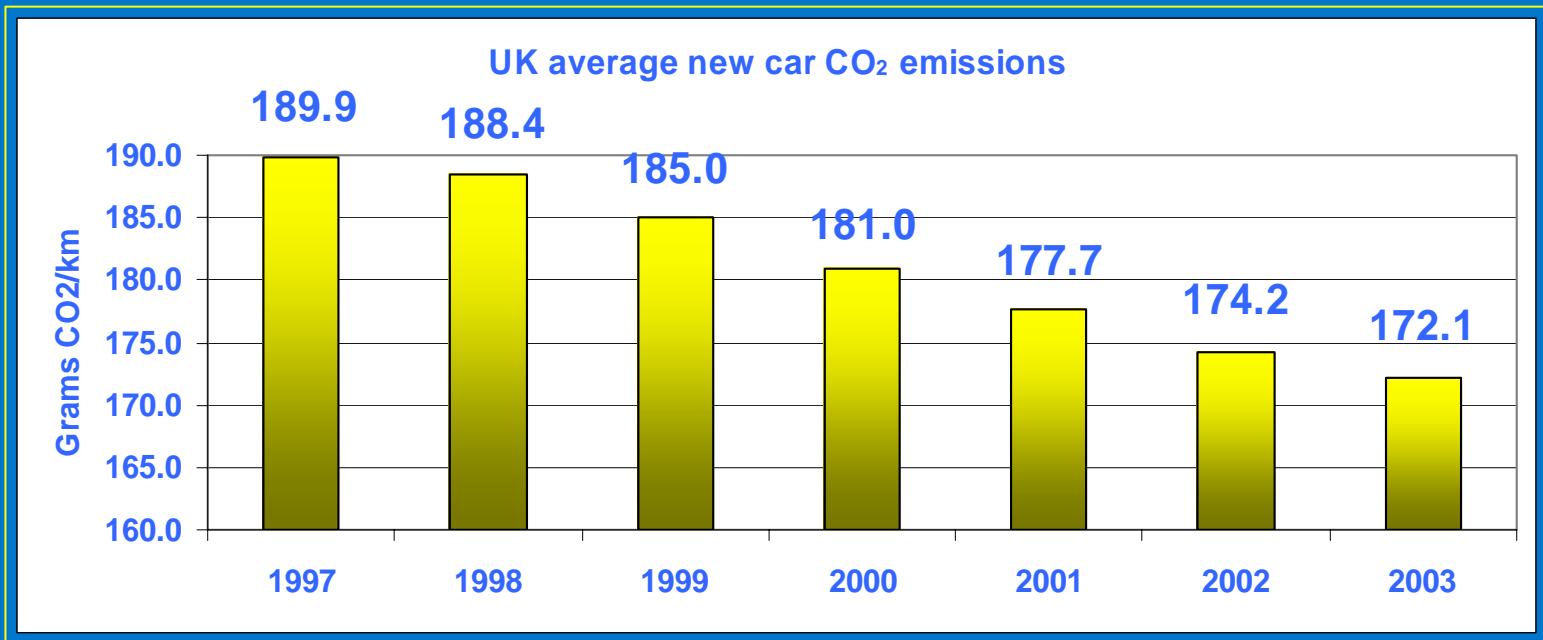
KAMA

Korean manufacturers, 2009



Discussions now taking place to follow up the voluntary agreement, post-2009

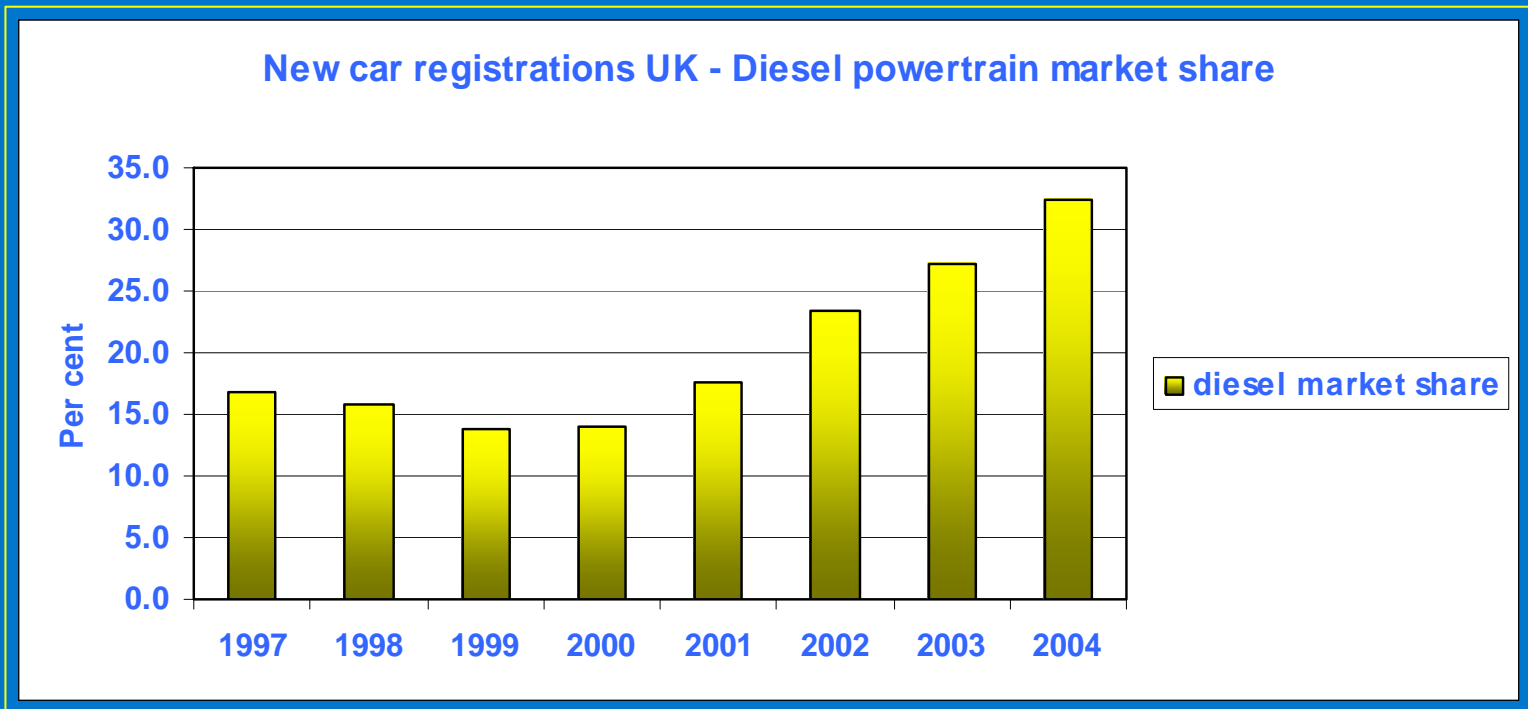
Progress since 1997



- 2003 – on average CO₂ emissions 9.3 per cent lower than in 1997
- The annual rate of change has varied between 0.7 and 2.2 per cent

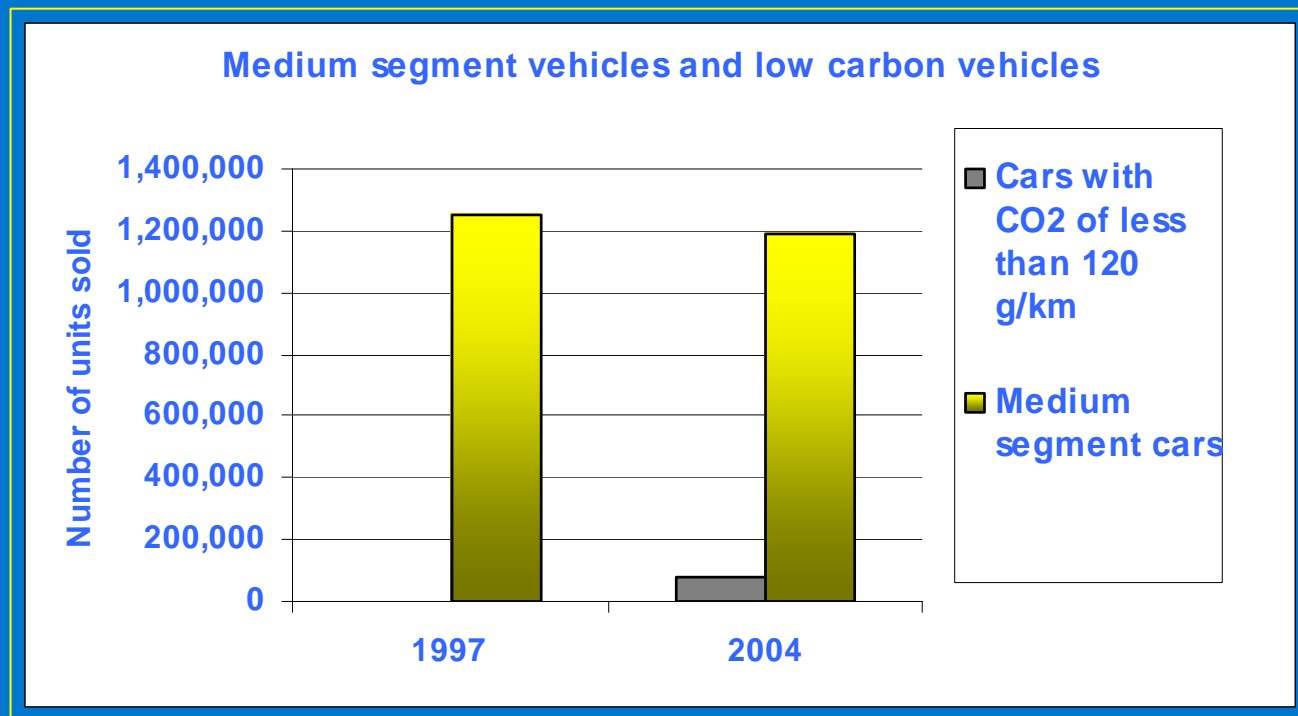
2004 developments

- Change in buying patterns
- Fewer private buyers - more fleet
- Diesel penetration increases - risen to 32.5 per cent



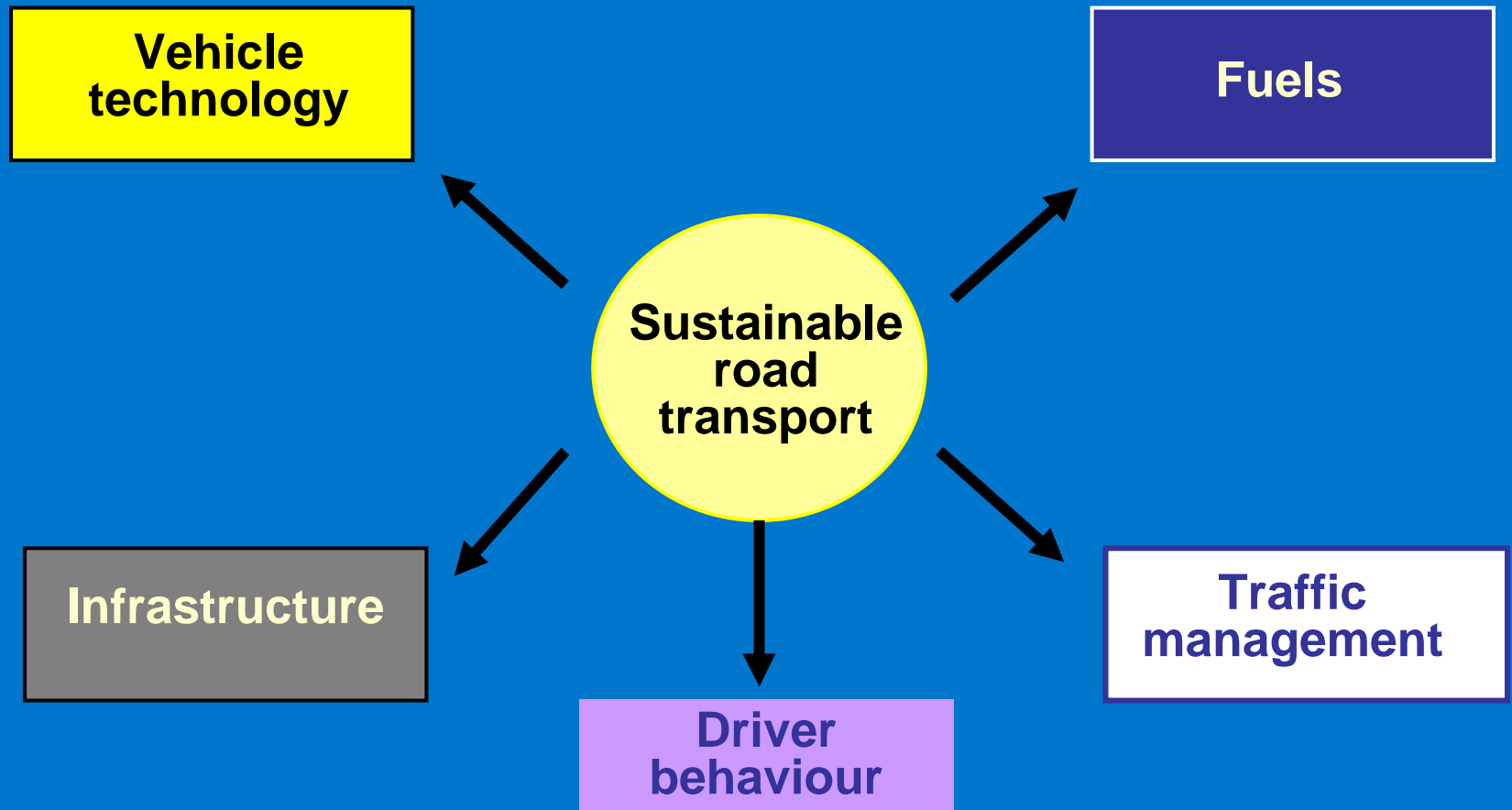
Low carbon cars

- Low carbon vehicles represent 3.1 per cent of the market place in 2004
- Medium segment cars 46.3 per cent



Is vehicle technology enough?

The integrated approach to CO₂ reduction from road transport



Is vehicle technology enough?

The integrated approach to CO2 reduction from road transport

Choice of technology
Integration of technology
Use of technology

Low sulphur fuel
Biofuels
Alternative fuels

Road investment
Reducing 'pinch points'
Traffic calming
Safer roads

Quality driver information
Real time traffic management
Intelligent transport systems

Developments to date

- Enhanced direct injection diesel technology
- Diesel technology across all vehicle segments
- Electric power steering
- Improved engine management systems
- Five and six speed gearboxes
- Fuel efficient auto and semi-automatics



Ongoing developments

- Stop-start engine development (engine shut-off in stationary position)
- Developments in hybrid technology
- Intelligent valve actuation
- Gearshift change indicator
- Development in double-clutch, semi-automatic and seven speed gearboxes
- Direct injection petrol engines
- Overall engine efficiency improvements



Advanced technology support

Foresight Vehicle Programme

- Supporting R&D projects that are central in the drive to cut CO2 and other harmful emissions from the vehicles of the future
- Led by project director Nick Barter, projects managed by a team of experienced engineers



Advanced technology support

Foresight Vehicle Projects

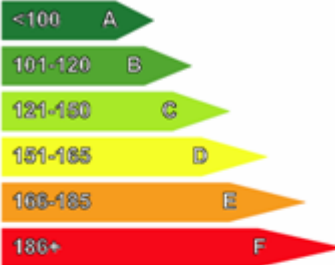




- **GASPART** – Prototype pollution control technology that traps and destroys nano-sized particulate emissions, thought to be contributors to cardio-respiratory disease
- **2/4 SIGHT** – Prototype engine designed to switch from two to four stroke operation automatically, improving performance and lowering CO2 emissions
- **MIHPOW** – Hybrid heavy goods vehicle, offering zero pollution during urban delivery, as well as better fuel consumption and lower operating costs
- **LIFECar** – sports car with a hydrogen fuel cell engine

Fiscal and political support

- Fuel duty and zero sulphur fuel - requires clarification for direct injection petrol engines
- TransportEnergy programmes - confusion over forthcoming grant structure
- Company car tax - removal of the three per cent diesel waiver for Euro IV and support for lower carbon vehicles
- Structured policy and longer time-frames for product planning



Providing information on CO₂

Fuel Economy		Supermini Special
CO₂ emission figure (g/km) 		B 117 g/km
Fuel cost (estimated) for 12,000 miles <small>A fuel cost figure indicates to the consumer a guide fuel price for comparison purposes. This figure is calculated by using the combined drive cycle (town centre and motorway) and average fuel price. Re-calculated annually, the current cost per litre is as follows – petrol 76p, diesel 71p and LPG 31p (VCA May 2004).</small>		£662
VED for 12 months <small>Vehicle excise duty (VED) or road tax varies according to the CO₂ emissions and fuel type of the vehicle.</small>		£85
Environmental Information <small>A guide on fuel economy and CO₂ emissions which contains data for all new passenger car models is available at any point of sale free of charge. In addition to the fuel efficiency of a car, driving behaviour as well as other non-technical factors play a role in determining a car's fuel consumption and CO₂ emissions. CO₂ is the main greenhouse gas responsible for global warming.</small>		
Make/Model: Supermini Special Fuel type: Diesel		Engine Capacity (cc): 1399 Transmission: 5 speed manual
Fuel Consumption:		
Drive cycle	Litres/100km	Mpg
Urban	5.4	52.3
Extra-urban	3.8	74.3
Combined	4.4	64.2
Carbon dioxide emissions (g/km): 117g/km Important note: Some specifications of this make/model may have lower CO ₂ emissions than this. Check with your dealer.		
   		

Providing information on CO2

SMMT will provide:

- New booklet for consumers
- A forum for discussions with the Vehicle Certification Agency to extend colour coding on their web site
- Information and training for showroom sales staff



Looking forward

- **Support European (15) voluntary agreements for 2008 (ACEA) and 2009 (JAMA and KAMA)**
- **Integrated approach can support a lower carbon vehicle future in addition to technological improvement**
- **Technology key to progress, but also need a shift in consumer buying habits**
- **Campaigns to inform the public will build through the colour-coded label**
- **Industry is committed to support the move to low carbon cars**

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