



ISLINGTON

# Improving and Greening your Fleet

28<sup>th</sup> March 2008

# Content

- Role of the driver
- Reliability, efficiency and reducing emissions
- Factoring in full life vehicle costs

## Role of the driver

- Correct vehicle for the application
- Fundamental to reducing 'emissions' footprint
- Fully explain the technology
- Competitions for best MPG
- Benefits to company – Cost (fuel, maintenance, damage), air quality, PR
- Safe And Fuel Efficient Driving (SAFED) driver training
  - Government led
  - £50 per day (2 drivers) instead of £300
  - Reduce fuel consumption
  - Reduce accident rate



## The possibilities...

- One car
- One route
- Driver 1 – 30 MPG, Driver 2 – 64 MPG, **34 MPG DIFFERENCE!**

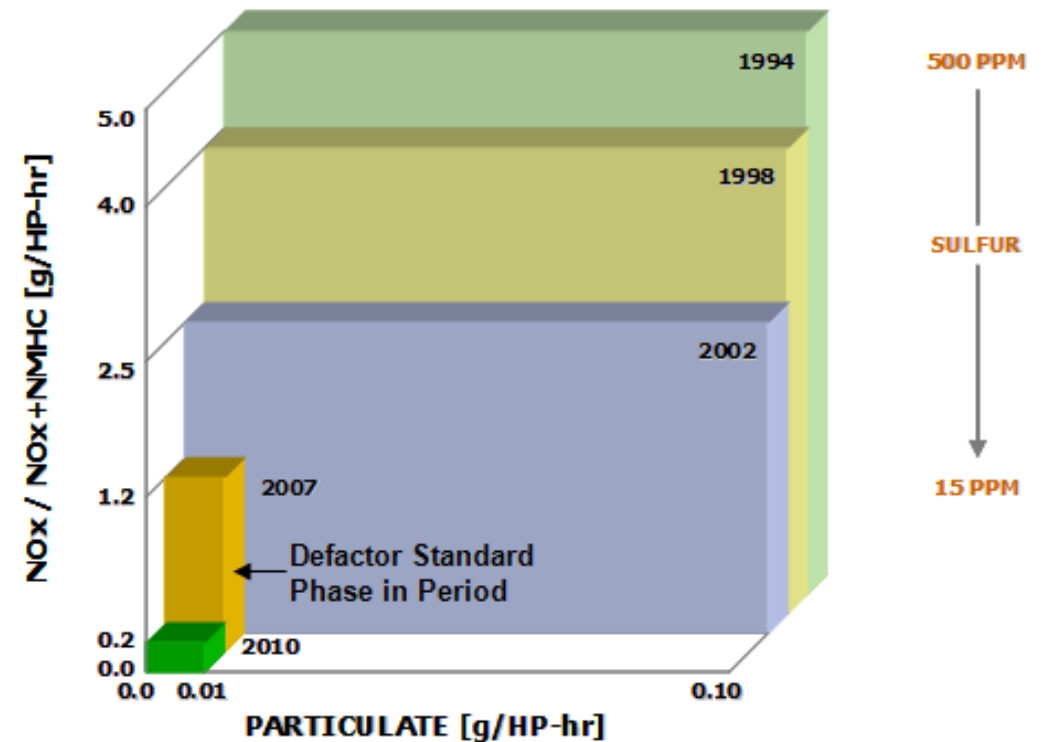


- Planning
- Accelerating/Braking
- EV mode
- Regenerative brakes
- Reduce gear changes
- Driving environment

# Reliability, efficiency and reducing emissions

- Reliability – Fundamental principle. Stand alone vehicles
- Warranties of 8 years, 100,000 miles for hybrid vehicles
- Efficiency – Don't forget diesel!  
Energy content – 130k BTU/Gal
- Not one simple solution!
- Areas to concentrate on – PM's, CO<sub>2</sub>, NO<sub>x</sub> etc
- New vehicles.

1 Euro 1 RCV = 35 Euro 5 RCV's



**Not many companies fleets can boast global emissions savings but the cumulative effects of many are extremely significant**

# OEM progress

Today

Tomorrow

Fuel Cell Vehicles



Hybrid Vehicles



CO2-neutral Bio Fuels



Improvement of Conventional Fuel  
Natural Gas



Optimisation of Combustion Engines



# Islington's progress

## Vehicles

- LPG cars and van conversions
- Electric cars, vans and scooters
- Hybrid cars
- Particulate traps
- Replacement programme
- Driver training/GPRS system

## Events

- Local events for the borough  
'Imagine Islington'
- Capital fuel challenge
- Green fleet awards





## Our new arrivals...



### Modec commercial EV

- 100 mile range
- 50mph top speed
- Zero emissions
- 2 tonne payload
- Silent running
- 90% recyclable
- Hybrid charging



## Our new arrivals...

### Smart EV

- 100 vehicle trial
- Zero emissions
- Powered by wind turbine
- 70mph
- Full NCAP
- 75 mile range



## Alternative fuels

Bio diesel – 5% (2.5 billion litres) by 2010 in the UK – Transparent system for purchasing through the Renewable transport fuels obligation (RTFO) but there is currently no set criteria regarding carbon savings and crop source

### Worst case

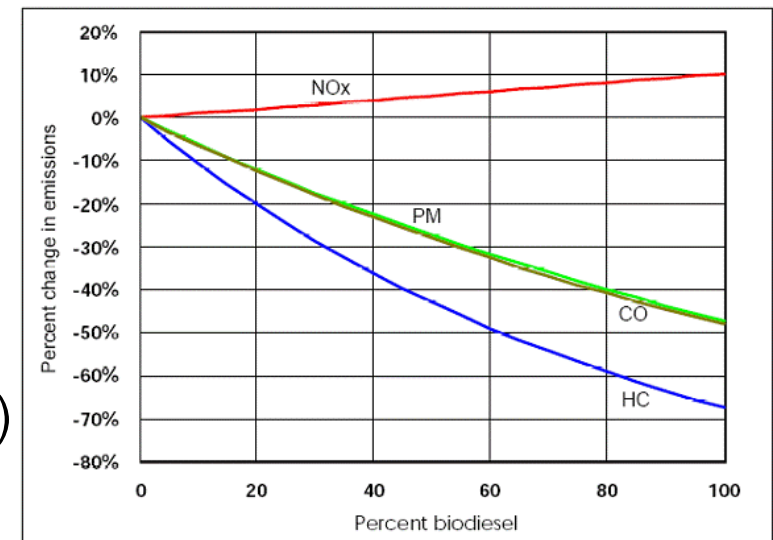
- Deforestation to make way for crop plantations
- Crop prices force people into food poverty
- Slight increase in NOx

### Best case

- Save 1 million tonnes CO<sub>2</sub> by 2010
- Controlled growing zones and waste oils (EN590)
- Reduce particulates

### Others currently used

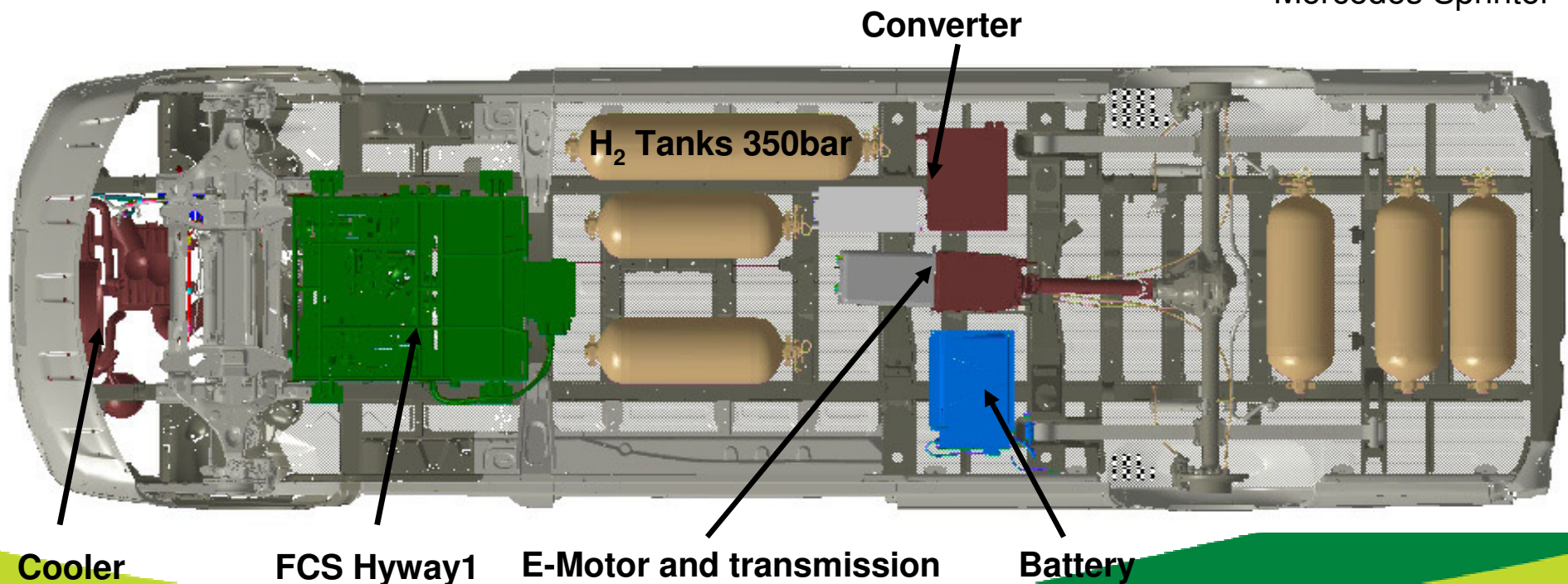
Liquefied petroleum gas (LPG), Liquefied natural gas (LNG), Renewable oils



## The future

- Diesel hybrids – Currently under development
- Bio-ethanol – Currently available but requires further infrastructure
- Pure plant oils with engine conversions
- Fuel cell – Estimated time to market ~ 10 years

Mercedes Sprinter



## Full life cycle costing

- Toyota Prius vs. Vauxhall Astra – Saving ~ £8,000
- LPG Vauxhall Combo van vs. Citroen Berlingo – Saving ~ £9,000
- Modec commercial electric vehicle vs. Ford Transit

	Modec	Transit	Assumptions
Initial outlay	£29,000	£18,000	
Servicing costs	£2,800	£5,600	Based on 7 year life
Insurance	£4,200	£5,250	Based on 7 year life
Fuel	£26,000	£18,200	Based on 300 miles per week
VED	£0	£1,225	Based on 7 year life
Congestion charge	£0	£12,740	Used in zone daily, based on 7 year life
<b>Total</b>	<b>£62,000</b>	<b>£61,015</b>	
<b>Difference</b>		<b>£985</b>	

**As a council, we can invest more money in ‘Green procurement’**

# Thank you

