

*A cleaner London – options for taxis and  
taxi drivers*

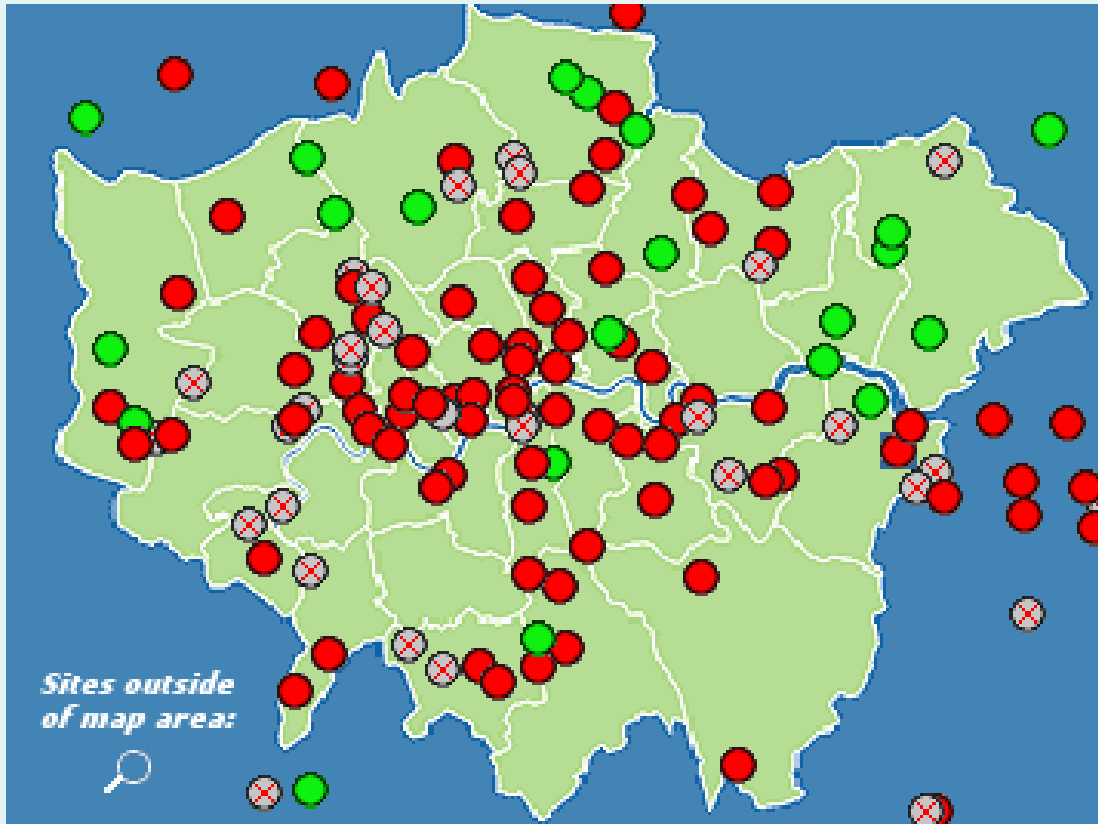
**Greg Archer**

**Director**

**Low Carbon Vehicle Partnership**

**23 September 2005**

# *Air pollution standards are widely exceeded throughout London*

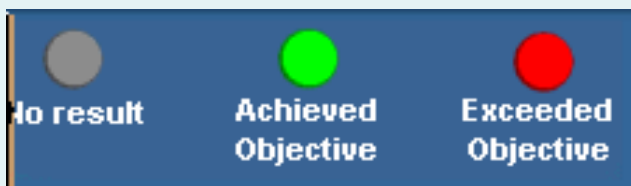


Air pollution in London leads to:

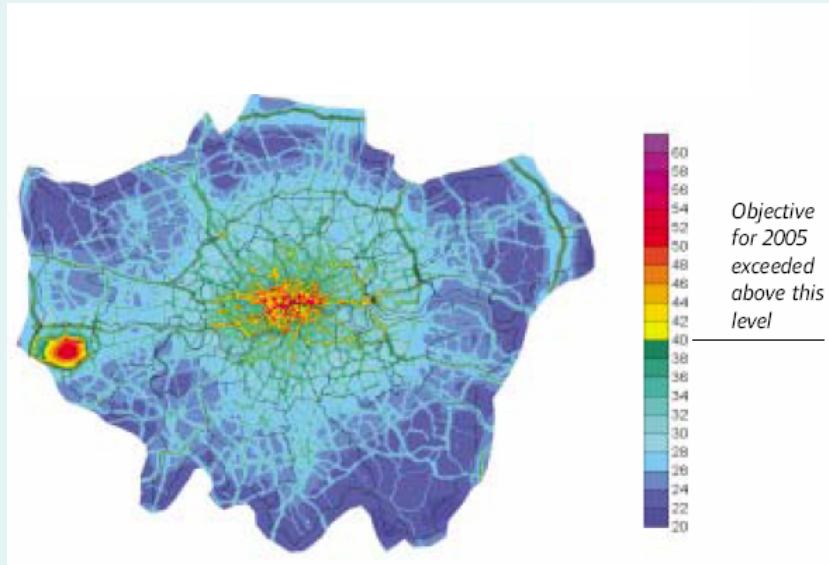
❑ 1,600 premature deaths

❑ 1,500 hospital admissions for respiratory illness

❑ 3,000 hospital admissions for heart issues or stroke

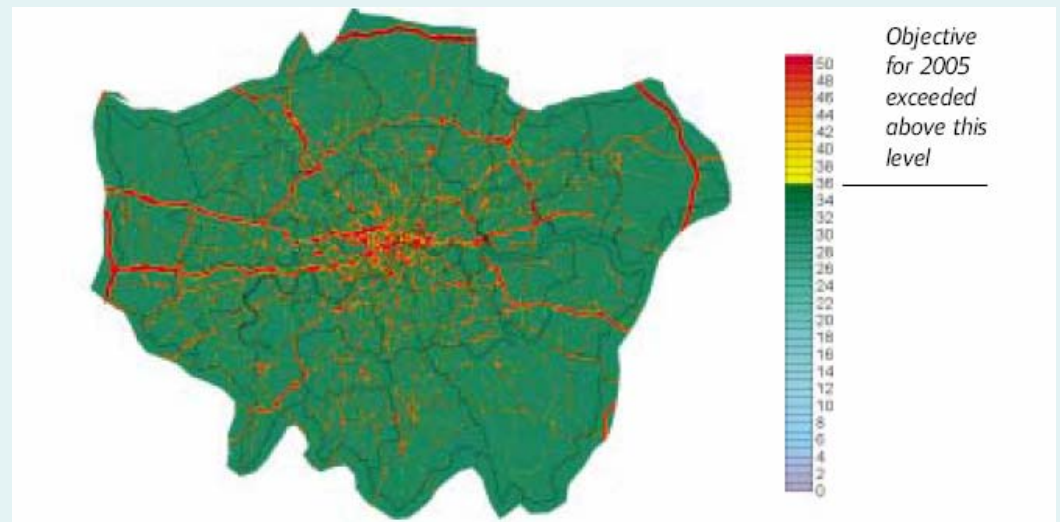


*The principal air pollution problems in London are caused by Nitrogen dioxide (NO<sub>2</sub>) and particles (PM<sub>10</sub>)*

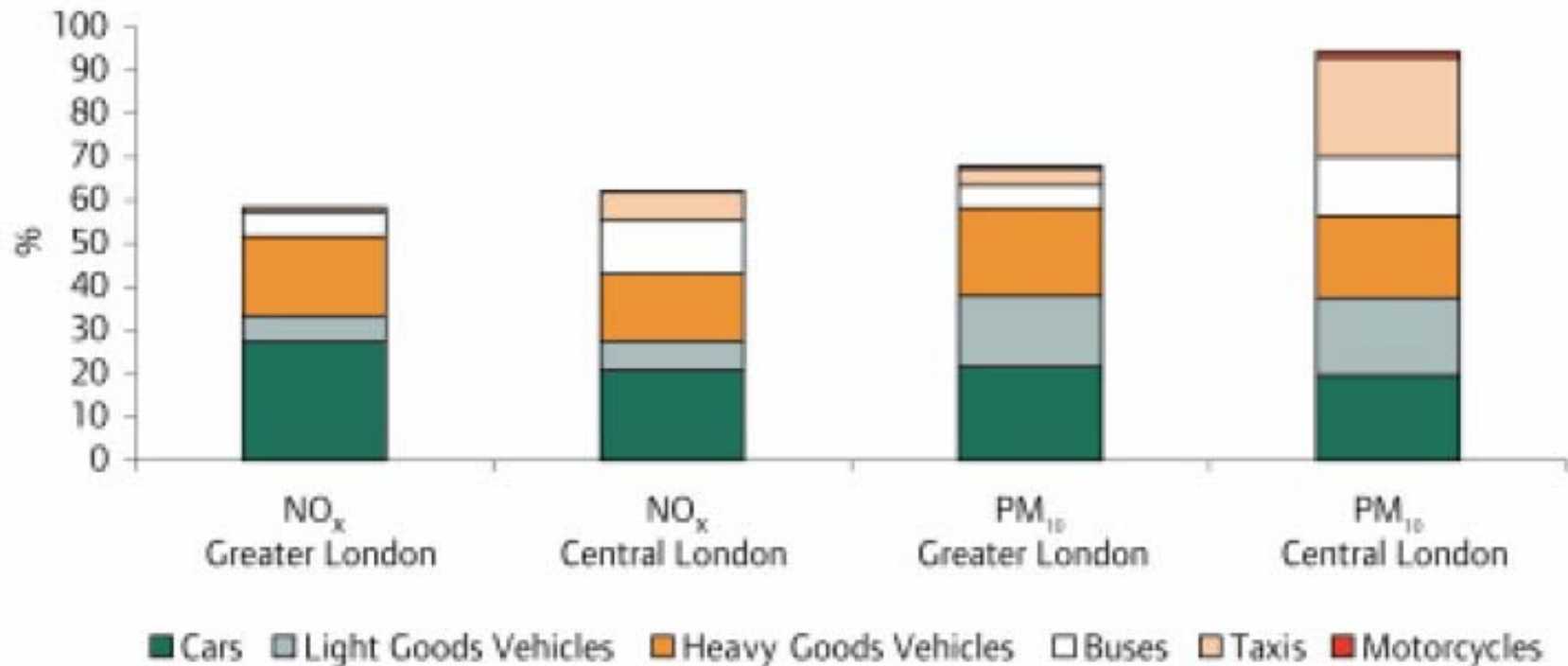


## Nitrogen Dioxide

## PM<sub>10</sub>



# Traffic is the principal source of air pollution in London



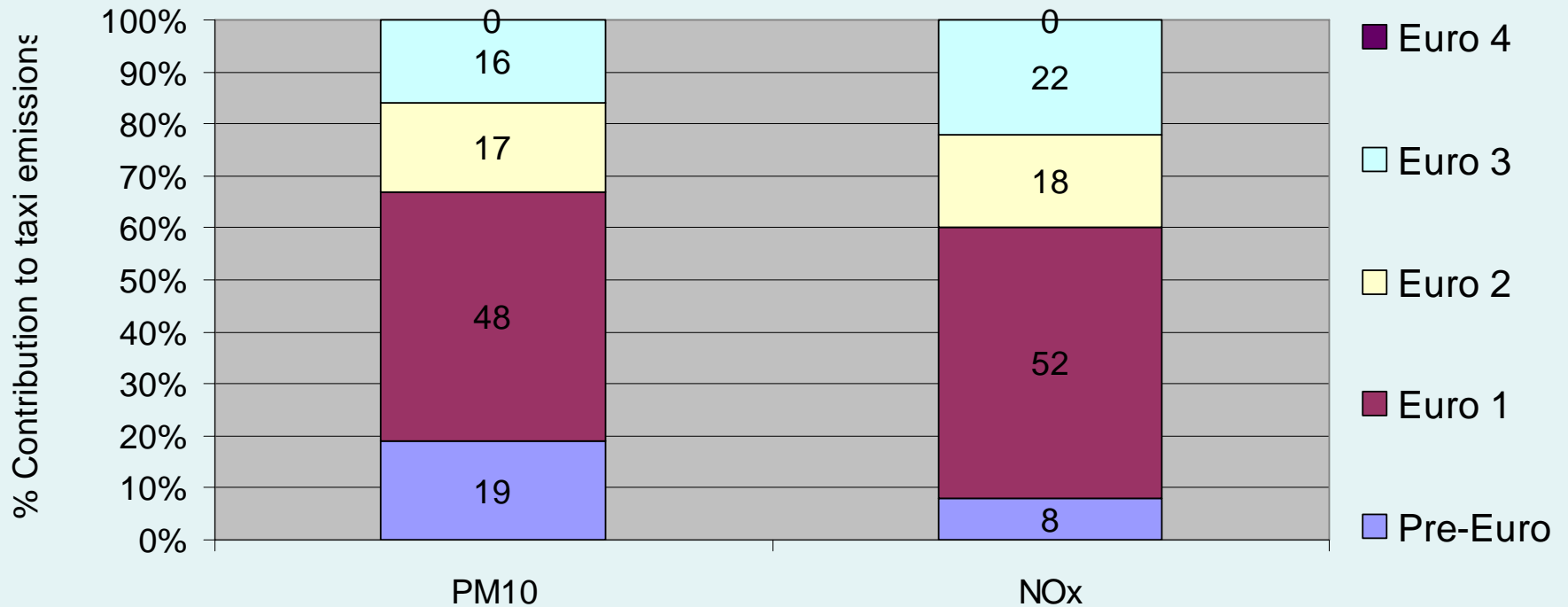
source GLA/TfL London Atmospheric Emissions Inventory, version February 2002

Taxis contribute

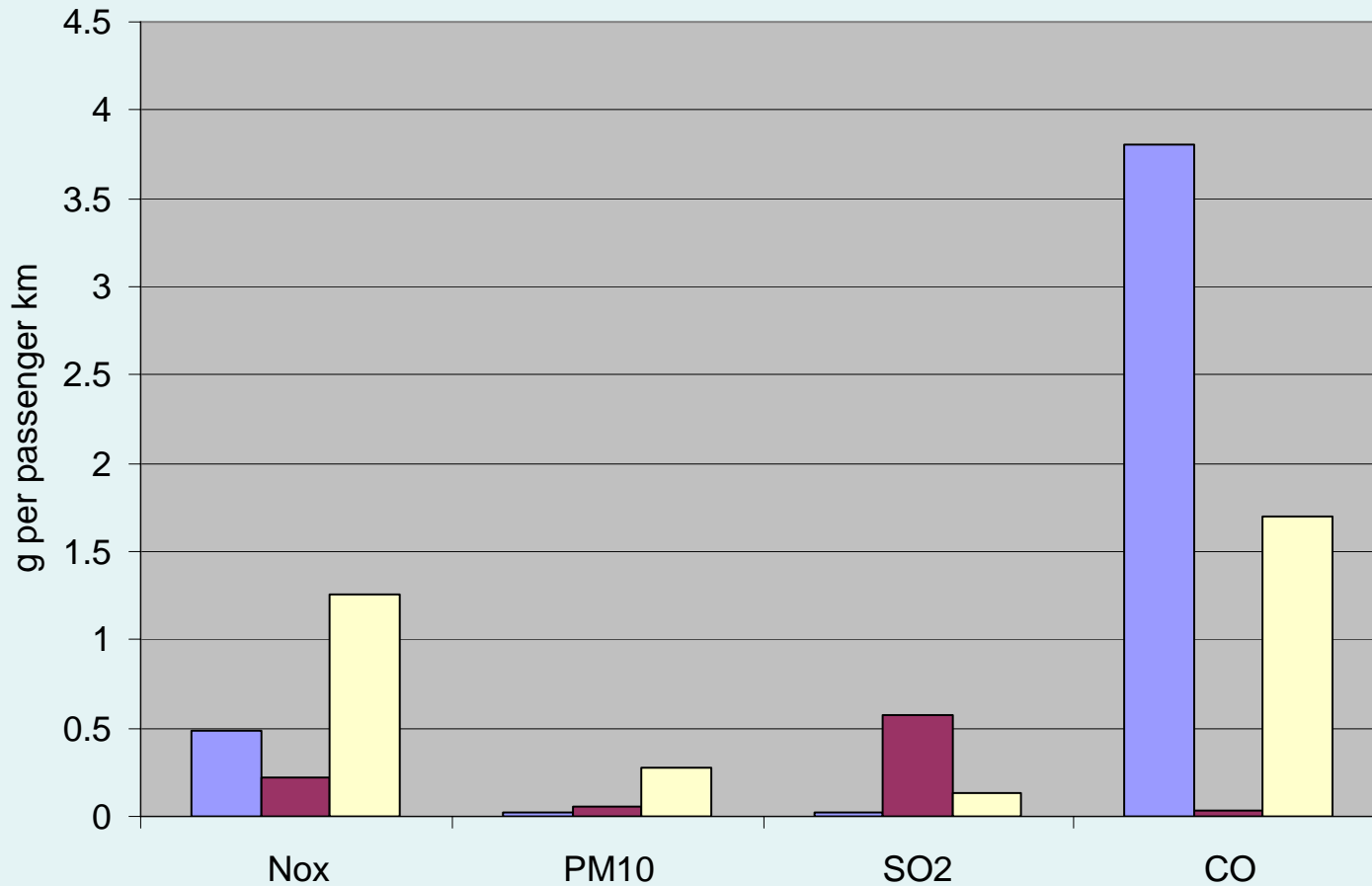
- c25% of PM<sub>10</sub> in Central London
- c10% nitrogen oxides

# *Most of the pollution of from Euro 1 or older taxis*

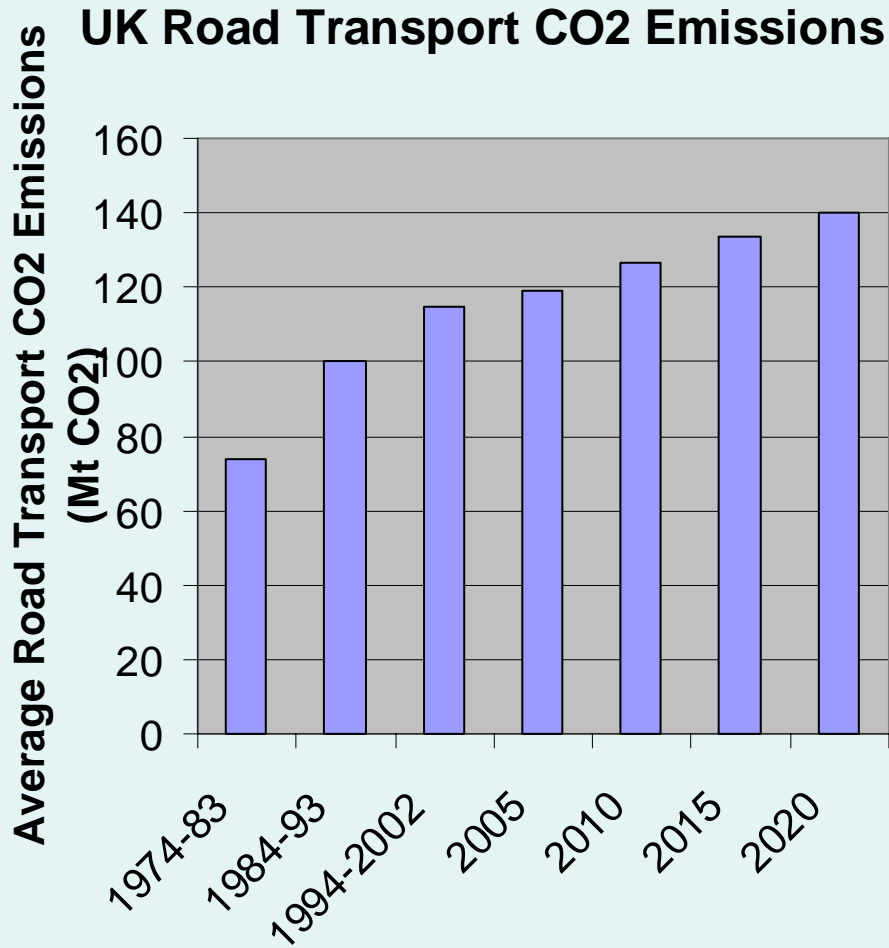
## Contribution of vehicle types to taxi emissions inside the M25



*Taxis produce relatively large amounts of air pollution per passenger km compared cars and buses*



*Vehicles also cause about a quarter of the UK emissions of carbon dioxide the main greenhouse gas*



# *Hurricane Rita is further evidence of accelerating climate change*

“The increased intensity of these types of storms is very likely to be due to global warming”

– Sir John Lawton

□ The frequency of the most severe hurricanes has increased from 18% ('70-'74) to 35% ('00-'04)

□ Katrina estimated to cost >\$200Bn,  
– Rita ???



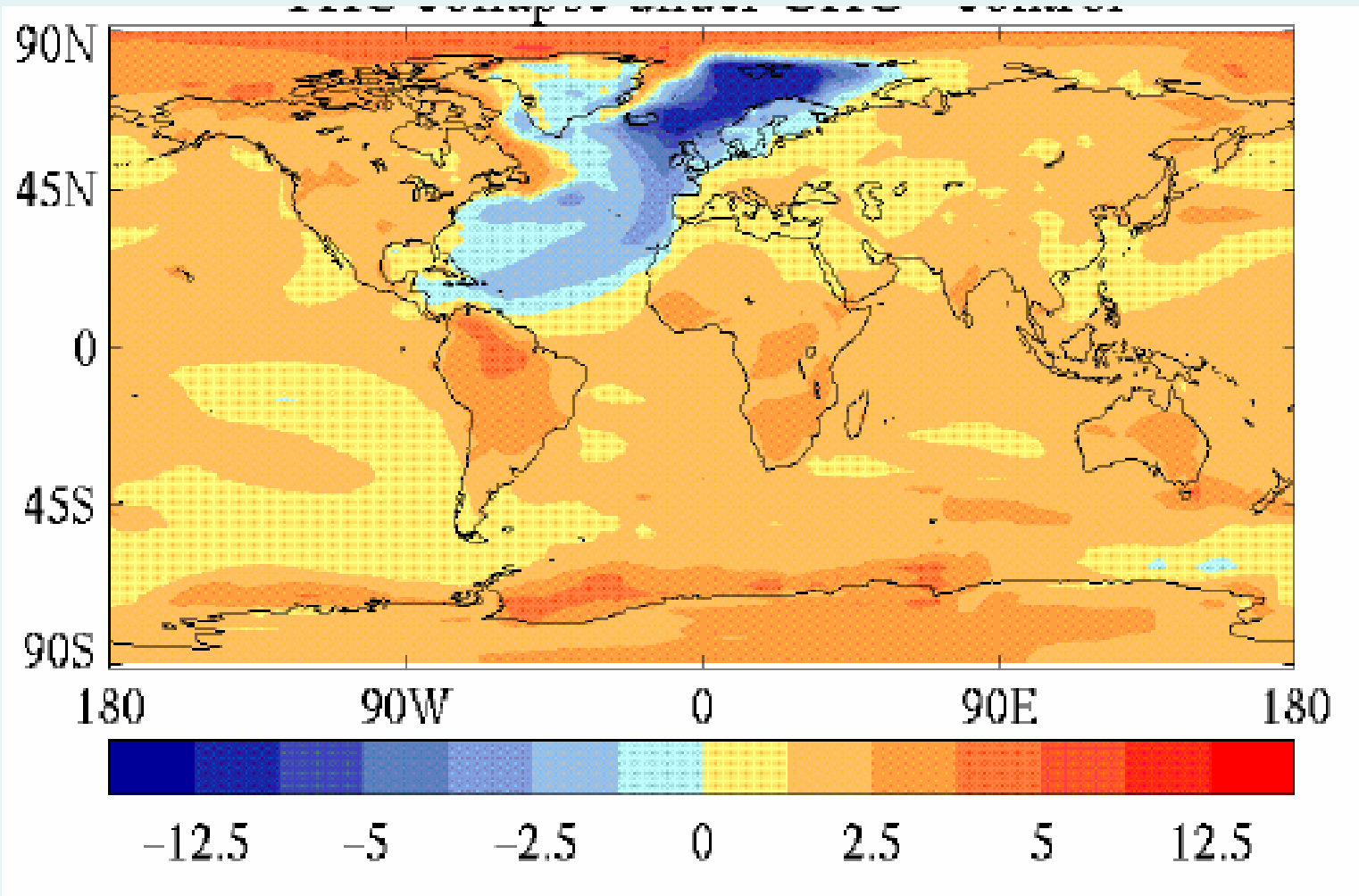


# *Birmingham tornado*

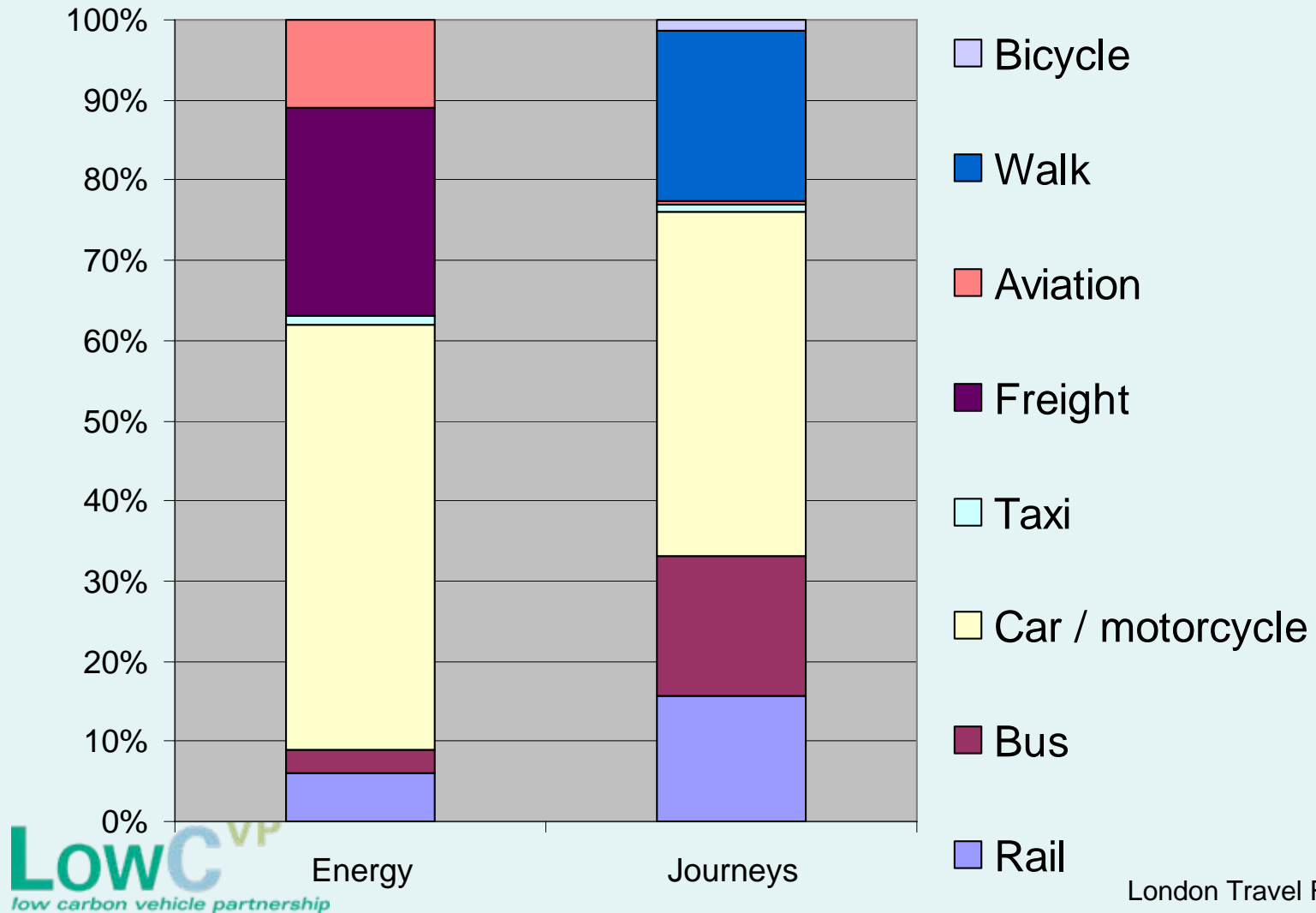
*29/7/05*



*Growing evidence indicates the oceans are influenced by climate change – with potentially extreme consequences*



# Energy consumption and journeys made in London



*We can choose less polluting options ...*



Toyota Avensis 2.4 WT-i 227g/km

Toyota Prius 104g/km



*Even less polluting 4x4's!*



Lexus RX400h – 192 g/km

Lexus RX300 – 288 g/km



*We have choices at home too..*





*A range of less polluting taxis are also available*



# Options to improve the environmental performance of taxis

	Environmental Benefits		Applicable to		
	Urban air quality <sup>1</sup>	CO <sub>2</sub> <sup>2</sup>	New Vehicles	Retrofit <sup>3</sup>	Taxi
Fuel Additive	Strong environmental benefit	Some potential environmental benefit	Yes	Yes	Some potential financial saving
Particulate Trap <sup>8</sup>	Strong environmental benefit		Yes	Yes	Strong environmental benefit
Oxycat <sup>8</sup>	Strong environmental benefit	Some potential environmental benefit	Yes	Yes	Some potential environmental benefit
Repowering	Strong environmental benefit			Yes	Some potential financial saving
New vehicle <sup>9</sup>	Strong environmental benefit	Some potential environmental benefit	Yes		Strong potential financial saving
LPG (vs petrol)	Strong environmental benefit	Some potential environmental benefit	Yes	Yes	Strong environmental benefit
LPG (vs diesel)	Strong environmental benefit		Yes	Yes	Strong potential financial saving
NG	Strong environmental benefit	Some potential environmental benefit	Yes	Yes	
Electric	Strong environmental benefit	Some potential environmental benefit	Yes		
Hybrid	Strong environmental benefit		Yes		Strong environmental benefit

■ Strong environmental benefit      ■ Strong potential financial saving  
■ Some potential environmental benefit      ■ Some potential financial saving



# Low Carbon Vehicle Partnership

*Accelerating a sustainable shift to low carbon vehicles and fuels in the UK*

*Stimulating opportunities for UK businesses*

Fuel Economy		Ford Fiesta 1.4 TDCi ZETEC
<b>CO<sub>2</sub> emission figure (g/km)</b> 		<b>B 117 g/km</b>
<b>Fuel cost (estimated) for 12,000 miles</b> <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 78p and LPG 36p (VCA May 2004).</small>		<b>£662</b>
<b>VED for 12 months</b> <small>Vehicle excise duty (VED) or road tax varies according to the CO<sub>2</sub> emissions and fuel type of the vehicle.</small>		<b>£85</b>
<b>Environmental Information</b>		
<small>A guide on fuel economy and CO<sub>2</sub> 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 CO<sub>2</sub> emissions. CO<sub>2</sub> is the main greenhouse gas responsible for global warming.</small>		
<b>Make/Model</b> <b>Ford Fiesta 1.4 TDCi ZETEC</b>	<b>Fuel type</b> <b>Diesel</b>	<b>Engine capacity (cc): 1399</b> <b>Transmission type: 5 speed manual</b>
<b>Fuel Consumption:</b>		
<b>Drive cycle</b>	<b>Litres/100km</b>	<b>Mpg</b>
Urban	5.4	52.3
Extra-urban	3.8	74.3
Combined	4.4	64.2
<b>Carbon dioxide emissions (g/km): 117g/km</b> <b>Important note:</b> Some specifications of this make/model may have lower CO <sub>2</sub> emissions than this. Check with your dealer.		

*Thank you*

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