

Average new car CO₂ emissions continue to fall

- Second CO₂ report shows average new car CO₂ emissions continue to fall
- Importance of shift to smaller cars and rise in diesel models
- Improved technologies mean more cleaner vehicles arriving

CO₂ emissions are a key factor in the Government's Climate Change programme. Last year the Society of Motor Manufacturers and Traders (SMMT) compiled a database on the CO₂ characteristics of the UK new car market. The data provides figures on a sales weighted basis and can be used to study the market by segment types, fuel types, taxation bands and so forth.

The vehicle industry has made positive steps in reducing CO₂ emissions, and is committed to significant future reductions. The average new car emits 174.2 g/CO₂ per km, 8.2% down on 1997 baseline and 1.9 per cent below the 2001 average.

Average new car CO₂ emissions in the UK (1997-2002)

Year	Average CO ₂ g/km	y/y % change	% change on 1997
1997	189.8	-	-
1998	188.4	-0.7	-0.7
1999	185.0	-1.8	-2.5
2000	181.0	-2.2	-4.6
2001	177.6	-1.9	-6.4
2002	174.2	-1.9	-8.2

Average new car CO₂ emissions have fallen consistently since SMMT began monitoring the data, in 1997. New technologies, to improve the environmental performance of vehicles, are playing a significant role in reducing CO₂ emissions. Improved fuel efficiency, better aerodynamics and the use of lightweight materials are among the many factors that are helping. This achievement is all the more impressive considering that safety levels and creature comforts have also improved - both of which typically add to the weight of the vehicle, hindering reductions in CO₂ emissions.

In addition to technical improvements in cars, the market has seen a shift toward smaller vehicles in recent years. Demand for superminis have been a cornerstone to the recent growth in the new car market as a whole, as products in this sector have improved, with greater safety and comfort features making them appeal to a wider audience. In addition, more compact MPVs and 4x4s have also entered and been successful in the market, lowering emissions of vehicles in these growth segments.

The increased market share taken by diesel fuelled cars has also been a significant influence on the reduction in average CO₂ emissions. Diesel cars are, on a sales weighted average, some 9 per cent lower CO₂ emitters than petrol cars. Diesels took a record 23.5 per cent share of the UK market in 2002, with demand up 38 per cent. However the gains are from a low base and penetration remains well below the EU average. Any changes to boost diesel penetration, or create a sharper uptake of alternative fuelled vehicles, would help reduce CO₂ levels further.

The reductions in CO₂ emissions are in line with expectations and ensure that the UK remains on course to achieve the reductions set out in the pan-European voluntary agreements made by ACEA, JAMA and KAMA members – which aim to reduce average new car CO₂ emissions to 140g/km by 2008. Already 13.6 per cent of the UK new car market is emitting less than 140g/km, versus 3.9 per cent in 1997. The table below shows the top ten lowest CO₂ emitters which were on sale to the general public in 2002 and shows how clean some vehicles in the market place now are.

Top 10 lowest CO₂ emissions models on UK sale in 2002 (lowest emitter in range)

	Model	Fuel type	CO ₂ g/km
1	Honda Insight	Petrol/Electric	80
2=	Citroen C3	Diesel	110
2=	Renault Clio	Diesel	110
4=	Peugeot 206	Diesel	113
4=	Smart	Petrol	113
4=	Toyota Yaris	Diesel	113
7=	Ford Fiesta	Diesel	114
7=	Toyota Prius	Petrol/Electric	114
9=	Audi A2	Diesel	116
9=	Ford Fusion	Diesel	116