

## Closing the gap in the race to be green

### GREEN CAR MYTHS

Improving fuel efficiency means conventional cars are challenging hybrids, **John Reed** finds in the first of a series on low-emission cars

Among green-minded drivers in the urban centres and academic groves of Europe and America, hybrid cars – Toyota's Prius in particular – are the environmentally correct wheels of choice.

Mayor Ken Livingstone invites the cars into central London free of the city's congestion charge. California's governor, Arnold Schwarzenegger, gives hybrids with good mileage ratings carte blanche in the state's car-pool lanes, even with only one passenger.

The Prius has won over celebrities and politicians, from The Simpsons' creator Matt Groening to Stavros Dimas, the European Union's environment commissioner.

The car, though it accounts for a small proportion of Toyota's overall sales, has lent a green "halo effect" to popular perceptions of the Japanese carmaker's overall fleet, which includes many higher-emission vehicles.

But while the Prius and other smaller hybrids remain some of the lowest-emission cars on the road, radically cleaner versions of conventional diesel and



Most environmentally-friendly cars 2007

Car	Score*
Smart (Roadster)	66.2
Smart (Fortwo cabrio)	59.8
Citroën (C1, 1.0)	40.1
Peugeot (107, 1.0)	38.6
Citroën (C1, 1.4HDI)	31.3
Fiat (Panda, 1.2 Dualogic)	28.4

\* Vehicles with higher scores are more environmentally friendly

Car	Score*
Ford (Ka, 1.3 Duratec)	27.5
Toyota (Yaris, 1.0)	27.2
Fiat (Panda, 100 HP)	23.6
Peugeot (206, 1.4)	23.5
Mini (R56, Cooper D)	23.3
Toyota (Prius, 1.5)	23.2

Source: Clifford Thames/ Cardiff University

Best and worst in class Ranked by vehicle category

Category	Best	Worst
Large off-road	BMW X5	Range Rover
Small off-road	Toyota RAV4	Landrover Freelander
Roadster sport	Lotus Elise S	Mercedes SLK
Large family	Toyota Prius	Ford Mondeo 3.0
Small family	Mercedes A-Class	Ford Focus 2.5
Super mini	Smart	Renault Clio 197

FT Montage

petrol cars are fast closing the gap – and may be poised to overtake them. Some smaller cars already outperform the Prius on emissions and, according to a new ranking of vehicles by Cardiff University in Wales and consultancy Clifford Thames that measures cars' overall "footprint", even outclass hybrids on overall environmental friendliness.

In rating cars' environmental credentials, most regulators and watchdog groups focus solely on their exhaust emissions of carbon dioxide and other gases and particulates.

But while green-conscious consumers carefully tally the environmental costs of their washing machines or the air-miles their string beans travel, few apply the same analytical rigour to

cars, the largest and most complex consumer goods most will ever buy.

Environmental groups say that carmakers, by inundating consumers with conflicting and sometimes misleading messages about their vehicles, are contributing to the problem.

Researchers are trying to help drivers unpack the issue with a new ratings system that calculates cars' total environmental costs. "There's a big focus on exhaust emissions, but they're only part of the story," says David Riemschneider, Clifford Thames's chief executive.

The Cardiff/Clifford Thames ranking gave CO<sub>2</sub>, nitrogen oxide and other emissions a 50 per cent weighting in assessing cars' overall environmental friendliness.

For the other 50 per cent, it ranked vehicles on their construction, energy and end-of-life costs, based on their length, width and weight.

Toyota's Prius still made the rankings of the most environmentally friendly vehicles, as did Honda's slower-selling Insight hybrid, which the rival producer is discontinuing as it develops an all-new hybrid.

The other highly ranked cars had conventional petrol or diesel engines, ranging from the Mini Cooper D diesel hatchback to the Fiat Panda and other Peugeot, Citroën, Ford and Smart cars, and Toyota's own Yaris.

All were of a smaller size class than the Prius, which the researchers acknowledge makes for an apples-and-oranges comparison.