

Hybrids



Nice theory, shame about the reality

There was a friend of the *Dog & Lemon Guide* editor who was visiting a family in Las Vegas. While our friend talked with the wife, she was taking the family washing out of the machine and putting it in the clothes drier.

For those who don't know it, Las Vegas is in the middle of the desert and it was 35° Celsius outside. The wife could have thrown the whole load of washing out onto a deckchair and it would have been dry in ten minutes. But that's not the American way. There is a deeply ingrained American attitude that says that the reward for all your hard work is the right to squander precious energy.

Despite the 'green' image that hybrid (petrol and electric) cars have, the claims about them tend to be exaggerated. Further, they generally have little support from the environmental movement – they're like hybrid clothes driers for Las Vegas – they rather miss the point because they are failing to deal with the real problem.

That's not just our opinion, either. General Motors vice president of global product development, Bob Lutz had the following to say:

"Hybrids are technologically of doubtful benefit, and expensive, but necessary from a political and public relations point of view."

Lutz went further: "Toyota has said, economically, hybrids make no sense. The reduction in fuel [consumption] does not pay for the technological content and cost of the vehicle so therefore economically it remains fairly nonsensical."

Toyota never denied Lutz's statement.

Essentially a hybrid is a petrol car with an electric motor that cuts in at low speed. The electric motor is powered by generators that also help brake the vehicle. At the traffic lights the petrol engine simply cuts out. If you start slowly the electric motor does all the work. If you boot it the petrol and electric engines kick in together. The electric motor is largely irrelevant once you reach 30kp/h, so any thought that a hybrid is going to help your highway cruising economy is misplaced.

According to Toyota's press kit for the previous model: "The Prius... has the performance of a 2.4-litre conventionally-powered car, and can carry five people and their luggage. Exhaust emissions are nearly 90 per cent less than those from a car of similar size powered by a conventional petrol engine, and fuel consumption is minimal – about five litres per 100 kilometres (56 miles per gallon). Performance has not been compromised...Prius has been recognised as a car of the future."

A complaint to the New Zealand Advertising Standards Authority had the following to say about an ad for the Prius:

"Toyota is still making the claim [that the Prius produces] 'Up to 89% fewer smog-forming emissions than the average new car', yet provides no data to support the claim, even though the Corolla, a fairly average car, of similar size, has lower nitrous oxide emissions than the Prius. As do practically all cars by their competitor Honda."

The Advertising Standards Authority upheld the complaint after Toyota repeatedly failed to come up with credible data to back its claims.

On June 6, 2007, Britain's *Auto Express* magazine reported that the Toyota Prius – the world's biggest-selling hybrid – gives 37% worse fuel economy than official figures suggest. Actual road tests showed that the Prius used an average of 6.8 litres per 100 kilometres (41.5mpg) This is 37% less than the official EU figure for this car, which is 4.3 litres per 100 kilometres, or 65.7mpg.

This meant that the Prius, far from being the most economical car to drive, barely made it onto the top ten list of economical vehicles. By comparison, the Citroën C4 Coupé 1.6 HDi, used 5.6 litres per 100 kilometres (49.6mpg).

Another Toyota hybrid, the Lexus GS450h, achieved fuel consumption of 10.5 litres per 100 kilometres (26.7 miles per gallon). Toyota claims a fuel consumption of 10.5 litres per 100 kilometres (35.8 mpg) for this vehicle. Because the Lexus uses far more fuel than claimed, it produces far more emissions as well.

It's not just Toyota that's lying, either. The Honda Civic hybrid, claimed to be one of the 'greenest' cars, actually emits 56% more carbon dioxide than the manufacturers claim.

Honda claimed that the Civic Hybrid put out 109 grammes of CO₂ per kilometre. In fact, the Honda put out 171 in actual road tests. It also used far more fuel than Honda claimed.

Hybrid cars came about as the result of legislation in California that states that a certain number of vehicles have to be run by electricity by a certain date. This is because California is dying from car pollution, and rather than take the simple step of leaving their cars at home, Californians want to keep their cars but ditch the fumes.

If you fill the streets of Los Angeles with hybrid cars you still have gridlock.

Basically, hybrid cars are a distraction from the real issue of dealing with millions of cars being driven to and from work when there's no real need to do so. It's not even true to say that hybrid cars pollute less – even assuming they pollute less than the average car, you mustn't forget that much of the energy that a car uses is consumed in the manufacturing process, and that the majority of this energy is produced using either coal, oil or nuclear reactors.

Many of the sales of hybrids in America are to people who simply want to be able to use car pool lanes on the motorway, and/or because the hybrid's heavy extra cost was subsidised by the US government. We'd love to say that hybrids offer a significant improvement over the conventional car, but we can't because it's simply not true.

Hybrids are part of a dream world of urban sprawl where people drive along endless motorways to and from endless suburbs. It's an unsustainable way of running cities, and hybrid cars just put off the day when we have to deal with it •

