

# Lexus GS450h

Richard Bott takes a look at Lexus' hybrid offering and discovers that green technology doesn't mean you should forfeit luxury



## Lexus GS450h

3.5 V6 & electric motor

0 - 62 mph 5.9 secs

Top speed 155 mph

BHP 341 (combined)

From £38,015

**S**ome facts and figures: according to the European Automobile Manufacturers' Association (ACEA), around 26 per cent of all man-made CO2 emissions in Europe are created by transport. When you consider the enormous amount of road, air and marine haulage that takes place within the EU each year, a slightly more startling figure is that cars alone are responsible for around 12 per cent of the total.

"Lies, damned lies and statistics" aside, it is becoming more and more socially and commercially unacceptable to ignore the growing green pressure

wave. Executive cars and large 4x4s are particularly sneered at and are, of course, taxed heavily both by stealth and show – for example, virtually all vehicles of this type fall into the highest bracket for road tax.

The world's motor manufacturers are working hard on the issue and, having been set tough targets to aim at over the coming years, there is a lot of development still to come. However, there are already some very good options around which allow you to still enjoy decent executive mobility whilst doing your bit for the environment.



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Japanese manufacturer Lexus has created a number of models which attempt to tackle the problem from both ends by creating high end, but green, luxury motoring. The model line up includes the large executive limo LS600h (favoured by Paul McCartney and David Cameron) and the 4x4 RX400h. The GS450h (pictured) is Lexus' BMW 5 series / Mercedes Benz E Class competitor, and the clever bit is denoted in its name by the lower case h – which tells you that this particular exec saloon is using hybrid technology.

Hybrid technology essentially means that a vehicle has both a conventional petrol engine – in this case a 3.5 V6 developing 292 bhp – and a compact, high output, permanent magnet electric motor, which in this particular model develops 197 bhp. The two power units can either work independently from each other or as one, giving a total of 341 bhp and a quite un-pc-like performance in a very pc package. Lexus claim that the GS450h performs as well as a conventional, larger capacity V8 but with significantly lower fuel consumption and CO2 emissions.

The car's vital statistics certainly seem to assist in placing company money where corporate mouth is. With a top speed of 155mph, it accelerates from rest to 62 mph in 5.9 seconds, 50 to 75 mph in a very impressive 4.9 seconds and, thanks to its all new electronically controlled constantly

variable transmission, acceleration is utterly seamless throughout, adding even more to its incredible refinement. It is the first car in this sector to offer hybrid technology, and is specifically aimed at providing a thoroughly practical and rational alternative to the larger sized engines offered by the competition. Such is the industry belief in this technology that a number of other manufacturers, such as Honda and Porsche, are following suit and developing their own hybrid vehicles.

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Under current legislation, hybrid cars also escape the congestion charge – the reason being that some of the biggest gains for hybrid technology are in town, by virtue of the simple fact that cars stuck in traffic waste fuel. The constant stop-start-stop of driving in London, for example, is very fuel consuming; in a hybrid car it is possible by using a gentle touch on the throttle to keep the petrol unit turned off completely as you creep along in silence. It doesn't get much cleaner than that, and to achieve it in a luxury saloon is quite something.

Many rivals of the Lexus model can match the all-important CO2 emissions with diesel engines, which also return slightly better fuel economy figures in some conditions; however, a diesel engine cannot hope to get near the astonishing refinement, smoothness and pace of the GS450h. Handling is also surprisingly good, thanks to sound basic chassis engineering which is then mated to adaptive suspension.

From the outside, the design works very well from some angles – such as head-on, where it looks sleek and classy – but not nearly as well from others. The rear three-quarters view, for example, looks a little dumpy, leaving you with an impression of ungainly bulkiness. Inside, however, the car is more cohesive and is a technological *tour de force* – you will want for nothing in the toy department. In all but the base model you get the new Lexus multimedia and navigation package, which includes one of the best satellite navigation systems around, a 14-speaker Mark Levinson surround sound system and a parking assist monitor, which does what it says on the tin. The large central touch screen provides all the usual functions you would expect, including television, but it also has a function whereby you can see which of the two motors is currently in use (in real time), at what point the electric motor is charging and by how much it is getting involved. It makes for fascinating viewing – just remember to look through the windscreen occasionally!

The GS450h may arguably lack some of the kudos of its German rivals but it is incredibly well built and exudes quality as well as class leading refinement to the point of being surreal. Its ability to really get up, go, stop and flow through corners initially seems at odds with the rest of its demeanour but is as welcome as the cossetting at which it excels.

As befits a company that has completely re written the rule book for reliability, the GS450h feels like it was honed from a solid block. It is also having a very good go at re writing the rule book for green, executive, personal transport. ■