

EV's and the case for used cars.

Putting to one side the ongoing debates about climate change. It is generally accepted as desirable to move toward “clean” energy sources for the powering of future automobiles. The increasing implementation of things like the ULEZ zones, now operating across London and (as at December 2023) 11 other cities in the UK, reflects this. But sadly, this has inevitably been politicised and perceived to be as much about swelling the coffers of overstretched local authorities at the expense of the motorist (as usual) as it is about achieving a cleaner environment. Some £200 million per annum in London over the first two years of implementation (see [FOI request detail - Transport for London \(tfl.gov.uk\)](#)).

When it comes to the present obsession of various governments with Electric Vehicles (EV), it can be argued that they have rather jumped the gun and largely ignored the huge evolutionary strides that have taken place over recent years in respect of the design of hybrid vehicles and other fuel sources such as hydrogen and biofuels in conjunction with combustion engines.

For example, since hybrid vehicles make use of combustion engines and electric motors together, these vehicles are inherently more energy efficient than normal combustion engine vehicles and don't suffer the “range anxiety effect” induced when driving any long distance in an EV. Hybrids make use of energy efficient tools such as regenerative braking, where the energy derived from stopping the wheels is used to turn the electric motor, like a generator.

At present EV batteries have low energy densities, meaning that you have to frequently recharge your EV and not always when most convenient. Moreover, EV's need more batteries to run, increasing the overall weight of the vehicle. This can impact performance factors such as handling or tyre wear and tip the crucial power to weight ratio, simply meaning that you need to consume more energy because EV's are inherently heavier. These factors give hybrid vehicles an edge when it comes to energy efficiency. Since hybrid vehicles work in conjunction with combustion engines, they do not have to carry heavyweight and expensive electric batteries and they deliver a very practical and highly energy efficient solution.

Aside from these considerations what people who advocate EV's also seem to ignore is the fact that here in the UK over the last year (to December 2023) some 63.6% of electricity was still being generated using non-renewable sources (see [National Grid: Live \(iamkate.com\)](#)) so whilst the EV certainly has no exhaust pipe and may produce zero emissions as it bowls along the road, these emissions are simply incurred elsewhere. It is a basic law of Physics when it comes to energy that, to paraphrase Einstein, you get “owt for nowt” and a degree of “Emperor's new clothes syndrome” seems to prevail amongst EV zealots!



Even governments, who arguably should know better, seem to think that by ignoring the carbon cost of producing an EV, the carbon cost of disposing of the EV at the end of its useful life and driving an EV using power largely generated from non-renewable sources actually equates to zero emissions!

The rising cost of electricity generation and the fact that the National Grid here in the UK couldn't cope if everyone was driving an EV was perhaps part of the recent decision by the Government to postpone the ban on new petrol- or diesel-powered cars and vans from 2030 to 2035. It is to be hoped that this now gives more time to properly consider the best way forward.

It is also to be hoped that the wisdom of making use of the huge volume of good, ULEZ compliant used vehicles on the market, where the carbon cost of manufacture has already been incurred, will become more widely appreciated. Rather than perpetuating the urge to constantly buy new – see [I love electric vehicles – and was an early adopter. But increasingly I feel duped | Rowan Atkinson | The Guardian](#).

Apart from huge savings compared with buying new. Good quality, well maintained and ULEZ compliant used vehicles are a very responsible way forward for the next few years whilst the most environmentally sustainable approach is being determined.