

It seems that the days of the internal combustion engine (ICE) in motor vehicles are numbered, with the UK (and other countries) banning their sale in just over 20 years time. You may feel that is some way off yet but the transformation isn't going to happen overnight.

Volvo have already said that won't be making solely ICE cars from 2019, only electric or hybrid and other manufacturers have intimated they're likely to follow suit very soon. In fact most already have an electric or hybrid version of much of their range and the likes of TESLA have seen long range, fast charging solely electric cars become a mainstream product. TESLA have also given their technology away to anyone who wants to use it which will only hasten growth.

With tech giants like Google and Apple investing heavily in electric and automated car technology, they are now looking at buying Mazda as a way to fast track in to car production, so we can only assume that they are also planning in entering mass production EV manufacturing in the very near future.

Sales of EV's are already growing by around 30% year on year, a figure which is likely to increase as cities ban or heavily tax the driving of diesels in their centres. It's estimated that by 2020 EV or hybrids could make up 1 in 4 of new car sales - around 700,000 per annum. I would think even now most people looking to buy new, especially for a second car, are least considering an electric car.



The recent 12.5% electricity price rise from British Gas came as a bit of a shock for some people but it was always inevitable that it was going to come soon. We've had an average of 8% increase year on year since the 1940's (doubling every 8 years) so taken in context, because we've had stable or even lowering prices for the past couple of years it was always going to catch up with a bump eventually, in fact I wouldn't be surprised if the rumours of a similar price rise in January were true as this would bring it back on track and more importantly closer towards the minimum £92.50 per MWh the UK Gov't have promised EDF when Hinkley C comes online in around 8 years. Its currently £42/MWh so will have to more than double over that time period!

Whilst none of us are happy with the price rises it seems to me that there might be an opportunity which benefits you as an installer and your customers.

Consumers will be looking at a way to reduce their bills and insulate themselves from the impact of future price hikes. The obvious first step is to reduce consumption with simple inexpensive solutions like LED light bulbs or buying low energy appliance when they need replacing, or maybe going slightly further and upgrading their home for smart control of lighting or heating, etc., but once they've done all that there'll still be (an ever increasing) bill to pay.

The only solution then is to self-generate and the simplest way to do this for the majority of homeowners is to fit PV with battery storage to ensure maximum self consumption. If the customer already has PV fitted but no storage they could be "wasting" 70% of their generated electricity by exporting it a just over 4p a unit on 50% or their generation or they could use it saving around 15p per unit with the addition of

a battery system AND still get paid the 50% export tariff. On a typical 4kW system this could be worth an additional £400 per year at current prices, doubling every eight years if price trends continue/gov promises to EDF are met!!

Obviously if they don't have PV installed yet, despite the doom and gloom about the reducing FIT rate, it makes it a very attractive financial proposition. An average return for a system with battery storage would work out at 21p per kWh for each unit generated taking into account FIT, savings and export and bring **payback well below 10 years*** – better than when it was at its height of 42p. With PV kit and battery prices lower than ever and electricity prices increasing we've nearly reached a point where it's almost too expensive not to fit.