

Written evidence submitted by the Alliance of British Drivers (EVP0037)

First of all, there is no such thing as a ‘zero emissions vehicle’ – zero emissions refers to the tailpipe only. Life cycle emissions including manufacture and use need to be considered for genuine comparisons between petrol/diesel vehicles and EVs. Battery EVs require around 70% more energy during manufacture and more energy to move them due to increased weight and increased rolling resistance – they are not ‘energy saving.’

Every kwh of electricity produced in the UK emits around 208g of CO₂, so charging a 100kwh battery emits 100 x 208g plus electricity transmission losses. The cleanest petrol/diesel vehicles can actually have lower or similar life cycle emissions/CO₂ emissions to Battery EVs. EVs have an inevitable environmental impact from the likes of mining Cobalt. Euro 6 petrol/diesel vehicles emit several times more Particulate Matter from tyres than exhausts and EVs have more tyre emissions due to their increased weight compared to petrol/diesel vehicles. Telling the truth about EVs isn’t about being against them, it’s simply about telling the truth. EVs are good, but they are not an environmental panacea or a 100% equivalent of a petrol, diesel or hybrid vehicle.

It’s not clear how the National Grid would cope with charging tens of millions of EVs, given the current and potential future over-reliance on intermittent wind and solar electricity generation. (As I write this, Texas has 2.3 million people without electricity due to the failure of wind power despite 100GW of installed wind capacity and charging a Tesla is currently costing \$900). A roll out of reliable 24/7 small modular nuclear power would inspire much more confidence.

Electrification provides a particularly difficult challenge for the caravan and motorhome industry. A BEV with a solo 200-mile range will fall below 100 miles when towing a caravan. Similarly, van-based motorhomes, which are typically 3500kg or greater in diesel form, will suffer a weight penalty and restricted range of less than 200 miles as a BEV. My own 4250kg motorhome can travel over 500 miles on 75kg of diesel. Compare that with the 625kg weight of a 100kwh Tesla lithium battery.

‘Climate Assembly’ ‘approval’ of anything, including the 2030 ban on petrol/diesel cars/vans, is irrelevant as they are not part of any genuine democratic process – a few citizens indoctrinated by one-sided views from climate activists is an insult to democracy and the UK’s 46 million voters. We are still waiting for the analysis of the 2030/2035/2040 DfT petrol/diesel ban consultation that ended on 31st July 2020. The ABD submitted a response to that consultation and we have written to Grant Shapps asking what happened to it. Meanwhile, the ban has been brought forward to 2030 regardless.

The price of making a switch to EVs is a barrier for the less well-off. A recent Centre for Economics and Business Research (CEBR) report suggested that access to an electric car is a pipe dream for a third of the population and a difficulty for a further 20%:

<https://fairfueluk.com/CEBR-Fuel-Duty-Impact---Nov-2020/>

Buses and HGVs obviously pose the biggest problem from an alternative to diesel point of view. Hydrogen fuel is probably a ‘pipe dream.’ There’s no natural supply of hydrogen, so it has to be manufactured in an energy intensive way. Hydrogen fuel cells are a possibility where hydrogen is used as an energy carrier. Ammonia as a fuel or as a fuel cell may be a more viable option than hydrogen.

It's essential and fair that the transition to EVs, or any other alternative powertrain, protects the use and value of exiting petrol/diesel vehicles and allows them to reach their natural end of life – they should not be taxed or regulated off the roads prematurely as they were originally purchased in good faith and complied with regulations prevailing at the time of purchase.

The Future of Motoring Taxation - Alternatives to Road Pricing

Motoring taxation is the currently fifth largest contributor to revenue raised by the Treasury, amounting to around £40 billion in VED and Fuel Taxes (and VAT). A Battery EV future for cars and vans means that new forms of taxation will be needed to replace both fuel duty and emissions based VED.

The Government has long favoured road pricing as an alternative and proposed the introduction of such a scheme in 2005. Public opposition via a 1.8 million signature petition in 2007 meant that the idea was shelved although some of the necessary technology was installed under the NRTS project. The main problems with road pricing include the high cost of administering such a scheme, compared to the cheap and easy to collect fuel duty/VED, and the intrusive requirement to track the time of day and location of vehicles. Whilst road pricing could in theory be 'revenue neutral' it would not be 'cost neutral.' Road pricing could also be very complex if mileage charges were based on criteria such as location, time of day, and vehicle CO2 emissions. Road pricing could be used to price the less well-off drivers off the roads – that's the only way any desired reduction in traffic and emissions could be achieved via a 'regressive' taxation system. No doubt it would also be lucrative for the private contractors who would inevitably administer road pricing.

VED, Road Tax and The Road Fund Licence

Another issue is VED itself, commonly but incorrectly referred to as a 'road tax.' A valid long-standing complaint from drivers and motoring groups is the poor state of repair of UK roads and how little of the £40 billion raised in motoring taxation is spent on roads. The 'Road Fund Licence' was introduced in 1921 in order to improve roads. The 'Road Fund' was abolished on 1st April 1937, as a result of the 1936 Finance Act, and since that date all motoring taxation has been treated as general taxation. VED was applied to motor vehicles from 1920 onwards. VED has been based on CO2 emissions since 1st March 2001 prior to which it was based on engine capacity. Clearly the zero-taxation free ride for BEVs has to end sooner rather than later and VED can't be based on emissions for a zero-tailpipe emissions vehicle.

An alternative VED for vehicles up to 3500/4250kg

We consider that the Motorcycle Action Group (MAG) proposal for a weight based VED is an excellent idea as it would relate to the energy required to move a vehicle and wear to the road surface. The heavier the vehicle, the higher the VED charge. This would ensure that EVs with heavy batteries paid their fair share of taxation. We propose this weight based VED for ICE vehicles up to 3500kg and BEVs up to 4250kg in line with the relaxation of a 'C' licence requirement over 3500kg to allow the extra weight of the batteries. As another alternative,

VED could also be charged on the kwh size of the EV battery, hence an EV with a 100kwh battery would pay more than one with a 40kwh battery, for example.

Alternatives to Road Pricing for zero tailpipe emissions vehicles

The Government clearly has motives other than alternative taxation methods behind its love of road pricing. We therefore propose that ICE (Internal Combustion Engine) vehicles under 3500kg continue to be taxed via fuel duty and the fuel duty escalator should be abolished. BEVs could easily be charged via a per kwh tax on electricity used for recharging the batteries, or even a simple yearly or monthly mileage charge.

Allowing ICE Vehicles to attain their natural end of life

A big worry is that the Government will be tempted to tax ICE vehicles off the roads as soon as possible or restrict their usage in order to achieve arbitrary targets. We are vehemently against this as it will result in ICE vehicles becoming worthless or heavily devalued 'stranded assets' despite the fact that they were originally purchased in good faith and met prevailing life-time emissions standards. A devalued or worthless vehicle will be a significant barrier to affording a new or newer EV, particularly for the less well-off.

HGV Taxation

The UK road haulage industry suffers greatly with fuel duty on diesel being higher than our European competitors, so this needs to be addressed as a matter of urgency either via lower fuel duty or an alternative system negotiated and agreed between the industry and the Government. Road pricing for lorries on UK roads has been mooted for some time, but has yet to materialise. Replacing the ICE with an equivalent alternative power source will be a huge challenge for heavy vehicles.

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