

Written evidence submitted by Electric Vehicle Association for England (EVA England) (EVP0135)

Introduction

EVA England is a consumer organisation of drivers of electric cars and vans, and prospective electric vehicle drivers. It was set up informally in March 2020 by a diverse group of enthusiasts, who then formed the board when it was incorporated as a Community Interest Company in June 2020. It is a fully independent organisation, and all funding has been, and is, on the basis of maintaining that independence. Since incorporation EVA England has been building its infrastructure in preparation for the public to join as members in early March 2021. However EVA England pressed for a change-over date of 2030, following a survey of 1114 vehicle drivers in July 2020, which indicated overwhelming support the end to sales of petrol, diesel, and hybrid cars by 2030 as being feasible and necessary to achieve air quality and reductions in emissions

EVA England is committed to press for improvements in the experience of drivers of electric vehicles (EVs) as well as for the change to full electrification of private car and fleet transport to be expedited, to contribute to the urgent need for improvements in urban air quality, and to support the commitment to achieve zero carbon emissions by 2050 or earlier.

As a result EVA England greatly welcomes the Government's commitment to making it easier to pay, opening up chargepoint data, using a single payment metric, and ensuring a reliable charging network. EVA England also welcomes the Government's pledge to be "working with the operators of major service areas to ensure that this charging provision is in place ahead of customer demand". However as a consumer organisation we are acutely aware that the customer demand, which needs to be met, is now. The increased uptake in the purchase of electric vehicles, which is not yet matched by the speed of improvements in the charging infrastructure, could create a possible crisis of confidence if the increase in EV drivers exacerbates the current problems in accessing reliable public charging. EVA believes that an implementation plan to achieve the roll out of the changes needed in 2023, 2025, and 2030 is urgently needed, and recognises that this may require urgent legislation. Previous Government statements have indicated that the improvements in the consumer experience of chargepoints should be in place by the Autumn of 2021.

Reason for Submitting Evidence

The work of EVA England to date (which in anticipation of a full membership drive has included the survey of 1114 drivers, liaison with multiple local and regional groups of EV drivers through EV Groups Nexus and with partners in the devolved nations, Ireland, other EU and European and international EV driver associations) has confirmed other evidence that key deterrents against drivers switching to battery electric vehicles are:

1. **Price** – In the minds of many drivers the price disparity remains the key deterrent, despite evidence that the life cycle costs of electric vehicles (EVs) are lower overall than for petrol or diesel cars. For example Norway, using tax incentives, has achieved both price parity as well as over 50 % battery electric new car sales with an additional 20% as plug-in hybrid cars in 2020. However this taxation model penalises petrol and diesel drivers, rather than rewarding the transfer to battery electric, and the

choice between these and other incentives raise policy decisions which have to be addressed by Government. What is clear is that significant financial incentives to make the change are currently needed.

2. **Infrastructure** – particularly in relation to charging and 4 key hurdles that must be addressed:
 - a. The most urgent need for reliable access to working and well maintained rapid chargers on Motorways and major A-roads, workplace chargers, and on-street and other chargers for those without off-street parking. While much of this is identified in the agreed timetable set out in the Government’s Vision for the Rapid Chargepoint Network in 2020, there are contractual and other hurdles which may require urgent government intervention to avoid further delays.
 - b. The need for adequate volume of chargers at key sites to avoid queues
 - c. Rapid expansion of the 150- 350 Kw high powered connectors, as proposed also by Transport & Environment, and support for the required grid upgrades these will need
 - d. The need for cost clarity, transparency, and consistency in charging pricing
 - e. The need for single mode of payment – whether through an App, RFID card, or contactless payment.
3. **Understanding and knowledge about EVs** – There is an urgent need to improve public education about electric vehicles as well as to counter multiple, and sometimes extreme, sources of mis-information.

EVA England recognises that significant investment will be required to adequately address these three deterrents against drivers switching to EVs. Therefore in response to the call for evidence EVA England has addressed the five of the eight questions, which relate to cars and vans in England:

<p>The feasibility, opportunities, and challenges presented by the acceleration of the ban of the sale of new petrol and diesel vehicles to 2030</p>	<ul style="list-style-type: none"> • EVA England recognises the enormous opportunities offered by the Government’s November announcement. It allows the UK to be one of the front-runners in Europe in addressing air pollution and makes a significant contribution to the UK’s commitment to drastically reduce Transport emissions, to limit the sales of all private and leased cars to fully electric by 2035, and achieve net zero by 2050. However for this to be a realistic aspiration urgent attention must be given to the three sets of actions set out in Section 2 below. • One constraint which is also an opportunity results from the Trade and Cooperation agreement with the European Union. An adequate supply of new EVs is essential, and to achieve that the manufacture of both EVs and batteries in the UK has to be significantly ramped up before 2023
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	<p>when the tariff for non-UK components comes in. This may require significant government incentives to establish sufficient manufacturing sites.</p> <ul style="list-style-type: none"> • The rapid lowering of the costs of batteries has in part resulted from improved R & D leading to lower costs of both materials and manufacture. EVA England urges the government to increase financial support for UK R & D in these areas
<p>The actions required by Government and private operators to encourage greater uptake of electric vehicles and the infrastructure required to support them</p>	<p>We have identified above three key deterrents against drivers switching to zero tailpipe emission vehicles. These deterrents are addressed below:</p> <ul style="list-style-type: none"> • Information and knowledge: Improved public information education and robust rebuttal of disinformation will itself make drivers aware of the both the cost and driving benefits of EVs to the individual, as well as to the public • Price: This in turn should have some impact on the public perception of the price differential. In addition EV battery costs have reduced drastically from 2010 to 2020 (From \$1000 to \$150 per Kwh) and are expected to reach \$100 per Kwh by 2022, and price parity for purchase of some cars is expected to be achieved by 2023. Parity in leasing contracts has progressed even further. However the current climate of public opinion may currently be more sensitive to the urgent need to improve the environment, and it is possible that this sensitivity may somewhat rebound in the next year or so as the population experiences freedom from the constraints imposed by the pandemic. This could therefore be an ideal time for the Government to give both a strong message and a financial incentive by increasing the grant by £1000 for purchase of new Electric Vehicles back to the 2018 level and /or introducing an early scrappage scheme for older diesel (initially) and (later) petrol cars. In addition a loan scheme should be considered • Infrastructure: By urgently addressing

	<p>the most pressing weaknesses in the charging infrastructure EVA England welcomes the Government’s consultation on the Consumer Experience at Public Chargepoints and wishes to see the recommendations translated through regulations this autumn – the most urgent of these being low availability, and frequent problems with the chargepoints on motorways. EVA England would welcome the publication of a clear measurable plan and timetable for these in the planned EV infrastructure strategy, addressing also the local constraints that hold back improvements in charging at a local level.</p>
<p>The case for introducing some form of road pricing and the economic, fiscal, environmental and social impacts of doing so</p>	<ul style="list-style-type: none"> • In the present context the paramount goal is to encourage the change to battery electric vehicles. Initially during this period up until 2030 EVA England would favour either a significantly higher Vehicle Excise (repeated) Duty, with the rate dependent on the level of emissions of the vehicle, or alternately a graded ‘granular’ VAT – again dependent on the level of emissions of the vehicle, as used in Norway, with levels up to 30% or 40% in some cases. However, as noted above, the decision to use tax increases to load the price of petrol and diesel vehicles is just one choice representing one policy option. Other alternatives would include increased positive tax incentives for the purchase of EVs. However, in making the case for a range of possible sources of revenue to support the change to fully electric, it is important from the public’s point of view to know exactly what that revenue would be funding. The above has identified a range of costs which would be incurred in supporting the road to zero car emissions: public education, increased immediate subsidies to accelerate parity in purchase price and scrappage schemes, subsidies to incentivise urgently needed improvements in the charging infrastructure (for which although ear-

marked for government funding, a detailed implementation strategy is urgently needed), incentives and possible subsidies to industry to improve local EV and battery production and to support R and D. A publicly available and easily understandable set of information about these costs and how they are to be funded would, in our view, significantly improve the acceptance of whatever fiscal actions the government had to take to raise the necessary revenue. Public support for whichever scheme will depend on whether it relates to a public perception of fairness and social benefit rather than only a convenient source of revenue (Ipsos MORI December 2020).

- However EVA England recognises that the Government will also need to replace the revenues lost from taxation of petrol and diesel fuels as well as vehicles. The opportunities for raising such revenue across the board (from all cars) cannot depend only on significant differentials in excise duty between ICEs and EVs (either one off or recurrent), but in the longer term some form of road pricing will be needed. In the view of EVA England there are particular disadvantages in road pricing at the present time:
 1. The costs of the technology – assuming it was to be designed to distinguish the charges based on the estimated emissions of each car – if implemented in all motorways and major trunk routes – is high, and the reliability not fully tested. (The technology used in urban environments, for example the London congestion zone, is now quite efficient at number plate detection, but to our knowledge at the present time a secondary process may be required to identify the emission category of each vehicle)
 2. It would probably require two systems: One for major trunk roads, and one for urban environments

	<p>(where the air pollution is most toxic). This might encourage a move to minor roads other than for long journeys, with consequent increases in air pollution in the areas served by those roads</p> <p>3. The revenue would then be based on driving habits – use of motorways or minor roads – rather than on the degree of pollution produced by the vehicle.</p>
<p>Which particular road pricing or pay-as-you-drive schemes would be most appropriate for the UK context and the practicalities of implementing such schemes</p>	<ul style="list-style-type: none"> • In the view of EVA England as the change-over progresses the benefits of road pricing should begin to outweigh the disadvantages. The need to incentivise the change to EVs should have diminished, and the government’s need for transport revenues will have consequently increased. There will also be more data on urban schemes following the London Congestion, low emission and ultra-low emission zones model. However a significant number of high emissions vehicles will still be operating. As a result EVA England would favour a mixed economy of road pricing and differential excise duty, combined with a scrappage scheme to encourage the move from the most polluting vehicles. • Until petrol and diesel vehicles are completely phased out the charges in the road pricing scheme should be dependent on the level of emissions of the vehicle • During this interim period EVA England sees a need to retain urban congestion zones as a separate charging system
<p>The level of public support for road pricing and how the views of the public need to be considered in the development of any road pricing scheme</p>	<p>Historically there has always been a strong antipathy towards road pricing in the UK and much controversy heralded even the pricing on the major Toll bridges such as the Forth road bridge and the initial Severn bridge. Possibly as the UK had become less insular and the population as a whole is more familiar with the practices in other countries, there is now evidence for growing support for some form of road pricing. A survey in 2010 by the RAC identified 19% of drivers as favouring a road</p>

	<p>pricing system, but estimated that this would increase to 47% in the years following. An Ipsos Mori poll in 2020 found support for a system of road charging in 60% of the population, which however fell to 39% if this was seen as a way to only reduce the road tax for motorists. The Mori results clearly indicate that respondents needed the revenues to be clear and transparent, and be used to improve the social and living conditions of the population.</p>
<p>The lessons to be learned from other countries who are seeking to decarbonise road transport and/or utilise forms of road pricing</p>	

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