

## Written evidence submitted by Mr David Haggie (EVP0057)

### Accelerating the shift to zero emission vehicles

#### **Respondent background**

I am writing as an EV driver to provide a user perspective on the shift to zero emission vehicles. I am also the managing director of a software business.

My reason for responding is that I believe that:

1. the recent House of Commons report Number CBP07480, 4 December 2020 Electric vehicles and infrastructure does not reflect my experience of the pace at which EV take-up might take place.
2. that level of EV charging points currently available is woefully short of government rhetoric and action is required to address this.
3. the government plans to end the sale of petrol and diesel cars by 2030, and hybrids by 2035 also seems worthy of review. It is presented as a 2030 target, but in fact is not. The target should be revisited.

Transport is a significant contributor to global warming and the project to decarbonise it is urgent. More needs to be done. I wish to contribute to the debate.

#### **Pace of take-up of EVs**

I believe the recent House of Commons report Number CBP07480 understates the dynamic currently underway in the car market. A shift seems to be going on which the report's focus on the current figures of EVs on the road misses. There's a 'don't get too excited' subtext to the reports' view that: 'The Government is keen to highlight the growth rate, rather than the absolute numbers on the roads', going on to say 'In 2019 around 58.5% of licensed cars were petrol, 39.1% diesel and 0.8% were either a plug-in-hybrid, battery electric, range-extended electric, or fuel cell electric car'.

This misses a real change. In my area, the number and types of people buying EVs is quite surprising. The purchasers are not particularly green. Buyers include people who fly a lot, like sports cars, are well off, and influence other people's behaviour. They see their EV cars as cool and socially desirable. The cars get talked about. Many in a wider group say their next car will be an EV, again including many who have no 'green' credentials. These are exactly the people who drive the new car market, and so should not be dismissed as a privileged subgroup: the investment the car industry has put in to creating desirable electric cars is having an effect. The demand just feels stronger than the House of Commons briefing suggests - if obstacles to take up can be removed.

#### **Obstacles to take up of Electric Vehicles**

This section relates to the Committee's interest in 'The actions required by Government and private operators to encourage greater uptake of electric vehicles and the infrastructure required to support them'

Clearly people without private parking face particular challenges. While electricity is available in the street through lighting systems, and despite the fact overnight charging only needs 7KwH connections, there seems to be a lack of innovation to solve this problem. A system of on street connection points with a QR code link to your domestic electricity tariff, for example, would be perfectly feasible. But in the public mind there are no such initiatives to address this issue and so people in flats/terraced housing feel an EV is not for them. I believe the government should take action by getting a variety of pilot schemes in play quickly to address this issue. This would mean viable solutions can be designed and rolled out, which must happen soon.

Range anxiety is the other obvious barrier. This is more psychological than real, as for most drivers 99% of trips will be fueled from home. However, the very possibility of being stuck on a trip is a key cause for hesitancy when it comes to car purchase decisions. The solution to this again is straightforward – to put in place a network of fast charging points (50KwH+) to address the issue.

The point I wish the Committee to understand is how vastly short of this objective we currently are. It is quite astonishing.

For example, I recently drove from my home in Cheltenham to Northumberland, largely using the M5, M42 and M1. We stopped to charge at the Wetherby Services on the M1, a major stop-off on one of the UK's main arterial roads. Only **one** CCS charging point (a fast charger), and two slower chargers were installed. Not surprisingly, all three were in use when we visited. To be clear one charge takes about an hour, so the provision was for only three cars to fill up every hour at this very busy, major service station.

We then went on to another fast charging station only to find it was also busy. We then went to yet another, with miles running out, and were lucky to find one of the three available slots was free. This site was located in an IKEA car park.

Given the level of government rhetoric about the importance of transport powered by electricity, this is an extraordinary situation. The public is encouraged to invest in a new mode of transport, but there is virtually no viable infrastructure to support their decision when they take longer trips.

These longer trips are very often made using the motorway network. It is essential that many thousands more charging points are put in place all along these key routes. They are essential to our national transport infrastructure.

The state will have to play a part in addressing this issue. Changes will be needed to the electricity network so sufficient power is available at key sites. I read online that Welcome Break, Roadchef and BP all said at the start of 2020 that they were concerned this was not being dealt with.

If this investment isn't done pretty quickly, it is also inevitable we will have a string of negative press stories about horrendous trips which will dent confidence in this important new technology and impede take-up. They will also make government look ridiculous. Indeed such stories are already starting to appear (see The Guardian, *'Why did it take nine hours to go 130 miles in our new electric Porsche?'* November 28th 2020).

The Committee should be aware, therefore, that the charging network is extraordinarily basic and the EV revolution will not happen unless this is addressed. I believe the government should take action by rapidly implementing a step change (100 fold) expansion in charging points on the main motorway network.

### **Government target for 2030**

The Committee wishes to investigate 'the feasibility, opportunities, and challenges presented by the acceleration of the ban of the sale of new petrol and diesel vehicles to 2030'.

I believe this 2030 target is a sleight of hand.

- Hybrids are still to be sold until 2035. Given many modern petrol cars have a hybrid component, the 2030 date may be a fiction, a classic 'big announcement' which does not drive change.
- The Committee should also question even the continuation of Plug in Hybrid EVs after 2030, as it appears they are not often 'plugged in' and so do not deliver the step change in emissions which is needed.

The government should take action and commit to a 2030 EV-only target, and remove the obstacles to its success.

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