



RAC submission to the Welsh Economy, infrastructure and skills committee consultation on electric vehicle charging in Wales

About the RAC

With more than eight million members, the RAC is the oldest and one of the UK's most progressive motoring organisations, providing services for both private and business motorists. As such, it is committed to making driving easier, safer, more affordable and more enjoyable for all road users.

The RAC, which employs more than 1,600 patrols, provides roadside assistance across the entire UK road network and as a result has significant insight into how the country's road networks are managed and maintained.

The RAC is separate from the RAC Foundation which is a transport policy and research organisation which explores the economic, mobility, safety and environmental issues relating to roads and their users.

The RAC website can be found at www.rac.co.uk.

In September 2018, the RAC published its latest [Report on Motoring](#).

To understand the current charging infrastructure in Wales, and to what extent it is fit for purpose:

The RAC has no comment on the physical condition of the charging infrastructure in Wales. However, we are able to assess demand for vehicles using the charging infrastructure. The 2018 RAC Report on Motoring¹, published in September, is based upon a cross-representative survey of UK motorists. We can break the data down by regions in England, Scotland and Wales.

We asked motorists about their next choice of vehicle. In Wales, 5% of drivers said they plan on purchasing a plug-in hybrid vehicle while 2% said they will opt for a pure battery electric vehicle. There are currently 1.9m licenced vehicles in Wales², and based on this, up to 38,000 owners will opt for a pure electric vehicle as their next car and up to 95,000 will opt for a plug-in hybrid. The rate of which this occurs will be dependent on when motorists will typically opt for a new vehicle. Within the RAC Report on Motoring, we found that 62% of Welsh motorists plan on changing their vehicle within the next three years.

How the infrastructure needs to develop to support an increase in EVs on our roads. How the Welsh Government, private sector and third sector can work together to develop EV charging infrastructure;

¹ <https://www.rac.co.uk/report-on-motoring>

² <https://www.gov.uk/government/statistical-data-sets/all-vehicles-veh01> (VEH0104)

The RAC Report on Motoring suggests that 41% of Welsh drivers are looking for a minimum of 300 miles on a single charge before they would consider purchasing an electric vehicle and 42% of Welsh motorists would want a full charge within 30 minutes. This indicates that for Welsh motorists, they would like to see a reliable network of rapid charging points to give them peace of mind when doing both short and, more especially, long distance journeys. This will need to be complimented by the ability to charge at home whether that is on or off-street. Home charging does not require rapid charging as this, alongside work place parking is likely to be the period where vehicles are left parked for the longest periods.

The RAC recommends that the Welsh Government works closely with EV charging infrastructure providers, businesses and consumer groups to understand and establish patterns of car journeys across Wales so that the appropriate infrastructure can both respond to consumer demand and encourage further uptake of EVs.

Whether the electricity grid in Wales is able to deal with a significant increase in EV infrastructure, particularly in rural areas;

The RAC is not in a position to directly comment on this.

To explore the potential for electric vehicles to promote behaviour change, for example in terms of vehicle ownership and car sharing initiatives;

Research carried out for the RAC Report on Motoring 2018 asked a series of questions on whether Welsh motorists would be willing to make certain behavioural changes in order to improve air quality. Our findings show that:

- Only 19% of Welsh drivers would be prepared to pay to a charge to enter a city centre to improve air quality -36% said they would not be willing to do this, with the remainder (45%) undecided.
- Almost half of Welsh drivers (47%) would be willing to share a car with a colleague or friend to reduce their emissions footprint. Only 19% would be unwilling to do this.
- Over half of Welsh drivers (55%) would be willing to buy a zero-emissions vehicle if the Government increased the financial incentive to do so. Only 11% said they would be unwilling.
- Willingness to buy a zero-emission vehicle falls substantially if the Government were to withdraw incentives. Only 18% of Welsh drivers would buy a zero-emissions vehicle if the Government didn't offer financial incentives to do so against 34% that would not.
- An encouraging 60% of Welsh drivers would be willing to understand more about how their vehicle's emissions impact on air quality. This could be done via an online emissions checker, though there is no central database available through either the UK Government or the Welsh Government.
- Almost half of Welsh drivers (46%) would be willing to switch their engine off more often when in traffic to reduce their emissions footprint, against 11% who would not be willing to do this. One in five (18%) say they already do this.

We recognise that in urban areas especially, there are alternatives to conventional ownership and leasing models such as car clubs. Many of these clubs operate lower emission fleets than the private ownership model and for those who do not want to own a vehicle but have access for occasional vehicle use, these car club models are a good option.

To what extent the Welsh Government has acted upon the recommendations in the Low Carbon Vehicle Report; and

The RAC is not in a position to comment on this.

Examples of best practice from Wales and further afield.

The RAC believes that to accelerate the take-up of pure EVs and plug-in hybrids, it is vital that policy makers and manufacturers understand the needs of drivers. Our research³ indicates that presently, consumers see the upfront cost of an electric vehicle as a significant barrier to switching to one, particularly when compared to an equivalent sized conventional vehicle. In addition to this, there remains concerns over a lack of charging infrastructure and the associated complications of charging tariffs together with a lack of standardised charging methods. Until such time as the upfront cost of pure electric vehicles come more in line with comparable conventionally-fuelled vehicles and a (more extensive) charging infrastructure is in place, we would urge the following as examples of best practice to help stimulate the market:

- The Welsh Government should urge the UK Government to reverse its decision to cut the plug-in car grant scheme⁴ which was announced in October 2018. An alternative may be to exclude or cut VAT on the sales of electric vehicles for a period until we reach a point where there are sufficient numbers of EVs on the market to compete with conventional vehicles on upfront cost. We believe this would boost demand and encourage manufacturers to invest in this technology. Similar policies in Norway have helped it to have one of the highest ownership levels of electric and plug-in hybrid vehicles in the world.
- Alongside this, local authorities can promote usage by offering priority parking for EVs, whereby EVs have parking spaces close to amenities, and discounted or free parking alongside this. They may also wish to permit zero-emission vehicles access to priority lanes in urban areas, such as bus lanes. However, this must be implemented in a manner which makes it clear to all drivers that only zero-emission vehicles have access to such lanes so to reduce the chances of conventional vehicles receiving FPNs. These will also be short-term initiatives to until demand increases.

³ https://www.rac.co.uk/pdfs/report-on-motoring/rac10483_rom-2018_content_web

⁴ <https://www.gov.uk/government/news/reformed-plug-in-car-grant-extended-into-next-decade>