

Dear Sir/Madam,

In response to your consultation on priorities for the committee I would like to encourage the committee to ensure that the Minister, Deputy Minister and broader Welsh Government are held to account in regard to the necessary and vital investment required to support the move towards Electric Vehicles and in particular the deployment by the market (with and without government support) of an effective and accessible Electric Vehicle charging infrastructure.

The Minister and Deputy Minister's response to your letter on priorities (["https://business.senedd.wales/documents/s116925/Letter%20from%20the%20Minister%20and%20Deputy%20Minister%20for%20Climate%20Change%20on%20the%20Welsh%20Governments%20priorities.pdf"](https://business.senedd.wales/documents/s116925/Letter%20from%20the%20Minister%20and%20Deputy%20Minister%20for%20Climate%20Change%20on%20the%20Welsh%20Governments%20priorities.pdf) <https://business.senedd.wales/documents/s116925/Letter%20from%20the%20Minister%20and%20Deputy%20Minister%20for%20Climate%20Change%20on%20the%20Welsh%20Governments%20priorities.pdf>) makes only a passing reference to Electric Vehicles, referencing the Transport Strategy (Llwybr Newydd) which itself makes reference to the Welsh Government Electric Vehicle Charging Strategy (["https://gov.wales/sites/default/files/publications/2021-03/electric-vehicle-charging-strategy-wales.pdf"](https://gov.wales/sites/default/files/publications/2021-03/electric-vehicle-charging-strategy-wales.pdf) <https://gov.wales/sites/default/files/publications/2021-03/electric-vehicle-charging-strategy-wales.pdf>).

It is clear from these Welsh Government strategies that Electric Vehicles are seen as a part of the overall transport decarbonisation solution, alongside modal-shifts and decarbonisation of other forms of transport, however I would suggest that the committee may wish to pay specific attention to Electric Vehicle Charging as early as possible in the Senedd term for a number of reasons specific to charging:

- The rapid growth in numbers of Electric Vehicles sold (17% of sales in July 2021 versus 9% in July 2020) and the UK Government commitment to end the sale of new fossil fuel cars in 2030 leading to rapidly rising demand for charging.
- The comparative scarcity of charging infrastructure in Wales in comparison to the rest of the UK, and in particular the uneven distribution of that infrastructure within Wales
["https://www.gov.uk/government/statistics/electric-vehicle-charging-device-statistics-july-2021/electric-vehicle-charging-device-statistics-july-2021"](https://www.gov.uk/government/statistics/electric-vehicle-charging-device-statistics-july-2021/electric-vehicle-charging-device-statistics-july-2021)
<https://www.gov.uk/government/statistics/electric-vehicle-charging-device-statistics-july-2021/electric-vehicle-charging-device-statistics-july-2021>)

- The 'different' nature of Electric Vehicle Charging infrastructure which is not comparable to traditional petrol and diesel fuels. For example, due to the near-ubiquity of electricity supply a small scale (domestic) charging station can be situated almost anywhere, a significant Rapid Charging site akin to a Fuelling Station requires careful planning and engagement with the Electricity Infrastructure operators. This is in direct contrast to traditional fuelling stations where the fuel is brought in by road and therefore a station can be almost anywhere but there is little to no charging at home.
- The significant price differential for charging (from as low as 5p per kWh at home, to 70p per kWh at some public site - an equivalent difference of 1.5p per mile and 22.5p per mile).
- The opportunity presented by Electric Vehicles to provide smart 'grid balancing' if charging infrastructure is strategically co-ordinated in collaboration with Electricity Networks - reducing the need to use fossil fuels for short-term energy peaks. An opportunity which will be lost if leadership is not shown early in deployment of charging infrastructure.
- The need for early intervention to ensure that the infrastructure investments made by the private sector are aligned with the needs of Wales, including the Welsh language and rural communities.

Alongside the committee's consideration of Electric Vehicle Charging in general, some areas that the committee may wish to consider might include:

The Ambition and Scale of the Electric Vehicle Charging Strategy in regard to Rapid Charging infrastructure

The Welsh Government's strategy predicts a need for 4,000 rapid chargers by 2030 and promises the delivery of "a rapid charging network will be provided across the strategic trunk road network of Wales, providing charging at a distance of approximately 20 miles" by 2025 (Charging Strategy, p.35). Given the rate of growth, this could be considered wholly inadequate and the '20 miles' goal has nearly been met by general private sector investment (although reliability is a significant issue).

The current approach by Welsh Government (by Transport for Wales) is to implement single or dual chargers at 'in-fill' locations which will ensure that there is a charging opportunity on all major roads across Wales. Whilst a broad spread of rapid charging locations is vital to increased Electric Vehicle uptake, the number of chargers at each location is a vital component. Given that the current rapid charge time for a 2021 electric vehicle is between 30 minutes and one hour, they can only service a limited number of vehicles at any one time.

Companies such as Gridserve commission over 30 rapid chargers in their 'hub' locations (["https://www.drivingelectric.com/news/982/uks-first-electric-forecourt-](https://www.drivingelectric.com/news/982/uks-first-electric-forecourt-)

[open-november" https://www.drivingelectric.com/news/982/uks-first-electric-forecourt-open-november](https://www.drivingelectric.com/news/982/uks-first-electric-forecourt-open-november)) today and the proposed M56 Tatton services aims to have 54 charge points at opening (["https://www.tattonservices.com/vision"](https://www.tattonservices.com/vision) <https://www.tattonservices.com/vision>). These levels are indicators of the likely parallel demand from Electric Vehicles during peak periods, and the need to ensure enough supply. In contrast to a filling station which may have six pumps, fuelling a potential of 72 cars an hour, the same number of rapid chargers would only be able to service 6-12 at maximum.

The risk exists in the current approach taken by Welsh Government that there will be a sporadic distribution of rapid charging across Wales to thousands of sites with small numbers of 'pumps' leading to queuing and 'charge point hunting' by Electric Vehicle drivers, resulting in a poor experience, lower uptake and slower decarbonisation.

The committee may wish to explore, therefore, whether the Welsh Government's strategy is set to the right timescale and, critically, whether their targets need to be revised to ensure that enough rapid chargers are available at any one location.

Leadership and collaboration in regard to on-street charging solutions

One of the major advantages of Electric Vehicles - the ability to charge at home for a (comparatively) low cost - is currently highly dependent on people having off-road parking. Although the UK Government has made available substantial grants for Local Authorities to provide on-street charging solutions this has not been taken up to a significant level in Wales. The risk exists that the experience for people across Wales will be vastly different based upon not only whether they have off-road parking but also their local authority, conversely the opportunity exists for an aligned schemes which meet the needs of local communities but also provide a consistency of approach (including cost levels and terms of use) across Wales.

The committee may wish to understand what role Welsh Government intends to play in supporting the needs of those people who do not have access to off-road parking in ensuring an effective uptake by this group of car users and how they will ensure this group is not disadvantaged by punitive electricity costs, lack of provision, or overly restrictive terms of use.

Impact on independent filling stations

Equity of access to charging infrastructure is key in ensuring that all areas of Wales are able to decarbonise and to realise the financial and other benefits of Electric Vehicles and no doubt Welsh Government and Local Authorities will be keen to ensure that rapid charging infrastructure is available in rural areas. However, current and planned rapid charging investments (both from the public

and private sector) in Wales have focused on either public sector locations (car parks, public sector offices) or 'destinations' (such as Pubs, Restaurants and Supermarkets).

As we move towards a world without fossil fuel vehicles, there is a genuine risk that independent filling stations will be left behind and that their role as shops and community resources will be lost. The committee may wish to explore with Welsh Government how their strategies will impact on these businesses, and in turn on the communities, and I have no doubt that any impact will be disproportionately disadvantageous to rural and Welsh speaking communities. In turn, there may be an opportunity to understand how Welsh Government might learn from the issues experienced in regard to broadband availability to work with these existing 'car-friendly' sites to increase the availability of rapid charging, including the important role of battery-supported rapid charging for areas which have lower levels of connectivity to the National Grid.

Engagement by Welsh Government and the wider Public Sector with the EV Driving Community

Finally, the committee may wish to explore how Welsh Government is engaging with existing Electric Vehicle users in Wales. It is notable that Electric Vehicle users in Wales do not have a national representative body (in contrast to EV Association England, EV Association Scotland, EV Association Northern Ireland) - these bodies work with their relative governments to support Electric Vehicle uptake, inform policy, and encourage uptake of Electric Vehicles. Although there are local interest groups in some areas of Wales, there is a need for a catalyst to bring together the community and perhaps an opportunity for the Welsh Government to explore similar models in use in regard to Railways to support the development of an 'EV Association Cymru'.

My submission is as an individual, and I am over 18 years old. Please can you anonymise my response and not publish my name or contact details.

Many thanks,