

ECONOMY, ENERGY AND FAIR WORK COMMITTEE ENERGY INQUIRY

SUBMISSION FROM ASSOCIATION OF CONVENIENCE STORES

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Electric Vehicles

1. The impact of increasing numbers of EVs on electricity generation, transmission and distribution?

The National Grid has acknowledged that there may be issues with the growth of electric vehicle users as the amount of power that can be drawn from the electricity network is limited, which could lead to issues with domestic charging, e.g. when using a charger it could mean that you could not use other high demand electrical items (such as kettles and ovens) without tripping the houses' main fuse¹. In their report, 'forecourt thoughts: mass fast charging of electric vehicles', they consider whether rolling electric vehicle charging points at fuel retailers would overcome this issue. However, they only appear to consider the role of supermarket forecourts, and whether charging could be integrated into the shopping experience rather than the forecourt sector as a whole².

When considering the role of forecourts in hosting electric vehicle charging points, The Scottish Government must take into consideration whether forecourt retailers have the capacity and connection to the National Grid to provide public charge points on their forecourt. Rapid vehicle charging points require a separate dedicated link to the national grid, this is not available at all fuel sites and would require significant investment in site infrastructure to remedy.

2. The role of EVs in balancing electricity transmission and distribution networks. Are new battery and grid technologies being adequately supported and rolled out to enable this?

N/A

3. Are enough and the right type of EV charging points delivering accessible charging, and keeping up with consumer demand?

¹ [National Grid: Forecourt Thoughts: Mass fast charging of electric vehicles](#)

² [National Grid: Forecourt Thoughts: Mass fast charging of electric vehicles](#)

We understand and support the need for developing the electric vehicle charging network. We believe that the growth of electric vehicle charging infrastructure should reflect the supply and demand in the market and as such should be led commercially rather than government mandating businesses to host charging points which would place considerable costs on businesses with no reassurances that they will receive a return from their investment.

The overall trend of electric vehicle charging points is positive, with the number of public charging connectors and locations increasing dramatically over the past 12 months. ZapMap suggest that as of January 2020, there are 3,951 charging points in Scotland³. Latest data from the Department for Transport suggests that Scotland has 32 public charging devices per 100,000 of population (the second highest region in the UK after London) and 7.5 public rapid charging devices per 100,000 of population, more than any other region in the UK⁴.

In the forecourt sector, there has also been an increase in the number of locations providing charging points. ACS' Forecourt Report 2019 found that there had been a 74% increase in the number of charging devices available at fuel retailer sites in the UK compared to the previous year, increasing from 254 to 441⁵. The number of fuel retailer sites in the UK providing electric vehicle charging points has also increased by 70% compared to the previous year from 197 to 334 sites. Forecourts are outperforming the overall trend in the electric vehicle charging infrastructure market, making considerable investments to offer this service to their customers.

To extend the network of electric vehicle charging points in Scotland, we believe that the Scottish Government should secure industry cooperation by making a business case for the extension of ULEV infrastructure. The Scottish Government must be able to show how they will incentivise investment, that there is sufficient consumer demand for electric vehicle charging points and that business investments will work to future proof businesses and support current trading models.

To grow electric vehicle charging infrastructure in Scotland, we believe that the Committee should consider the following recommendations:

- Deliver meaningful incentives to fuel retailers to extend the reach of EV public charging points on the road network.
- Avoid mandating businesses to host electric vehicle charging points - only to be used as a last resort if the market does not deliver an effective network.
- Exempt electric vehicle charging points and the associated car parking space from business rates.
- Place ULEV infrastructure in strategic locations that match consumer demands, for example, retail and leisure facility car parks and workplaces

Deliver Meaningful Incentives

³ ZapMap 2019

⁴ Department for Transport: Electric vehicle charging device statistics October 2019

⁵ We do not hold specific data for forecourts in Scotland

Currently, there is uncertainty about electric charging point infrastructure, including the longevity of equipment, length of contracts with suppliers, if there is sufficient consumer demand, and how the infrastructure will support current trading models. The charging speed is also an important factor when fuel retailers are considering whether or not to invest due to the short dwell times at their sites which make it commercially viable. Rapid electric vehicle charging points can charge between 30-60 minutes however this speed is entirely dependent on the electric vehicle's battery capacity. Even if the charge point has a high KWH output, if the electric vehicle cannot charge on a high capacity it will take the same amount of time as if it were being charged on a slower charger. ACS has also heard anecdotally from fuel retailers that a barrier to investment is the lengthy contracts proposed by charge point suppliers, that can range from 10 years to 15 years. Given the fast-paced nature of technological changes in the market, fuel retailers are reluctant to sign up to a contract which may not be an attractive offer and commercially sustainable if faster chargers become available.

As such, the Scottish Government must provide concrete commitments to fuel retailers, so they have the confidence to make a long-term investment in this technology. For the investment to be effective it needs to be across the supply chain for consumers purchasing ULEVs, fuel retailers providing the infrastructure and car manufacturers to produce these vehicles. Uncertainty can lead to businesses being reluctant to invest, and therefore we believe that to incentivise investment from businesses, the Scottish Government should consider incentives such as dedicated funding and business rate exemptions for public charging points. We welcomed the commitment in Transport Scotland's Switched On Scotland Phase Two Action Plan that the Scottish Government will investigate ways to encourage private sector investments in infrastructure.

Business Rates

Installing an electric vehicle charging point could increase the rateable value of the site and the business rates they are required to pay. Currently there is no provision in the Scottish Assessors Practice Notes for the assessment of electric vehicle charging for business rates or the parking spaces that the vehicle occupies to charge, however, this is likely to change at the next business rates revaluation. The Scottish Government should ensure that electric vehicle charge points and the car park space associated are exempt from the rating list to ensure that businesses do not incur increased rating bills for investing in electric vehicle charging.

Strategic Locations

For many fuel retailers, their business model does not lend itself to supporting EV charge points. Consumers will be spending between 30 minutes to an hour charging their battery and at present most fuel retailing sites are not designed to support consumers waiting for long periods of time. Research by Baringa⁶ found that the average amount of time consumer drives would be willing to wait in order to charge in-transit is just 13 minutes. While the increasing use of rapid charging points may be more appropriate for the business model of a fuel retailer, the Scottish Government should make a business case to show how there is sufficient consumer demand for charging in that location.

⁶ [Baringa: Is the UK ready for electric cars?](#)

To understand if there is sufficient consumer demand for charging in that location, the Scottish Government should understand how and where consumers want to charge. By determining suitable locations where there is demand for public charging, this will promote the charging network more effectively. This could incorporate strategic locations on the road network and in local communities that could sustain electric vehicle charging rather than charging points being located on sites where they are not used.

4. Given the declaration of a climate emergency, what more needs to be done to promote a change in culture where EVs are the preferred alternative to fossil fuelled vehicles?

The Scottish Government should consider the following areas that currently act as barriers to consumer uptake of electric vehicles.

Use of electric vehicle charging

While range anxiety is a concern for electric vehicle users, consumers' use of public electric vehicle charging points is still minimal. A report from the UK Government's Rapid Evidence Assessment suggests "95% of private EV owners reported charging at home daily or weekly compared to 26% who reported charging at work daily or weekly and 12% who reported using public charging daily or weekly." As such, the Scottish Government should look to understand where consumers want to charge to ensure that there is sufficient consumer demand for charging in those locations.

Length of waiting lists

Consumers are also deterred by long waiting lists and lead time for electric vehicle purchases. While waiting list times will vary by car manufacturer, some have a waiting list of at least 12 months. Car manufacturers cannot keep up with demand as their battery suppliers cannot make battery packs quick enough.

Funding available

The cost of an electric vehicles is also a significant factor when consumers are considering purchase an electric car. More than half (55%) of people say that the high cost of buying a 100% electric car is the main reason they are unlikely to buy one⁷. This demonstrates the importance of ensuring grants for electric cars continue to be offered until price fall more in line with petrol/diesel cars. As such, we welcomed that Transport Scotland's Switched on Scotland Phase Two Action Plan included commitments to provide financial support for the purchase of EVs. If the Scottish government want to grow electric vehicle charging infrastructure, they must ensure the continued growth of the electric vehicle market.

⁷ [Baringa: Is the UK ready for electric cars?](#)