



ACS Submission: Consultation on proposed ultra-low emission vehicles measures for inclusion in the Modern Transport Bill

ACS (the Association of Convenience Stores) represents 50,000 local shops across the country including fuel retailers such as Motor Fuel Group, MRH, HKS Retail, Petrogas, Rontec and many independent fuel retailers. Fuel retailers currently employ 117,000 people and in the past year fuel retailers have on average invested £16,603 per site.¹

We acknowledge that the Government has set an ambitious zero emissions target by 2050, to meet this target it will be paramount for the Government to secure industry co-operation. For the Government to secure industry support, the business case must be made for an extension of alternative fuel provision. The Government must be able to show how they will incentivise investment, that there is sufficient consumer demand for alternative fuel provision and that business investments will work to future proof businesses and support their current trading model.

Mandating the development of electric charging points and hydrogen refuelling at large fuel retail sites is a significant cause for concern given the current market for ultra-low emission vehicles (ULEVs). Fuel retailers have estimated that the development of electric charge points on fuel sites could cost between £50,000 and £60,000, and this is heavily dependent on the existing fuel sites capacity and connection to the National Grid. Hydrogen fuel by comparison would require much higher levels of investment with even less evidence that a viable market exists to justify installation of hydrogen refuelling stations by retailers.

Based on the Government's latest figures² from 2015 there are 9,000 registered ULEVs on UK roads and there are already 11,996 charge points available for ULEVs³ - there is already ample supply. Moreover, the provision of electric charge points at fuel sites does not directly fit with consumer use of ULEVs. A report from the Government's Rapid Evidence Assessment suggested; "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."⁴

For many fuel retailers, including those that operate in motorway service areas, 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. For example, only 11% of sites include a seating area⁵. We believe it would be more appropriate for the Government to consider the development of infrastructure in strategic locations where consumers want to use EV charge points i.e. leisure, shopping facilities and workplaces.

ACS does not support the introduction of legislation for mandatory provision of EV charge-points and hydrogen refuelling. The key points that we highlight in our consultation response are:

¹ ACS Forecourt Report 2016

² <https://www.gov.uk/government/publications/number-of-newly-registered-ultra-low-emissions-vehicles>

³ <https://www.zap-map.com/>

⁴ [Hutchins, R., Delmente, E., Stannard, J., Evans, L. and Bussell, S. \(2013\) Assessing the role of the Plug-in Car Grant and Plugged-in Places scheme in electric vehicle uptake](#)

⁵ ACS Forecourt Report 2016

- The Government should not seek to mandate the provision of EV charge points or hydrogen refuelling points at fuel retail sites or Motorway Service Areas without delivering meaningful incentives to off-set capital investment or reduce business rates liabilities for fuel retailers.
- There is not one threshold that will determine whether a fuel retailing site or Motorway Service area has the capacity to introduce EV charge points or hydrogen refuelling. The Government must work with fuel retailers to audit the number of fuel sites in the UK that are viable and the overall cost.
- The Government needs to provide monetary incentives across the supply for ULEV manufacturers, owners and fuel retailers in order to meet the zero-emission target in 2050. This needs to be supplemented with annual data about the growth and investment in the ULEV market to support businesses assess their investment options.
- The Government should seek to deliver ULEV infrastructures in locations that match consumer demands, for example retail and leisure facility car parks and work places. This could be achieved by amendments to the National Planning Policy Framework and monetary incentives.
- The Government should lead on the technical standards for EV charge points and hydrogen fuelling to maximise interoperability and accessibility for consumers, as well as providing fuel retailers with certainty about the longevity of the equipment they are investing in.

ACS has responded to the main consultation questions below. For more information on this consultation response please contact Edward.Woodall@acs.org.uk or call 01252 515001.

Consultation Responses

- 1. What are the costs and benefits of requiring infrastructure operators to provide open (static) data on geographical locations of publicly accessible charge points and refuelling points? In what standardised format should this most appropriately be provided?**
- 2. Do you agree that live (dynamic) data should also be openly available? What proportion of existing publicly accessible charge points and refuelling points have the technical capability to provide information on the live availability of services?**
- 3. How could a roaming platform, or bilateral roaming solution between operators be developed to best serve users and operators? Could this be delivered without legislative intervention?**
- 4. What are the costs and benefits of requiring EV infrastructure operators to deliver a roaming platform solution for open public access? How could the Government best support this?**
- 5. Provision for ad hoc access to publicly accessible chargepoints will be mandated by AFID. Is mandating a minimum specific ad hoc access method for consumers preferable to a roaming platform / bilateral roaming solution in the UK market? If so, should there be a minimum access method that is most appropriate as a minimum standard?**

- 6. How should operators of chargepoints and hydrogen refuelling stations and networks best display and make available pricing information for users?**
- 7. If required, in what comparable format should the pricing of electricity from a chargepoint and hydrogen from refuelling stations be specified as a minimum? What other relevant regulations/ guidance on consumer pricing is already in place, and could this be used for these purposes?**

We do not have data on the technical capability of charge points and the live availability of data. Fuel retailers support interoperability and accessibility of EV charge points making it as easy as possible for consumers to know where charge points are available and the cost for charging their vehicle. Feedback from retailers suggests that there is not consistency and clarity about location and costs for EV charging in the market currently. At some locations consumers would have to be registered to charge, whilst others have open access.

We believe that it is necessary for the Government to take the lead in regulating the specification of charge points and their capability to display and share live information. This specification should be delivered at the point of sale and installation so fuel retailers will be sure that all charge points on the market meet minimum standards, if mandatory installation is brought forward.

In terms of pricing, fuel retailers cannot pass on charges for electricity usage, despite consumers spending considerable time and using car parking space on their fuel sites to recharge. If the Government is to consider mandating the charge points on fuel sites, they must consider reviewing how fuel retailers can recoup investment costs. Pricing for EV charging is currently only promoted at charge points and at the till, and there is not enough consumer demand for this to be displayed on the pump sign.

- 8. Do you agree that the Government should take powers to allow for new technical standards to support smart charging?**

Yes. We believe the Government should deliver new technical standards to support Smart charging. It would be of great value for fuel retailers and other stakeholders that when they make investments in equipment they know it will meet appropriate technical standards and market needs in the long term. i.e. working for all types of EVs.

- 9. Do you agree that that technical standard requirements would best apply on sale and installation of a chargepoint?**

Yes. The regulations should apply at point of sale and installation. This will ensure that fuel retailers can source charge points from a wider range of suppliers, not just UK based manufacturers.

- 10. What could the direct costs of this capability be, and on which party are they likely to fall?**
- 11. Are there any other regulatory or non-regulatory ways by which widespread smart charging capability could be achieved?**
- 12. Do you have any other comments on government's proposed intervention in this area?**
- 13. What provision of fuel for EVs at Motorway Service Areas, and at fuel retailers, is necessary now, and desirable in the short, mid and long-term futures? This**

might include recharging infrastructure for battery electric vehicles, and/or hydrogen refuelling for fuel cell electric vehicles.

The Government needs to complete a more robust assessment of the current ULEV market and consider how likely the market is to grow when seed funding and subsidies are removed from businesses and consumers after 2020. Fuel retailers have in the past experienced issues with investing in alternative fuel provision, such as LPG, only for the market not grow at the desired rate and to be curtailed by Government duties.

In terms of current ULEV market, based on the Government latest figures⁶ from 2015 there are 9,000 registered ULEVs on UK roads and there are already 11,996 charge points available for ULEVs⁷. We therefore question why the Government believes it is necessary to take such drastic action to intervene in the fuel retailing market, especially as fuel retailing sites are not the desired source of charge points for consumers.

If fuel retailers were to invest in EV charge points it would be most appropriate for them to invest in rapid charging terminals. This would decrease the amount of time that vehicles would stay on fuel sites and increase convenience for customers. Provision of rapid charging terminals is more expensive than standard charge points and needs its own dedicated power supply. Many retailers would have to invest in the infrastructure for securing a dedicated power supply and it would be costly.

In terms of hydrogen refuelling, it is very difficult for fuel retailers to justify delivery of hydrogen refuelling infrastructure as there is limited evidence to suggest that consumers and manufacturers will be investing in hydrogen powered vehicles. Moreover, the investment requirement to deliver hydrogen refuelling is much higher than EV charge points; retailers suggest in the region of £1million per site.

14. Can provision of fuel for EVs at Motorway Service Areas, and at fuel retailers, be improved by non-regulatory means?

Fuel retailers indicate that where they are developing new fuel sites they will include EV charging points. However, there is not sufficient growth in the fuel retailing market for this to make a significant difference to consumer's experience on ULEV infrastructure.

For fuel retailers to invest in electric charge points and hydrogen refuelling they would need concrete commitments from the Government that there will be 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 – Norway and Thailand are the best examples of this type of Government backed investment. The Government's plans to stop seed funding after 2020 is therefore the wrong approach to encourage industry investment in infrastructure.

There is also not sufficient Government data about consumer take up of ULEV to justify the fuel retailers to invest. Fuel retailers would need to understand the commitment across the supply chain to deliver ULEVs; What are car manufacturers plans to invest in ULEVs? What are the estimated consumer made figures? What are the environmental benefits of ULEVs vs other technological developments? Can the National Grid sustain a shift to EVs? Would it be more appropriate to introduce EV charging in other strategic locations?

⁶ <https://www.gov.uk/government/publications/number-of-newly-registered-ultra-low-emissions-vehicles>

⁷ <https://www.zap-map.com/>

An attractive investment incentive for fuel retailers would be if the Government could off-set investments in electric charge points and hydrogen fuelling against retailers' business rates liabilities to deliver a discount. The installation of EV charge points or hydrogen fuel provision would increase the overall cost of fuel retailing sites, despite the significant investment required by fuel retailers and the small or non-existent margins on fuel. Providing fuel retailers a discount on their business rates or off-setting their capital investment in electric charge points against their business rates bills could promote more investment in alternative fuel provision.

15. What standards of provision and availability should be provided by EV infrastructure at Motorway Service Areas, and at fuel retailers?

If fuel retailers are forced to invest in EV charging points, at some or all their sites, they want reassurance that their investments have longevity. It would be unacceptable for retailers to invest in EV charging points and for them to be obsolete before fuel retailers have seen any return on investment. The Government must specify the standardisation of EV charging points to ensure that investments are future-proofed.

A consideration would have to be made of the most appropriate type of charging points for fuel retail sites. As highlighted by figure 42 in the Department for Transport's evidence assessment⁸ rapid charging points will be most appropriate to meet consumer needs and fuel retailers' needs. Consumers are unlikely to want to wait long periods at fuel retail sites for their EV to charge, this is especially the case at motorway service stations – why mandate provision of EV charging at the fuel site when it could be provided in car parks next to existing retail and leisure facilities?

16. What would the impacts of mandatory provision of fuel for EVs be on Motorway Service Areas and fuel retailers, and how might this vary between different sizes and types of fuel retailer?

The mandatory provision of EV charge points would place substantial burdens on all fuel retailers as they would have to secure large amounts of capital investment. Out of a sample of 750 fuel retail sites from three ACS members only 1% of sites had electric charging points. Mandatory provision would result in fuel retailers having to retro fit existing sites, resulting in substantial costs and disruption.

Fuel retailers estimate that it would cost between £50,000 and £60,000 per site to fit EV charge points. To put this cost into perspective, in 2016 on average, independent retailers invested £16,000 in their convenience stores per site. If you extrapolate the cost of EV charge point installation across the 8,478 fuel retailers across the UK⁹ it would result in a cost fuel retailers over £480million.

We also question consumer demand in relation to EV charge points at fuel retail sites and Motorway Service Areas. The business model for fuel retailers is focused on a high turnaround of customers in order to keep the forecourt clear of vehicles. This does not match with the provision of EV charge points, as no margin is made on the EV charging and fuel sites do not have service areas for consumer to wait for 30 minutes (fast charge point) to an hour to charge their vehicle.

The Government review of ULEV usage and experience showed that data on where consumers charged their EV is limited. However, the evidence available shows that consumers using EV were far more inclined to charge their vehicle at home or in the daytime at work based charging. We therefore question whether it is the right approach for the

⁸ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/464763/uptake-of-ulev-uk.pdf

⁹ ACS Forecourt Report 2016

Government to mandate provision of charge points on fuel sites over other strategic locations like retail and leisure car parking areas.

17. Should provision just be required at some fuel retailers, and how should they best be differentiated?

Finding a threshold to determine a “large” fuel retailer is challenging as there are a range of variables across different fuel sites and locations. The best options would be for businesses to be incentivised to take on EV charging points or hydrogen fuel sites based on their individual business model and assessment of market demand.

The table below shows that there is a large distinction in the fuel volumes dependent on fuel retailer ownership. Volume of fuel turnover is often used as mechanism for measuring fuel site activity and viability. According to Experian Data¹⁰ hypermarket fuel sites have considerably high annual volumes than dealer operated and oil company operated sites.

OWNERSHIP	AV FUEL VOLUME (KL per annum)
Hypermarket	11,096
Dealer	2,195
Oil Company	5,035

If a volume fuel threshold were used this would have to **exclude** bunkered fuel or fleet fuel. This is because bunkered fuel and fleet fuel can make up a high proportion of fuel retailers fuel volumes, but account for little value in terms of associated shop purchases, which accounts for the profitability of many fuel retail sites.

Site size for both EV charging and hydrogen refuelling is also relevant, as sufficient space is needed on the forecourt for charging points to be installed. Feedback from fuel retailers suggests that to introduce EV charge points you would need a minimum site footprint of 1 acre and for hydrogen refuelling a minimum footprint of 1.5 acres. This is to ensure there is sufficient space on site for EVs to wait for long periods of time for their vehicle to charge. There is a practical concern that long waiting times for EV charging will prevent consumers from accessing the store by blocking parking spaces. The current fuel retailing model in the UK is dependent on shop sales for profitability given the low margins on fuel.

As stated above there are numerous factors in play to determine whether a fuel site could sustain EV charging points and hydrogen fuel. No one measurement of fuel volume, site numbers or site size will give a proficient indication of sustainability. Instead we recommend that the Government considers further how it can incentivise fuel retailers and Motorway Service Areas to invest in EV charge points and hydrogen fuelling points which they assess to be appropriate.

18. Are there any other strategic sites might it be appropriate to require provision of fuel for EVs? For example, train stations, bus stations, public car parks, retail/leisure developments, hospitals, educational establishments. For any such locations, who should be responsible for providing the fuel for EVs?

Based on the evidence available we believe it is more appropriate to increase the number of sites of EV charge points at work places, car parks, established retail locations and leisure facilities to meet consumers charging needs. We do not advocate mandating these locations to introduce infrastructure but the Government could consider issuing further incentives or strengthening the current provisions in the National Planning Policy Framework.

¹⁰ Forecourt Trade UK Fuel Market by Ownership

The National Planning Policy Framework currently states: “incorporate facilities for charging plug-in and other ultra-low emission”. This could be amended to be more specific about the exact locations that EV charge points should be provided and the capacity they need to deliver. It is unlikely that Local Plan developments would specify EV charge points unless there is a specific reference in the National Planning Policy Framework.

19. Would granting franchises for hydrogen refuelling infrastructure help attract investment?

20. Do you agree this method of enforcement is proportionate to potential offences?

The approach to enforcement in the consultation is very high level and therefore difficult to provide feedback on. We are concerned the Government are electing to use financial penalties based on the cost of purchasing the infrastructure. This would mean fines would reach the tens of thousands of pounds and likely to prohibit others investment that are required to make sites viable and attuned to consumer needs.

21. Are there other measures, that alongside enforcement, the Government should consider to encourage compliance? If so please explain your views.

22. What appropriate factors should be taken into account when determining the level of civil penalty which should be levied for non -compliance with data accessibility requirements