CMA - Electric Vehicle Charging Market Study

Consultation Response by ENGIE

5th January 2021

About ENGIE

ENGIE is a leading energy and services company focused on three key activities: production and supply of energy, facilities management and regeneration. Our 17,000 employees combine these capabilities for the benefit of individuals, businesses and communities throughout the UK & Ireland.

We enable customers to embrace a lower carbon, more efficient and increasingly digital world. Our customers benefit from our energy efficient and smart building solutions, the provision of effective and innovative services, the transformation of neighbourhoods through regeneration projects, and the supply of reliable, flexible and renewable energy.

In respect of electric vehicles, ENGIE owns and manages a UK wide public charging network ("GeniePoint") with over 400 rapid chargers and over 60,000 registered drivers. In addition, ENGIE is a market leading provider of workplace charger solutions to support fleet /depot electrification.

Globally, the ENGIE Group employs 150,000 people worldwide and achieved revenues of €60 billion in 2019.

Executive Summary

Thank you for the opportunity to respond to the CMA's Invitation to Comment regarding the electric vehicle (EV) charging market. Please find our main points set out below:

- **The EV market is rapidly growing.** Over the last 12 months, ENGIE has experienced c100% increase in customer sign up to its GeniePoint network with public charging utilisation increasing by c380%.
- **Competition is also increasing - barriers to entry and expansion are relatively low.** This is supported by the large number of market participants and new entrants, and the relatively low market share of each participant. However, customer choice at any given location can be limited - significantly more investment is required in public and workplace charging infrastructure to increase consumer confidence in making the transition to EV.
- **The private sector is best placed to deliver and operate EV charging** in the UK to meet the growing demand. The public sector may be best placed to improve coordination through local area energy planning and data sharing.
- **Private investment requires market stability to support the required acceleration of charging infrastructure**. Introduction of overly prescriptive or restrictive measures must be avoided, particularly where this would undermine historical investments.

- **Public subsidy is required where it is not economically viable** for private investment and to stimulate market growth. This includes rural or remote areas, as well as projects requiring large connection upgrades or where charger locations are remote from the nearest grid connection. Such funds should not be used where it would undermine previous private investment in charging infrastructure.

- **Public subsidy allocation requires review to consider the best routes to ensure optimal outcomes and to improve transparency**. The role of local authorities should be considered in light of grant subsidy take-up to date and also the expertise and resource required in this sector (availability of which differs across the various local authorities). The establishment of a national public body may be needed to provide guidance, coordination and best practice to local authorities. In addition, improved reporting is required in respect of use of public subsidy and the remaining available amounts for EV market growth.

- **There does not appear to be any widespread customer detriment issues**, but there are many improvements that can be made to improve customer experience, encourage transition to EV and enable customers to get a good deal for EV charging:

    - **Excellent customer service and charger reliability** is critical to support consumers in their choice of network provider and to overcome range anxiety. Information on customer service standards and charger reliability is currently limited - increased transparency is recommended;

    - **Information on planned charger rollouts** to improve customer understanding of the pace at which infrastructure will become available in their region or on their regular journeys;

    - **Increased guidance and consumer awareness campaigns** are required, including development of common terminologies to avoid complexity and confusion – we must strive to introduction simplifications wherever possible;

    - **Interoperability between chargepoints and vehicles** will bring simplifications and improve customer experience, and will also provide a platform for increased innovation in data provision;

    - **Exclusive public networks should be avoided.** As the market grows, it is fundamental that networks are available to any driver regardless of vehicle type on a “pay as you go” basis.

- **In summary, <u>ENGIE does not believe a market investigation reference (as provided for under section 131 of the Act) is necessary</u>** recognising the level of activity and growing competition in the EV sector and the lack of evidence of any widespread customer detriment issues.

Response to questions:

Please find below our detailed response to questions.

Theme one: developing competition while incentivising investment

1. ***How is the EV charging sector developing and how will technological or other developments (for example smart technologies) impact sector development and competition?***

The UK EV charging sector is rapidly expanding. Over the last 12 months, ENGIE has experienced c100% increase in customer sign up to its GeniePoint platform with public charging utilisation increasing by c380%. This has been driven by the significant increase in electric vehicle sales and our continued investment in rollout of public rapid charging across the UK, supported by our excellent customer service.

Similar growth has been experienced in workplace requirements to support fleet electrification, although our view is that such growth would have been significantly more without the challenges presented by COVID 19.

Technology is still evolving; the EV charging sector has seen significant innovation occurring across the range of segments in the scope of the CMA study. We note in particular that:

- Choice and functionality of charger hardware is expanding; 50kW rapid charging is increasingly being expected as standard for public charging, and chargepoint manufacturers are introducing higher powered chargers (100kW+), often through modular designs that allow additional power over time as required.
- Driver access channels to networks is evolving as automotive OEMs begin to include chargepoint networks within their car navigation systems and collect customer payments.
- Smart charging technologies are being combined with dynamic energy tariffs and other energy assets to cut costs for customers and improve the user experience.

Continued technological innovation will improve competition, reduce costs and improve user experience supporting acceleration towards a net zero carbon transportation system in the UK. Such innovation should not be hampered by overly restrictive regulation or policy. In addition, increased government funding should be put towards such technological developments, in an open and transparent manner.

2. ***How well is competition between EV charging providers working at present in the different sector segments and what are the key risks to effective competition (including any emerging competition concerns)?***

In our core markets of public rapid charging and workplace, there is extensive competition from various types of parties (e.g. Charge Point Operators, installers, hardware suppliers). Consumer facing access is also competitive with multiple networks, innovative pricing and products, and new channels evolving.

Key risks to effective competition include the following points:

- regulatory and planning barriers, which can slow down charger rollout and potentially prevent new projects going ahead (although it is noted that this is not in scope of the CMA study);
- the application process and allocation mechanisms for Government funding into the EV sector must be open and transparent, ensuring a fair and equitable regime. We would welcome regular reporting;
- Government funding should not be used to subsidise charger rollout which would undermine previous private investment in charging infrastructure;
- overemphasis by Local Authorities and use of funds on Street Lamp charging which could be ineffective as battery size and range increases - a minimum standard of 7.4kWh is proposed;
- introduction of overly restrictive regulation or policy.

3. ***How can competition in the different sector segments be strengthened as the sector develops, either by building on current policies and/or through other approaches?***

Competition in the EV charger market will continue to strengthen with increased sales of electric vehicles. We recognise that there have been many initiatives to stimulate electric vehicle sales from Government policy, such as the phasing out of ICE vehicles from 2030 and zero/reduced BIK for company cars, and also OEM innovations, which are welcomed.

However, there remains considerable uncertainty as to the overall growth rate in electric vehicle sales and in particular the expected charger requirements by segment and location. Recognising the importance of ensuring development of charging infrastructure in line with electric vehicle sales, we consider that more focus should be given to forecasting UK charging infrastructure requirements at both a national and local level in collaboration with OEMs (matching supply and demand), and to regular reporting. Such information will serve to identify key areas for development and act as a catalyst for business to invest and innovate.

4. ***What are the main existing and potential barriers to entry and expansion for EV charging providers and how can these be addressed?***

We are observing many new market entrants in our core markets, introducing different propositions and broadening customer choice. Overall the barriers to entry and expansion for EV charging seem relatively low. However, key focus areas to support acceleration of charger rollout include:

- simplification of the regulatory requirements, such as land rights, wayleaves and planning permission;
- reducing the timescales for DNO connection application quotations;
- ensuring a stable market to encourage private investment;
- improved co-ordination and reporting of charger infrastructure needs to meet forecast electric vehicle sales and user charging preferences;

- application of Government funds to support uneconomic projects due to costs of connection upgrade and/or distance from the connection to the charger, or to stimulate growth in certain regions or market segments.

5. ***How can chargepoints be effectively deployed to ensure there is sufficient supply to meet future demand? What factors need to be taken into account?***

   In respect of public charging investment, the current market is based on individual market players identifying opportunities for charger rollout and developing commercial arrangements with land owners and / or winning competitive tenders. Companies need to make their own assessment of the investment case economics which fundamentally rely on forecast utilisation of the chargers driven by local supply-demand requirements.

   Such decisions therefore tend to be made in isolation and would be enhanced by:

   - local area energy planning by the public sector and provision of data to help coordinate and support the efficient rollout of EV charging infrastructure;
   - improved access to 'tyrefall' data to enable effective investment decisions;
   - greater cross industry collaboration enabling multiple stakeholders to work together to build effective networks (e.g. CPOs, OEMs, DNOs, Local Authorities, local businesses).

6. ***What incentives are there for private investment in EV charging infrastructure including within the different sector segments? How might incentives need to change for the future growth of the sector and development of competition?***

   ENGIE has experience of the OLEV Ultra Low Emission Taxi Scheme in securing the West Yorkshire Combined Authority tender for 88 rapid public chargers. Supported by private investment from ENGIE, this scheme has allowed focus on the taxi market transition to EV, focusing on improving air quality in our cities, which would not have been economic without subsidy due to the low EV take-up in this sector.

   Further incentives are required for private investment in areas of low EV take-up, either in early years of charger availability or in the longer term, to avoid consumers being disadvantaged by their location.

7. ***What impact does public subsidy have on private investment incentives; are there any areas/gaps where public support is most likely to be needed?***

   Public charger installation requires support from public subsidy where it is not economically viable for private investment. This includes:

   - rural or remote areas;
   - on-street charging in regions where alternative chargers are not available;
   - large capital projects such as high powered chargers due to connection upgrade cost;
   - projects where charger locations are remote from the nearest grid connection.

   In addition, public subsidy is needed to:

- stimulate market growth, such as undertaking consumer campaigns;
- support migration of specific sectors e.g. taxis;
- support technological innovations.

However, the availability of public funding needs to be carefully considered as public subsidy has the potential to undermine historic and future private investment.

8. ***What is required in order to ensure that rural / remote communities and those without off-street parking are well served by charging infrastructure?***

Rural and remote communities tend to have a higher proportion of off-street parking. However, there will still be a need for public chargers for those without off-street parking, or where faster charging rates are required for consumers undertaking longer daily journeys. The relatively low utilisations of such public chargers (making them uncommercial for private investors) will often mean that public subsidy is required to avoid consumers in such regions being disadvantaged.

In addition, incentives could be introduced to encourage businesses to open up workplace chargers "out of hours" to those consumers without off-street parking.

9. ***What role should local authorities play to help deliver EV charging in a way that promotes competition? What support would they need?***

Local Authorities have an important role to play in delivering EV charging:

- driving improved air quality in cities, such as introduction of Clean Air Zones, and undertaking local campaigns to stimulate EV uptake;

- co-ordination of the rollout of EV charging, ensuring that it is aligned with other local transport and energy plans and bringing together relevant stakeholders;

- increasing the speed of providing various permissions, potentially requiring increased budgets for planning departments.

Local Authorities have been the main route for public subsidy allocation, but this may not always lead to optimal outcomes. Many Local Authorities have not taken up the opportunity to secure grants in the first instance due to lack of capacity resulting in a "postcode lottery" for drivers. Where grants have been secured, such funding has not always been spent in an effective way due to the expertise required, leading to low charger utilisation or reliability issues. Potential initiatives to support Local Authorities include:

- establishment of a national government support function providing expert guidance and quality criteria e.g. charger reliability;

- established frameworks to enable Local Authorities to work with selected providers to manage charger site identification and installation.

10. What can be learned from the different policy approaches taken in the devolved administrations for the EV charging market's development?

The approach taken by the Scottish Government is one of the most interesting examples and has many positive aspects to support EV take-up:

- proactive rollout of public chargepoints;
- co-ordination with local authorities in rolling out EV charging infrastructure;
- offering free charging.

However, such a "hands-on" approach and use of public subsidy seems to have stifled organic growth of the private sector in Scotland and could therefore have longer term impacts on competition and growth.

Theme two: effective consumer interaction with the sector

1. What challenges or difficulties related to chargepoints might act as a barrier to consumers switching from a conventionally fuelled passenger vehicle to an EV and how might these be overcome?

To switch to an electric vehicle, consumers require confidence in how they are going to charge their vehicle for day to day journeys and/or longer journeys recognising battery / range limitations. This is fundamentally different from the traditional "forecourt" model due to the more varied locations for charging (home, workplace, destination etc.…) and different charger types; to begin, this shift in "refuelling" activity may look very confusing for a consumer.

ENGIE is continually seeking to support consumers in this transition by making charging as simple as possible. Our GeniePoint app allows customers to easily locate our chargers, view the tariff and connect to charge their car. In addition, we provide a 24/7 customer help desk to support consumers, including online guides.

Specific challenges which may undermine consumer confidence include:

- **Lack of availability of public chargers** in certain regions particularly remote or rural locations, or at a place of convenience to avoid specific journeys solely to charge their EV. **Consumers require the right type of chargepoints in the right locations**;
- Information on **planned charger rollouts** to understand the pace at which infrastructure will become available in their region, or on their regular journeys.

The common theme in respect of required improvements, beyond the obvious need for EV infrastructure to keep pace with EV sales, is to improve consumer information on availability and support.

2. What are the key challenges for consumers already interacting with the sector and how might these change over time as the sector grows?

In addition to many of the points raised under the previous question, consumers already interacting with the sector will be faced with the day to day challenges associated with charger availability, reliability and customer support:

- **Status of a charger** – consumers need to understand whether a charger is available and how busy that charger is. This will allow the consumer to fully understand the queue time for available chargers (and take an informed decision on whether to queue or to select a different charger) and to avoid a trip if a charger is out of action. Our GeniePoint platform allows consumers to view whether a charger is available/in use or out of order to support our customers, but this is not something which is universally available across other platforms.
- **Reliability of a charger** – consumers need confidence that a charger will work. Information on charger reliability is limited to inform consumer decisions on charger selection.
- **Customer service standards** – although many operators have forms of customer support, there is a wide range of standards of service. Consumers may benefit from regular reporting of standards of service in their charger selection decision process.

As the volume of drivers and type of vehicles expand, support provided by operators will need to keep evolving and capacity will need to be continually enhanced.

3. ***How do consumers decide which chargepoint services and providers to use? What information do consumers need to make this decision and at what stage in the decision-making process?***

As the availability of public chargepoints is currently relatively low, our customer feedback is that the key deciding factors on which charger to use are: i) reliability of chargepoint; ii) chargepoint location; and iii) speed of charging. Other factors then come into consideration such as whether a driver is familiar with the charger network, previous experience of ease of use, and local amenities (particularly for longer duration charging). Price tends to then come after these factors, however we expect price to play a greater role in charger selection as rollout accelerates.

Such information tends to be available via comparison websites/apps or charger network apps such as our GeniePoint platform. From our research, 40% of EV drivers register with a network in advance of making a journey to that charger and 17% register with a network if there is a chargepoint on that network in the local area.

4. ***Can consumers easily understand and compare charging tariffs in this sector and what barriers, if any, do they face?***

There are a wide range of tariffs and tariff structures in place within the EV market reflecting different charger types/location and different approaches by various market players.

Direct price comparison can be challenging due to ensuring comparison of “like for like” services, such as speed of charge, payment mechanism (with contactless incurring increased cost) and location benefits such as amenities while charging which tend to increase charger investment costs.

As the market matures, operators will begin to see the impacts of their pricing strategies and will adapt accordingly to avoid loss of market share or accelerate growth. We do not believe that imposition of tariff structures is the best solution as has been tried in other markets and shown to stifle innovation and development of compelling propositions for consumers.

Instead, we believe that more focus should be given to ensuring conformity of language and guidance to allow consumers to better understand different offers and determine cost per mile for their particular vehicle

and charging decisions. This includes relative differences between charging at home vs public charging and different charger types as well as comparison with ICE vehicles.

5. ***Do particular groups of consumers face additional challenges to interacting with the sector and if so, who and why? How might these be overcome?***

   Customers without off-street charging are faced with additional challenges in EV take-up, particularly in areas where there are a limited number of local charge points. Such customer groups do not have the opportunity to charge at convenience and benefit from lower domestic electricity costs, particularly cheaper night rates.

   Identification of such regional gaps and developing a co-ordinated approach to resolution of such issues is key. Beyond acceleration of charger rollout, businesses could be encouraged to allow "out of hours" use of workplace chargers for such user groups.

6. ***Are there any technological developments or tools that could support consumers to navigate the sector, for example by helping to make more informed choices?***

   Comparison websites/apps are already available to support drivers, which continue to improve in data quality and functionality. Such tools however do not tend to show:

   - live charger availability information; this can typically be accessed from the individual network operator apps;
   - historical reliability and usage data;
   - customer service details or customer service standards.

   Such websites/apps support advanced planning of routes, however viewing dynamic data on nearby chargers via car navigation systems, configured with user preferences on charger type, price etc…, would help make more informed choices and improve user experience.

7. ***Are existing protections offered by consumer law and other measures (such as sector regulations) sufficient?***

   We are not aware of any customer protection issues in the EV charging sector which is not already covered by existing law or regulations. However we would welcome an industry review of this area to ensure that this remains the case as the market evolves.

8. ***What, if any, open data measures are needed to support consumer interaction, such as through the growth of comparison sites and apps?***

   Customers would benefit from more complete information on public chargers being available on comparison sites including live charger availability and historical reliability data, as we described in our response to Q6.

   In addition, as the comparison market evolves, there needs to be effective quality measures in place to ensure that these affiliate channels are also operating to agreed standards and to support open competition.

9. ***What else is required to help ensure that the EV charging sector develops in a way that is responsive to consumer needs?***

At this stage of EV market growth, we consider that are already sufficient Government programmes and policies, supported by industry working groups to consider and respond to customer needs. In future, there may be a need for a central body to be established to act as a champion of customer needs including focus on customer service/complaints, development of customer guides, and support for vulnerable groups.