

The Competition and Markets Authority
25 Cabot Square,
London
E14 4QZ

5 January 2021

Sent via E-mail: EVCharging@cma.gov.uk

Dear Sir/Madam,

Electric vehicle charging market study - Invitation to comment, ENA response

Energy Networks Association represents the companies that operate and maintain the gas and electricity grid network in the UK and Ireland. Serving over 30 million customers, they are responsible for the transmission and distribution network of “wires and pipes” that keep our lights on, our homes warm and our businesses running.

ENA members believe that if our power, heat, transport, waste, and industrial sectors are all interdependent, then so must the solutions for their decarbonisation. Solutions will be driven locally as well as nationally. There are a number of areas in which industry and government can focus on with the right regulatory support to accelerate economic recovery and a carbon neutral future and we are working with Ofgem and the government to support this.

The scale of the challenge ahead is vast. The networks are looking to the future and the ‘difficult to reach’ sectors – including transport - which we need to decarbonise to fulfil our Net Zero obligations. We are ready to provide the digitalised backbone to the national uptake of electric vehicles (EVs), a fully flexible energy system and decarbonisation of heating systems.

Energy network companies are central to the effective roll-out of EVs. EVs are anticipated to be one of the main reasons for a forecast doubling of peak electricity consumption by 2050. Electricity networks are primed to deliver a smart-charging system which, based on the National Grid Future Energy Scenarios from 2018, with 20% of flexibility could reduce the new investment in electricity generation by 20% and with 40% of flexibility could reduce the cost of reinforcing the network by 36% - around £6bn.

Through ENA’s Open Networks Project, UK distribution network operators have already created the world’s largest local flexibility market with 2GW of flexibility tendered. Currently focussed more at industrial and commercial operators, as this

matures and these markets grow, consumers will be able to become 'prosumers' and participate more actively – providing the charging infrastructure that has been installed is 'smart'.

Where flexibility cannot provide all the solutions, network upgrades will be required. Accelerating the upgrading of infrastructure is something that with the right regulatory conditions industry could start delivering almost immediately. These conditions include a supportive regulatory framework whereby Ofgem more fully align with government ambition so the networks can deliver the innovation and investment needed at the pace needed.

Detailed local plans and coordination in conjunction with local authorities, utilities and community groups would help identify the priority decarbonisation needs, enabling the co-designing of plans for network investment. We believe this should go beyond the long-term targets outlined in the government's current Road to Zero strategy.


Beyond the work delivered through the flexibility programme in the Open Networks Project is a series of initiatives encouraging and incentivising innovation within the networks. Network companies have delivered a number of grid-based efficiency projects and many trials are under way across the country. With the right conditions and steer from the Government in place these could be scaled up at pace. With these trials expedited, so would be the creation of new jobs installing electric vehicle chargers and in developing and manufacturing the smart in-home appliances which will drive this full system digitalisation.

Charging infrastructure providers should be required to make their infrastructure fully compatible with other providers so owners can switch operators/networks if necessary. This is not currently required and can leave owners stuck with the network that installed it forever and potentially result in them being exposed to excessive maintenance and operation costs.

The networks will support a full, smart-charging system for electric vehicles and, similarly, could enable customers' homes to become aggregated, flexible generators allowing consumers to take full control of their energy use.

We look forward to supporting the market study you will soon be commencing and welcome the opportunity to facilitate any conversations that the CMA may wish to have with our membership.

Yours sincerely,


Head of Public Affairs