

How smart meters are driving the low carbon economy

Smart meters put consumers in the driving seat of the mass adoption of electric cars in the UK.

Consumers will need to be empowered to take control of their energy use if the UK is to take a significant share of the global electric vehicle (EV) market, currently growing at 60% a year.

What is the connection between domestic energy consumption and the decarbonisation of the private transport sector? It all comes down to the way these vehicles will be powered. According to a recent Populus poll, almost three quarters of prospective electric vehicle owners expect to be able to charge their vehicles at home.

The government's aim to ban the sale of non-electric vehicles by 2040 will lead to major road infrastructure changes, including many more public and workplace charging points, but the biggest changes will take place in consumers' homes.

Smart meters, currently being rolled out by energy suppliers to every home across Great Britain, enable the efficient and reliable management of energy, helping to prevent expensive peaks in energy demand, which is particularly important when charging electric vehicles. Essentially, the flexible energy packages offered through smart meters will shape the way consumers view the running costs and appeal of electric vehicles.

Energy utilities are starting to offer new EV tariffs for smart meter customers that better reflect wholesale pricing and pass market savings onto consumers. For example, Eon have recently launched an off-peak tariff for EV customers and Ovo are partnering with Nissan to offer an EV tariff.

As highlighted in [The Innovation Interface](#) report from the University of Leeds, in the future we are likely to see the auto industry and energy utilities creating specially branded EV tariffs so that both vehicle and electricity supply are from the same company. This will allow the vehicle manufacturer to take responsibility for both battery warranty and energy service provision. This means that technology and energy choices can be taken together to balance upfront costs and longevity of batteries.

Consumers might even buy mobility as a service from utility companies, bundling energy and transport services together. In this model, consumers won't need to buy an electric vehicle and will instead pay a regular energy and mobility bill.

Electric vehicles and smart energy provide an opportunity for hybrid services that enable huge opportunities for cleaner, more efficient and cost-effective transport solutions. However, to meet consumer mobility needs in the future, while also meeting carbon emission targets, air quality and safety goals rely on consumers with smart meters becoming engaged with innovative charging options.

With the Clean Growth Plan just launched and an Industrial White Paper expected shortly, a vital step to a low carbon economy will be ensuring that consumers engage with innovative new ways to manage their energy needs.

A combination of innovative energy and EV business models, creative brands and targeted consumer propositions will be critical to stimulating consumer engagement. British businesses can all have a role - simply by encouraging your employees to have a smart meter installed, you can help homes get ready for the electric vehicle revolution.

As the national campaign to promote the smart meter rollout, Smart Energy GB aims to work with as many organisations as possible to encourage consumers to engage with their energy. To find out more about how to be a Smart Energy employer see [here](#).



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John leads on communications in Scotland. John has many years of experience working in media relations and public affairs for a variety of organisations such as Historic Scotland, The Glasgow 2014 Commonwealth Games, VisitScotland, and Digital UK.

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