

 **VIEWPOINT**

Partnerships will help unlock the EV charging infrastructure

Last year, 2018, saw further growth for the UK's electric vehicle (EV) charging infrastructure market, most notably driven by increased adoption of EVs by drivers and the corresponding need to supply more charging points. As consumers, industry and the government become increasingly aware of the issues associated with traditional diesel and petrol cars, they are looking to EVs to cut pollution and long-term costs. The government's decision to ban the sale of new petrol and diesel vehicles by 2040 serves to underscore how the future of vehicle transportation will be electric.

A tipping point has now been reached and there is significant need to scale-up the UK's EV charging infrastructure. Data from Emu Analytics predicts that there will be more than one million EVs on UK roads by 2020, which will require around 100,000 charging points. With approximately 18,000 EV charging points currently available, we will need a more than five-fold increase in the number of charging points over the next two years to meet the forecasted demand.

While this presents a logistical challenge, it also provides high growth prospects for developers, investors and organisations looking to deliver such infrastructure, particularly on a partnership basis. Of course, various partnerships have already been established around the concept of destination charging, including between Tesco and Volkswagen and pub chain Marston's and Engenie.

Destination charging

The idea behind this model is to fit charging stations at destination locations such as high street, city centre and retail outlet car parks, making it convenient for consumers to charge their vehicles where they plan to spend a bit of time. While largely driven by consumer demand, destination charging also benefits local retailers and hospitality businesses as it encourages the consumer to spend time at their premises while their cars charge.



Maria Connolly is a Partner and Head of clean energy at law firm TLT, tlt solicitors.com

We are likely to see more retail and leisure operators make use of parking spaces to install charging points in the future, which will involve partnering up with developers, energy providers and even vehicle manufacturers to provide charging services.

In a similar vein, partnerships between developers and public sector bodies – in particular local authorities – are also likely. Given the expectation on local authorities to support the delivery of charging points, both to meet increasing consumer demand but also to alleviate financial pressures, public-private partnerships to deliver charging stations are likely to become more prominent. Indeed, councils are increasingly looking to exploit their land assets by partnering up with developers to provide charging points on town and city centre streets and car parks.

Forecourt and standalone models

However, while many partnerships will be based around the destination charging model, forecourt charging models are also being developed. Much like traditional service stations, such partnerships tend to involve landowners, developers and convenience retailers, while also providing further opportunities for mixed energy projects.

We are increasingly witnessing mixed schemes with solar PV and energy storage, which are being used to provide energy for charging points and to create auxiliary revenue streams for the developers operating the infrastructure and landowners leasing the sites.

An uptake in standalone charging points in residential locations is also forecast, especially in densely populated urban areas where residents do not have driveways or on-street parking and are therefore unable to charge at home. As with destination charging, local authorities are likely to play a major role in the development of this model by partnering up with developers and operators.

Partnerships

These partnerships within the private sector and between public

and private organisations will play an especially crucial role in boosting the UK's EV charging infrastructure. They enable charging infrastructure to be deployed at scale, without significant resource or capital from site owners themselves. This typically works through landowners or local authorities supplying land for charging sites, which developers then use to build, operate and maintain the infrastructure.

To give a concrete example, a local authority could lease (or, if 'on-street', licence) the land to a third-party developer that will fund and own the charging infrastructure. Such partnerships can be put together either through negotiation with a single developer or through competitive tender.

While partnerships can present some disadvantages (for example, site owners not owning the infrastructure or the developer interest complicating the sale of the land), there are many ways around such issues (such as buyouts or compensation). Overall, the benefits of partnerships for EV charging infrastructure largely outweigh any disadvantages that may exist and the models emerging in this space resemble those that exist for other capital projects, especially in the energy sector.

The government and public are continuing to move towards EVs and this is being reflected in the clean energy market. We're likely to see many more developments emerge in 2019, particularly in locations that are ideal for destination charging, which maximise the use of charging points and the opportunities for return on investment. Until now, many investors were waiting in reserve, but as the EV market continues to grow we should expect to see the number of partnerships (big and small) multiply to deliver the charging infrastructure the UK needs. ●

The views and opinions expressed in this article are strictly those of the author only and are not necessarily given or endorsed by or on behalf of the Energy Institute.