

Electric Vehicle Charging Infrastructure

Background

The UK Government has set ambitions to ensure that almost every car and van in the UK is a zero-emission vehicle by 2050, and to make the UK a world leader in electric vehicle (EV) and battery technologies. The Office for Low Emission Vehicles (OLEV) has been established to support the early market for ultra-low emission vehicles (ULEV – which includes EVs) and is providing over £900 million to position the UK at the global forefront of ULEV development, manufacture and use.

Poor provision of charging infrastructure has been identified as one of the greatest barriers to growth of the UK EV market. The existing charging network is lacking in size and geographic coverage, with substantial disparities in the provision of public charge points across the country and with the fastest ('rapid') charge points being particularly scarce. At the same time, the market for training; assessment and assurance of competence to install and maintain EV charging infrastructure remains at an early stage of development. There is also evidence of a lack of 'joined up thinking' and proactive engagement between central Government and local authorities.

Meeting the EV market

There is disparity between the ambition of vehicle manufacturers for an earlier transition to ULEVs and the UK Government's current timetable, and also a gap between the target date to end the sale of petrol and diesel fuelled vehicles in the UK and target dates set in European and other countries.

Some sector businesses are active in EV charging installation and have advised government on the possibility of bringing the 2040 end of new petrol/diesel car sales closer.

Policy and political momentum is gathering behind the ULEV market, with a House of Commons BEIS Committee report recently published on the subject; trail blazing plans from London Mayor Sadiq Khan to build five "flagship" rapid electric vehicle (EV) charging hubs in the capital and [collaborative industry research](#) into the progression from smart charging to Vehicle to Grid (V2G) charging.

According to a recent [BEIS data release](#), total renewable generation has increased by 9.2 per cent on the same quarter last year to 31.1 TWh. Decarbonisation of our electricity supply

ensures that electrification of any sector of the economy will support wider emissions reduction, transport included. There is broad cross-party consensus on this issue and it is likely that any new Government will view decarbonisation of road transport and the gradual phasing out of fossil fuel vehicles as a priority.

One estimate suggests that another 20 million public electric vehicle charge points would be needed to support the transition.

Workforce and Skills

A number of training providers offer training in electric vehicle charge point installation and demand for training is likely to grow. There is no industry-wide registration scheme for electric vehicle charge point installers and a review of training provision and standards is currently being undertaken.

OLEV administers the Electric Vehicle Homecharge Scheme (EVHS) which provides grant funding of up to 75% towards the cost of installing electric vehicle charge points (capped at £500 Inc. VAT) at domestic properties across the UK. The grant funding is directed through the installer, who must meet OLEV's registration requirements. 1,490 installers are currently listed, with their contact details and geographical area covered. Only installers authorised by OLEV on the EVHS list can draw down grant funding for installation of charge points.

Latest Policy Developments

The independent Committee on Climate Change called for the end of petrol/diesel cars to be brought closer in its [progress report to parliament](#).

The government opened a [consultation](#) on its plan to require all new-build homes to have electric vehicle charge points.

The [Department of Transport](#) announced £40m to develop the electric vehicle charging infrastructure.

Further information

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