



# Electric vehicle (EV) position statement

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## Summary

The council's climate change and sustainability strategy, [Woking 2050](#), supports an integrated transport system that promotes lower carbon, healthy transport choices. As well as the environmental benefits this brings in terms of reducing carbon and other pollutants associated with petrol and diesel vehicles, greener transport choices also benefit our health and wellbeing by improving local air quality.

There is currently much change in national government policy and market developments around electric vehicles (EVs) and EV infrastructure. The current situation provides Woking Borough Council with an opportunity to take stock of policy and market developments together with development plans for the borough to inform a longer term future strategy on appropriate EV infrastructure.

## 1. What is an electric vehicle?

The term electric vehicle (EV) is used to refer to all types of plug-in vehicles that can be powered solely by a battery. A brief description of each type is shown below.

- **Battery electric vehicle (BEV)** is 100% electric or 'pure electric' and is wholly driven by an electric motor, powered by a battery that can be plugged into the mains. There is no combustion engine. Current pure electric vehicles have a current range of approximately 100 miles.
- **Plug-in hybrid electric vehicle (PHEV)** has a smaller battery than a BEV but that does enable it to have a pure electric range for most urban trips with no emissions. Once the electric battery range has been used, it can switch to its conventional combustion engine. The battery can also be recharged by the engine and through regenerative braking. Hybrid vehicles work in the same way as PHEVs but do not have the ability to be charged and so have a shorter zero emissions range.
- **Extended range electric vehicle (E-REV)** has a plug-in battery, electric motor and combustion engine. The difference between an E-REV and a PHEV is that the electric motor always drives the wheels, with the internal combustion engine acting as a generator to recharge the battery when it is depleted (source: Office for Low Emission Vehicles). E-REVs

have a greater capacity in terms of zero emission range, typically up to approximately 125 miles.

[Find out more about the different types of electric cars available.](#)

## 2. Electric vehicle charging points

The latest electric vehicles are now issued with type 2 connectors. However, it is worth noting the availability of other types of connectors across public charging networks. Surrey County Council has produced a useful reference guide to the different types of connectors within their [Electric Vehicle Strategy](#) on page 49. Generally speaking, the different types of connectors offer varying charge times:

- Trickle (slow) charge (3kW): full charge in approximately 6 to 10 hours
- Fast charge (7 to 22kW): full charge in approximately 3 to 4 hours
- Rapid charge (43kW+): full charge in under an hour

Table 1 below details the types of connectors that are available\* in Woking town centre car parks:

<b>Car park</b>	<b>Location</b>	<b>Number of bays</b>	<b>Charge point</b>
Brewery Road car park	Directly ahead as you enter the car park	4	4x 3 Pin (13 amp) 2x type 1 sockets 2x type 2 sockets
Shoppers' Yellow car park	Level 2	2	3 phase with 7 pin
Shoppers' Yellow car park	Level 2	6	3 pin
Victoria Way car park	Ground level	6	3 pin

\*The majority of our charging points offer immediate access to charging on a plug and go basis.

Use of the points is free with payment for parking only. The two 7 pin points in the Shoppers' Yellow car park operate via the Charge Your Car (CYC) scheme. Drivers are required to provide their own charging cables.

[Visit the CYC website for more details.](#)

## 3. Government grants

The government offers a discount on the price of brand new low emission vehicles through a grant given to vehicle dealerships and manufacturers. The maximum grant available for cars is £3,500. Low emission vans, motorcycles, mopeds and taxis may also be eligible for grants. Only vehicles on the government's approved list are eligible and the amount of funding will depend on which category they are in.

[Find out more about low emission vehicles eligible for a plug-in grant.](#)

The government also offers grants for electric vehicle charging infrastructure. There are schemes for householders and workplaces. OLEV's Electric Vehicle Homecharge Scheme (EVHS)

provides grant funding of up to 75% towards the cost of installing electric vehicle charge points at domestic properties across the UK. Meanwhile, the Workplace Charging Scheme (WCS) is a voucher based scheme that provides support towards the up front costs of the purchase and installation of electric vehicle charge-points, for eligible businesses, charities and public sector organisations.

[Read more about Grant schemes for electric vehicle charging infrastructure.](#)

#### 4. Electric vehicles in Woking

There are an estimated 294 ultra low emission vehicles currently registered in Woking ([Quarter 3 2018 statistics from the Department for Transport](#)). This has increased from just 11 in 2011.

This increase will in part be due to the greater level of choice now available for drivers. As EV technology continues to develop, EVs have an increasing range (mileage capability), enhancing the feasibility of EV usage and ownership by a larger number of people.

#### 5. What is the council doing to support EVs in Woking?

The council installed its first public EV charging points from circa 2006 on an ad hoc speculative basis before market and customer demand peaked in more recent years. Since the initial installations the market has changed significantly both in terms of charge point technology and the numbers using the facilities. Some points were replaced during 2017 to 2018 to improve customer experience and we will continue to review these as refurbishments take place. **Table 1 in section 2** details the location of current EV charge points in town centre car parks.

The council's climate change and sustainability strategy, [Woking 2050](#), supports an integrated transport system that promotes lower carbon, healthy transport choices. The strategy includes two themes which have links to EVs. The 'getting around' theme seeks the promotion of the local EV network and links to wider provision in the South East. The theme also promotes lower carbon transport choices generally – of which EV is an integral part. Within the 'great outdoors' theme, there are links to the council's requirements to monitor and review local air quality in line with government based health standards.

With regards to planning policy, the council's [Climate Change Supplementary Planning Document](#) (SPD) provides detailed guidance on the application of sustainable construction and renewable / low carbon energy generation policies in the determination of planning applications. Section 6 of the SPD gives guidance on the number of active and passive electric vehicle charging points by development type.

The cost of a parking season ticket is determined by a vehicle's CO2 emissions. In this way, there are financial incentives for those parking low emission vehicles in town centre car parks. A 50% discount is applied for those driving vehicles in band A (under 100g/km CO2 emissions).

[View season ticket pricing bands.](#)

## 6. National and county level policy support

Government announcements and policy developments continue to support a growing EV market, the most recent being announcements made in the [autumn 2018](#). The Government's [25 year Environment Plan](#) presents the vision of 'a cleaner, greener country for us all'. Opportunities for greener transport are a fundamental part of this vision. Additionally, the Government has pledged to phase out the sale of all new diesel and petrol cars and vans by 2040.

During summer 2018, Surrey County Council published a consultation draft of an [Electric Vehicle Strategy](#). Complementing its Surrey Transport Plan and Low Emissions Transport Strategy, the new policy looks to promote the growth of EVs through supportive policies and new charging facilities.

Surrey County Council has also developed an [Electric Vehicle On-Street Charging Policy](#) which seeks a coordinated network of on street charging facilities for residents and visitors.

## 7. Next steps

As technology continues to develop, EVs have an increasing range (mileage capability), enhancing the feasibility of their usage and ownership by a larger number of people. In tandem with an expanding EV market, there are continuing improvements to charging technologies and EV batteries.

This presents the council with an opportunity to take stock of policy and market developments together with development plans for the Borough in order to inform a future strategy for a coordinated EV charging network for Woking Borough. This will be key as new developments come forward within the area as well as in replacing or upgrading existing points.

However, whilst customer feedback and usage surveys demonstrate that existing town centre charge points are at or near capacity, there is caution around electrical grid capacity – a key consideration for any new developments incorporating EV charging infrastructure. An increase in take up of EVs would mean additional demand on the existing electricity network. This must also be factored into the long term view.

In the short term, the redevelopment of the Red Shoppers' car park in Woking town centre provides a significant opportunity for an increase in EV charging infrastructure.

The council will continue to consider opportunities for enhancing the network and incorporating a range of charging facilities catering for different customers. A mixed profile of destination (slower charge) and rapid charging will benefit the different needs of those visiting the town. The council also recognises the need to futureproof developments with the installation of passive points that can be made active at a future point in time as demand increases.

As well as public provision, the council will continue to look to incorporate EVs and EV infrastructure where feasible across its own operations and buildings.

## Contact details

For more information about electric vehicle charging facilities in Woking Borough, contact [green@woking.gov.uk](mailto:green@woking.gov.uk)