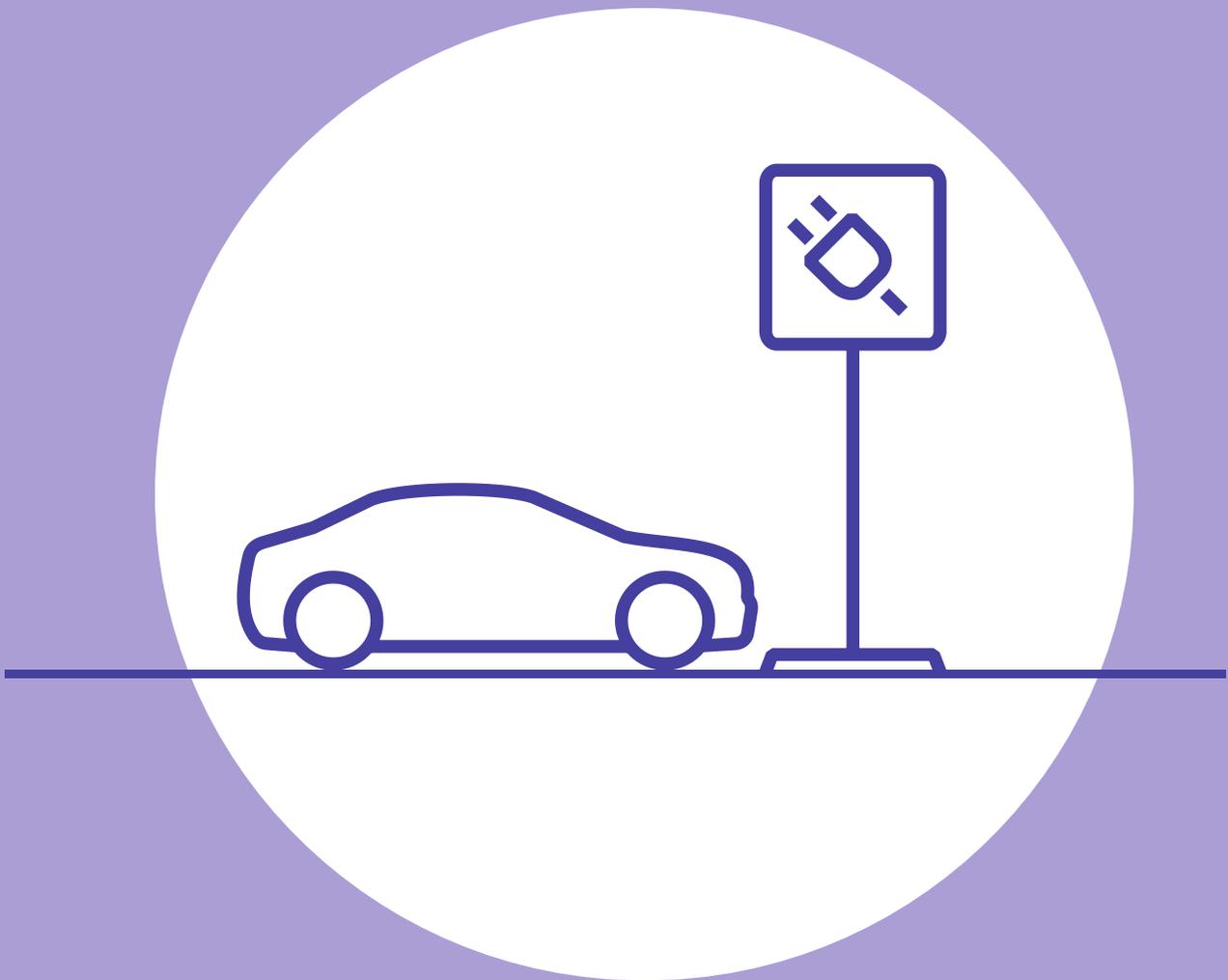


Camden Transport Strategy

Electric Vehicle Charging Points Action Plan



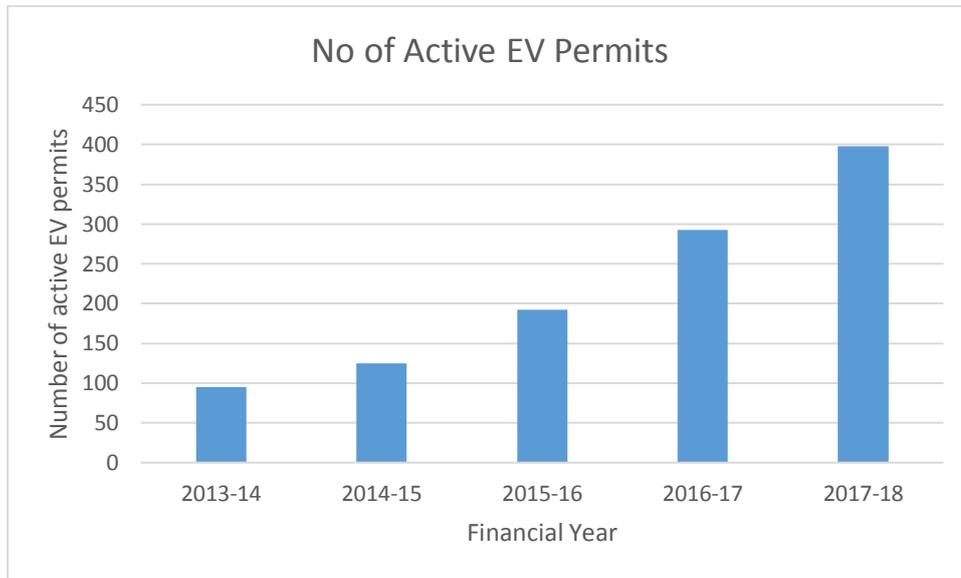
1. Purpose of the EVCP Action Plan

- 1.1. Addressing poor air quality is a top priority for both the Mayor of London and Camden. Emissions from road transport make the largest contribution to poor air quality in Camden, particularly Particulate Matter (PMs) and Nitrogen Dioxide (NOx) which affect the health of thousands of people. Both the young and the old are more susceptible to the impacts of poor air quality, while more deprived areas are disproportionately affected due to their proximity to heavily trafficked streets, such as the communities living alongside Euston Road and Kilburn High Road.
- 1.2. The MTS and the draft CTS both focus on reducing car use and enabling a switch to walking, cycling and public transport as the most effective ways to achieve air quality improvements; they also contribute to wider goals, particularly delivering the Mayor's Healthy Streets outcomes and commitments in Our Camden Plan. However, where vehicles are essential, they should be as clean and energy efficient as possible.
- 1.3. This Electric Vehicle Charge Point (EVCP) Action Plan sets out the Council's plans to develop a comprehensive network of electric vehicle charge points that both responds to existing demand for EV infrastructure and provides for and accelerates the uptake of cleaner vehicles in the future.
- 1.4. This EVCP Action Plan will help to deliver Objective 5 in the draft CTS - to reduce and mitigate the impact of transport-based emissions and noise in Camden. While there is no CTS target for EVCP infrastructure, the Action Plan will help to deliver our LIP targets for a 71% reduction in Nitrogen Dioxide by 2021 (based on 2013 levels) and a further 84% by 2041.

2. Background and context

- 2.1. In London, Camden has the third highest proportion of Electric Vehicles (EVs) in its total private vehicle stock, after Westminster and Barnet. The numbers of active resident EV permits in Camden currently sits at just under 400 as shown in Figure E1, overleaf. However, TfL data suggests that 499 EVs were registered in Camden in 2016, so it is likely that many more EVs are kept off-street in private garages. The data also shows that the number of EV permits issued has grown most significantly since 2016.

Figure E1: Number of active Electric Vehicle (EV) resident permits issued in Camden (2013/14 to 2018)



2.2. The EVCP Action Plan also reflects other measures in the CTS and MTS which are likely to impact on demand for EVCP infrastructure in the future. This includes the following MTS ambitions:

- the introduction of London's Ultra Low Emission Zone (ULEZ) in April 2019 and plans for further expansion to the North and South Circulars,
- TfL's target to install 150 rapid charge points by the end of 2018, and at least 300 by 2020
- The Mayor's ambition for Central London to be zero-emission by 2025.

2.3. The CTS also proposes several initiatives which are likely to encourage EV uptake, including:

- Support for expanding ULEZ
- A School Low Emission Zone in Frognal and Fitzjohns, with further zones to be rolled out in the future
- Reviewing all parking charges and structures every two years to ensure they meet our transport objectives, particularly with regard to air quality.
- Permanent and timed street closures and restrictions to traffic except for EVs in specific locations

2.4. Camden has already seen an increase in the switch to cleaner vehicles and a corresponding demand for EVCPs, particularly from residents, evidenced by the growth in EV permits. Officers maintain a list of residents' requests for EVCPs which demonstrates a similar trend, rising from an average of three a year in 2009, 2010 and 2011, to 23 a year in 2018. Predictions are that demand will continue to grow and accelerate, and that it will be higher in Central London: TfL and GLA studies show that the number of EVs in London

from people switching from petrol and diesel vehicles could surpass 40,000 in 2020 and reach approximately 150,000 EVs by 2025, possibly rising to 250,000, with an increasing reliance on publicly accessible charging infrastructure.

- 2.5. In addition to providing for residents, Camden needs a coherent network of electric charging infrastructure that serves the needs of all types of EV uses, including taxis and Private Hire Vehicles (PHVs), car clubs and commercial fleets. This Plan also includes measures to meet this demand.
- 2.6. Although new taxis need to be zero-emission capable to be licensed, taxis in the existing fleet are exempt from ULEZ, and Private Hire Vehicles (PHVs) will comply with Euro 6 standards in the short term. However, all taxi and PHV fleets will need to be zero emission capable by 2033 at the latest. Given taxis' significant contribution to pollution, particularly in Camden in the areas around King's Cross station, implementing EVCPs will provide the necessary infrastructure to encourage a speedier upgrade of the taxi fleet.
- 2.7. Camden has an extensive network of nearly 250 back-to-base car club locations in the borough. Although car club cars tend to be cleaner vehicles than the average, as they are updated on a regular basis, upgrading the fleet to EVs has the potential to contribute to improved air quality in the borough. The Council's ability to roll out EVCPs for car clubs however is limited due to legislation which prohibits public funding being used to support private, profit making businesses above a certain threshold. Nevertheless, the Council will identify opportunities to deliver infrastructure for car clubs, in partnership with the operators, to encourage an upgrade of the fleet.
- 2.8. The CTS also aims for a greater proportion of low emission vehicles in the Council's own fleet which will create an additional demand for EVCPs. Camden's planning processes also encourage low emission vehicles serving construction sites through Section 106 requirements and Construction Management Plans (CMPs). CMPs are live documents and are reviewed regularly to align with changing local and regional priorities and policy.
- 2.9. Camden facilitates a Climate Change Alliance of businesses committed to improving air quality. Working with these businesses as well as our Business Improvements Districts (BIDs) offers an opportunity to encourage our business partners to help deliver Camden's air quality targets. This can be achieved, for example, through upgrading their fleets as well as through their procurement processes for deliveries and servicing. EVCPs will again be needed to provide infrastructure for this changing demand.

3. EVCP Infrastructure options and measures

- 3.1. Camden will need to consider a wide range of users, the most appropriate locations and charging infrastructure, as well as an even distribution across the borough to both encourage a switch to cleaner vehicles and minimise the distance that drivers need to travel to top up.

Source London on-street charge points:

- 3.2. Source London is an open access, on-street network of EVCPs in dedicated bays, which can be used by anyone who is a member, and are mainly aimed at residents. The Council will aim to install a minimum of ten Source London points a year (subject to public consultation) during the first three-year delivery phase of this Action Plan (see Appendix A).
- 3.3. Officers maintain a list of residents' requests for EVCPs, and locations for new Source London points will be assessed based on requests across an area, while also aiming to fill in gaps in provision across the borough to ensure an even spread. Evidence from usage data at our existing Source London network shows that demand is generally higher in the north of the borough. This may be associated with higher car ownership compared to the south of the borough, and which must also be a consideration to better match demand.
- 3.4. In Camden, Source London bays have a maximum stay time of three hours to ensure an adequate charge, regular turnover and fair access to the bays. To provide a dedicated bay, new Source London EVCPs require the reallocation of existing waiting and loading provision and are therefore subject to Traffic Order consultation which may be a risk. However, officers will investigate using redundant bays, such as doctors', blue badge and car club bays which are no longer in use to transfer them for new Source London points. Officers will also investigate transferring redundant parking bays on housing estates (and other Council owned land) to EVCPs.
- 3.5. The Council is aware of concerns among pedestrians, particularly those with mobility impairments, about EVCPs obstructing the footway and taking away limited space. The Council will aim to deliver all new charge points in the carriageway as the default option to minimise their impacts.

Lamp column EV charge points

- 3.6. Lamp columns offer a lower cost, less visually intrusive opportunity for local residents to charge on their street, overnight using existing street infrastructure. Lamp column EVCPs are aimed at provision for local residents who live on the street as they require a long charge time (usually overnight) due to a lower wattage. Providing local lamp column charging also reduces the pressure on the public Source London network.

- 3.7. Camden has secured funding to deliver a residential lamp column network from the Office of Low Emission Vehicles' Go Ultra Low City Scheme (GULCS), managed by London Councils, which will be used to deliver a network in an initial phase up to 2020. Officers have identified 50 lamp column charging point locations based on residents' requests and existing EV permits which have undergone an initial feasibility study. They will require further investigation to ensure they are suitable for the technology, which will be undertaken by Camden's procured provider, with installations taking place in 2019 and 2020. Additional opportunities will be investigated beyond that point.
- 3.8. The Council will not be providing dedicated bays for lamp column charging in the first instance in order to simplify the process. However, it may be the case that residents who are non-EV owners may park in the spaces close to the lamp column EVCPs. Multiple points will be needed within small areas to expand the opportunity for overnight charging should individual lamp column bays be occupied. Officers will continue to monitor the situation and dedicated bays could be provided, subject to consultation, if that monitoring shows that EV-owners are having difficulties accessing spaces.
- 3.9. Both lamp column and Source London EVCPs are primarily aimed at residential use. Expansion of the programme will take account of residents' requests, usage data, data on EV permits and gaps in provision to inform future EVCP provision.

Rapid charge points

- 3.10. Rapid charge points can charge an electric vehicle battery in 20-30 minutes compared to 7-8 hours for regular EVCPs. They are mainly for use by taxis and commercial vehicles which have extensive daily mileage, and need a powerful energy supply (50Kw) so they can refuel quickly. Rapids may also be used by residents, especially the smaller models.
- 3.11. All costs related to the supply, installation, operation and maintenance of the charge point infrastructure is met by the charge point operators. The Council's ability to deliver rapids is constrained: a key requirement is that any charge point site should be available for 8-10 years in order for operators to recoup their original investment. The infrastructure is quite large and visually unattractive, and there is a lack of available space particularly on the public highway. Space on private land is also a problem and it is unlikely that a developer would commit to the required 10 year time-frame.
- 3.12. However, Camden is working with TfL to help deliver its target to install at least 300 rapid charge points London-wide by 2020, with many proposed to support taxis at taxi ranks. TfL provided Camden with a list of 23 preferred locations which are being investigated for implementation as part of this Action Plan. Locations for rapid charge points to support the Council's own future fleet of EVs will also be assessed and implemented where feasible.

Neighbourhoods of the Future – School Low Emission Zone

3.13. The Council has also secured GULCS funding to deliver a Low Emission School Zone in the Frognal/Fitzjohn's area of Camden. This part of the borough suffers poor air quality almost on a par with the south of the borough. There is a large cluster of schools which generates a high level of driven school journeys which are likely to be a contributing factor to poor air quality, particularly during term times. The NoF project will aim to increase the uptake of EVs in the area through a mixture of EVCP provision for local residents and schools as well as traffic management schemes, such as Healthy School Streets, which favour EVs. The project aims to deliver:

- 10 lamp column charge points for local residents' use
- 10 on-street Source London points,
- 10 (5 22KW 'fast' and 5 standard 7KW) EVCPs on school car parks in the study area;
- An additional 8 lamp column charging points at the home end of school journeys

3.14. This Action Plan will assess the impact of those facilities and seek to deliver similar projects elsewhere in the Borough if successful, and if future funding for doing so can be secured.

4. Funding

4.1. Infrastructure schemes will be funded through various funding sources which include:

4.2. Source London: the estimated costs of installing new on-street charging infrastructure is £10,000 per charging point. This includes statutory consultation, as well as the infrastructure and maintenance. Under the existing contract, the operator pays for the installation and maintenance costs and Camden will cover other costs.

4.3. Rapid charge points are fully funded by the operator and TfL.

4.4. Go Ultra Low City (GULC): Camden has secured £127,500 to progress approximately 40-50 lamp columns; Camden's own funding sources will contribute 25% of the total cost

4.5. Neighbourhoods of the Future (NoF): Camden has been awarded £359,500 of GULCS funding to implement a Low Emission School Zone, of which an element will be used to support implementation of the EVCPs noted above.

5. Monitoring and Review

5.1. We will provide annual updates on progress against the EVCP action plan on specific actions and on the targets. This will include:

- The number of EVCPs delivered for different users
- The number of EV permits/vehicles owned in the borough
- Usage data on all live charge points
- The proportion of EVs in Camden's fleet
- The proportion of EVs in the taxi fleet
- Review of LIP targets particularly transport's contribution to NOx

Appendix A: Electric Vehicle Charge Points Action Plan (2019/20 to 2021/22)

Action Area	Action for 2019/20 to 2021/22	Main Funding Source/notes	Target Date
Residential EVCPs			
Meet current demand for residential EV charging and plan for future growth	<u>Identification of locations:</u> Assess number and distribution of residents' requests for EVCPs, and EV permits, to identify appropriate locations for new lamp column and stand-alone Source London points. Locations to be identified both on-street and in appropriate off-street locations such as Camden housing estate land	Camden	Ongoing
	<u>Lamp column charging:</u> <ul style="list-style-type: none"> • Deliver a minimum of 40 lamp columns for the residential lamp column programme funded by GULCs. • Identify funding and locations for additional lamp column charging points beyond initial tranche 	GULC	Install initial 40 points during 2019
	<u>Source London EVCPs :</u> <ul style="list-style-type: none"> • As part of the process of identifying locations, officers will review all redundant bays in the borough which can potentially be used for EVs (i.e., converting car club, blue badge and doctors' bays) 	Camden	Ongoing
	<ul style="list-style-type: none"> • We will identify, consult and install a minimum of 10 new Source London EVCPs in each year over the course of the three year period 2019/20 to 2021/22 	Source	Each financial year 2019/20 to 2021/22
Rapid charge points – taxis			

Action Area	Action for 2019/20 to 2021/22	Main Funding Source/notes	Target Date
Contribute to TfL target for EVCPs for taxis	Undertake feasibility, consultation and implementation of on-street rapid charge points at taxi ranks, in partnership with TfL, following initial pilot of 2-4 locations delivered in 2018. To deliver a similar number each financial year subject to outcome of that pilot	TfL	Each financial year 2019/20 to 2021/22
Commercial/freight fleets – rapid and ‘fast’ charge points			
Encourage the use of EVs among freight vehicles	<u>Off-street</u> - Assessment of four rapid EVCPs at the Council’s Freight Lane depot for enable public access for all commercial users - commercial, taxis and our own fleet. Implementation of ‘fast’ (22kw) EVCPs at Holmes Road depot (on and off street locations) subject to feasibility. Assess additional locations within Camden's depots including at York Way and Crowndale Road	Camden	2019
	Continue to work with TfL to identify locations and undertake feasibility to expand the network for rapid EVCPs for all fleets	Camden	Ongoing
	Work with Business Improvements Districts (BIDS) to upgrade commercial fleets servicing businesses in Camden and identify EVCP requirements	Camden	Ongoing
	Encourage the use of EVs through the planning process, both for construction and for servicing and deliveries (through Construction Management Plans and Servicing and Delivery Plans) for new developments, with regular reviews of the Plans to ensure they meet our air quality objectives	Camden	
Neighbourhoods of the Future Low Emission School Zone			
Reduce pollution in the vicinity of 23 schools in Frogna/Fitzjohns	Implementing 10 on street Source London EVCPs subject to public consultation	Source	2019
	Implementing 18 lamp column charge points subject to further feasibility	GULCs	
	Implementing 5 fast charge and 5 standard charge points in school car parks subject to feasibility	GULCs	

Action Area	Action for 2019/20 to 2021/22	Main Funding Source/notes	Target Date
Communications			
Improve communications to promote Camden's EVCP provision and encourage the uptake of EVCPs	Update Camden website when new EVCPs are delivered	Camden	Ongoing
	Update Source London website	Source	Ongoing
	Encourage the use of EVs, and promote new EVCP infrastructure and EV projects such as the NoF, and other successful bids eg, Mayor's Air Quality projects, through measure including: Information in residents' parking permit renewal letters Newsletters to schools Articles in the Camden magazine Press releases Social media Information on Camden's web site	Camden	Ongoing