



Public Safety and Transport Select Committee Review Scoping Report - 2021/22

Working Title:
**“Electric Vehicle Infrastructure and Future Policy Direction for the
Borough”**

1. OBJECTIVES

Aim of review

The aim of this review is to support the Cabinet and Council in developing its future policies with regard to Electric Vehicles (EV) and EV infrastructure within the Borough; to explore how the Council has so far adapted to the transition to EVs, and how the Council’s own fleet, transportation and highways responsibilities may need to adapt moving forward. The review would aspire to produce positive medium and long-term overarching outcomes to present to Cabinet to help shape the Borough for residents moving forward. In addition to the Council’s own zero-carbon commitment and climate emergency declaration, this review would tie in with related deadlines set by central government such as the proposed ban on the sale of new petrol and diesel cars and vans in the UK from 2030.

It should be noted that, due to the nature of the review, it is expected that the findings and recommendations will be presented to Cabinet not for immediate implementation but to offer guidance and direction in helping to shape future policy.

At the Public Safety and Transport Select Committee meeting on 9 June 2021, it was agreed that the Committee’s first major review would focus on Electric Vehicles and EV infrastructure.

Terms of Reference (DRAFT)

The following Terms of Reference are suggested for the review, subject to any changes agreed by the Committee:

1. To understand the Council's current stance with regard to the prospective uptake in the use of Electric Vehicles (EV) and requirement for specific EV infrastructure;
2. To explore the national setting and initiatives undertaken by other local authorities to facilitate future EV infrastructure;
3. To understand the growing demand for EVs and explore any limitations residents may encounter in accessing suitable EV requirements;
4. To explore future evolutions with regard to EV battery and charging technology;
5. To investigate what grant funding may be available to local authorities relating to EV infrastructure;
6. To influence or propose any emerging Council plans, guidance or policies with respect to the future of EV use and the Borough's transportation and highways infrastructure;
7. Subject to the Committee's findings, to make any conclusions, propose actions, service and policy recommendations to the decision-making Cabinet.

2. BACKGROUND

Key information and issues

As of 2017, transport was the largest-emitting sector of greenhouse gas emissions, accounting for 28% of UK emissions. The UK has a target to reduce these to net zero by 2050, to achieve this the Committee on Climate Change has recommended that the sales of electric cars should 'scale up to 100% of new sales by 2035'. Ultra-Low Emission Vehicles (ULEV) still only represent a small proportion of the total number of cars licensed. In 2019 around 58.5% of licensed cars were petrol, 39.1% diesel and 0.8% were either a plug-in-hybrid, battery electric, range-extended electric, or fuel cell electric car.

Public awareness of, and interest in, EVs and methods of charging them has been growing rapidly and over the remainder of the 2020s, expectations and demand will grow exponentially ahead of the legislation to outlaw the sale of pure Internal Combustion Engine (ICE) vehicles by 2030. In the meantime, there are a number of types of vehicle which are relevant to this topic:

Vehicle Type	Comments
Pure electric, batterypowered (BEV)	Likely to become the dominant type.
Petrol-electric HybridElectric Vehicles (PHEV)	Hybrids use small ICE engines to extend extra-urban range. The technology remains reliant on carbon-fuels and so is no more than an interim solution.
Hydrogen powered	Seen as a rival to EVs; some variants use ICE type engines and others use fuel-cells to generate power for electric drive.

EVs are still a fairly new area of focus and the pace of development is being accelerated by government legislation and the desires of ‘early adopters’ of new technology. In what is a rapidly evolving sector, the future of EV infrastructure, particularly battery and charging technology, will continue to develop and the way in which EV infrastructure is implemented by commercial entities and public authorities needs to be carefully considered to avoid significant investment in technology that could quickly become obsolete. Technological advancements that are noted to be on the horizon include, inductive charging loops buried in the owners driveway or potentially in the road surface (meaning that the vehicle can recharge on the move, dramatically extending its range) and as autonomous vehicles come to fruition, the prospect of a vehicle autonomously driving away to, and coming back from, a remote charging dock may become a reality. EV Battery technology has advanced considerably in recent years but appears likely to remain wedded to the lithium-ion principles familiar in mobile phones for the foreseeable future.

Leading up to the increased production of EVs globally, there has already been significant public and private investment into the EV arena both around the world and in the UK. Plans have recently been submitted by Coventry City Council for a 5.7 million sq ft EV battery ‘gigafactory’, the first of its kind in the UK.

Areas identified for improvement.

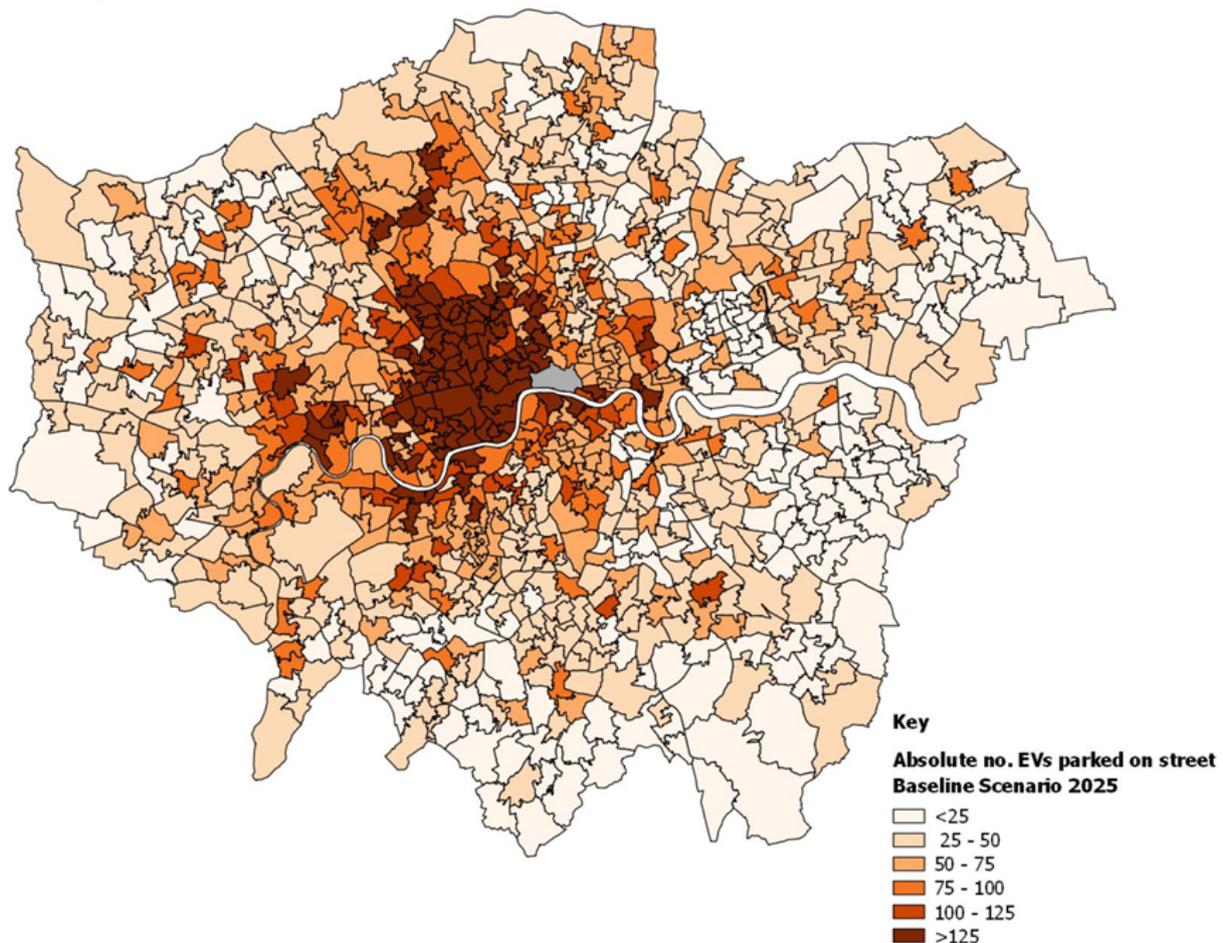
Many residents (and businesses) would be understandably keen to be supported in terms of moving towards electric vehicle ownership and practical use. The Council has a number of areas to consider, some of which are within its oversight and which could be further developed. Currently, a number of factors may deter prospective owners from transitioning from an ICE vehicle to an EV including cost, range anxiety, charge times and accessibility to charging points. In a recent Policy Exchange think-tank report, it was stated that the UK will need 400,000 public Electric Vehicle Charging Points by 2030, up from 35,000 currently.

What is still relatively new technology, albeit evolving rapidly, provides many challenges in terms of the necessary support infrastructure. Whilst investment is clearly needed, it needs to be carefully focused, aided with the right partnerships and in a manner which allows room for the development of all the equipment – vehicles and charging infrastructure – so that they can evolve in tandem and not leave key stakeholders, the Council in particular, owners of equipment which is no longer fit for purpose after significant capital investment has been made.

Current data, best practice and research

According to [On Street Charging \(acceleratedinsightplatform.com\)](https://acceleratedinsightplatform.com) Hillingdon currently has a fleet of circa 1,069 battery electric vehicles. In November 2020, the Prime Minister announced the end of the sale of new petrol and diesel cars and vans in the UK by 2030.

The below Transport for London projection for possible EV take up across Greater London by 2025 shows that Hillingdon is broadly similar to other Outer London Boroughs.



Legislative / national context

The Automated and Electric Vehicles Act 2018 has two primary objectives. Firstly, the act establishes that insurers are required to deal with all claims even when the vehicle is operating in automated technology mode. Insurers will also have a right of recovery against manufacturers and the right to exclude liability where the relevant individual

fails to keep the software up to date. Secondly, and more pertinent to the Committee's review, the act establishes laws relating to EV charging infrastructure including issues such as availability, compatibility vehicle types, reliability standards and standardising how they are paid for.

In November 2020, the government brought forward the ban on sales of new petrol and diesel cars and vans from 2040 to 2030 as part of its "green industrial revolution". A two phased approach to the process was also announced.

Step 1 - the phase-out date for the sale of new petrol and diesel cars and vans brought forward to 2030.

Step 2 - all new cars and vans be fully zero emission at the tailpipe from 2035.

Between 2030 and 2035, new cars and vans can be sold if they have the capability to drive a significant distance with zero emissions (for example, plug-in hybrids or full hybrids).

In 2017, the government announced the On-Street Residential Chargepoint Scheme aimed at local authorities to increase the availability of on-street chargepoints for plug-in electric vehicles. In February 2021, £20 million of further funding was made available; of the circa 111,476 households in Hillingdon, around 34,419 do not have off-street parking, this represents nearly a third (31%) of all households in the Borough.

Connected work

The transition to Electric Vehicles is an area of policy currently under development by Cabinet Members and Council officers. The Committee's review, and findings thereof, will form an important part in guiding this policy development.

Executive Responsibilities

This review would fall under the Public Safety and Transport Select Committee's remit as set out in the Constitution. The Cabinet Member responsible for this area of work is Councillor John Riley – Cabinet Member for Public Safety and Transport.

It should be noted that the, depending on the Committee's findings, the review may touch upon Planning and Housing matters which come under the Environment, Housing and Regeneration Cabinet Member portfolio.

Discussions on draft or emerging recommendations may be undertaken with Cabinet Members as per the Protocol on Overview & Scrutiny and Cabinet Relations approved by full Council on 12 September 2019.

3. EVIDENCE & ENQUIRY

Potential witnesses

Potential witnesses could include:

- Testimony from LBH Officers;
- Representatives of an EV infrastructure association (Electric Vehicles Association England or a commercial EV infrastructure enterprise);
- Academic experts
- Testimony from residents;
- Testimony from the Cabinet Members.

Lines of Enquiry

Lines of enquiry can be expanded as the review progresses or included in relevant witness session reports. However, lines of enquiry may include:

- Investigating the national setting and initiatives undertaken by other local authorities to facilitate future EV infrastructure.
- Exploring technological innovation with regard to EV battery and charging developments.
- Understanding the growing demand for EVs and exploring any limitations residents may encounter in accessing suitable EV requirements.
- Considering any future, possible fundamental, changes to the Borough's transportation and highways infrastructure that may be required to enable EVs to operate successfully.
- Investigating what grant funding may be available to local authorities relating to EV infrastructure.

Surveys, site-visits or other fact-finding events

It is expected that witness sessions within the Committee's meetings will act as the primary method of enquiry.

Future information that may be required

Further information may be identified as the review progresses.

4. REVIEW PLANNING & TIMETABLE

It is advised that witnesses attend in 'themed' sessions to better focus questions and discussion. A draft schedule for the review is set out below, this can be amended as the Committee sees fit:

Meeting Date	Action	Purpose / theme	Witnesses / officers attending
28 July 2021	Agree Scoping Report	Consider and agree Scoping Report	LBH Officers
21 September 2021	Witness Session 1	Understand the Council's current position and national setting	LBH Officers Cabinet Member
19 October 2021	Witness Session 2	Explore EV demand, limitations and technological advancements	Residents EV Representative
17 November 2021	Witness Session 3	Future infrastructure requirements and funding opportunities	LBH Officers
18 January 2021	De-brief and emerging findings	To discuss key findings and identify potential recommendations	LBH Officers
10 February 2021	Approval of draft final report	Proposals – agree recommendations and final draft report to Cabinet	LBH Officers
Cabinet – March 2022	Report presented to Cabinet (target date)	Cabinet considers and decides whether to agree recommendations to shape Council policy	Select Committee Chairman
Spring 2023	Monitoring of implementation of any recommendations		

Financial Assessment

This review is not expected to require a financial assessment at the scoping stage.

However, as the review progresses, the Committee should seek to ensure any recommendations are feasible, cost-effective or indeed can save the Council money. Any early findings or recommendations by the Committee which may result in a call on Council budgets should be discussed at the earliest opportunity by the Chairman, with the relevant Cabinet Member, Cabinet Member for Finance and the Leader of the Council to assess viability.

This is in accordance with the approved Protocol on Overview & Scrutiny and Cabinet Relations approved by full Council on 12 September 2019.

Resource requirements

None identified - Officer support from Democratic Services and Infrastructure, Transport and Building Services.

Equalities impact

TBC.

Background Papers / further reading

[Government takes historic step towards net-zero with end of sale of new petrol and diesel cars by 2030 - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/news/government-takes-historic-step-towards-net-zero-with-end-of-sale-of-new-petrol-and-diesel-cars-by-2030)

[Electric cars: Rollout of charging points still too slow - BBC News](https://www.bbc.com/news/transport-56824241)

[Charging Up | Policy Exchange](https://www.policyexchange.org.uk/charging-up/)

[Electric vehicle batteries: what will they look like in the future? \(theconversation.com\)](https://theconversation.com/electric-vehicle-batteries-what-will-they-look-like-in-the-future-121111)

[Plans submitted for electric battery 'gigafactory' in Coventry - BBC News](https://www.bbc.com/news/technology-56824241)

[On-Street Residential Chargepoint Scheme guidance for local authorities - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/news/on-street-residential-chargepoint-scheme-guidance-for-local-authorities)

[Government powers up electric vehicle revolution with £20 million chargepoints boost - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/news/government-powers-up-electric-vehicle-revolution-with-20-million-chargepoints-boost)

[Automated and Electric Vehicles Act 2018 \(legislation.gov.uk\)](https://www.legislation.gov.uk/ukpga/2018/16/section-1)

[Plug-in Electric Vehicle Uptake and Infrastructure Impacts Study – Transport for London](https://www.transportforlondon.gov.uk/news/plug-in-electric-vehicle-uptake-and-infrastructure-impacts-study)