

Report to:	Environment and Neighbourhood Committee	Date:	23 November 2017
Report title:	Ultra-Low Emission Vehicles (ULEV) Policy		
Report from:	Mary Morrissey - Strategic Director, Environment, Housing and Regeneration		
Ward/Areas affected:	Borough Wide		
Chair of Committee/Lead Member:	Councillor Jill Whitehead		
Author(s)/Contact Number(s):	Daniel Quan, Sustainable Transport Planner, 020 8547 5107 Ian Baker, Team Leader - Parking and Sustainable Transport, 020 8547 5071		
Corporate Plan Priorities:	A Green Council		
Open/Exempt:	Open		
Signed:	 Mary Morrissey, Strategic Director Environment, Housing and Regeneration	Date:	7 November 2017

1. Summary

- 1.1 This paper provides information about ultra-low emission vehicles (ULEVs) in Sutton and proposes adoption of a ULEV policy.

2. Recommendations

The Environment and Neighbourhoods Committee is recommended to:

- 2.1 Accept the findings of this report and the Council's proposed role in facilitating development of a ULEV network in Sutton.
- 2.2 Approve the new ULEV policy as set out in section 5.8
- 2.3 Delegate authority to the Strategic Director, Environment, Housing and Regeneration, in consultation with the Chair, Environment and Neighbourhood Committee, to bid for funding and arrange subsequent installation where appropriate of ULEV infrastructure.

3. Background

- 3.1 The draft Mayor of London's Transport Strategy aims to make London's transport network zero emission by 2050. It notes that even with higher levels of walking, cycling and public transport use, motorised vehicles will remain a feature of London's streets, which requires strong policies to encourage vehicles to be as clean and energy efficient as possible.



- 3.2 The Government has recently released its intention to ban the sale of non-hybrid petrol and diesel cars by 2040.
- 3.3 Sutton Council has a Sustainable Transport Strategy, and objective 4 is reducing the harmful effects of transport on health and the environment, and its contribution to climate change. Within this section there are a number of points identified which support this policy, and these the key points are air quality and climate control.
- 3.4 The air quality measure seeks to implement measures to improve the air quality through reducing traffic levels, encouraging more fuel efficient driving techniques and the greater use of zero and low emission vehicles. In order to address the impact of climate change there needs to be a reduction in greenhouse gases, which can be supported by a switch to more sustainable modes and greener vehicles.
- 3.5 Sutton Council currently provides 13 electric vehicle charging points, located in six off-street car parks. These were originally provided through the Source London network, which has since been taken over by BluePoint London (BPL). There are fees (set and collected by BPL) for using them. Complementary to the Council provided charging points, there are 25 additional charging points, located in nine locations across the borough. These charging points are publically accessible but not Council-provided.
- 3.6 Planning requirements related to off-street charging points are provided both in the London Plan and the Draft Local Plan for Sutton (Policy 37). These do not refer to the installation of on-street charging points.

4. Issues

- 4.1 While Sutton Council has ULEV charging points in the borough, there is no overarching policy in place. As a result, there is no adopted strategy guiding the location and installation of additional charging points.
- 4.2 The Council has limited understanding of the different types of charge points and types of users of ULEVs and their applicability to the borough. Transport for London (TfL) has undertaken research to help inform boroughs about ULEVs.
- 4.3 The Council receives only occasional requests for additional on-street charging points from residents and businesses.

5. Options Considered

- 5.1 This report and appendices is not an options assessment but rather aims to gather the relevant background information to inform the development of an ULEV policy.
- 5.2 The following sections provide a summary of the key findings from the ULEV report and should be read in conjunction with Appendix A.



5.3 The report includes the following objectives:

- Understand existing operation and current demand
- Provide for future uptake based on research undertaken by TfL and strategic objectives (national, London-wide and borough level)
- Understand the different types of charge points based on the type of user
- Develop guidelines and a potential implementation plan to guide the roll-out of ULEVs
- Provide recommendations on how to facilitate the take-up of ULEVs in the borough.

5.4 Existing operation and current demand findings:

Sutton has, in recent years, supported people who wish to convert to ULEV use by providing charging points in town centres. Usage of these has been variable and ULEVs remain a small proportion of vehicles registered in the borough.

- In total there are 38 publicly accessible charging points in 15 locations across the borough – 15 with slow and 37 with fast charging capability.
- Of these, the Council provides 13 charging points in six locations.
- The highest use Council-provided locations are Gibson Road Car Park, Wallington Library Car Park, The Square Car Park and Times Square Car Park.
- The lowest use locations are Melbourne Road Car Park and Kingsway Road Car Park.
- At present, the 134 registered ULEVs in the borough equate to 0.13% of the total vehicle fleet.
- When taking into account adjacent boroughs, there are approximately 850 registered ULEVs.
- The borough has car clubs in six locations, none of which are ULEV.
- New licensing requirements for taxis and private hire vehicles are about to come into force from January 2018 with a stricter emissions regime proposed.

5.5 Future uptake of ULEV - Findings

It is important to understand the likely rate of growth of the total ULEV fleet in and around Sutton.

- The fleet mix calculations (Appendix A) suggest that the proportion of plug-in hybrid vehicles will grow and could potentially account for 44% of the fleet by 2050, and that hydrogen fuel cell electric vehicles will become popular between 2030 and 2040.
- The Council already encourages ULEV ownership by allowing free parking while electric vehicles are plugged into a charging point. However this may not be sustainable as a financial model should uptake become significant.
- Sutton Council also allows fully electric vehicles to park for free in pay and display bays upon application for a permit.
- The Council is introducing a CO2 emission-based pricing scheme for residents parking, which incentivises the uptake of ULEVs.
- Developments which require 10 or more car parking spaces are required to provide both active and passive ULEV charging points (20% of each) which will support the growth of the ULEV fleet in the borough.

5.6 Types of charge points and users findings

A range of types of charging points are available, depending on type of location.

- TfL guidance identifies three charging categories based on power output and three charging types based on users, including:
 - Residential on-street charging points
 - Rapid charging points, and
 - Destination/top-up charging points.
- Residential on-street charging points may be located on local streets and provided as slow (3kW) or fast (7kW) charging.
- Charge points should ideally be within a 5 minute walk of owners' houses – most ULEV users are willing to walk 5 minutes to a charge point and 75% will walk up to 10 minutes.
- Rapid charging points should be located in off-street hubs in proximity to streets with high 'movement' or high 'place' function.
- TfL research indicates there is potential demand for rapid charging points at Royal Marsden Hospital and Asda Wallington Superstore.
- Destination/top-up charging points should be located on high streets, as well as off-street car parks.

5.7 Sutton Council's role in ULEV provision

It is important to consider the role the Council will play in the growth of ULEV. Development of infrastructure is key to achieving sufficient provision of charging/filling facilities. The choice for LBS between becoming a Scheme Partner or Scheme Operator could determine the speed of rollout and what level of risk and financial responsibility the Council retains.

- Local Planning Authority
In its role as LPA, the Council can condition developers to include ULEV (both active and passive) charging points as part of a proposed development.
- Scheme Partner
In a role as Scheme Partner, the Council would work in partnership with the Scheme Operator to identify and introduce charging points, with a monetary reimbursement provided by the Scheme Operator. Responsibility for implementing and managing charging points remains with the Scheme Operator. For this ULEV policy, the Council is planned to be the Scheme Partner
- Scheme Operator
The Scheme Operator is responsible for managing the scheme at its own cost. This includes promoting and marketing the scheme, implementing a dedicated website or microsite, administering the application and registration process for scheme users and reimbursing the Scheme Partner in accordance with the conditions of the contract.

This report recommends that the Council operates as a Scheme Partner rather than a Scheme Operator. By doing so, the Council bear little financial risk (the cost of installation and

management of charging points is borne by the Scheme Operator). As a Scheme Partner, the Council also controls the siting of charging points in consultation with the Scheme Operator. Therefore, no new charging points can be installed without the consent of the Scheme Partner. This role is seen as appropriate for a local government authority.

5.8 Proposed ULEV policy

The following section of this report summarises a proposed approach to implementing additional ULEV charging points (both on-street and off-street). This is based on the charging point type, being either for residential charging, rapid charging or destination/top-up charging. Hydrogen cell vehicles are yet to be considered.

It should be noted that there is a significant resource implication associated with the expansion of charging networks and that the pace of expansion will be dictated by the availability of resources from internal or external sources. The procurement implications of network expansion will also need to be carefully considered before implementation.

On-street installation will require detailed consideration of the impact upon scarce kerb-space, particularly in residential areas.

This ULEV policy generally covers Council-controlled land and developments (with ten or more car parking spaces). It excludes residents installing charging points in existing properties.

Residential charging - on-street charging points

- **Policy objective** - to support access to those without access to off-street parking (in appropriate locations)
- **Charge point speed** - slow and/or fast (publically accessible)
- **Council role** - Scheme Partner
- **Scheme operator** - Council-approved Scheme Operator
- **Criteria for implementation:**
 - **Street type** - local streets
 - **Land use / centre type** - residential without off-street availability
 - **Availability of alternative charging point** - not within 400m of alternative slow or fast charging point (unless usage warrants)
 - **Opportunity cost** - existing parking space revenue is approximately £300 per annum – which is roughly the amount that Council could expect from the Scheme Operator.

Residential charging - off-street charging points

- **Policy objective** - ensure adequate provision for ULEVs in new developments – both now and into the future
- **Charge point speed** - slow and/or fast (private – for residents)
- **Council role** - Local Planning Authority
- **Scheme operator** - Council-approved Scheme Operator
- **Criteria for implementation:**
 - **Development type** - residential, A1 Retail, B1 Office and Light Industry which requires 10+ car spaces
 - **Charging point requirement** - residential (20% active), A1 Retail (10% active), B1 Office and Light Industry (10% active). All developments to require 100% passive provision. This would be subject to discussions with Planning, as they would be required to update Council policy.

Car club charging points

- **Policy objective** - to ensure 50% of car club vehicles are ULEV by 2025 – supporting the draft Mayor's Transport Strategy
- **Charge point speed** - Slow and/or fast (private – for car club use)
- **Council role** - Scheme Partner for Council assets & Local Planning Authority for non-Council assets
- **Scheme operator** - Council and/or car club approved Scheme Operator
- **Criteria for implementation:**
 - **Street type** - local streets or off-street car park
 - To be implemented as part of a wider car club strategy or development condition.

Rapid charging - off-street charging points

- **Policy objective** - to facilitate a network of off-street rapid charging points across the borough, close to strategic routes and in/around major town centres, transport hubs and industrial areas.
- **Charge point speed** - rapid (publically accessible)



- **Council role** - Scheme Partner for Council assets and Local Planning Authority for non-Council assets
- **Scheme operator** - Council-approved Scheme Operator
- **Criteria for implementation:**
 - **Street type** - off-street hubs in proximity to streets with high 'movement' or high 'place' function (core road, high road, city hub, city street, city place)
 - **Land use / centre type** - close to strategic routes and in/around major town centres, transport hubs and industrial areas.
 - **Availability of alternative charging point** - not within 400m of alternative slow or fast charging point (unless usage warrants).

Destination/top-up charging - on-street charging points

- **Policy objective** - to support residential and off-street rapid charging network with destination/top-up charging points along high streets and city streets – near key destinations such as shopping centres, retail parks, town centre car parks and transport hubs.
- **Charge point speed** - fast or rapid (publically accessible)
- **Council role** - Scheme Partner
- **Scheme operator** - Council-approved Scheme Operator
- **Criteria for implementation:**
 - **Street type** - high streets and city streets
 - **Land use / centre type** - Key destinations such as shopping centres, retail parks, town centre car parks and transport hubs
 - **Availability of alternative charging point** - not within 400m of alternative slow or fast charging point (unless usage warrants)
 - **Opportunity cost** - existing parking space revenue is approximately £300 per annum – which is roughly the amount that Council could expect from the Scheme Operator.

Destination/top-up charging - off-street charging points

- **Policy objective** - to support residential and off-street rapid charging network with destination/top-up charging points off-street – near key destinations such as shopping centres, retail parks, town centre car parks and transport hubs.
- **Charge point speed** - fast or rapid (publically accessible)



- **Council role** - Scheme Partner for Council assets and Local Planning Authority for non-Council assets
- **Scheme operator** - Council-approved Scheme Operator
- **Criteria for implementation:**
 - **Street type** - off-street car parks
 - **Land use / centre type** - Key destinations such as shopping centres, retail parks, town centre car parks and transport hubs
 - **Opportunity cost** - existing parking space revenue is approximately £300 per annum – which is roughly the amount that Council could expect from the Scheme Operator.

Supporting policy guidelines

Electric Vehicle Permits

Electric Vehicle permits are available, upon application, if a vehicle is 100% electric (not hybrid). Vehicles displaying a valid electric vehicle permit can park for free in all pay and display bays (not permit holder only bays) within a controlled parking zone.

Controlled Zone Residents Permits

The Council is currently proposing the introduction of CO² emission based pricing for residents parking permits across all controlled parking zones in Sutton. This will mean free permits for 100% electric vehicles and cheaper permit costs for lower emitting vehicles to park in permit holder only bays. Statutory consultation is currently taking place in anticipation that this will come into operation in October 2017.

Electric bikes

Complementary to this ULEV policy, the Council should support and encourage the uptake of electric bikes. Further detail outlining measures to do so would be most appropriate as part of a review of the Sutton Cycling Strategy.

6. Next steps and timetable

The implementation plan (in Appendix A) outlines the next steps and timeframes of actions to support the implementation of ULEV charging points in the borough.

This includes short-term actions (to be completed this financial year subject to resourcing and/or bid funding availability, medium-term actions (within the next five years) and ongoing actions (business as usual tasks).

7. Impacts and Implications

Financial

- 7.1 As this paper is asking the committee to adopt a policy, there are no financial implications at this time.
- 7.2 If there are any works required to make the policy compliant, then funding would be sought from external parties (such as TfL and Scheme Operators) at no additional cost to the Council.
- 7.3 Location specific installation in current permit or pay and display bays (on or off-street) would need to consider loss of income and suitable recompense should be made to the On/Off Street parking accounts.

Legal

- 7.4 Consideration with regards to procurement will be required when implementing this policy. This includes ensuring that installation of additional on-street charging points comply with all procurement requirements.

8. Appendices and Background Documents

Appendix letter	Title
A	Ultra-Low Emission Vehicles Options Paper

Background documents
Plug-in electric vehicle uptake and infrastructure impacts study, Element Energy and WSP Parsons Brinckerhoff (2016)
Electric vehicle charging study: A review of options for charging at homes without off-street parking, WSP Parsons Brinckerhoff (2015)
A feasibility study into a rapid charge network for taxis, Energy Saving Trust (2015, updated 2016)
Mapping rapid charge point locations for commercial vehicles in London, Energy Saving Trust (2015)
Rapid Charging Network Study, Element Energy (2015)
ULEV car club Study, WSP Parsons Brinckerhoff and Frost & Sullivan (2016)
Understanding electric vehicles – research findings, Future Thinking (2014)
Mapping rapid charge point locations for private hire vehicles in London, Energy Saving Trust (2017)

Private hire vehicle rapid charging points: Research findings, Future Thinking (2016)
The road to reducing commercial vehicle emissions: Exploring the technical barriers to uptake of alternatively fuelled commercial vehicles (2016)
How can LoCITY increase operator uptake of ultra low emission vehicles? (2016)
Electric vehicles: Gauging interest amongst disabled and elderly drivers, 2CV (2016)

Audit Trail		
Version	Final	Date: 7 November 2017
Consultation with other officers		
Finance	Yes	Al Mawji
Legal	Yes	Rachel Godson-Amamoo
Parking, Operations and Resources Manager	Yes	Matt Donaldson
Equality Impact Assessment required?	No	N/A