

Report No.
ES18010

London Borough of Bromley

PART ONE - PUBLIC

Decision Maker: ENVIRONMENT PORTFOLIO HOLDER

FOR PRE-DECISION SCRUTINY BY THE ENVIRONMENT PDS COMMITTEE ON:

Date: 30th January 2018

Decision Type: Non-Urgent Executive Non-Key

Title: ELECTRIC VEHICLE (EV)/ULTRA LOW ELECTRIC VEHICLE (ULEV) CHARGING POINTS

Contact Officer: David Bond, Transport Planning & Traffic Engineering Manager
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Chief Officer: Nigel Davies, Executive Director of Environment & Community Services

Ward: All Wards

1. Reason for report

- 1.1 To up-date Members with regard to the progress that has been made to date with the installation of charging points across the Borough for electric/hybrid (EV/ULEV) vehicles and what is proposed going forward.

2. **RECOMMENDATION(S)**

That the Portfolio Holder:

- 2.1 notes the progress that has been made in developing a network of public charging points
- 2.2 notes the need to make provision for residents who own EV/ULEV vehicles but do not have access to off-street parking to charge their vehicles on-street
- 2.3 agrees to trial the installation of lamp column trickle charging points in an area or areas to be agreed with the Portfolio Holder and the respective Ward Councillors
- 2.4 agrees to imposing a tariff of £1 per charge for lamp column charging
- 2.5 agrees to ring-fence the net surplus of income from BPL (paragraph 4.4) to install additional trickle charging points, should the trial be successful.

Impact on Vulnerable Adults and Children

1. Summary of Impact: None
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Corporate Policy

1. Policy Status: New Policy:
 2. BBB Priority: Excellent Council Quality Environment
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Financial

1. Cost of proposal: potentially £20k in 2018/19
 2. Ongoing costs: Potential annual net income of £8.6k, which may be used for additional trickle charging points
 3. Budget head/performance centre: Capital Programme
 4. Total current budget for this head: £20k
 5. Source of funding: TfL LIP funding
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Personnel

1. Number of staff (current and additional): Existing staff resources
 2. If from existing staff resources, number of staff hours: 15 hours per month, on average
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Legal

1. Legal Requirement: Non-Statutory - Government Guidance
 2. Call-in: Applicable
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Procurement

1. Summary of Procurement Implications: a tendering process has already been carried out by the Go Ultra Low Cities scheme which has created a framework of suppliers that all London Boroughs can use, negating the need for each Borough to carry out their own individual tendering process.
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Customer Impact

1. Estimated number of users/beneficiaries (current and projected): all existing, and potential owners of EV/ULEVs
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Ward Councillor Views

1. Have Ward Councillors been asked for comments? No
2. Summary of Ward Councillors comments: N/A

3. COMMENTARY

Public Electric Vehicle Charging Points

- 3.1 In 2013, funded by Transport for London, all London Boroughs were offered some time limited funding through the previous Mayor's low emission programme with Source London being the name given to the charging point element of that programme. The Council was given sufficient funds to deliver 10 units which were installed in 5 Council owned public car parks and they were managed and maintained by a company called Chargemaster.
- 3.2 In 2015 TfL approached all London Boroughs informing them that the Source London scheme was to be taken over by a new supplier, BluePoint London (BPL). This resulted in the replacement of the current stock of charging points, plus all new sites, by the new operator, BPL, and them paying each Council £300 per annum per bay. This required all councils to enter into a contract with BPL which Bromley duly did in 2015.
- 3.3 In 2016, as part of a planning condition for the extension of New Beckenham public car park, another two charging units were installed and the latest wave of installations in 2017 has seen the first two on-street locations installed as well as a further two car park locations, resulting in a total of a further 6 units. These were installed at a cost of £4,160, funded from TfL LIP funding, see Table 1.

Table 1: EV current charging point locations

Location	Number of units	Status	One-off installation costs (£)	Income per annum (£)
Car Parks				
Bromley, Civic Centre car park	2	Active	460	600
Bromley, The Hill car park	2	Active	460	600
Beckenham, St Georges car park	2	Active	460	600
Penge, Penge East Station	2	Active	460	600
Beckenham, New Beckenham car park	2	Active	460	600
Sundridge, Burnt Ash Lane car park	4	Active	600	1,200
Hayes, Hayes Station Approach	2	Active	460	600
On street				
Chelsfield, The Meadway	2	Active	400	600
Bromley, South Hill Road	2	Active	400	600
TOTAL	20		4,160	6,000

- 3.4 Bromley receives £300 annually for each charging bay from BPL once the unit has been active for 1 year, and penalty tickets for misuse may also bring in additional revenue, although that will vary. The £6,000 income shown in Table 1 will be received during 2018/19.
- 3.5 Membership of Source London is a quick and easy process and customers pay a monthly subscription and are then able to charge their vehicle at any Source London location. The Council does not incur any costs for the chargers and the electricity usage is paid for by customers and normal car parking charges still apply in public car parks.

- 3.6 Officers in conjunction with BPL, have identified a number of potential new sites across the Borough in areas which are not subject to any pay and display parking, as shown in Table 2. These sites will be progressed , within existing agreed TfL LIP funding, following consultation with the Portfolio Holder and Ward Members.

Table 2: proposed new EV charging point locations

Location	Number of spaces	Current Status	One-off installation costs (£)	Income per annum (£)
On Street				
West Wickham, Glebe Way	3	Free parking	400	900
Bromley, Ravenscroft Avenue	3	Free parking	400	900
Bickley, The Avenue	3	Free parking	400	900
Crystal Palace, Brunswick Place	3	Free parking	400	900
Penge, Clevedon Road	3	Free parking	400	900
Orpington, Homefield Rise	3	Free parking	400	900
Shortlands, Valley Road	3	Free parking	400	900
Petts Wood, West Way	3	Free parking	400	900
TOTAL	24		3,200	7,200

- 3.7 Usage of the charging points has been increasing significantly since the first installations in 2013, as shown in Table 3 below: -

Table 3: EV current charging point usage

Year	Total Number of charges
2013	7
2014	15
2015	21
2016	208
2017	558

Residential Electric Vehicle Charging Points (trickle charge)

- 3.8 Since early 2017 12 requests have been received from members of the public for on-street residential charging units (trickle-chargers) and whilst this may not seem very high this compares with only 2 in the previous year which is a significant increase, the majority of those requests coming from Penge and Crystal Palace.
- 3.9 With regard to residential charging the Government currently offers an individual a grant of up to a maximum of £500 for the cost of a home charging unit for those with off-street parking whilst some manufacturers offer them at no additional cost when a new electric/ULEV vehicle is purchased from them, eg Nissan.
- 3.10 Although there was the opportunity to sign up to the first round of the GULCS funding, the Council chose not to at that time and this source of funding has now been fully committed. Whilst a second round of funding has been announced a combination of late notification, a

more onerous bidding process than the first round, a short timescale to submit bids and no policy yet in place, has meant that The Council will be reliant on funding from either;

- LIP
- BPL capital funding
- annual income from BPL for installing additional public charging points

3.11 Clearly, however, there is a need for a means of convenient, safe and efficient charging for those who do not have off-street parking. Using funding from the Government's 'Go Ultra Low City' (GULCs) scheme, a number of councils, including Kensington & Chelsea (K&C), Westminster and Hounslow have successfully trialled trickle-charging points incorporated into lamp columns and they now see this as the way forward in these situations. In considering these it is useful to note the following;

- the need to consider on-street parking demands
- 70% of EV/ULEV owners charge at home
- the adaptation of lamp columns to house charging points is easy and discrete and, so far, seems possible with all column types, minimising street clutter
- where columns are at the back of the footway a bollard type post is provided at the front of the footway with a spur from the nearest lamp column
- the lamp column charging points are relatively low cost at approximately £1,000 each and the bollard type approximately £2,500
- maintenance costs are estimated to be approximately £100 per year which is likely to reduce as numbers increase and experience of the equipment grows
- in addition to the customer charge, K&C, for example, levy £1 for each charge period to cover maintenance costs of the actual charging unit which would mainly include periodic maintenance inspections, but it is up to each Council the rate they set or whether they levy any charge at all
- Hounslow ask for a minimum of 3 residents in the same area to justify the installation of a communal charging point
- K&C believe that 3 charging points are required per resident to ensure that they are able to charge their vehicle
- a number of units would negate the need to provide any dedicated bays which would otherwise preclude non-ULEV/EV vehicles from using them and therefore this approach doesn't affect the supply of on-street car parking
- a framework of suppliers has already been drawn up by London Councils which means that councils don't have to go through a costly and time consuming tendering process and will keep prices competitive; each council can decide on who to use and where
- the units can be installed within P&D zones as these will be free outside the restricted periods when the vast majority of residents would want to charge their vehicles, eg., overnight so would have little or no impact on P&D revenue
- the cable (with a meter attached) and contract for the supply and charging would be between the resident and energy provider, not the respective council

3.12 It is proposed to roll-out residential charging points in Bromley, funded initially from £20,000 of LIP funding in order to commence the trial in 2018/19. This will fund 8 – 20 charging points depending on the type, lamp column or bollard). It should be noted that these charging points will not be part of the Source London scheme and therefore do not attract an income of £300 per charging point.

3.13 Subsequently as income from Bluepoint public charging points comes on-stream during 2018/19 (see table 2 and 3), the balance of resources after meeting the maintenance costs of the BPL charging points, can be used to fund any additional trickle charge sites, with no further call upon LIP or Bromley funds.

3.14 It is proposed to levy a £1 fee per charge to the resident (on top of the energy cost paid to the supplier). It is anticipated that this will yield sufficient income to cover the annual cost of maintaining each charging unit, estimated to be £100 per annum.

Electric Taxi Charging Points (rapid charge)

3.15 With new legislation requiring taxis to be zero emission capable with effect from 1st January 2018, there is a requirement from the Mayor upon local Councils to provide rapid charging points for taxis. The Council has identified a site in Elmfield Road, adjacent to the existing taxi rank which is currently being progressed on our behalf by BPL, at no cost to the Council, and other sites are being looked at. Once installed, Bromley will be only the second London Borough to have provided dedicated charging points for taxis.

Table 4: proposed new taxi charging points

Location	Number of spaces	Current Status	One-off installation costs (£)	Income per annum (£)
On Street				
Bromley, Elmfield Road	2	Within rank	nil	600
Bromley, Walters Yard	3	Within rank	nil	900
Orpington, Crofton Road	3	Within rank	nil	900
TOTAL	8		0	2,400

Public Interest in Electric Vehicles

3.16 As far as pure electric vehicle registrations are concerned, Bromley is ranked 6th highest out of all 33 London Boroughs showing that there is a real appetite for low emission and electric vehicles in Bromley. Looking to the future, a report by Parsons Brinkerhof (2015), on behalf of TfL, puts Bromley 4th highest of all the London Boroughs for the predicted growth of electric vehicle ownership, see Appendix 1, and it is therefore important that this growth is not stemmed by a lack of charging infra-structure.

3.17 As an up-date, during 2017, 137 EVs were registered in the Borough of Bromley and 427 low emission vehicles, the former being a significant increase on 2016. Unfortunately, no data is available for other London Boroughs so it is we cannot see how Bromley currently compares with the rest of London.

Conclusions

3.18 From the commentary above, Members will see the progress that has been made with the installation of public charging points, the further sites that are planned, including those for the sole use of taxis, and proposals to introduce on-street residential charging points. It is therefore recommended that;

- a trial installation of residential on-street charging points is agreed in conjunction with the Portfolio Holder and Ward Councillors;
- the LIP budget allocation is increased to £20k in 2018/19 to support the trial;
- Bromley levies a £1 fee per charge to cover maintenance costs;
- in future years, and dependent on the success of the trial sites, that further residential installations are funded from the annual income received from BPL for public charging points.

4. FINANCIAL IMPLICATIONS

- 4.1 Through the Source London Scheme, 20 charging units have already been installed in the Borough funded from TfL LIP monies. As part of the scheme Bromley will receive £300 per unit once the units have been active for 12 months, and therefore £6k will be received during 2018/19. Part of this will need to be set aside to meet the annual maintenance cost of the units, which is estimated to be £100 per unit per annum.
- 4.2 A further 24 charging units are due to be installed within the next year, again funded by TfL LIP monies. Income of £7.2k should be received during 2019/20.
- 4.3 In addition to these units, BPL is progressing the installation of 8 taxi charging points at no cost to the Council. Income of £2.4k will be received during 2019/20.
- 4.4 The table below summarises the estimated income and maintenance costs: -

	2018/19	2019/20
	£'000	£'000
<u>Income</u>		
Original 20 charging units	6.0	6.0
Additional 24 charging units	0.0	7.2
8 Taxi charging points	0.0	2.4
	<u>6.0</u>	<u>15.6</u>
<u>Expenditure</u>		
Annual maintenance costs, admin & enforcement	3.0	7.0
Net surplus income	<u>3.0</u>	<u>8.6</u>

- 4.5 It is proposed to roll-out a trial of residential trickle charging points within the Borough, funded from £20k of TfL LIP monies. This is not part of the Source London Scheme so will not attract the £300 income per unit, however officers are recommending that a tariff of £1 per individual charging carried out to cover the annual cost of maintaining each unit.
- 4.6 The Council will not incur any costs for the electricity usage as this is paid for directly by the customers.
- 4.7 It is also proposed that the net surplus income be ring-fenced for installing additional trickle charging points. If agreed, this position will have to be reviewed in futures years, given the financial position of the Council.
- 4.8 Members should note that there will be no loss of parking income as the new sites will not be located in pay and display bays. Where charging points have been introduced in off street car parks, normal car parking charges still apply.

Non-Applicable Sections:	Impact on Vulnerable Adults and Children, Policy, Personnel and Procurement Implications
Background Documents: (Access via Contact Officer)	

Table 5: registration of low emission vehicles

Rank	Borough	Year 2016	Year 2015	Year 2014	TOTAL
1	Brent Total	785	757	491	2033
2	Barnet Total	748	545	426	1719
3	Hillingdon Total	656	503	307	1466
4	Camden Total	565	415	425	1405
5	Croydon Total	560	457	303	1320
6	Redbridge Total	444	404	339	1187
7	City of Westminster Total	412	401	322	1135
8	Bromley Total	405	445	263	1113

Table 6: registration of electric vehicles in Bromley

Rank	Borough	Year 2016	Year 2015	Year 2014	TOTAL
1	Hillingdon TOTAL	366	182	35	583
2	Barnet TOTAL	97	102	56	255
3	City of Westminster TOTAL	70	87	79	236
4	Havering TOTAL	89	59	63	211
5	Camden TOTAL	54	56	59	169
6	Bromley TOTAL	75	54	39	168