

**AGENDA ITEM 7**

**TITLE OF REPORT: Hackney residential on-street Electric Vehicle Charging Points Procurement**

**BUSINESS CASE**

**Key Decision No FCR R72**

**CPIC MEETING DATE  
(2021/22)**

**7 June 2021**

**CLASSIFICATION:**

Open

**If exempt, the reason will be listed in the main body of this report.**

**WARD(S) AFFECTED**

**All Wards**

**CABINET MEMBER**

**Cllr Mete Coban, Cabinet Member for Energy, Transport, Waste and Public Realm**

**KEY DECISION**

Yes

**REASON**

Spending/or saving

**GROUP DIRECTOR**

**Ian Williams, Group Director of Finance and Corporate Resources**

**1. CABINET MEMBER'S INTRODUCTION**

- 1.1 In July 2019, the Council declared a Climate Emergency with the ambition to become a zero-net carbon borough by 2040, which is ten years earlier than the national target.
- 1.2 In order to meet this ambitious target, the Council will need to start acting immediately to reduce emissions from fossil-fuel powered cars and improve the Air Quality in the borough. According to the 2018 baseline emissions data, Transport accounts for 125ktCo2 emissions, which is the second (after domestic energy use) polluter in Hackney. The Council plays a key role in influencing the transition from petrol/diesel cars to the electric vehicles, by providing a sufficient level of charging infrastructure, for our residents, businesses and our own Council fleet.
- 1.3 Hackney is already on target to meet the Mayor Manifesto Commitment from 2018 to provide the charge points within 500m from every household, currently installing 95 additional charging points, which by the end of 2021 will add to the total number of 296 points.
- 1.4 The Council is taking one step further to deliver a much more ambitious plan that includes meeting the current demand for charging points, and offering charging points in areas where the demand might be lower as an encouragement for our residents to switch to the cleaner vehicle.
- 1.5 In 2020, the Central Government announced an end to sales of new petrol and diesel vehicles from 2030. It is clear from this development, and in light of the climate emergency that the Council must take a more ambitious and proactive position on Electric Vehicle Charging.
- 1.6 Working in partnership with an appointed service delivery partner with expertise in this field, as proposed in this report, will allow the Council to take a holistic approach for the rollout of infrastructure, without discriminating against residents living on the housing estates, and the Council own fleet which in the future will be run by 100% electric vehicles.
- 1.7 Implementing all the schemes combined, will dramatically impact on the air quality, noise and wellbeing of our residents. Convenient access to the charging stations will potentially encourage more people to make a switch to electricity powered vehicles which will help us together rebuild greener Hackney. I commend this report to Cabinet Procurement Committee members for approval.

## **2. GROUP DIRECTOR'S INTRODUCTION**

- 2.1 Working in partnership with the Electric Vehicle Charging Point (EVCP) supplier (s) who have a greater level of expertise in this field, will ensure the infrastructure plan is driven by the data and enhance the performance of the existing charging stations and new installations.
- 2.2 The Council is looking to work collaboratively with the charging stations operators to ensure there is consistency in service levels and tariff prices offered to electric car users across Hackney. The partnership model will prevent the Council from taking a financial exposure of funding the infrastructure ourselves, but rather participate in the business model, where Council can bring external funding from grants and schemes available, where possible, but without the risk of not meeting the ambition in relation to the number of units, Council intends to deploy. The partnership model, which the Council is seeking, will also encourage collaborative working between the market operators and the borough for a coherent and long-term working relationship to benefit Hackney.
- 2.3 It is clear from the soft market testing that there is a market to fulfill the Council's ambition. The work undertaken since 2018 in relation to the charging stations exploratory work, shows that the Council's ambitious target can be achieved in a relatively short period of time, thereby resulting in reduced number of fossil fuel vehicles on Hackney street and a borough wide emission reduction.
- 2.4 The installation of more charging stations will in broader terms contribute to rapid decarbonisation of the borough. The EVCP are relatively easy to install, operate and maintain, but can massively influence the choices people make in relation to the vehicle they drive. Whether there will be a slow charge on the residential street or the rapid hub for the Council fleet, this scheme will solve an existing problem in respect of access to the power stations, which is common in inner London boroughs like Hackney, where most of our residents does not have a driveway and are required to park within the estate or on-street.
- 2.5 The Council is looking to partner with companies who can undertake a large-scale roll out of electric vehicle charge points throughout the borough over a long period of time as opposed to a short term arrangement. The Council is seeking companies who can install, operate and maintain a network of charging points at zero cost to the Council under a flexible long-term concession contract.
- 2.6 The Council is anticipating that the majority of charging points will be installed on the public highway but the Council is also wanting charging points installed on housing estate car parks if feasible. The Council will also work with the Provider to replace existing points for the Council fleet and work on the plan to increase the number of charging stations, in Council Depots and car parks. The Council is seeking to appoint one provider for

each of the following lots (for the avoidance of doubt one provider could win multiple lots):

- Lot 1: Rapid Charging
- Lot 2: Fast Charging
- Lot 3: On Street residential charging
- Lot 4: Fleet charging points

The Council will consider the opportunity to build a “charging hub” in Council Depots for Fleets and public usage, following detailed site selection criteria and business model proposals presented by the Partner.

### **3. RECOMMENDATION(S)**

**Cabinet Procurement & Insourcing Committee is recommended to:**

- 3.1 Agree the procurement strategy for the selection of the partner supplier/suppliers to support the Council in delivering on-street and residential electric vehicle infrastructure for the borough**

### **4. RELATED DECISIONS**

- 4.1 In 2019 at Full Council meeting, Council adopted the Climate Emergency to become a zero-net carbon borough by 2040. Hackney Council committed to doing everything within its power to deliver net zero emissions across Council functions.
- 4.2 The Hackney Transport Strategy aims “to reduce the need to travel through the judicious use of land use planning and co-locating residential development, employment and essential services with public transport and high quality walking and cycling networks.” It includes Target T13: Reduce the levels of car ownership in Hackney to 39,700 by 2021 and to 32,300 by 2041 (MTS, HTS). The next iteration of the Local Implementation Plan is due to be revised during 2021. This may include a Kerbspace Allocation Strategy as has been developed by LB Westminster and Southwark. This helps determine the relative importance of disabled bays, cycle hangars and electric charge points, for example. Hackney is currently investigating these as a means of prioritising usage such as Parklets.

### **5. OPTIONS APPRAISAL AND BUSINESS CASE (REASONS FOR DECISION)**

- 5.1 London Borough of Hackney consists of 21 wards with a total population of 279,554 which is forecast to increase to 355,000 by 2050.
- 5.2 The borough has one of the lowest vehicle ownership in the country –with only 34% of households having access to a private vehicle compared to 57% across Greater London, with some areas in the south of the borough reporting to be 70% car free. Only 12.7% commute by car. The Electric Vehicle Charging Point (EVCP) network within Hackney has steadily grown

in the last 5 years. To date the borough has installed the following publicly available provision;

Type	Power (kW)	Number of units	Vehicle capacity
Residential using Lighting column	3-5kW	63	63
Rapid charger	48kW	10	20
Fast free-standing	7kW	45	45

- 5.3 In addition to the charge points that were live on the network at the end of 2019, the borough has funding and plans in place to increase the network by another 95 units by end 2021, bringing the total vehicle charging capacity within Hackney to 296.

Type	Number of units	Vehicle capacity
Residential using Lighting column	70*	70
Rapid charger	2**	4
Fast free-standing	24	48

\*excluding 13 which will replace existing points and assuming 10 chargers if NoF funding is used (not yet confirmed)

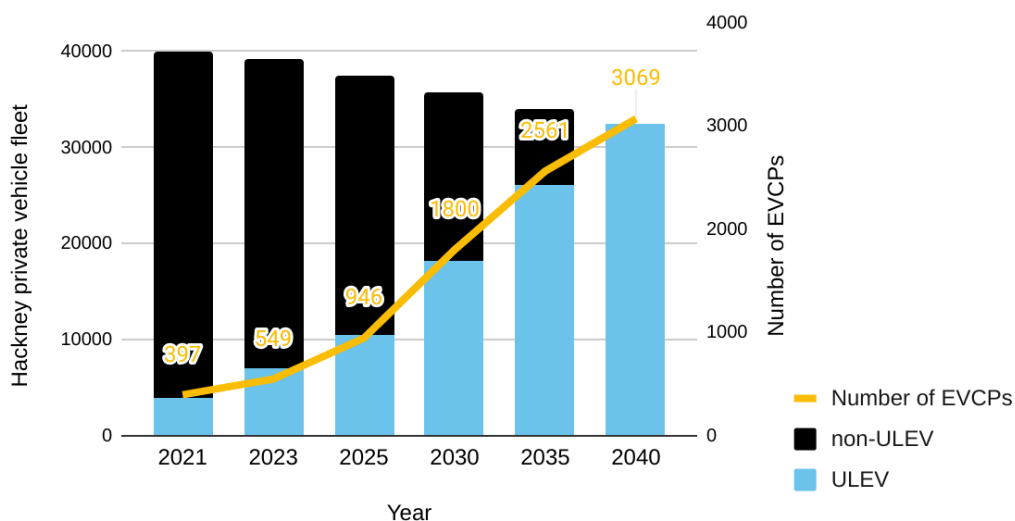
An important part of EVCP availability is those in semi-public places such as in supermarket car parks and filling stations. No firm figures are available for this but the website Zapmap suggests there could be as many as 8-12 Hackney or just over the border.

- 5.4 Hackney Council's own fleets already had 27 charging stations in operation, with an additional 13 in development. This tender process gives an opportunity to review the state of the current fleet infrastructure and consider rapid/fast charging at suitable locations and in particular, the Depots.
- 5.5 According to the research undertaken on behalf of the Council, the key drivers for buying an Electric Vehicle (EV) in the UK are cost savings from cheaper running costs and tax reductions. At the same time, the reduction of carbon emissions as a benefit of owning an EV has been mentioned as a motivating factor by 65% respondents of the Confused.com survey, 2018.

Research by TfL in 2015 also indicated that environmental and financial gains are key motivators for EV purchase.

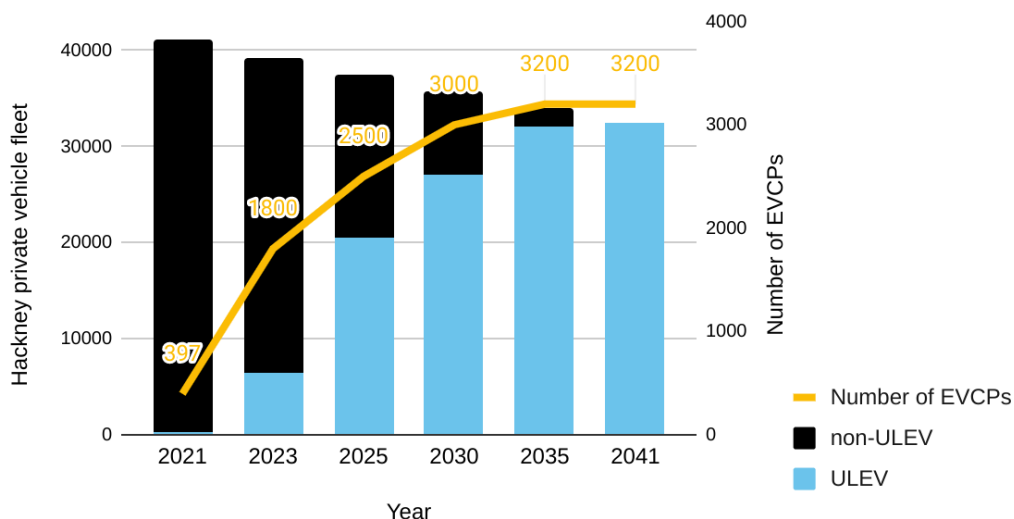
- 5.6 The key barriers for buying an EV in the UK include driving range concerns, purchase price and recharging. A recent survey of a sample of people indicated cost (53%), access to charging (45%) and range (38%) as barriers for EV purchase. In a report published in 2018, Capgemini stated that 'charging anxiety' is the fourth most referenced important barrier to EV purchase after driving range, diversity of EV models and price. With the EV prices decreasing and improvement in the driving range of EVs, access to charging may become even more important in future. Limited mileage range, poor provision of public EVCPs and the number of public EVCPs out of service were the most commonly recalled concerns expressed during the purchase process for TfL in 2015.
- 5.7 The Department for Transport's (DfT) report 'Public attitudes towards electric vehicles: 2016 (Revised)' stated that of those reporting recharging as a deterring factor, the most important recharging factors were around the availability of EVCPs, including lack of EVCPs in their area and lack of knowledge of where EVCPs are. Data from Transport Scotland, 2018, indicates a similar trend with the following top four reasons stopping people to purchase EVs: vehicle range (46%), availability of EVCPs (46%), lack of knowledge (27%) and cost of vehicle (26%).
- 5.8 Through the borough-wide electric vehicle charging points rollout - as well as additional policies to restrict private ICE (Internal Combustion Engine) motor vehicles - the Council aims to achieve the following objectives:
- Reduction in overall motor vehicles ownership in the borough
  - Increase in proportion of electric vehicles, through encouraging the transition of remaining vehicles to EV
- 5.9 The two main factors deterring people from switching to electric vehicles are anxiety around charging and battery range. By providing a high supply of EVCPs, we anticipate an increase in the likelihood of residents switching to EVs. It is recognised that complementary policies aimed at restricting car ownership, of any sort, will also be needed to achieve a reduction in car ownership overall. For this purpose, we aim to create a charging infrastructure that will drive demand, rather than follow demand.
- 5.10 Our research report produced an estimate of 'demand driven' EVCP requirements in the borough based on a linear projection of current EV ownership in the borough, factoring in a linear projection of overall car ownership. This shows that by 2041, we expect a need for 3,000 EVCPs simply to meet demand (at a 1:10 ratio of EVCPs to EVs).

Figure 1: Number of EVCPs to follow demand for switch to EVs



5.11 The Council wants to be more ambitious and accelerate the switch to EVs through a number of measures, including parking restraint measures, as well as a high provision of EVCPs. With the right set of measures, the Council can influence the adoption of EVs in line with the projection in the figure below, which sees the supply of EVCPs leading the demand. For this purpose, the provision of the 2041 EVCP requirements ahead of time will address consumer anxiety around availability of charging. The Council proposes to supply the 2041 requirement by 2030.

Figure 2: Number of EVCPs to lead demand for switch to EVs



5.12 The summary of our findings shows that the Council will require a minimum of 1,800 EVCPs by 2030 to meet demand (as per figure 1), it would need to

provide 3,000 EVCP by 2030 to lead demand and help accelerate the uptake of EVs (as per figure 2), with a focus on front loaded, rapid deployment in the next two to three years.

- 5.13 An overarching aim of the Council is to achieve equalities for its citizens. Any approach to provide facilities for electric vehicles should recognise this. Currently EV drivers tend to be in the wealthiest income bracket but this will change over time.
- 5.14 The Council's ambition to deploy the large EVCP infrastructure is beyond doubt the most advanced across London. We are looking into innovative ways of procuring and in the long term working with the appointed supplier to ensure the sufficient dialogue in relation to the station location, tariff setting, profit share and risk management.
- 5.15 The Council deployment of EVCP is driven by the emerging Climate Declaration target for borough decarbonisation by 2040 and the Government plans to scrap the diesel and petrol vehicles from the market from 2030.

## **6. BENEFITS REALISATION / LESSONS LEARNED**

- 6.1 Hackney Council has not procured a similar contract on this scale for EVCP, however we have installed 162 charging points in the borough so far, through OLEV funding.

Currently, the business models for lamp post columns rely on subsidies. At present low power chargers are inherently unprofitable, especially in the short term. (the best site in Hackney raised £250 last year - less than maintenance costs, most sites were between £15 - £125). It is important to roll out the charge points at the right location to make sure the profitability of them is extended across all the points, even the ones which will underperform in the first few years.

Experience with trials and from other Boroughs suggests there will be hidden costs, such as increased lighting maintenance and costs associated with vandalism, which should be addressed as part of the procurement process.

- 6.2 Until recently the Council's Fleet had a definite direction for emissions reduction through the use of high blend renewable biofuels and development of our electric vehicle fleet. As a result, 'Fleet' make a substantial contribution to Hackney's corporate carbon reduction targets and capitalised on positive publicity from our achievements signing up to the 'Go Ultra Low' programme and the 'Clean Van Commitment' committing us to electrify all our light commercial vehicles by 2028 (subject to vehicle availability, suitability and funding). Our work with 'alternative fuels' has identified Hackney Council as a leading public sector organisation in this space.
- 6.3 This has been achieved through the use of:



- high blend renewable biofuels on approximately 70% of our fleet - we're on target to save circa 2000 tonnes of CO2 annually with scope for a further 1000 tonnes if all non electric vehicles use the fuel,
  - expansion of our electric vehicle fleet currently standing at 66 vehicles,
  - installation of a private network of 47 charging points for fleet users spread over 13 sites, and
  - Installation of 5 home based charging points for drivers that take vans home.
- 6.4 Upkeep of our charging infrastructure is proving costly in terms of some vehicles being forced to use expensive 'on-street' chargers incurring high billing charges (see footnote article), annual service charges of between £250.00 to £350.00 per charging unit depending on desired service response which we haven't bought into due to the poor service response experienced to date and failure to provide proof of maintenance or health & safety documentation during the warranty periods.

## 7. **Strategic Context:**

- 7.1 Air pollution levels in London exceed legal and World Health Organisation (WHO) limits for NO<sub>2</sub>, and WHO limits for particulate matter. In 2010, for example, these pollutants caused a range of health problems in the capital that are estimated to have shortened lives by a total of 140,173 years – the equivalent of up to 9,400 deaths, and representing an economic cost of up to £3.7 billion.
- 7.2 Council Air Quality Action Plan 2020-25 outlined 10 key priorities, one of which is: “ Increase uptake of electric vehicles and ensure electric vehicle charging infrastructure is commensurate with growth in the Borough's Fleet”.
- 7.3 The Council supports the principles of the Mayor of London's [ultra low emissions vehicle delivery plan](#) and works in partnership to help achieve its targets. We're particularly supportive of the 50 per cent ultra-low emission vehicles target in London car club fleets by 2025, which matches our own target.
- 7.4 Council Green Energy Strategy highlights the need to improve electrical infrastructure in the borough. The Strategy refers to the technologies that are needed to support electrification include electric vehicle charging infrastructure, increased supply and distribution capacity and new ways to share energy locally (smart grids) and shift times of energy demand (demand management). This will help manage energy and reduce peak demand.
- 7.5 The Local Implementation Plan's Objective number O1 is to: “reallocate carriageway road space from private motor vehicles to cycle route provision

or cycle parking, walking or bus infrastructure. O9 states: residents will not need to own a private car because of the ease of using sustainable modes of transport (LN). O19: Reduce the dominance of cars by reducing car parking to support more sustainable modes of transport. However Objective 25 states "Hackney's neighbourhoods and streets will be equipped to facilitate the transition to electric vehicle technology, and traffic based air pollution is no longer affecting the health of residents", Target T20 says "We will support residents that require access to a car to switch to electric by ensuring 80% of residents are within 500m of an electric vehicle charging point by 2022 and all residents are within 500m of an electric vehicle charging point by 2025. Target 13 is to Reduce the levels of car ownership in Hackney to 39,700 by 2021 and to 32,300 by 2041.

## 8. Preferred Option:

- 8.1 The preferred option will be to award the EVCP to multiple suppliers, who will be able to work with Hackney through a long term partnership arrangement and based on a flexible type concession contract. Previous market testing exercise suggested the contract length should be between 15-20 years. There are 4 Lots as detailed in 2.5 and each Lot has its own requirement and different technologies, the tender may result in one supplier being awarded more than 1 Lot, the market does not currently have one supplier who can provide all the services
- 8.2 The long term contract and partnership style yields cooperation between the supplier and the Council and will allow for a partnership delivery approach with the Council. The Council and its appointed partner share responsibility for delivery, tariff setting, profit sharing and risk management.
- 8.3 The concession based contract will include the provision of infrastructure of electric vehicle charging points for the borough which is fully funded by the supplier, with flexibility to amend the contract and allow the Council to contribute any government grants received into the scheme so as to enable the Council to secure wider community benefits for the borough through this contract .
- 8.4 The Council will work closely with the supplier to ensure the right level of infrastructure is distributed across the borough, at competitive tariffs. The procurement will be based on the seven key objectives, which Council has aim to achieve:
  - **Asset Value/Share profit** - The ability of EVCP operators to share the profit from infrastructure, with preferable long- term contracts in order to maximise the site utilization, where currently the demand is low. Retained/embedded value of the asset at the end of concession contract.
  - **Asset Reliability** - Proven system reliability to provide positive customer experience and give confidence to the end users. The operator ability to complete real-time monitoring of charges. The turnaround time for repair or replacement of the units.

- **Flexibility/Innovation** - Operator flexibility to adapt into a technology development, such as: induction charging, micro-mobility schemes. Operator business model which encourages innovation and investment in new technologies. Time or cost penalties for moving or cancelling chargers.
- **Environmental impact** - The environmental impact of charging infrastructure both in terms of embedded carbon of the chargers (materials, shipping etc.) themselves, site construction activity and energy power supply. This should be considered over the lifespan of the chargers (including end of life disposal) and supporting infrastructure. The charges should be powered by 100% renewable energy, including, where feasible, Council owned solar panels, to maximise local energy distribution.
- **Social justice/Community engagement-** Operator contribution to create local jobs, improve air quality, reducing carbon emissions. The important aspect of proposing a sufficient proposal of community engagement, to accelerate the smooth transition from petrol/diesel to electric vehicles for residents. Commitment to work with the Council to distribute EVCP in the areas where the uptake of EVCP is low, such as areas affected by poverty. Commitment to support lower-take up groups, such as disabled users, blue badge holders and residents from restricted parking zones or Low Emission Neighbourhood. Demonstration of strong ethical commitment in any loans necessary for the project.
- **Partnership approach-** Council is willing to work with the operator, who is keen to work with the Council on a long-term strategic vision of EVCP in the borough, based on a partnership approach. Council is open to work with the operators to make the project a success, by sharing our knowledge, community insight and funding, where possible by actively applying for the existing and future national Government funding supporting the on-street EVCP infrastructure.
- **Transparency-** The operator should be able to demonstrate the transparent approach with the tariff charge make up, any associated costs of rolling out infrastructure as well as agree on due diligence undertaken by the Council, where necessary. The operator should also be willing to mark the charging stations with the borough- widely recognised Hackney Light and Power brand to encourage take up and accountability of the infrastructure.

8.5 There is a significant risk in relation to securing a single supplier, who will be able to offer a range of services from slow charges to ultra rapid charges to accommodate the demand between residential and commercial charging stations. As part of the procurement process, Council will explore the option to select one main supplier (aggregator) who will be required to work collaboratively with other suppliers (sub-contractors) via separate contracts to secure the various services and charging speed requirements across the borough. This will minimise the risk of procurement failure and reduce the Council exposure to manage multiple contracts with different suppliers.

- 8.6 Council is exploring the possibility of utilizing Hackney owned roof spaces for the installation of solar panels. In November 2020 Council commissioned a techno-economical feasibility study to assess the generation capacity of Council-owned stock and investigate the best delivery model to achieve both: significant energy and carbon savings and strong financial return of investments. The study confirmed there is a significant potential across the Council owned building portfolio for installation of solar panels. The asset has been divided into Tiers 1-4, with a short term goal to implement projects across Tier 1 and 2 in both commercial and residential buildings. The study estimated the potential for approximately 2.5MW and 9.5MW on commercial and residential sites respectively of the solar generation. The business model has recommended that the increased site usage (up to 95%) will shorten the payback period and increase the profitability of the investment. The use of EV charge points is one of the areas we are exploring to utilise the generation.
- 8.7 The Syzygy Renewables report study suggested that in order to increase the site consumption the alternative options should be considered such as linking the installation of solar generation with other technologies, such as EVCP and heat pumps as well as alternative PPA arrangements with local businesses or selling energy back to the Council.
- 8.8 Part of this procurement exercise will be to work with the market on an innovative business model, where Council can sell the energy to the energy operator for the purpose of powering EVCP or if feasible, connect the ECVP directly to the solar panels installation, this will be balanced with the Council ambition for sleeved PPA. This solution will significantly increase the energy usage on site, increase the ROI for solar panels projects and contribute to powering the EVCP with locally generated renewable energy.
- 8.9 The Council aims to achieve greater promotion and run successful social campaigns, increasing population awareness of renewable energy generation. The project will raise the profile of the Council as an innovative organisation, with non-precedential business models, which will meet the key objectives for Net Zero ambition as well as contribute to the delivery of “greener Hackney”, boosting local economy and retaining the profit within the local community.
- 8.10 At the soft market testing stage, all the suppliers greatly supported the idea to work under the Hackney Light and Power brand to ensure equality and transparency across ECVP infrastructure in the borough. Moreover, the majority of the respondents agreed to use locally generated solar energy to power the future EVCP installations.

## **9. ALTERNATIVE OPTIONS (CONSIDERED AND REJECTED)**

### **9.1 Option 1: Do Nothing**

- 9.1.1 Doing nothing will mean not putting any financial investment time and resources into the EV charging scheme and leaving it to operators in the market to take the lead in the deployment of EVCPs across the borough.
- 9.1.2 By doing nothing, the rollout of EVCPs across the borough will not be coordinated and would also lead to varied tariffs, poorly managed infrastructure and could impact on the Council's reputation with regards to how the charging points are utilised and maintained.
- 9.1.3 This option will not allow the Council to deliver on its strategic objectives stated in various strategy and policy documents .

## **9.2 Option 2: Procure a Supplier to deliver borough-wide EVCP infrastructure, fully funded by the Council**

- 9.2.1 In this option we would pay for all of the hardware and installation costs. An EVCP supplier would carry out installation and run the scheme. The estimated upfront costs of this option to the Council is in the region of £8m, based on the cost of installing a simple charger along with the necessary signs and lines and TRO costs.
- 9.2.2 To operate the sites, the market would need a contract length of circa 7-8 years plus two 2-year extensions. Net revenue share would be 100% Council until such time as when the Council capital investment has been recovered, following this the split would be 30% operator: 70% Council.
- 9.2.3 With all of the options there are doubts from the market that our ambition in terms of number of sites will return an operating profit in the first few years as many may be underutilized. There could be running losses at low usage locations, although how these losses are covered would be subject to tendering and negotiations with the eventual operator.
- 9.2.4 The council pays option has the advantage of maximising potential income for the Council. The main disadvantage of this option is that the failure of technology or systems could fall entirely within the Council's responsibility. There is also the need to allocate large sums of money upfront.

## **9.3 Option 3: Procure a Supplier to deliver borough-wide EVCP infrastructure, funded 50/50 by the Council / Private partnership**

- 9.3.1 Council would need to find circa £4m in capital.
- 9.3.2 Installation and hardware costs are split between Council and appointed private partner, normally using some form of funding agency/bank.
- Suppliers would normally expect a contract length in the region of 7-10 years plus two 3-yr extensions. Although this can be agreed based on negotiation.

- Net revenue sharing would be 70% funder: 30% Council until such time as the funders capital investment has been recovered after which the split would be 50% funder :50% Council

9.3.3 This has similar advantages and disadvantages to the other options discussed above; the Council will commit to a contract period that is shorter than a full concession and which therefore involves less risk. However it does have a higher cost than a full concession arrangement.

#### **9.4 Option 4a: Procure a Supplier to deliver borough-wide EVCP infrastructure, fully funded by the Supplier through a concession arrangement**

9.4.1 A supplier would arrange finance for the capital infrastructure and installation.

9.4.2 The concession contract options would be very long - ranging from ten year to fifteen year contract plus five year extension(s). Net revenue share would be 100% funder: 0% Council until such time as the funders' capital investment has been recovered after which the split could be 70% funder, 30% Council.

9.4.3 The specific share of revenue relating to the contract can be more firmly negotiated when firm proposals are received from the market. A ten year contract might apply only where the supplier gets to choose high volume sites such as near taxi ranks. A fifteen year contract (or even longer) would be expected over a range of sites.

9.4.4 The length of concessions contract suggested by the market is an indication of the low expectation of profit from the scheme. Two major risks associated with this option are that technologies might change and that companies might not be in operation for the whole term. A further risk, though one that can be mitigated by the contract terms and conditions, is that bays will be reserved for one specific use for a long period of time. This may hinder future attempts to reallocate space to other beneficial uses such as cycle parking or bus priority. Advantages include that there is no initial cost to the Council.

9.4.5 Trade off is essentially free rent on parking spaces for fifteen years. This could represent an opportunity to cost the council of up to £10m in parking revenue. Some providers claim that their equipment is easily moved if an alternative use was needed for a parking space such as a bus lane, or if it was clear that paid parking would raise more income for the Council. In a case like this it would be necessary to be very clear in the contract how much this change would cost.

#### **9.5 Option 4b: 'Market Stall' Option**

9.5.1 From the soft market testing exercise undertaken by officers, many suppliers made assumptions that even under a 100% externally funded scenario, there would be some costs borne by the Council to prepare parking bays, and this

gives rise to a further option. Under this option, which is essentially a form of concession arrangement, the Council's 'contribution' is to prepare the bays, at a staged cost ranging from £3k up to £2.5m as demand increases, but then rents the space to potential suppliers. The suppliers then assume all risk relating to capital investment of charging infrastructure, ongoing maintenance and operations. The operators take 100% of the revenue and pay a flat fee to the council.

9.5.2 The sites in order of identified potentials could be prepared for use by EV charging companies. They would have TROs, planning permission and a set of drawings of signs and lines ready to be introduced when needed. This could be done using the Council's internal funding. Income would be correspondingly lower but the risk would be reduced to a manageable amount. Charges could be set so as to incentivise, but not unduly reward, commercial providers. Income estimates can be based on residential and paid parking income but could average £1K per space based on current parking fees.

9.5.3 This has the advantage of focussing on areas in which Council has knowledge and expertise such as defining parking spaces and liaising with the public. Until there is demand for space rental it can be used by the Council to generate revenue in other ways such as residents or paid parking. If only half the expected spaces are required the savings on site preparation could be £4M. Though it is, of course, more likely to be a flexible sliding scale arrangement. The disadvantage of this option is that there may be a lost opportunity to provide more spaces than might otherwise happen and also there may be a reduced potential for income.

9.5.4 In this scenario, we shall consider the contract, where no dedicated bays are needed in particular, where there is on street parking available. This model will allow the stations to be rolled out in phases, based on the high and low intake areas. The convenience of having access to the charging stations, will convert into more than initially anticipated 2 charge points per street, up to between 6-10 which will ultimately resolve the issue, in some areas, for taking the bays away from the streets.

**10. Success Criteria/Key Drivers/Indicators:**

Project goal/objective	How this is addressed by the project
Support transition from fossil fuels to electric vehicles	Providing sufficient, convenient and easy to access charging infrastructure across the borough
Contribute to the Hackney Transport Strategy (HTS)	Contributes to overall HTS vision to make "Hackney's transport system will be an exemplar for sustainable urban

	<p>living in London” and is consistent with overall objectives to reduce traffic and reduce vehicle ownership in the borough.</p> <p>This proposal contributes to the basic hygiene factors that a residential parking solution requires at scale to meet the HTS vision.</p>
Contribute into the overall Air Quality Action Plan for the borough	The increase in update of electric vehicles will contribute to reduction of carbon emissions and pollution, overall improving air quality in the borough
Contribute to wider Council decarbonisation target	The installation of EVCP contributes to a wider Council decarbonisation agenda and zero-net carbon target by 2040.
Utilizing energy generated from solar panels to power the charging stations	Increase maximum use of energy generated by solar panels locally to minimise costs for energy distribution and support financial model for solar panels installation on Council asset

## 11. Whole Life Costing/Budgets:

- 11.1 Apart from other benefits described under the option for a concession contract, this option will also ensure that the Council is not directly exposed to a visible financial risk in the operation of this scheme.
- 11.2 The Council will make a commitment to bring in external grant funding, where it is feasible, to contribute to the contract, which can have a positive impact on the delivery of wider community benefits or reducing the tariffs. Note however that the recent OLEZ grant is for a maximum of £0.1M compared to an estimate of £8M needed for a complete roll out.
- 11.3 Even though project management is included within the concession there will inevitably be the need for some internal staff resources from Streetscene, Parking, Planning, Legal and Finance departments. Overall project management will be provided by the Hackney Light and Power team and reported regularly to the Hackney Light and Power Delivery Board.
- 11.4 Opportunity costs will be incurred if during the 20 years concession period the spaces used could instead have been used for generating parking or other income in excess of the EV receipts. Parking permits and Pay & Display generated almost £20M. This income is important for the Council as it helps support fully inclusive transport modes such as walking and bus use. The Centre for London has estimated that the Land Value of one single parking space in Hackney is £41,299.



11.5 Part of the negotiations process within the two stage procurement, with the suppliers will provide more details of financial risks and costs associated with the infrastructure rollout and will facilitate the future decision making process in relation to the rollout.

## **12. Policy Context:**

12.1 In 2019, the Council made a Climate Emergency declaration, with an ambition to become a net zero carbon borough by 2040. Transport represents almost 40% of emissions in the borough. On the back of the declaration, the Council has developed a ZeroNet Energy Strategy which highlights the key areas the Council has to focus on to reduce carbon emissions.

12.2 The ZeroNet Energy Strategy focuses on the area within Council control, such as electrification of the fleet and encouraging active travel for the Council staff. However, the Council is also working on scoping the borough-wide emissions strategy, which focuses on areas which Council can directly and indirectly influence to reduce emissions. Parking policy and access to EVCP are key elements the Council can implement and provide to increase the level of electric vehicles in the borough.

12.3 It is the case that some policies could be negatively impacted. The use of kerbspace for other users such as cycling, bus priority or for improving the urban realm could be affected. The Local Implementation Plan's Objective number O1 is to: "reallocate carriageway road space from private motor vehicles to cycle route provision or cycle parking, walking or bus infrastructure. O9 states: residents will not need to own a private car because of the ease of using sustainable modes of transport (LN). O19: Reduce the dominance of cars by reducing car parking to support more sustainable modes of transport. Target 13 is to Reduce the levels of car ownership in Hackney to 39,700 by 2021 and to 32,300 by 2041.

## **13. Consultation/Stakeholders:**

13.1 This Business Case has been developed on the basis of the commitments within the Mayor's Manifesto of 2018 and the policy direction given by the Mayor at the Council Annual General Meeting in May 2018.

13.2 The Council commissioned consultants Steer to conduct an initial feasibility study for accelerated electric vehicle infrastructure rollout in the borough. The purpose of the study was to explore the feasibility of implementing a dense network of Electric Vehicle Charging Points (EVCPs) for Hackney residents. The Steer report considered the feasibility of the Council's ambition to provide two lamppost chargers per street across the borough and the potential for electric vehicle charging points to be rolled out in a greater quantity and density than any existing UK local authority. The route to facilitate this being a user based quality driven approach. Steer did not consult with cyclists, pedestrians or bus users.

- 13.3 A recommendation of the Steer report was to conduct soft market testing to examine suppliers' appetite to meet the ambitious targets and to help the Council identify some of the risk and commercial opportunities associated with the rollout.
- 13.4 In November 2020 Hackney Council concluded soft market testing, which received eighteen responses from various suppliers across the UK and overall confirmed that the level of ambition for EVCP in the borough will meet the market appetite to work with the borough on the long term contract. The outcome of the soft market testing report has been presented to the Hackney Light and Power Delivery Board In November 2020.
- 13.5 The Steer report found that CP Network Operators are increasingly reaching agreements that mean that drivers of electric vehicles in the UK will in future need only a single subscription to one of the charging network operators to access the combined network, removing barriers to access and making it easier for consumers to charge their vehicles.
- 13.6 The Steer team had discussions with both the Street Lighting and Estates management team within the borough, the limitations of the existing pre 1970s wiring was highlighted as a concern
- 13.7 The Steer team had discussions with UKPN. This found that while the High Voltage (HV) network is monitored by UKPN and usage is known, the majority of the 120,000 Low Voltage Substations within London do not have the same capability which means UKPN does not have the ability to take a live view of the usage. At present UKPNs process is to react to any issues on the LV network that may be reported by users or residents within the boroughs.
- 13.8 Hackney has received two tranches of OLEV funding via the GULCS scheme. We have discussed our aspirations for the future of EV charging in the borough with them and will look to access additional grants if they become available.
- 13.9 Consultation with stakeholders with an interest in kerbspace, such as cyclists and bus operators would need to happen before the introduction of EV points.

**14. Risk Assessment/Management:**

	<b>Likelihood</b>	<b>Impact</b>	<b>Overall</b>	
<b>Risk</b>				<b>Action to avoid or mitigate risk</b>

	<b>L – Low; M – Medium; H - High</b>			
Technology might change and make chargers redundant	H	M	M	Flexibility written into contract
EV sites will be vandalised	M	L	L	The operator must put measures in place to discourage vandalism
EV sites will be under-utilised	H	M	M	The contract should offer a flexibility of kit relocation or retain profit to fund the underutilized stations
EV equipment will interfere with street lights	H	M	M	Tender process to ensure the technology selected will not interfere with the street scene
EV users will increase mileage and hence oil and tyre pollution	M	L	L	To monitor the usage of electric vehicles in the borough by sufficient data collection to consider offsetting emissions.
There is a reputational risk to Hackney Council and Hackney Light and Power in the event things go wrong.	H	H	H	Work with stakeholders, both internal and external, in order to make sure the process runs smoothly. Stakeholder and communications management will need to be controlled carefully
Supplier might go out of business	M	H	M	Supplier will be requested to submit and update regularly a business continuity plan and an exit strategy for the Contract Manager's approval

Points are not well maintained post-installation	L	L	L	Cover in contract
Progress in delivering EVCPs may be slower than anticipated and this may put the targets within the AQAP and Green Energy Strategy at risk	M	M	M	Regular monitoring and performance meetings schedules with the internal and external stakeholders to monitor the project progress. Dedicated Project Manager resources provided by Hackney Light and Power.
Failure in procurement	L	M	M	As the result of the procurement process, it could become apparent that the Council plans on rolling out primarily on-street residential charge points no longer match the market appetite. To mitigate this risk, Council will be working the market to find a partnership approach.

## 15. Market Testing (Lessons Learnt/Benchmarking):

- 15.1 In August 2020, the Streetscene team undertook a soft market testing to identify whether there is a market to meet Council ambition on EVCP rollout for the borough. Overall, the Council received eighteen responses from the market, who overwhelmingly expressed an interest in working with the Council in the long term.
- 15.2 The report from soft market testing has been written and presented at the November 2020, Hackney Light and Power delivery Board meeting.

## 16. Savings

- 16.1 The project will contribute to overall improvement of Air Quality and carbon savings for the borough. There is a potential for the profit share between the supplier and the Council from each charge point.
- 16.2 In relation to the Council owned Fleet there will be potential savings on maintenance and repairs for the existing, out of service infrastructure and in future the EVCP will incentivise electrification for the whole Council fleet.

- 16.3 The indirect savings will be received by the residents who decide to swap their fossil fuel cars to electric, and to take advantage of the competitive tariff for charging, no emission charges (ULEZ) for driving in London and free or reduced charge parking fee.

## **17. SUSTAINABILITY ISSUES**

### **17.1 Procuring Green**

The installation of EVCP will meet the green indicators from Hackney Sustainable Procurement Strategy by significantly reducing the reliance on fossil fuel vehicles and carbon emissions. The charging stations will be powered by 100% renewable electricity, in some cases generated locally, which will contribute towards achieving a zero-net carbon target by 2040.

### **17.2 Procuring for a Better Society**

The delivery of the strategy will help enable residents, businesses and visitors to the borough to gradually transition to electric vehicle ownership/use. This should result in improvements to overall air quality in the borough. Through the services provided to the Council we will look to the supplier/s to support the Hackney community through a variety of routes. The supplier/s will be tasked with engaging with the Apprenticeships Team and Ways Into Work service within the Council to support local people into job and training opportunities.

### **17.3 Procuring Fair Delivery**

There are no fair delivery concerns in procuring these services. The procurement will fulfill the Council obligation as a public sector organisation, by reducing carbon emissions and lowering the costs of owning the vehicle by profiting competitive tariffs for the charging units. The contract will require the contractor to employ staff on the London Living Wage (LLW). In order to avoid the Council in unfair use of offshore finance, contractors will be asked to prove that their funding is coming from an equity or green investor.

A number of social value elements will be included as part of the specification. These enhanced social value requirements include: Apprenticeships, school programmes with access to environmental learning, promotion of electric vehicle schemes, skills and training opportunities, careers fair, free training material and self-development to support people with their employment moves or entry and community support.

## **18. Equality Impact Assessment and Equality Issues**

- 18.1 This should include more than just considering whether chargers are uniformly spread. There is a grave risk of inadvertent subsidy to the owners of expensive cars. Equality considerations covered in more detail in the Hackney EV Strategy.
- 18.2 On-street charging addresses an inequality in terms of access. Currently, residents with access to off-street private parking are able to install their own charge points and costs of this can be as low as 5p/kWh
- 18.3 Vehicle ownership correlates to income. A 2013 analysis found that Tesla buyers had an average household income of £210K. Until prices fall it will be much harder for those on lower incomes who rely on second-hand cars to replace petrol/diesel cars and work vans.
- 18.4 The Hackney Transport Strategy Objective 3 is Ensure that the needs of older people and those with visual and mobility impairments are considered in all plans and proposals to upgrade the Public Realm.

## 19. PROPOSED PROCUREMENT ARRANGEMENTS

**Procurement Route and EU Implications:** Due to the nature of the services and goods being procured the Council wishes to engage with the market to ensure that the supplier we partner with can provide all the requirements of the project.

A fully compliant tender process will be undertaken which will follow the Council CSO's and the Procurement Contract Regulations 2015. The preferred choice will be a process such as competitive dialogue or competitive procedure with negotiation that allows engagement and dialogue with the bidders, this will enable us to meet openly with the shortlisted bidders and discuss the various options to ensure a fit for purpose outcome for the Council in the long term.

### Resources, Project Management and Key Milestones:

<b>Key Milestones</b>	
BC Report to CPC	7th June 2021
[OJEU] Advert placed	1st July 2021
Closing date for EoI	30th July 2021
SQ evaluation	13rd - 13th 2021
Issue Tender	16th August 2021
Dialogue with shortlisted bidders	1st - 10th September 2021
Final ITT Tender returns	30th September 2021

Tender Evaluation	4th - 15th October 2021
CA Report to CPC	December 2021
Standstill Period	December 2021 - January 2022
Mobilisation period	January - March 2022
Start on site / Contract start	April 2022

**Contract Documents: Anticipated contract type**

There is a preference for concession type of contract, established during the two stage negotiation process with the Partner supplier.

**Contract Management:** Day to day project management will be undertaken by the Head of Operations Hackney Light and Power and Group Manager Sustainable Transport and Engagement, who will work with the Partner to coordinate the work. There will be a need to extensively work with other relevant officers from the Street Scene team, Parking Policy team and licensing team.

The project will be overseen by Hackney Light and Power Delivery Board and the regular reports will be submitted to the Environmental and Sustainability Board.

**Key Performance Indicators:** The final set of KPIs will be established during the procurement process, however overall the team is aim, within the contract duration to have a visibility of:

KPI Target	Monitoring
Number of points installed (kWh per site)	Quarterly report
Hours of interrupted operation	Monthly report
Performance reports	Monthly report
Service level- time to respond	Monthly report
Demand/Supply report	Annual report
Number of complains/reponses	Monthly report

**20. COMMENTS OF THE GROUP DIRECTOR FINANCE AND CORPORATE**

- 20.1 This report asks CPC to agree the procurement strategy for the selection of the partner supplier/suppliers to support the Council in delivering on-street and residential electric vehicle infrastructure for the borough. As outlined above, the Council announced a Climate Emergency in 2019 and has the target of becoming a zero-net carbon borough by 2040. Our approach to electric vehicle charging forms a major strand of achieving this target.
- 20.2 Approving the content of this report will enable officers to commence exploring how we develop this approach. We are at the embryonic stages of this work, and hence it is not currently possible to give any definitive financial analysis. As outlined above there are a number of considerations to work through from the financial perspective, e.g the impact of switching parking bays to charging bays, and finance officers are part of a cross-cutting working group.
- 20.3 A guiding principle within this project will be to keep Hackney whole financially, but the commercials will be explored via the working group and options set out in due course for review and consideration.

## **21. VAT Implications on Land & Property Transactions**

Tax implications around the delivery model will be considered through the due diligence process taking place in the coming months.

## **22. COMMENTS OF THE DIRECTOR OF LEGAL & GOVERNANCE SERVICES**

- 22.1 This Report has been classified as High Risk and therefore pursuant to Contract Standing Order 2.7.10 the approval to progress to market a Business Case will be with Cabinet Procurement Committee.
- 22.2 The proposal in this Report is to procure the appointment of a long term partner (or partners) to support the Council in delivering on-street and residential electric vehicle infrastructure for the Borough. This is likely to involve various elements of services and works. It is difficult at the moment to predict the exact scope and value of the services and works to be procured under this process. However, the appointment of a partner is likely to involve elements of concession contracts and profit share between the Council and the partner. Therefore it will be necessary to follow a procurement process which meets both the requirements of the Council and is compliant with the relevant legislation, either the Public Contracts Regulations 2015 or the Concession Contracts Regulations 2016. Legal Services will assist officers in the design and application of a suitable procedure to meet the Council's requirements.

## **23. COMMENTS OF THE PROCUREMENT CATEGORY LEAD**

This business case sets out the approach to undertake a procurement exercise to deliver on-stre



et residential electric vehicle infrastructure for the borough. The approach is fully compliant with the Council CSO's and Public Contract Regulations. The procurement procedure to be utilised will enable open and transparent discussions with bidders, this is to ensure that the right decision for the Council is taken to ensure a long term working relationship is developed with the chosen supplier.

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