

Subject:		Electric Vehicle Charge Point Roll Out	
Date of Meeting:		8 October 2019	
Report of:		Executive Director, Economy, Environment & Culture	
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Ward(s) affected:		(All Wards);	

FOR GENERAL RELEASE**1. PURPOSE OF REPORT AND POLICY CONTEXT**

- 1.1 This report updates Committee on progress with expanding the electric vehicle charge point infrastructure to meet the needs of residents and visitors. This report outlines recent successful awards from the Office for Low Emissions Vehicles (OLEV) and Innovate UK as well as the progress of the projects arising from that funding.

2. RECOMMENDATIONS:

- 2.1 Notes the award of the concession contract for the provision, installation and maintenance of electric vehicle charge points.
- 2.2 Notes the contents of the report and the risks identified during the procurement process which are set out in this report at paragraph 7.7
- 2.3 Notes the successful bid submitted in November 2018 to OLEV for £468,000 for rapid taxi charging hubs and delegates authority to the Executive Director Economy, Environment & Culture to use this funding to require the successful bidder to install these charge points.
- 2.4 Notes the outcome of the taxi trade survey on potential sites for the rapid charging hubs and agrees to their installation at the 4 identified sites.
- 2.5 Delegates authority to the Executive Director Economy, Environment & Culture to change the proposed location of chargepoints should site surveys indicate that they are unsuitable, following consultation with the Chair and the relevant ward councillors.
- 2.6 Notes the award of £86,265 research funding from Innovate UK for a trial of the use of smart network extenders to expand the charge point infrastructure and delegates authority to the Director Economy, Environment & Culture to use this funding to procure and install chargepoints in line with the Innovate UK award conditions.

3. CONTEXT/ BACKGROUND INFORMATION

Lamp post chargers

- 3.1 On 26 June 2018 Environment, Transport & Sustainability Committee noted the April 2018 award of £300,000 (75% funding) from the Office of Low Emission Vehicles (OLEV) to the council for at least 200 new lamp post charging points and delegated authority to the Executive Director Economy, Environment & Culture to undertake the procurement of a concession contract.
- 3.2 Five tender responses were received and assessed based on a price weighting of 60% with 40% allocated for quality criteria. Two bidders were disqualified as they failed to meet a number of pass / fail tests. The remaining three bidders were assessed based on the price and quality criteria.
- 3.3 Electric Blue has been appointed (subject to contract) to operate the concession contract. It has previous experience of installing integrated charge points in Cardiff, Coventry and Cambridge. Drivers will pay 28p per kilowatt hour (kw/h) to charge at public charge points. They will be able to view which nearby chargepoints are available via an app.
- 3.4 The terms of the contract require the successful bidder to invest at least £100,000 (i.e. the remaining 25% funding requirement) and to supply, operate and maintain the charging point infrastructure in return for the fees received from vehicle owners for charging. The council will receive a small percentage of those fees starting at 1p per kw/h in year 1 increasing to 4p per kw/h in year 4.
- 3.5 The winning bidder offered to provide 207 chargers, of these 33 will be advertised as mandatory electric vehicle bays to ensure they can be accessed in areas of high parking demand. Details of these locations can be found in Appendix A. They have been selected in response to requests from residents who want to buy an electric vehicle but have no off street parking or already have an electric vehicle. Any objections to these mandatory bays advertised through a Traffic Regulation Order will be brought back to Environment Transport & Sustainability Committee for consideration.
- 3.6 Lamp post chargers are classed as 'slow chargers' and will provide residents with a full charge when the electric vehicle is parked overnight. The 207 chargers should be installed by January 2020 and further bids for OLEV investment will be made in future funding rounds.

Fast chargers

- 3.7 As part of the concession contract the existing network of 'fast chargers' which provide a full charge in around 5 hours, will be integrated with the app. This can be used to see which charge points in the city are available for use. This work should also be completed by January 2020
- 3.8 Additional fast chargers can be purchased through the concession contract for areas outside the city centre without fast chargers and in response to demand from residents.

Rapid taxi charging hubs

- 3.9 In November 2018 the council also submitted a successful bid for £468k of OLEV funding (again 75% of total cost) towards four rapid charger hubs for taxis. Under the concession contract, the council will carry out the civil works necessary and provide the concessionaire with a prepared site. This reflects approximately 75% of the cost of the installation. The concessionaire is required to pay the rest of the installation costs i.e. approximately 25% (£117,000).
- 3.10 Each of the 4 proposed rapid taxi charger hubs will include at least 3 charge points capable of providing taxis with a full charge in less than 30 minutes. The sites were selected for their wide geographical coverage of the city. They are currently being assessed by UK Power Networks to ensure there is sufficient grid capacity at the proposed locations.
- 3.11 Authority was given to start the procurement for electric vehicle charging points at the ETS Committee in June 2018. It also gave authority to submit further bids to OLEV. At the point at which the invitation to tender was issued it was not known whether the bid for funding for taxi chargers would be successful and the contract was therefore drafted so that taxi chargers could be required under the concession contract if the bid was successful. As the bid was successful, a delegation is now sought to require the installation of taxi chargers in accordance with the terms of the concession contract.

Research funding

- 3.12 A successful bid has been submitted to Innovate UK by a consortium of partners including Stoke-on-Trent City Council and Southend Borough Council for the real world testing of smart network extenders which could double the number of vehicles able to charge at a charge point from 2 to 4. This is an 18 month research project. A photo of the prototype is shown in appendix D. This project could be helpful in enabling the city to increase the number of charge points flexibly to meet additional demand in response for example to large events.

4. ANALYSIS & CONSIDERATION OF ANY ALTERNATIVE OPTIONS

- 4.1 The council does not have the technical expertise in this fast developing sector to create the required apps or carry out charge point maintenance itself.
- 4.2 Framework agreements were investigated but they were very limited with only a 2-3 year term which would not have generated the level of commercial interest for this scale of investment. As such a tender was issued to seek a provider to operate a concession contract for a 5 year term with an option to extend for a further 2 years.

5. COMMUNITY ENGAGEMENT & CONSULTATION

- 5.1 Council officers have given presentations about the development of the charging infrastructure to the taxi forum and resident groups. Our website encourages the public to write in should they wish a lamp column charger near their property to the email address electric.vehicles@brighton-hove.gov.uk

- 5.2 Officers have also engaged with the community run website Electric Brighton (www.electricbrighton.com). The Electric Brighton website provides information on our electric vehicle proposals and how to get in touch with the council for any electric vehicle infrastructure requests and acts as a one stop shop for information about electric vehicles locally.
- 5.3 Officers have been in discussions with the taxi trade for the past year about removing barriers to the uptake of electric taxis and have consulting with them about suitable sites for these rapid charging hubs. The outcome of the consultation can be found in appendix C. Engagement was via an online survey, and the taxi licencing team sent out emails to the trade inviting them to take part.

6. CONCLUSION

- 6.1 The 'Road to Zero' strategy paper sets out the government's ambition for half of new cars sold to be ultra-low emission by 2030. The number of electric vehicle models manufactured is also set to expand dramatically over the next few years. The lack of local overnight on-street charging facilities is a significant barrier to purchasing an electric vehicle for many residents, particularly for those without off street parking. This report aims to address this issue by providing convenient chargepoints for overnight and fast charging throughout the city to meet the expected demand.

7. FINANCIAL & OTHER IMPLICATIONS:

Financial Implications:

- 7.1 To date the investment committed to in order to deliver electric vehicle charge point facilities is fully externally funded. The projects are expected to be externally (grant) funded or contained within existing resources (for example, officer time). As new initiatives are further developed, resourcing implications, if these emerge, will be brought back for decision by members as appropriate.

Finance Officer Consulted: Jessica Laing

Date: 11/09/2019

Legal Implications:

- 7.2 The procurement was carried out in compliance with the council's obligations under its contract standing orders and procurement legislation and the award of the contract does not amount to state aid.

Lawyer Consulted: Alice Rowland

Date: 11/09/2019

Equalities Implications:

- 7.3 An Equalities Impact Assessment has been carried out on the roll out of further charge points in the city. There are significant benefits to all groups from improved air quality and reduced noise pollution from much quieter electric motors.

Sustainability and Public Health Implications:

- 7.4 A report by the Ricardo consultancy estimated that production of an average petrol car will involve emissions amounting to the equivalent of 5.6 tonnes of CO₂, while for an average electric car the figure is 8.8 tonnes. Of that, nearly half is incurred in producing the battery. Despite this, the same report estimated that a typical medium sized family car will create around 24 tonnes of CO₂ during its life cycle, while an electric vehicle will produce around 18 tonnes over its life.
- 7.5 Petrol and diesel engines produce harmful NOx emissions which contribute to 36,000 premature deaths in the UK, as well as having a negative effect on biodiversity. The move away from the combustion engine to electric vehicles will help improve air quality in the city and reduce the negative effects of exhaust emissions on public health.
- 7.6 All of the public charge points referred to in this report will be powered by renewable energy. The successful bidder has appointed a company called 'Good Energy' to supply 100% renewable energy.

Risk and Opportunity Management Implications:

- 7.7 The industry for installing, operating and maintaining electric vehicle charge points is a new, fledgling industry that, while a fast-growing market, inevitably contains operators with more limited experience and service history than more established markets. This, of itself, presents potentially higher delivery risks than the procurement of services within more established markets. The Procurement Advisory Board considered these risks which became clearer during the procurement at their meeting in September.

SUPPORTING DOCUMENTATION

Appendices:

- 1. Electric vehicle charge point requests from public and map of proposed mandatory bays for lamp column chargers
- 2. Taxi rapid charge point proposed Locations
- 3. Taxi charging location survey report
- 4. Charge point smart network extender information

Background Documents

- 1. Report to Environment Transport and Sustainability Committee on the successful bid to OLEV on street charging points June 2018
- 2. 'Road to Zero' Department for Transport publication
- 3. Brighton and Hove Joint Strategic Needs Assessment (Air Quality Chapter)

