

<b>Committees:</b> Corporate Projects Board - for decision Projects Sub - for decision Corporate Asset Sub Committee – for decision		<b>Dates:</b> 28 February 2019 22 March 2019 4 April 2019
<b>Subject:</b> EV charge points for transition to a zero-emission fleet  <b>Unique Project Identifier:</b> <i>Confirmed after CPB paper review.</i>	<b>Gateway 2:</b> <b>Project Proposal</b> Light	
<b>Report of:</b> Chamberlain <b>Report Author:</b> Natalie Evans, Responsible Procurement Manager		<b>For Decision</b>
<h1>PUBLIC</h1>		

## Recommendations

<b>1. Next steps and Requested decisions</b>	<b>Approval track:</b> 3. Light <b>Next Gateway:</b> Gateway 4a - Inclusion in Capital Programme (Light) <b>Next Steps:</b> More detailed survey work at each site to confirm viability <b>Requested Decisions:</b> Projects Sub and Corporate Asset Sub Committees to: <ol style="list-style-type: none"> <li>1. Approve progression to Gateway 4a</li> <li>2. Approve £5000 budget to get to the next gateway (internal staff costs)</li> <li>3. Note the total estimated cost of the project £157,500</li> </ol> Corporate Asset Sub Committee to support the installation of electric vehicle (EV) charging points at key corporate facilities to support and enable departments to implement the new zero emission fleet targets.											
<b>2. Resource requirements to reach next Gateway</b>	<table border="1"> <thead> <tr> <th style="text-align: left;">Item</th> <th style="text-align: left;">Reason</th> <th style="text-align: left;">Funds/ Source of Funding</th> <th style="text-align: left;">Cost (£)</th> </tr> </thead> <tbody> <tr> <td style="height: 40px;"> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	Item	Reason	Funds/ Source of Funding	Cost (£)							
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	Additional surveys and project design	Establish viability of recommended charge points	City Surveyor's BAU activities	£5000
	<b>Total</b>	11 charge points	15 man days	£5000
<b>3. Governance arrangements</b>	<p>This is a cross departmental initiative being coordinated by City Procurement up until Gateway 4a due to the fact that there is no natural owner and due to the Commercial Director being recently assigned Chairmanship of the Transport Coordination Group (TCG). Project lead during this time will be Natalie Evans (CHB), Senior Responsible Officer will be Chris Bell.</p> <p>From Gateway 4a onwards City Surveyor's will lead the project operationally with support from City Procurement on any necessary aspects. Project leads will be therefore jointly Harry Lakin (CSD) and Natalie Evans (CHB), with Senior Responsible Officers jointly Chris Bell (CHB) and Chris Hartwell (CSD).</p>			

### Project Summary

<b>4. Context</b>	<ol style="list-style-type: none"> <li>1. Around half of emissions of oxides of nitrogen (NOx), which contribute to illegal levels of nitrogen dioxide (NO2), and particulate matter (PM) come from transport. These pollutants are collectively estimated to cause around 9,400 equivalent deaths every year in Greater London and impose an economic cost between £1.4bn - £3.7bn a year.</li> <li>2. The City of London Corporation (City Corporation) is required by statute to measure air pollution and develop and implement an improvement plan if health-based air quality limits are not met. Despite the implementation of a wide range of action by the City Corporation to improve air quality, the health-based limits for nitrogen dioxide are still not met everywhere in the Square Mile.</li> <li>3. In response to this issue and to the requirements of ULEZ, the City Corporation has recently enacted a policy on a transition towards a zero-emission fleet, which will see 34 corporation vehicles and 44 Police vehicles removed, replaced or retrofitted. A maximum of 14 vehicles will be new/retrofitted electric models during this first replacement phase, hence the need for additional electric vehicle charging infrastructure.</li> </ol>
<b>5. Brief description of project</b>	<ol style="list-style-type: none"> <li>4. This project will involve the installation of 11 electric vehicle (EV) charge points at four locations. This infrastructure is</li> </ol>

	<p>needed to facilitate the transition of the City Corporation’s fleet to zero emission vehicles, as set out in the policy paper approved by Policy &amp; Resources Committee on 21/02/19.</p> <p>5. This EV infrastructure will be used to charge the anticipated 14 electric vehicle models that will be sourced across six departments in the coming months.</p> <p>6. Significant efforts have been made to consolidate the locations of the charge points to minimise costs, whilst working within the parameters of operational efficiency and also to ensure that existing charge points are used to the fullest extent possible. This still leaves departments with the need for an additional 11 charge points at four locations; the Barbican Centre (1), City Garden’s Depot (1), Guildhall Complex - Member’s Car Park (8) and the Cemetery &amp; Crematorium (1).</p>
<p><b>6. Consequences if project not approved</b></p>	<p>7. The Corporation’s ambitious ‘Transition to a Zero emission Fleet’ policy will attract media attention.</p> <p>8. These charge points are essential to facilitate the implementation of the above policy. It will therefore be a significant reputational risk if they are not installed as the policy implementation will be frustrated and specific actions under the Responsible Business Strategy and the new Air Quality Strategy (going to Port Health &amp; Environmental Services Committee 05/03/19) will be not be achieved.</p> <p>9. The City’s poor air quality, which is a red risk on the Corporate Risk Register. If we fail to facilitate the new policy on transitioning to a zero emission fleet, the City may be perceived as not playing its part to minimise its own NOx and PM emissions and will lose credibility when trying to encourage Square Mile Businesses to do so</p>
<p><b>7. SMART Project Objectives</b></p>	<p>To facilitate meeting the policy objective of transitioning the City Corporation’s fleet to zero emission by designing and installing 11 additional electric vehicle charge points at four key locations to facilitate the operations of 14 new electric vehicles intended for purchase or lease by City Garden’s, Barbican Library, DCCS Housing, GSMD, Mansion House, Central Criminal Court, Town Clerks (VIPs).</p> <p>City Surveyor’s Electrical engineers are undertaking much of the design work internally and are using £16k already assigned from the transformation fund to commission necessary preliminary surveys by end of March 2019. The final completion date in terms of installed, functioning charge points is estimated by September 2019.</p>
<p><b>8. Key Benefits</b></p>	<p>1. 11 functioning charge points used to successfully charge 14 additional electric vehicles will facilitate the</p>

	<p>implementation of the Transition to Zero Emission Fleet Policy and the City's compliance with the Mayor of London's Ultra Low Emission Zone (ULEZ).</p> <ol style="list-style-type: none"> <li>2. The Sustainability benefits of this project are positive in terms of helping to facilitate reductions in local air pollutants (NOx and PM) effecting respiratory ailments and CO<sub>2</sub> emissions contributing to climate change.</li> <li>3. Reputational benefits are significant; the City Corporation needs to be seen to be leading the way in terms of 'greening' our fleet in order to be in a position to encourage Square Mile Businesses and supply chain partners to do the same.</li> </ol>
<b>9. Project category</b>	7a. Asset enhancement/improvement (capital)
<b>10. Project priority</b>	B. Advisable
<b>11. Notable exclusions</b>	<ol style="list-style-type: none"> <li>1. Infrastructure for Police vehicles is not included in this project – this is being included as part of Police Accommodation</li> <li>2. Infrastructure for vehicle replacement outside of the Square Mile, with the exception of Cemetery &amp; Crematorium, is not dealt with as part of this project as these sites fall outside the remit of ULEZ 2019</li> </ol>

### Options Appraisal

<b>12. Overview of options</b>	<p>An options appraisal per se will not take place for this project.</p> <p>The 'Transition to a zero-emission fleet' Policy presented various options when it went to Summit Group in terms of the speed and level of ambition of fleet replacement for clean technologies. This infrastructure is merely to facilitate the option selected by Chief Officers and endorsed by Policy and resources.</p> <p>In terms of assessing various options for EV charging technology, please see box 18 on investment appraisal.</p>
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### Project Planning

<b>13. Delivery Period and Key dates</b>	<p><b>Overall project:</b> 9 months, completion would ideally be as soon as operationally possible due to the fact that ULEZ comes into force on 8<sup>th</sup> April 2019, but completion is more likely to be by September 2019</p> <p><b>Key dates:</b> The order in which the infrastructure will be installed will depend on the delivery dates of the respective vehicles by each department and on to what extent they are inconvenienced operationally by using temporary charge points. More precise dates at each site will therefore be determined in the coming</p>
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	<p>weeks when each department has secured a loan for vehicle purchase (where relevant) and has an estimated delivery date.</p> <p><b>Other works dates to coordinate:</b> none</p>
<b>14. Risk implications</b>	<ol style="list-style-type: none"> <li>1. There is a low risk that initial surveys are incorrect and that more significant power upgrades are needed, this will pose both a time and cost increase.</li> <li>2. There is a low risk that the time will slip due to any further necessary liaisons with UKPN but the project team are satisfied that enough time has been included to account for a realistic turnaround time.</li> <li>3. Both of these risks would imply that departments will have to implement contingency measures for longer i.e. charging their vehicles elsewhere, which would result in operational inefficiencies</li> </ol> <p><b>Overall project risk:</b> Low</p>
<b>15. Stakeholders and consultees</b>	<ol style="list-style-type: none"> <li>1. City Surveyors have already been consulted and are part of project delivery.</li> <li>2. Preliminary consultations have already happened with each department with a fleet requirement and as well as cursory consultations with Committee Services, Guildhall Facilities Services etc.</li> <li>3. Others that will need to be consulted if this project is approved include: <ul style="list-style-type: none"> <li>- Highways (DBE) – internal</li> <li>- UK Power Networks (UKPN) - external</li> <li>- Barbican residents to ask permission for a few vehicles to be charged at their (underutilised?) Car parks until the new ones are installed</li> <li>- Chief Commoner to confirm the additional charge points in the member's car park along with some impact on parking spaces on the first level due to use by Mansion House and potentially Town Clerk's fleet.</li> </ul> </li> <li>4. An Equality Impact Assessment will not be undertaken for the project; the charge points are not intended to be made available to the public, only to those operating the Corporate fleet and Members in the Guildhall members car park. It should be noted however that it has been recognised that poor air quality has a disproportionate impact on more vulnerable members of society, especially those with existing respiratory ailments. This project will help facilitate the Corporation's fleet in reducing local air pollutants.</li> </ol>

### Resource Implications

<b>16. Total estimated cost</b>	<b>Likely cost range:</b> £145,000- £170,000
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<b>17. Funding strategy</b>	Choose 1: No funding confirmed	Choose 1: Internal - Funded wholly by City's own resource								
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<b>18. Investment appraisal</b>	<ol style="list-style-type: none"> <li>1. The exact charge points that will be used have not yet been decided on specifically, due to the fact that the exact vehicles to be purchased by the departments have not yet been finalised (the policy and finance papers relating to the scheme are being approved at the time of writing). However, it is foreseen that 10 charge points will be fast (22kW) and one will be a trickle charger (3kW)</li> <li>2. City Surveyors in partnership with City Procurement will ensure options for each charge point in question will be investigated and the best value option in terms of cost and operational output will be selected.</li> </ol>									
<b>19. Procurement strategy/Route to Market</b>	<ol style="list-style-type: none"> <li>1. It is envisaged that this will be a direct award through our existing minor works M&amp;E (mechanical and electrical) provider, namely Sykes &amp; Son, as the predicted cost is below the £250k threshold</li> </ol>									
<b>20. Legal implications</b>	None									
<b>21. Corporate property implications</b>	<ol style="list-style-type: none"> <li>1. The impacts to Corporate property include the use of additional power from the electricity supply. This is being surveyed by City Surveyors prior to installation to ensure that enough is available and that all associated risks are effectively mitigated.</li> <li>2. The charge points will also effectively become an asset and they are being installed on to City Corporation built assets. Each charge point comes with a 5 year warranty meaning the manufacturers will be responsible for any necessary maintenance and repairs. After this point, it is envisaged that the charge points will need to be upgraded</li> </ol>									

	due to rapid changes in technology types of both vehicles and the infrastructure itself. It is therefore foreseen that City Surveyors will not need to take responsibility for the units, at least not for a very long period of time.
<b>22. Traffic implications</b>	1. None of the charging points are being installed on street or on the public highway, however there may be some very minor traffic implications during the installation phase in the service road underneath the Barbican centre, and the use of the Member's car park at the Guildhall may also have some partial restrictions during this short phase.
<b>23. Sustainability and energy implications</b>	<ol style="list-style-type: none"> <li>1. The Sustainability benefits of this project are positive in terms of helping to facilitate reductions in local air pollutants (NOx and PM) effecting respiratory ailments and CO<sub>2</sub> emissions contributing to climate change</li> <li>2. In terms of energy, there will be a marginal increase in electricity use at the four sites. This will be offset by the decrease in fuel use, in terms of environmental impacts, and is of negligible significance bearing in mind the City Corporation buys 100% renewable electricity. In terms of monitoring the electricity used in relation to carbon descent plan targets, data will be collected through a data and communications package that comes with all electric vehicle charge points.</li> </ol>
<b>24. IS implications</b>	None
<b>25. Equality Impact Assessment</b>	An equality impact assessment will not be undertaken
<b>26. Data Protection Impact Assessment</b>	The risk to personal data is less than high or non-applicable and a data protection impact assessment will not be undertaken

## Appendices

<b>Appendix 1</b>	Project Briefing
<b>Appendix 2</b>	
<b>Appendix 3</b>	

## Contact

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