

Leaders' Committee

Electric Vehicle Charging Infrastructure for London

Item no: 8

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Date: 20 March 2018
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Summary: This report describes progress with the roll out of electric vehicle charge points across London and seeks support to increase the rate of provision of rapid charge facilities on borough roads.

Recommendations: Members of the Committee:
a) note and discuss the issues raised in this paper; and
b) agree to increase efforts to identify potential suitable locations on borough roads for more rapid charge points.

Electric Vehicle Charging Infrastructure for London

Introduction

1. Poor air quality in London is contributing to approximately 9,500 premature deaths each year and causes significant health effects to London's population¹. This air pollution is predominantly caused by ground based transport in London and consists of nitrogen dioxide (NO₂) and Particulate Matter (both PM₁₀ and PM_{2.5}).
2. Boroughs and TfL are addressing poor air quality from transport in many ways. For example, boroughs are installing green infrastructure at locations vulnerable to air pollution, introducing variable parking charges based on the vehicle's emission, encouraging their residents to walk, cycle, take public transport or car share as well as installing electric vehicle charge points to accommodate and encourage take up of electric vehicles. Key TfL initiatives include developing an Ultra Low Emission Zone (ULEZ) and a new requirement from 1 January 2018, for all new black cabs to be battery-powered electric models.
3. The Go Ultra Low City Scheme (GULCS), which is a programme led by the Office for Low Emission Vehicles within the Department for Transport, provides funding to local authorities in the UK to encourage people to consider switching to an electric car. London's Go Ultra Low City Scheme (GULCS) bid was awarded £13m in capital funding to drive the uptake of ultra-low emission vehicles in the period 2015/16 - 2019/20. The London GULCS bid was jointly prepared by TfL, GLA and London Councils in October 2015 and has led to the development of proposals for thousands of additional charge points and innovative proposals to encourage take-up of ultra-low emission vehicles across the Capital.
4. London Councils' Transport and Environment Committee (TEC) has been overseeing the implementation of the London Go Ultra Low City Scheme (GULCS) since 2016, as discussed in an update report to Leaders in February 2016.
5. Part of the London GULCS project is the implementation of rapid charge points at key locations across London, which will be essential to support the growth and take-up of electric vehicles, particularly for a new electric London taxi fleet. TfL has a target of 150 by the end of 2018 and 300 by 2020. At the point of writing, 85 have been installed using public funding on London's roads.
6. In April 2017, the Mayor and Cllr Julian Bell (as chair of TEC and the London GULCS steering group) wrote a joint letter to all borough Leaders explaining the importance of the

¹ https://www.london.gov.uk/sites/default/files/HIAinLondon_KingsReport_14072015_final_0.pdf

rapid charge point element of the GULCS programme and encouraging boroughs to help identify sites for implementation.

7. The Mayor has recently raised concerns about the slow rate of identification of sites on borough roads for rapid charge points and is proposing to seek new legislative powers to bypass boroughs in the implementation process.

Automated and Electric Vehicles Bill

8. The Automated and Electric Vehicles Bill is currently going through Parliament, having reached the House of Lords at the point of writing this report. Part 1 of the Bill deals with the liability of insurers with regards to automated vehicles and Part 2 deals with charging points (access, connection, provision of public charge points at large fuel retailers, information requirements for users, data transmission relating to charge points and smart charge points).
9. The GLA is pursuing a number of amendments to this bill, seeking more power for TfL over the installation of electric vehicles charging infrastructure and parking bay designations across London, using Permitted Development Rights (PDR) on borough roads as well as TfL's own highway network. The reason for this is that the GLA and TfL feel that progress on borough roads with regards to installing rapid charging infrastructure has been slow and that the planning process is one of the barriers.
10. The proposed amendments would allow TfL to bypass borough consultation and planning processes in the installation of charge points and give them powers to create and re-designate parking bays on borough roads. Such powers are unprecedented and are deemed unacceptable and unnecessary by London Councils – a view clearly established by TEC lead members.
11. A locally-led approach is essential to weigh up the competing multiple demands for limited street space, including space for parking, waiting and loading. It is important to work collaboratively, through the local authority, with the local community and other stakeholders to ensure the best solution for a particular location is found.
12. London Councils is therefore actively lobbying against the GLA's proposed amendments and has recommended to the Mayor that a collaborative approach through the GULCS project and steering group is the better way forward.

Electric Vehicle Market in London

13. Currently, the overall market share of plug-in electric vehicles (hybrid and full electric) in London is 0.47 per cent. Purchasing electric vehicles has increased year on year since 2012, as shown in Table 1 below. Research undertaken on behalf of TfL suggests that this figure could rise to 40,000 plug-in vehicles in London by 2020, which includes the target of 9,000 Zero Emission Capable (ZEC) taxis for London².

Table 1 – Number of Plug-in vehicles in London

	2012	2013	2014	2015	2016	2017
Number of Plug-in vehicles	961	1,252	2,240	4,408	7,247	11,977
Percentage increase		30	79	97	64	65

14. Research from 2014³ suggest that London residents want to be able to charge their current or future electric cars as close to their final destination as possible. This includes destination charge points (located near high streets and shopping centres) as well as residential on street charge points for overnight charging. These tend to be a mixture of fast chargers (7 or 22 kWh) and slow chargers (3 kWh).
15. Research with business and trade organisations, particularly the Taxi and Private Hire Vehicle (PHV) operators, suggests the need for more rapid chargers (50 kWh plus) in strategic locations to enable businesses to access top up facilities during operational hours. These will usually fully charge vehicles in 20 minutes or less.

London Go Ultra Low City Scheme (GULCS)

16. London therefore requires a mix of different charging infrastructure, which is supported through the GULCS project. The GULCS project has four work streams;
- Provide electric vehicle charging infrastructure in residential areas;
 - Infrastructure to support car clubs;
 - Funding to help further develop the planned rapid charging network in London;
 - Funding to help deliver “Neighbourhoods of the Future” that would provide the opportunity to test the effectiveness of innovative local measures.

² <http://content.tfl.gov.uk/electric-vehicle-charging-infrastructure-location-guidance-for-london.pdf>

³ <http://content.tfl.gov.uk/understanding--electric-vehicles-research-findings.pdf>

17. As a partnership of GLA, TfL and London Councils, the GULCS project is supported by a governance framework that includes a borough officer Working Group, officer Programme Board and political Steering Group. Cllr Julian Bell is chairing the Steering Group and both Labour and Conservative vice chairs of TEC are also members, along with senior officers from all three organisations. The GULCS Steering Group is overseeing the strategic direction as well as implementation of the four strands listed above.
18. The GULCS Steering Group has met since its inception for at least three times per year, more often when required, and regular updates have been provided to TEC through individual reports or updates in the TEC Chair's report.

Borough Charge Point Activity

19. Where residents rely on on-street parking, local authorities have focused on the provision of lower cost, slower charging facilities, giving the ability for residents to charge their cars overnight. Boroughs have led the rollout of innovative charging solutions, such as charging points installed within streetlamp columns, to minimise costs and maximise the number of points that can be provided.
20. From January to December 2017, boroughs have installed 556 (based on returns from 25 boroughs) electric vehicle charge points, including slow (266), fast (273) and rapid chargers (17). In the pipeline for the 2018/19 financial year are 2,438 charge points, mainly slow and fast, but also including at least 12 rapid chargers.

Conclusion

21. As this report describes, the London boroughs are committed to ambitious programmes of rolling out electric vehicle charging points in consultation with local residents and businesses. Boroughs want to continue to work positively with the Mayor and TfL to ensure that London achieves improved air quality and a world class electric vehicle infrastructure for the future. The proposed legislative changes by the GLA to allow TfL to bypass boroughs in the charge point implementation process is considered to be an unnecessary distraction from the task at hand.
22. London Councils GULCS project officers are currently collecting borough intelligence on how collaboration with TfL and GLA can be improved to help the delivery of the varied charging infrastructure that is required in London. This will help inform a discussion on the faster roll out of rapid charge points at the next GULCS Steering Group to ascertain what

further actions are required by all partners to meet the challenging targets London would like to achieve collectively.

Recommendations:

Members of the Committee:

- a) note and discuss the issues raised in this paper; and
- b) agree to increase efforts to identify potential suitable locations on borough roads for more rapid charge points.

Financial implications for London Councils

None

Legal implications for London Councils

None

Equalities implications for London Councils

None