

TRANSPORT FOR LONDON

SURFACE TRANSPORT PANEL

SUBJECT: ELECTRIC VEHICLE DELIVERY PROJECT UPDATE

DATE: 30 JUNE 2010

1 PURPOSE

1.1 The purpose of this paper is to update the Panel on the progress being made by TfL on the implementation of the Mayor's Electric Vehicle Delivery Plan in support of the Mayor's Air Quality Strategy.

2 BACKGROUND

2.1 In May 2009, the Mayor's Electric Vehicle Delivery Plan was published. The plan set out the Mayor's desire to have 100,000 Electric Vehicles (EVs) in London as soon as possible and listed activities to deliver this objective under three headings: Infrastructure, Vehicles, and Marketing and Incentives.

2.2 Under the Electric Vehicle Delivery Project (EVDP), it is expected that TfL will:

- (a) manage the procurement and installation of 500 charge points on public authority land, both on and off-street;
- (b) manage the procurement and installation of a further 2,000 charge points for installation on publicly accessible privately owned land;
- (c) create and operate a pan-London scheme that will allow members to access all charge points in (a) and (b) above;
- (d) purchase and utilise 120 Electric Vehicles within the TfL fleet and assist with the procurement of 1,000 within the GLA Group fleet;
- (e) run a range of marketing and other initiatives to stimulate the market for EVs aiming to achieve:
 - (i) 25,000 charging points by 2015 (including (a) and (b) above); and
 - (ii) 100,000 EVs in London as soon as possible.
- (f) lead a London consortium of public and private partners to obtain government funds (via the DfT's Plugged in Places Scheme and European Union, described further below) to assist with the delivery of the above;
- (g) use the EVDP budget to match-fund any DfT or European Union grants received by TfL for Infrastructure or Vehicles; and
- (h) commit £20m from the TfL business plan to the EVDP.

- 2.3 This project should deliver significant environmental benefits by reducing vehicle emissions of carbon dioxide and other pollutants such as PM₁₀ and NO_x. From generation to tailpipe, electric vehicles produce 22 per cent less CO₂ than internal combustion engine vehicles and none of the harmful tailpipe emissions. Based on 100,000 electric vehicles in London in 2020, significant emissions benefits should be achieved. The TfL methodology values these benefits at some £12 million.
- 2.4 A potentially negative impact is £19 million of lost revenue due to continuing exemption of electric vehicles from congestion charge payments. However, the policy will be kept under review. The impact on the business plan is currently estimated as follows:

	2009	2010	2011	2012	2013	2014	2015	2016	2017	Total
Total (£m)	-	0.2	0.3	0.5	1.2	2.4	3.5	5.0	5.9	19.0

3 PROGRESS

Charging Infrastructure

- 3.1 TfL is procuring and letting a £30 million umbrella framework contract for the deployment and maintenance of a standardised inter-operable charging infrastructure throughout Greater London. In March 2010, TfL advertised in the Official Journal of the European Union (OJEU) its intention to contract. Pre-qualified bidders have been short-listed and the Competitive Dialogue process is now about to commence.
- 3.2 Much of the activity on charging infrastructure is delivered through the consortium that came together, under TfL's lead, to seek Plugged in Places funding from the DfT's Office for Low Emission Vehicles (OLEV). The consortium comprises TfL, EDF Energy, Scottish and Southern Energy, London Councils, NCP, Sainsbury's, Tesco, the Society of Motor Manufacturers and Traders, Nissan, Siemens, Hertz, Enterprise Rent-A-Car, Streetcar, Europcar and Zipcar.
- 3.3 Individual partners in the Plugged-in Places consortium will determine the location for charging infrastructure based on the needs of their residents, visitors, employees or customers. As scheme operator, TfL will maintain an overview of the whole charging infrastructure and will work with partners as necessary to provide London-wide coverage.
- 3.4 While some of the pan-London charging infrastructure will be in place from summer 2010, the main rollout of infrastructure will only take place after the execution of the new contract in early 2011.
- 3.5 In parallel, TfL undertook a mini-competition and is in discussion with a preferred service partner who will work with TfL to develop and implement the pan-London scheme back-office to support the charging infrastructure across London, including a contact centre for customer registrations, enquiries and information services.

Vehicles

- 3.6 TfL is procuring and letting a £67 million umbrella framework contract for the provision of up to 1,300 Electric Vehicles, of which 1,000 are expected to be in the GLA fleet by 2015. This framework contract will be able to be used for the procurement of electric vehicles across the GLA Group and more widely by public sector partners across England.
- 3.7 The contract was advertised in the OJEU in March 2010. The pre-qualification process is currently being undertaken.
- 3.8 Of the 1,000 electric vehicles for the GLA fleet:
 - (a) 120 are funded through TfL's Business Plan;
 - (b) 57 are funded under the London Fire Brigade's Business Plan; and
 - (c) 14 (with a further 10 planned to follow) are being funded under the DfT's Low Carbon Vehicle Public Procurement Programme (LCVPPP).
- 3.9 TfL and other members of the GLA Group are also seeking other sources of funding and examining ways to encourage suppliers to use EVs wherever appropriate.
- 3.10 Manufacturers are launching the next generation of mass produced, purpose built electric vehicles from 2010. Electric cars are likely to retail for about £28,000 - £30,000 with delivery expected from the latter part of 2010 onwards.

Marketing and Incentives

- 3.11 Supported by consumer research, TfL will run marketing communications and initiatives to educate the public and stakeholders on the benefit of EVs, to encourage take-up of EVs and establish and promote the pan-London scheme.
- 3.12 Incentives include a 100 per cent Congestion Charging discount and a 'business fund' to encourage the uptake of vehicle charging points at businesses (50 per cent funded by TfL and OLEV). However, the policy will be kept under review.
- 3.13 A proposed brand name and logo have been agreed for the pan-London scheme and related communications activity. These are now subject to trade marking. Website development is well underway to coincide with the launch of the brand in summer 2010.
- 3.14 During the remainder of 2010, electric vehicles will feature as a key part of the 'Better Way to Travel' programme, with up to 50 event days planned across London. A 'London Goes Electric' exhibit will run at the London Transport Museum from November 2010. A much larger EV exhibit will take place in 2011 at the London Transport Museum as part of the 'Sense-able Cities' display.
- 3.15 London Councils has confirmed its support for the pan-London scheme and the planned roll out of EV infrastructure in London. The project team is working closely with London Councils and the boroughs on EVs in London and, through the 'J-Cities' network, is engaging with other UK cities with an interest in Electric Vehicles.

Funding

- 3.16 Within the TfL Business Plan, £20 million was identified to drive forward the Delivery Plan.
- 3.17 TfL led the successful January 2010 consortium bid to the OLEV 'Plugged in Places' infrastructure fund which has resulted in a grant of £9.3 million (over three years) for London. Funding for year one (2010/11) was confirmed for £5.6 million. Years two and three are subject to review from OLEV with an outcome expected by November 2010.
- 3.18 As lead member of the bid, TfL will administer the relationship between the consortium partners and OLEV. This includes managing the flow of funds and associated accounting. Consortium members and TfL will install infrastructure and claim 50 per cent of eligible costs from the 'Plugged in Places' infrastructure fund.
- 3.19 In addition, TfL is a member of Electric Vehicles for Advanced Cities (EVA), a Europe-wide consortium bidding for a European Commission grant to fund EV trials. Results will be announced later in 2010 and TfL may obtain up to €1.3 million from January 2011 to spend against 60 per cent of eligible project costs for:
- (a) 31 EVs to be piloted in 19 London borough municipal fleets;
 - (b) three quick charging points; and
 - (c) 60 EVs and charging points for car rental schemes and car clubs.
- 3.20 TfL is a member of the CAPIRE (Co-ordination Action on PPP Implementation for Road Transport Electrification), a public-private consortium that aims to build up a European research and development strategy to ensure Europe becomes a world-leader in electric vehicles. London is requesting €87,000 in staff costs to support participation. The bid was submitted in January and a response is expected later this year. If funded, activity will commence in October 2010.

4 CONCLUSION

- 4.1 Electric vehicles are particularly well suited to urban trips – and 99 per cent of return car trips in London are less than 100 miles. London has a high proportion of likely early adopters with a high income and enthusiasm for new technologies. Also, with strong incentives like the Congestion Charge exemption already in place, London is an ideal location for the EV market to become established.
- 4.2 The Electric Vehicle Delivery Project is at the heart of the Mayor's aspiration for London to become the electric vehicle capital of Europe. During the latter part of 2010, electric vehicles will become increasingly visible, with the launch of the pan-London scheme coinciding with the first of the next generation of vehicles becoming available for purchase.
- 4.3 Good progress has been made during 2010, and activity is well underway in delivering contracts to supply both vehicles and charging infrastructure. The charging infrastructure in particular plays a critical role in assuring potential purchasers that London has a network to support the wide scale adoption of

these vehicles.

5 RECOMMENDATION

5.1 The Panel is asked to NOTE the paper.

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