

Ultra Low Emission Vehicle Delivery Plan

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Electric Vehicle Delivery Plan (2009)

- 100,000 Electric Vehicles in London as soon as possible



Infrastructure

- Develop a comprehensive network of electric charge points

Vehicles

- Make EVs more common place on London's streets

Incentives, Marketing & Communications

- Stimulate the market

- Charging network
- Local Plan policy

- Procurement framework
- 100% Congestion Charge discount guaranteed

TfL Fleet

➤ Buses

- Trialling 8 electric buses (BYD & Optare)
- 8 Hydrogen buses in use (Route RV1)
- Trialling wireless charging with 3 inductively charged hybrid buses from summer 2015 (ZeEUS project)



➤ TfL Support Fleet

- 15 EVs at present
- Funding to increase to 120
- Required in contracts
(e.g. Victoria Bus Station)



Source London



- Source London launched May 2011
- Consortium of 65 partners, managed by TfL (registrations, website, data etc.)
- Partners own their own charge points, purchased using government's Plugged in Places grants
- Over 1,400 charge points to date, mostly 3kW or 7kW
 - Now transitioned to Blue Point London Ltd (a subsidiary of Bolloré, who run Paris chargepoints)
 - Network can expand without further public subsidy
 - Blue Point London plans to expand network to 6,000 CPs by 2018 (mostly 7kW) and improve services for customers e.g. bookability



ULEV Delivery Plan (summer 2015)

Infrastructure

Vehicles

*Marketing,
Incentives &
Regulation*

- New research and studies
 - EV Uptake and Infrastructure Impacts
 - Rapid charging studies (commercial fleet mapping, taxis, private hire, lessons from elsewhere)
- Trails of new technology
 - e.g. buses; geo-fencing; innovative charging solutions
- Links to demand management measures e.g. Roads Task Force and Car Club Strategy
- Extensive stakeholder engagement
- 10-15 key actions including new strategic charging infrastructure policy

Workshop: Focus on charging infrastructure

- Different charging facilities needs for different types of user e.g.:
 - Source London
 - Rapid charging for commercial fleets with high mileage
 - Residential (in addition to Source London network)
 - Car club – round-trip and free floating
 - New innovations?
 -?

(see matrix)

Workshop

- Each workshop group considers one type of user group:
 - Private cars (residents and visitors)
 - Commercial Fleets
 - Taxis and Private Hire Vehicles
 - Car Clubs
- Three questions to answer for your given user group (20 mins):
 1. What are the driving patterns and charging requirements of this group?
 2. What are the challenges for EV use and charging?
 3. What solutions could overcome the barriers? New innovations needed?

➤ Each group feeds back a summary of specific challenges for that user group and top recommendations for charging infrastructure solutions (25 mins)

EV Charging matrix 1

EV Charging Location Types							
	Domestic <ul style="list-style-type: none"> Standard domestic socket or dedicated wall-box in garage or driveway OLEV offer a 75% grant towards the cost of buying and installing a dedicated domestic wall-box. 	Residential <ul style="list-style-type: none"> On-street charge point provided for residents where no off-street parking is available OLEV offer a 75% to local authorities for buying and installing residential charge points 	Depot <ul style="list-style-type: none"> Standard domestic socket or dedicated charge point in vehicle depot Used to support the operation of electric vehicle fleets 	Workplace <ul style="list-style-type: none"> Charge point provided in workplace car parking Intended for use by employees commuting to work in electric vehicles 	Public On-Street <ul style="list-style-type: none"> Charge point provided on-street, either open access or requiring payment Majority of these charge points are within the Source London scheme 	Public Off-Street <ul style="list-style-type: none"> Charge point located in car parks, either open access or requiring payment Majority of these charge points are within the Source London scheme 	Restricted Access <ul style="list-style-type: none"> Charge point off-street or on-street restricted for use by certain types of vehicle, e.g. taxi, car club
Installed By:	Homeowners	Boroughs	Businesses and Public Sector Fleet Operators	Businesses and Public Sector	Boroughs, Blue Point London	Businesses, Boroughs, Blue Point London	Boroughs, TfL
Current Capability:	Unknown	Approx. 20 (All Fast)	Unknown	Unknown	Approx. 300 (50% Slow, 50% Fast)	Approx. 1000 (40% Slow, 60% Fast)	None

EV Charging matrix 2

Charging Requirements by Vehicle Type

Charging Requirements by Vehicle Type							
Private Cars	Slow, Fast	Fast		Slow, Fast	Slow, Fast, Rapid	Slow, Fast, Rapid	
Private Motorcycles	Slow, Fast	Fast		Slow, Fast	Slow, Fast	Slow, Fast	
Car Clubs							Slow, Fast
Private Sector Fleets			Slow, Fast, Rapid		Fast, Rapid	Fast, Rapid	
Public Sector Fleets			Slow, Fast, Rapid		Fast, Rapid	Fast, Rapid	
Taxi	Slow, Fast	Fast			Fast, Rapid	Fast, Rapid	Fast, Rapid
Private Hire Vehicles			Slow, Fast, Rapid		Fast, Rapid	Fast, Rapid	Fast, Rapid
Buses			Fast, Rapid				
Commercial Fleet Vans			Slow, Fast, Rapid		Fast, Rapid	Fast, Rapid	Fast, Rapid
Heavy Goods Vehicles							