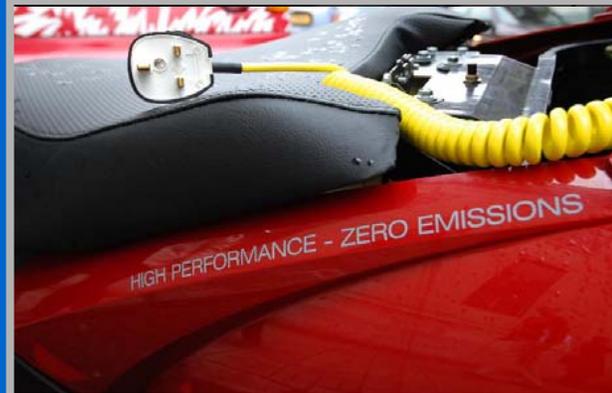


# An Electric Vehicle Delivery Plan for London

May 2009



# Contents

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- **Why Electric Vehicles?**
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# Executive summary

- Electric vehicles (EVs) deliver a reduction in emissions of particulates, NO<sub>x</sub> and CO<sub>2</sub> compared with conventional internal combustion engines.
- A strong market for EVs will also improve our energy security and help to give the UK automotive industry a leading edge in this technology.
- The EV Delivery Plan sets out a comprehensive strategy to stimulate the market for electric vehicles in London:  
The strategy is grouped around three key themes [like pins of a plug]
  - A) Infrastructure
  - B) Vehicles
  - C) Incentives, marketing & communications
- **Infrastructure** – a comprehensive network of charge points across London
  - Work with the boroughs and other partners to deliver 25,000 charge points across London by 2015 – including a network of fast charge sites
    - 500 on-street, 2,000 in off-street public car parks, station car parks;
    - 22,500 will be provided in partnership with businesses - to be located in employers' car parks and retail/leisure locations;
  - London Plan policy – a requirement to provide charge points in all new developments.
- **Vehicles** – electrify public sector vehicle fleet and stimulate wider EV market
  - Deliver 1,000 electric vehicles in the GLA fleet by 2015.
  - Active support to extend the number of EVs in the public sector vehicle fleets e.g the boroughs and central Government.
  - Work with fleet users and companies to expand the use of EVs in business fleets.
- **Incentives, marketing & communications** – increase and communicate customer benefits;
  - Guarantee the Congestion Charge discount – worth up to £1,700 a year.
  - Working with the boroughs to develop simplified range of parking incentives.
  - Encouraging uptake of electric vehicles in car clubs.
  - Working with the boroughs to develop a London-wide membership scheme for EV users – giving access to the charge point network and the congestion charging discount.

# Why Electric Vehicles?

- There is growing agreement that electric vehicles are the closest 'near to market' green technology. The battery technology, particularly the application of lithium-ion batteries, has been developing at a rapid pace. This is mainly due to its growing application in other industries, like lap-top computers and mobile phones. The batteries can carry more energy for a given size and vehicles are now being developed with a range and a re-charge time better suited for everyday city life.
- The technology has developed to extend the range of vehicles to in excess of 100-130 kilometres. One model, the Tesla Roadster, has a reported range of over 300 kilometres. These sorts of ranges are more than adequate for driving in London. The cost of this technology is falling at a time when petrol/diesel fuel prices have risen. Fuel prices are likely to continue to rise in the future, making electric vehicles more cost effective over their lifecycle.
- Vehicles currently available, many of which are classed as quadricycles, are predominantly mini and super-mini size. The choice of available models is increasing and many of the major manufacturers are planning to launch electric and plug-in hybrid vehicles from 2011 onwards. Many of these will be electric variants of their four and five seat family cars.
- The EU is setting new car fleet emissions targets which all manufacturers will need to achieve – a new car sales fleet average of 95g/km of CO<sub>2</sub> by 2020. Vehicle manufacturers that bring electric vehicles or plug-in hybrid electric vehicles to the market will find it easier to meet this target, whilst still having a broad range of petrol/diesel models.

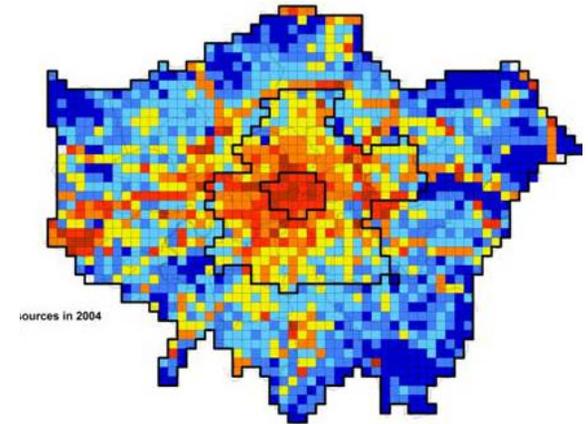
# Why Electric Vehicles?

- The EV Delivery Plan is only one strand of the Mayor's strategy to decarbonise transport and improve air quality in London. Other elements include reducing the need to travel and the distance travelled through better land-use/transport planning, encouraging the use of less energy intensive modes of travel - more walking, cycling and travel by public transport, and the use of cleaner fuels and vehicles. The Mayor's Transport Strategy will set out the full policy framework.
- This is not about picking a winner in the technology race, but creating a level playing field where new technologies can flourish and innovation can be encouraged.
- Other technologies will also have a role to play. The Mayor is committed to supporting the London Hydrogen Partnership, the development of the hydrogen fuel cell powered bus project and the use of bio-fuels in the bus fleet.

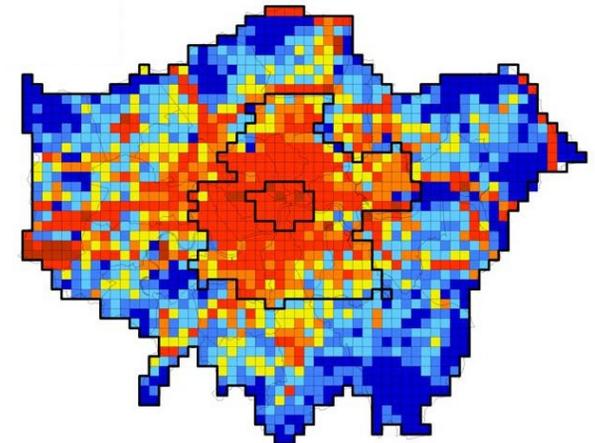


# Why Electric Vehicles? – Air Quality

- Road transport is responsible for 66% of particulate emissions and 42% of NOx emissions in London.
- It is estimated that poor air quality is responsible for 1,000 premature deaths and 1,000 hospital admissions per year in London. It is a particular problem in central London, around Heathrow airport, along major roads and in our town centres. The Mayor's Air Quality Strategy and Transport Strategy are currently being revised and these will put forward proposals to deal with this.
- The EU has imposed a duty on governments to improve air quality – if the UK Government fails to meet this the UK could be subject to a fine of up to £200m.
- **Electric vehicles do not emit any of these pollutants at the tailpipe.**
- EVs are suited to London's busy traffic conditions where engines spend a lot of time idling but emissions are still being pumped out.
- 100,000 EVs could reduce emissions of particulates by 70-90 tonnes per year and emissions of oxides of nitrogen by 350-400 tonnes per year.



**Concentrations of particulates**

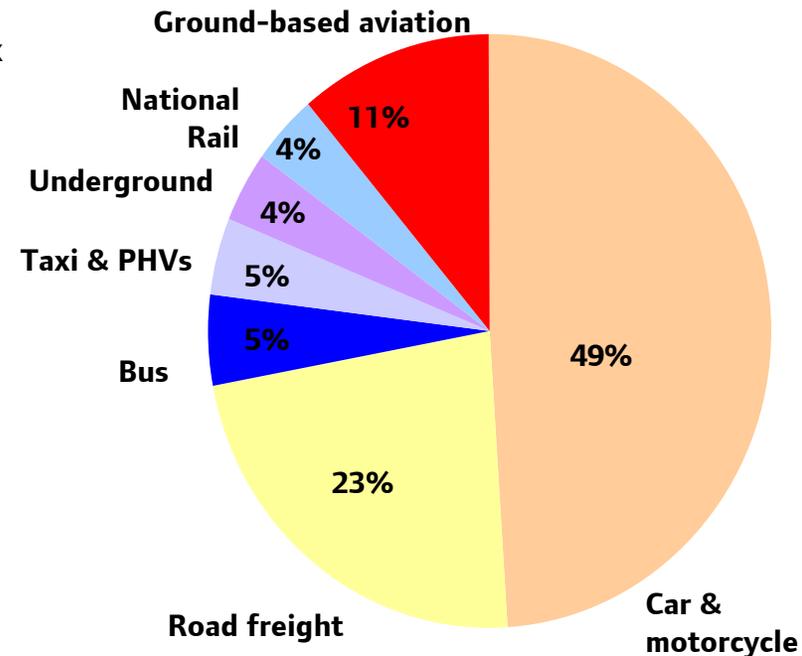


**Concentrations of oxides of nitrogen**

# Why Electric Vehicles? – CO<sub>2</sub>

- The UK is the world's eighth largest emitter of CO<sub>2</sub>. London is responsible for 8% of these emissions, producing 44 million tonnes of CO<sub>2</sub> each year.
- Transport accounts for 22% of CO<sub>2</sub> emissions in London and road based modes comprise 81% of this total.
- The comparison between petrol/diesel vehicles and EVs needs to consider the 'well to wheel' emissions and not just those produced at the tailpipe. Even taking into account the current UK electricity generation grid mix, electric vehicles result in 30-40% less CO<sub>2</sub> emissions than petrol or diesel vehicles.
- As the amount of renewable energy increases in the generating mix of the grid CO<sub>2</sub> emissions from electric vehicles will fall over time.
- Furthermore, re-charging at night, using electricity from base-load generating capacity, will reduce the need for the more carbon intensive peak generating capacity.

**CO<sub>2</sub> emissions from the London's transport**  
100% = 9.6 million tonnes CO<sub>2</sub> - 2006



# Why Electric Vehicles? – Other Benefits

- Energy security – we need to reduce our growing dependency on imported oil. Supplies of oil from the North Sea have been declining since 1999 and the UK is increasingly a net importer of oil, with 50 million tonnes imported in 2007. If current trends continue, net oil imports are projected to account for 26% of the UK's primary energy supply by 2020.
- Lower fuel costs - fuel prices will continue to rise as global demand increases and recoverable reserves diminish. New electric vehicles are typically more expensive to purchase than a petrol or diesel vehicles. However, the fuel costs are significantly lower – typically around £400 for an average annual mileage of 10,000 miles. This compares to a petrol cost of around £1300 per year – a saving of £900.
- Less noise – electric vehicles are significantly quieter for city driving as there is minimal engine and transmission noise. This is particular the case where they replace stop-starting diesels and at night when ambient noise levels are lower.
- Helping the UK automotive industry gain a competitive edge – the UK automotive industry adds £9.5bn to the economy and directly employs 180,000 people. The UK is at the leading edge of research & development in this sector. If the UK can develop a significant production capability then the potential domestic and overseas markets for these vehicles will be huge. This would secure British jobs and provide sustainable long-term income for the UK manufacturing sector.

# Why Electric Vehicles in London?

- London is the best potential market for EVs in the UK.
- Electric Vehicles receive a 100% discount on the Congestion Charge worth up to £1,700 a year, and a number of boroughs offer parking concessions for these vehicles, saving the customer yet more money.
- Londoners make shorter trips – On average, 84% of car trips made by Londoners are less than 20km and 95% of London motorists travel less than a total of 75 kilometres per day. This makes range much less of an issue compared with outside London.
- Londoners embrace new technology – London contains the largest fleet of electric and hybrid vehicles in the UK. Over 1,700 electric vehicles and 15,000 hybrids are registered for the Congestion Charge discount.
- Commercial vehicles are an important and growing element in London's transport system, accounting for 17% of all traffic. The use of vans, in particular, is expected grow rapidly - by 29% over the next 20 years. They generally have shorter duty cycles than elsewhere in the UK making EVs a more attractive option.

# EV Delivery Plan



# EV Delivery Plan

**We aim to make London the electric vehicle capital of Europe.**

This requires:

- A comprehensive and integrated plan – delivered in partnership with the boroughs, central Government and the private sector – no one party can deliver this.
- A long term commitment with significant resources – we estimate that to deliver this plan will require £60 million, split equally between the GLA, central Government and the private sector. We will work with the Department for Transport to secure a share of the £20 million fund for infrastructure announced in April 2009 and with CENEX to secure a share of the £50 million fund to promote low carbon vehicle technology.
- Flexibility- as with any rapidly changing market we need to be able to adapt quickly to new challenges.

There are three key elements of the strategy:

**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**

# Infrastructure



# Infrastructure - Background

- EVs have a shorter range than comparable petrol/diesel vehicles. The lack of charging infrastructure is a major barrier to the greater use of EVs.
- London currently has a network of 100 charge points on the highway and in public car parks - mostly located in central London and in car parks. These are 240 volt 13 amp charging points. A number of boroughs also provide free or discounted parking.
- **We will increase the number of charging points by around 50 this year and 100 next year.** Boroughs will be provided with the funds to deliver these points on-street and in public car parks.
- Charge points are increasingly being provided in other developments, e.g. hospitals, shopping centres as well as within private developments.
- But more needs to be done.
- **We will work with partners to deliver comprehensive coverage of charging points across London with 25,000 points by 2015.** A detailed implementation plan comprising the proposed location of charging points and procurement processes for the first phase (up to 2012) will be produced by November 2009.



# Three Main Types of Charging Points are Available

## Slow charging points (step 1)

- Spec = 240V, 13A single phase
- Typical Uses:
- Recharge overnight at home
- Recharge during the day at work



- Company car parks



- On street parking bays in dense residential areas where off street parking is not available



- Public car parks (e.g. TfL, NR, NCP, Borough) with large proportion of long stay customers

## Fast charging points (step 2)

- Spec = 240V, 32A three phase
- Typical uses:
- Recharge while undertaking daily activities, e.g. shopping, gym etc. cinema



- Private car parks in shopping and leisure centres, supermarkets, large retail stores, polyclinics/ hospitals...



- Short stay public car parks in town centres
- On street parking in visible town centres locations
- Specific city centre locations to cater for taxis, commercial vehicles
- Key London arteries, M25/ key motorways

## Rapid charging points (step 3)

- Spec = up to 200A, 500V three phase
- Typical uses:
- Recharge “on the go” while driving to a destination
- Important to build confidence in the early stages of EV adoption



# Public Access Charging Network

- This charging network will be available to registered users and will be a mix of slow and fast charging points.

## Slow Charging

- The slow charging network is aimed at those who travel and then park for a considerable time at one location
- **We will work with the boroughs and Transport for London (TfL) to provide a total of 250 on-street charging points by 2012.** We will investigate the distribution of points between borough roads and TLRN side roads. As part of this process we will look to future-proofing the systems to enable faster charging to be implemented later at minimal cost.
- **We will work with partners to deliver 2,000 charging points in public car parks by 2015:**
  - **We will install charging points in London Underground car parks with the first points installed in late 2009.** There are 70 London Underground car parks, predominantly in outer London, containing a total of over 12,000 spaces.
  - **We will work with Network Rail and the Train Operating Companies to install charging points in station car parks.** There are 84 National Rail car parks with around 7,000 spaces in total.
  - **We will work with boroughs and car park providers to deliver additional dedicated charging points in long stay public car parks.** There are around 220,000 spaces in public off-street car parks in London.
  - Additional charge points may be provided during this period if the level of demand warrants this.

# Public Access Charging Network

## Fast Charging

- The fast charging points will assist those that only wish to stop for a short period of time (e.g. 30 minutes) and need to quickly charge their vehicle.
- **We will work with partners to roll out a network of 50 fast charge points across London by 2012 so that all users are within 3 miles of a fast charge point.** We will work with boroughs and other partners to install this network at a variety of locations, including retail developments, leisure centres and short stay car parks. This will require a minimum network of 50 charge points.
- **We will work with partners to install a denser network of faster charge points as part of the roll-out strategy.** A total of 200 additional fast charging points will be installed by 2015.
- **We will work with partners to further develop the fast charging network as demand requires.**

## Rapid Charging

- **We will work with partners to investigate the potential for rapid charging points in London.** Whilst slow and fast charging will satisfy the requirements of the vast majority of users, there is still potential for rapid charging, where a vehicle can be fully charged in a matter of minutes. This could be particularly useful for drivers embarking on a longer trip or for specific market segments, such as taxis and commercial vehicles, where they may not wish to be delayed for an extended period.

# Public Access Charging Network

## An Integrated Charging Network

- Currently, there are separate membership schemes for each of the boroughs operating charging points. As the charging infrastructure expands across London it will be important to develop a network that can be accessible to all users.
- **We will work with the boroughs and other providers to develop a London-wide charging network, so that registered users in the scheme are able to use all the public charging points provided.**

## An Easily Recognisable Charging Network

- Most users will be able to identify the general location of the nearest charging point through in-car locational devices such as 'sat-navs'. However, it is important that users will be able to easily pinpoint the precise location of the charge point. Furthermore, this will help to give confidence to potential EV users that the network of charge points is sufficient.
- **We will work with partners to create a strong and easily recognisable brand for London's charging point network.**

# Private Charging Network

## Residential

- The majority of users will charge up their vehicle off-street at home. We would expect that utility companies will begin to offer competitive packages to EV owners, which could include the cost of the charging equipment and a subsidy towards the cost of installation.
- **We will continue to work with the utility companies to develop the opportunities for recharging at home.**
- **We will incorporate advice on home vehicle charging through the Green Homes service which provides information on how to reduce carbon emissions and cut energy bills.**

## Workplace

- **We will work with companies to encourage the installation of electric charging points and aim to deliver at least 22,500 charging points at these locations by 2015.** There are 670,000 parking spaces at workplaces in London and this would form the mainstay of the non-residential charging network. A set of incentive packages, integrated with TfL's Smarter Travel initiative, will be in place by December 2009.
- **We will also develop technical guidance to assist businesses to install charge points.**

## New Developments

- **As part of the revision to the London Plan we intend to place a condition that new developments with parking should be provided with charging point infrastructure.** We would propose that for all new developments with 5 parking space or more at least 20% of parking spots are equipped with charging infrastructure for electric vehicles. Although the rate of new development is likely to be significantly lower in the next couple of years, in the longer term this requirement is expected to yield several thousand spaces per year. These charging points will be delivered at a lower additional cost than retrofitting, as the equipment will be incorporated in the initial design.
- The London Plan is expected to be adopted in 2011, however, we would expect developers to take account of this policy in the intervening period.

# Summary of Charge Point Infrastructure

Public charging network

**500**  
**on street**

- Mix of slow charging points in residential areas where off-street parking is limited - “fast” charging points in visible key locations

- *Identify priority areas*
- *Work with boroughs and TfL*

**2,000**  
**in “public” car parks**  
**(open to general public)**

- Mix of slow and “fast” charging points in car parks run by boroughs, TfL/ London Underground, Network Rail and in retail and leisure developments

- *First points installed in London Underground car parks late 2009*
- *Work with Boroughs, Network Rail and private operators*

Private charging network

**22,500**  
**in “private” car parks**  
**and customer car parks**

- Slow charging points in company car parks.
- Low cost charging points available to customers
- Infrastructure to be provided as part of planning requirements

- *Engage with businesses and retailers – develop incentives packages*

**Residential**  
**off-street parking**

- Infrastructure to be provided by utility companies and as part of planning requirements
- Low cost, high impact

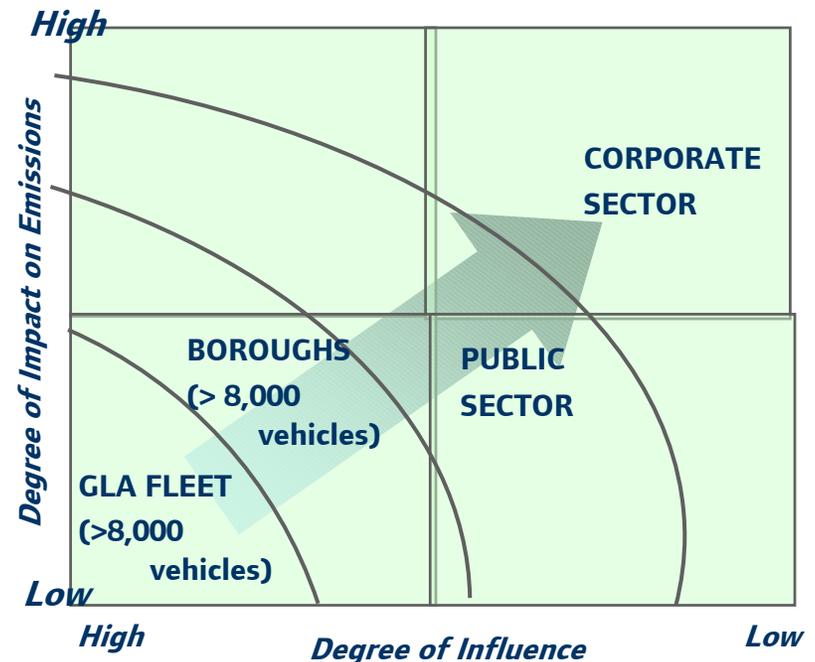
- *Work with utility companies*
- *London Plan policy to place a condition that new developments with parking should be provided with charge point infrastructure*

# Vehicles



# Vehicles

- There are currently 1,700 EVs operating in London out of a total of 8,000 nationally.
- However, the Mayor is committed to a step-change in the number of EVs, with 100,000 vehicles (or 5% of London's fleet) on the Capital's streets as soon as possible.
- This will require a concerted effort to stimulate demand and develop the market for these vehicles.
- We propose the following actions:
  - To continue with EV trials, including those through the TSB, ETI and CENEX initiatives
  - To increase uptake of EVs in the GLA group fleet
  - To increase use of EVs amongst suppliers to the GLA group
  - To increase uptake of EVs in the borough and other public sector fleets
  - To develop EV options for wider public transport, e.g. taxis
  - To work with business partners to make EVs an integral part of the wider London fleet market for commercial vehicles and cars



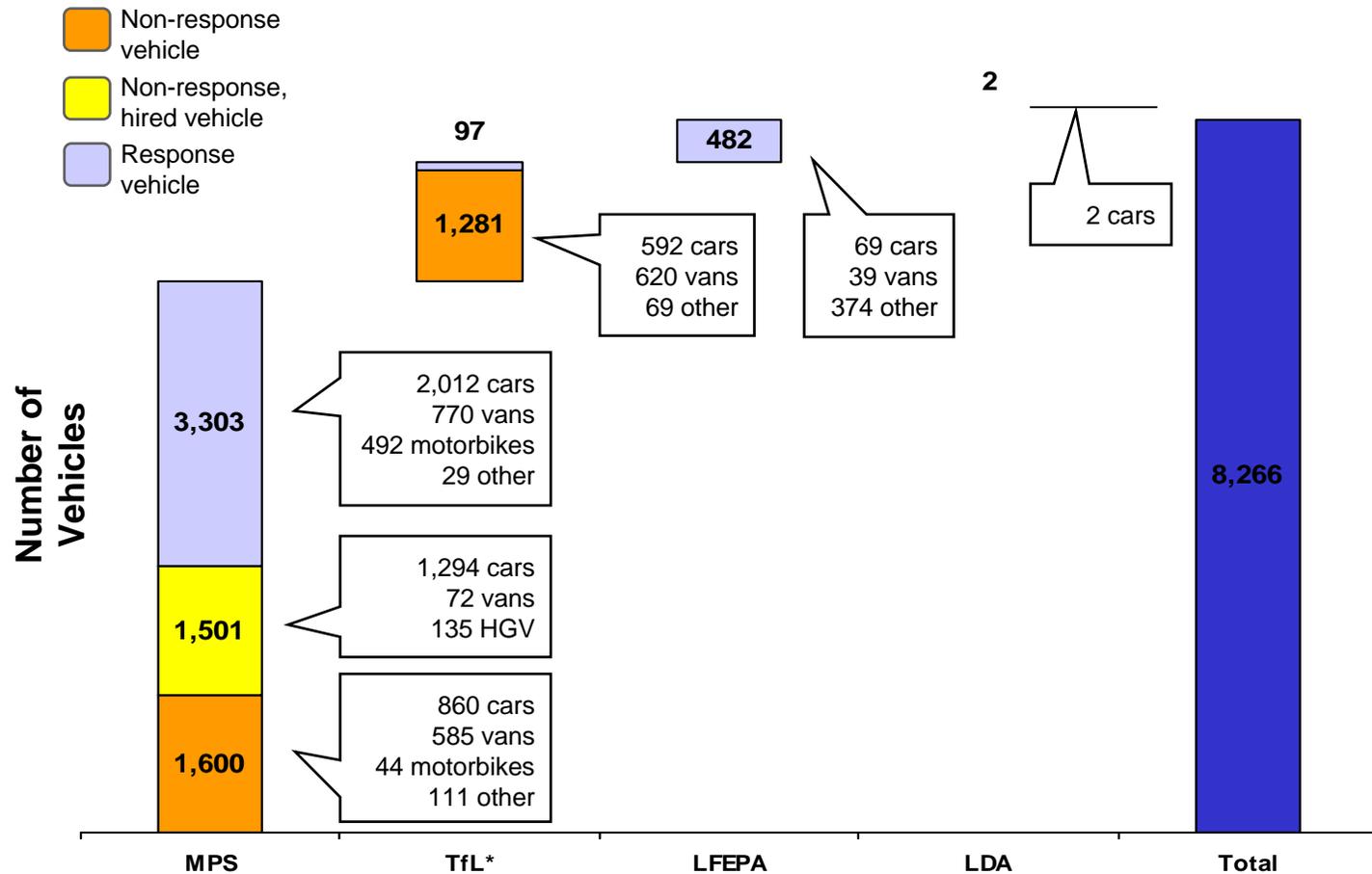
# Trials

- The GLA family, through Transport for London and the Metropolitan Police Service, are taking part in the Low Carbon Vehicle Procurement Programme funded by CENEX. The programme aims to achieve economies of scale in procurement by combining the vehicle requirements across public sector fleets. The Programme provides grants to make up any shortfall on costs compared to a petrol/diesel equivalent vehicle. In the first phase, TfL and the MPS will initially be trialling up to ten vans, with the first vehicles entering the fleet in the Autumn 2009. The requirement for cars is being assessed.
- The GLA is a member of three consortia bidding in the Technology Strategy Board's Ultra Low Carbon Vehicle Demonstration Programme. The programme seeks to put in place large scale trials of EVs, charging infrastructure and electric 'smart metering' which will be tested by a range of users with differing requirements. An announcement on the successful consortia is expected in mid-June 2009.
- **The GLA will continue to encourage and support a range of trials within its fleet and within London to inform research and development – consumer behaviour, range of vehicles types, drive cycles and infrastructure, fast charging and smart metering.**



# Vehicles - GLA Fleet

- The GLA Group contains the GLA, Transport for London (TfL), Metropolitan Police Authority (MPA), the London Development Agency (LDA) and the London Fire & Emergency Planning Authority (LFEPA).
- The GLA Group is responsible for over 8,000 vehicles, of which around half are non-response vehicles.



# Vehicles - GLA Fleet

## GLA Fleet Vehicles

- It is important for the GLA to lead by example and set challenging targets for the procurement of EVs for its own fleet.
- We do not intend to concentrate on the fast response vehicles such as police cars or fire engines (which make up approximately half of the fleet) during this period as there is more than enough opportunity to meet this target amongst the support fleet, which we will concentrate on.
- **We will work to develop a joint procurement plan across the GLA family to deliver 1000 EVs by 2015 making use of the increased volumes to reduce cost. A comprehensive procurement plan will be in place by December 2009.**
- We recognise that the most opportune time to revisit the fleet mix is at contract renewal stage, although there may also be cost-effective opportunities to add electric vehicles to the fleet within existing procurement contracts.
- **We will review existing fleet contracts to identify opportunities to increase the number of EVs.**

## Suppliers to the GLA

- There is also an opportunity to encourage our major suppliers to move towards EVs through the specification of contracts with them.
- **We will work with existing GLA suppliers and review supplier contracts to increase the use of low carbon vehicles.**

# Vehicles - Public Sector Fleet

## Wider Public Sector

- Public sector vehicle fleets in London presents an even larger potential market than that of the GLA. The combined fleet of the London boroughs is over 8,000 vehicles. Other fleets such as those of the NHS and central Government departments increase the public sector pool of vehicles. The inclusion of EVs within these fleets will act as a further stimulus to the market and will demonstrate that the public sector at all levels is committed to a shift to electric vehicles.
- **We will work with boroughs and central Government to encourage uptake of EVs in their fleets – investigating appropriate procurement mechanisms to secure economies of scale.**

## 2012 Olympic Games

- The eyes of the world will be on London during the 2012 Olympic and Paralympic Games. The London Organising Committee for the Olympic Games (LOCOG) is responsible for procuring the fleet of several thousand vehicles. One of the key ways to demonstrate our commitment to the “greenest games ever” is for a substantial proportion of the Olympic fleet to be comprised of EVs.
- **We will work with and support the London Organising Committee for the Olympic Games Olympics (LOCOG) to include EVs as part of Olympic fleet.**

# Vehicles - Public Transport

## Taxis

- TfL's Public Carriage Office (PCO) is currently conducting a Low Carbon Taxi trial, to establish the capability of technologies to reduce carbon emissions from London's black cabs. The project does not explicitly specify electric vehicles, but defines a CO2 reduction compared with conventional taxis. Therefore a number of technologies may be eligible.
- A key consideration is that vehicles should have similar operational capabilities to current taxis, in terms of passenger/payload carrying capacity and range. There are clearly opportunities for EVs to become part of the taxi fleet, but given the demands on typical taxi operation and daily range, a number of barriers need to be overcome before electric taxis would become commonplace.
- **We will work with industry to develop technical solutions to the issues surrounding the electrification of taxis.**



## Private Hire Vehicles (PHV)

- The PHV fleet comprises a diverse range of vehicles, although multi purpose vehicles (MPVs) typically carrying up to 6 passengers, are commonly used. Like taxis, the issues of daily range and speed of charging will need to be resolved before a roll-out of electric PHVs is likely.
- However, early adoption of the electric vehicles may be possible, either as a specific part of an operators fleet, or in certain areas, such as inner London, where range may be less of an issue.
- **We will work with the PHV sector to identify the potential market for electric vehicles and the incentives required.**



# Vehicles - Public Transport

## Buses

- It is the view of Transport for London that battery-powered buses are not yet able to meet the arduous operational requirements of buses used in London (18 hours per day).
- However, this will not always be the case. In the interim period, hybrid diesel-electric buses deliver significant fuel and emission savings (approx 30-40%) and offer a pathway to fully electric buses in the future.
- TfL currently has almost 60 hybrid buses in operation and procurement of hybrids is about to accelerate rapidly. From 2012 all new buses entering service in London will be hybrids.
- As battery technology improves it will be possible to reduce the reliance upon the diesel combustion engine. Eventually, buses will become completely reliant upon a battery (or another form of energy storage device) for their power supply.
- **We will work with bus manufacturers and other cities to determine the operating requirements of an electric bus and develop technical solutions to overcome the operational barriers.**



# Vehicles – Private Sector

- A growing number of companies, including large fleet operators, are users of electric vehicles e.g. UPS, Fed Ex, Royal Mail, Marks & Spencer, Tesco, Sainsbury's and Ocado already run a fleet of electric vans.
- 180,000 business fleet vehicles are registered in London every year giving an opportunity to penetrate the market quickly – but there is currently uncertainty regarding the life-cycle costs and the residual value of these vehicles.
- **We will work with key businesses to encourage the uptake of EVs within their fleets** – This will include Green500 members operating a private fleet; operators of the largest commercial fleets in London and the main vehicle leasing companies with fleets based in London.
- **We will work with commercial fleet users to establish the cost effectiveness of EV technology to potential users.** We will work to establish the business case: incorporating purchase and operating costs, incentives for the purchase, fuel cost savings, tax rebates, congestion charging discounts and reduced parking charges.
- **We will work with business and commercial fleet operators to establish a plan for larger scale procurement of EVs** – EV's are currently procured in small numbers (typically up to 10 at a time) and therefore manufacturers are not given the long-term assurance of large scale demand. A greater certainty of market requirements will encourage manufacturers to invest. This will help bring about economies of scales, thereby reducing the purchase price for consumers.



# Incentives, Marketing & Communications



# Incentives - National

- The Department for Transport (DfT) announced in April 2009 that £230 million would be allocated to incentivise the market uptake of EVs in the UK. The scheme will become operational in 2011 and each EV purchaser could receive a rebate of between £2,000 - £5,000.
- Electric vehicles are exempt from purchase and annual vehicle tax. From April 2010, purchasers of an average new car (Band G) will pay a one off £155 showroom tax and an annual vehicle tax of £155. EVs are tax free.
- The Mayor strongly supports these initiatives and is encouraged that the incentives are of a similar level than those offered by other countries in Europe.

Country	National incentives offered by a selected number of European countries
Norway	No car registration tax (approx €7,500 on a b-class car), No VAT (25% of retail price), no annual car tax (€345).
Denmark	No car registration tax (approx €7,500 on a b-class car), no annual car tax.
Sweden	€2,500 cash back.
Ireland	50% reduction in registration tax, which equates to 22.5-30% of price.
Spain	€6,000 cash back or 22% of retail price.
France	€5,000 cash back or 20% of retail price.
Italy	€5,000 cash back for combustion engine trade-ins.
Belgium	€4,000 EV income tax reduction at point of purchase.
Greece	No car registration or road tax.

# Incentives - London

## Parking

- A number of boroughs offer subsidised parking for EVs. For example, parking at public car parks in Westminster is free, saving the user up to £6,000 a year. An annual fee of around £200 is charged which also covers the cost of electricity.
- In addition, a number of London Boroughs have in place emissions based on-street parking permits. In Richmond, the permit for a band C car costs £90 p.a., whilst a permit for an EV is free.
- However, as EV usage increases, consideration needs to be given to the revenue impacts on boroughs of these parking benefits as well as whether this would encourage a shift from more sustainable modes. Furthermore, a lack of consistency in parking subsidies across London may be confusing for users. Whilst it may not be appropriate for identical concessions to be offered throughout London, there is merit in investigating the potential for a greater level of consistency.
- **We will work with the Boroughs to review the potential for a consistent and simplified range of on-street and off-street parking incentives for EVs.**
- Whilst it is not possible to put a monetary value on the provision of priority parking, the allocation of dedicated spaces close to the desired destination will be of benefit to users.
- **Where possible, we will locate EV parking within London Underground car parks at the points closest to the station.**
- **We will work with the boroughs and other parties to investigate the potential for the provision of priority parking for EVs in car parks and in town centres.**



# Incentives - London

## Congestion Charging

- **We will guarantee that the 100% congestion charging discount available for EVs will remain** – This discount is worth £8 per day (£7 for fleet account users) and up to £1,700 per year for regular travellers in the congestion charging zone.

## Car Clubs

- Car clubs are a growing success with over 1,100 vehicles and over 60,000 people registered in London – representing 80% of car club members in UK. One car club operator estimates mileage drops by 71% if people replace their own car as a consequence. We support and encourage car clubs as it reduces use of vehicles. It would be even better if the vehicles that were used were electric.
- Some commercial proposals are being developed – we will support these operations and would also look to encourage existing operators to migrate towards EVs.
- **To assist in this process we will fund the installation of dedicated bays and charge points for car club EVs.**

## Bus Lanes

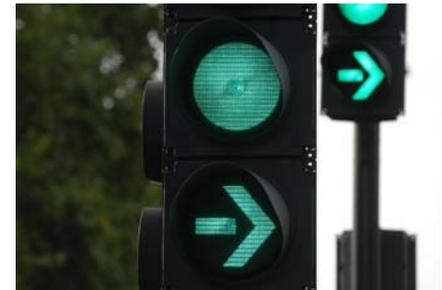
- In Oslo EVs are allowed to travel in bus lanes, providing added benefit for EV users, particularly at peak times. It has been asked as to whether a similar concession could be offered in London. However, there are concerns that at peak times many bus lanes, particularly in inner London, are heavily used by buses, taxis, cyclists and motorcyclists and the inclusion of additional vehicles may affect the reliability of these journeys.
- **We will undertake a review to assess the feasibility of allowing EVs into London's bus lanes. This will be completed by August 2009.**



# Marketing & Communications

## The London Brand

- It is essential that we provide a simple and consistent brand for EVs across London. This will make it clearer for users and help to encourage potential users to purchase EVs.
- **We will work with partners to create a strong and easily recognisable brand for EVs in London.**
- Whilst there are already a number of websites relevant to London, we believe that there is an opportunity to deliver a significant improvement in the quality of information provided and to act as the main portal for EV issues in London.
- As mentioned previously, we will work with the boroughs and other providers to develop a London-wide charging network, so that all those registered in the scheme are able to use all the public charging points provided. We will look to use this website as the means by which users can register their EV for the London-wide charging network and to establish eligibility for the 100% discount for the congestion charge. Registered users will also be able to access specific information relating to the charging of their vehicle. Over time we will look to provide additional information to users, for example, the location of vacant charge points.
- **We will work with partners to develop a pan-London interactive web site.**



# London Electric Vehicle Partnership

- In addition to providing a single point of contact for EV users it is important to have a single point of contact to work with the variety of public and private sector bodies responsible for taking forward the implementation of this delivery plan.
- The London Electric Vehicle Partnership (LEVP) was established in November 2008 and includes representatives from utility companies, vehicles manufacturers and public sector organisations at all levels. The objective of the group is to work together to deliver the plan to substantially increase the number of electric vehicles on London's roads.
- **We will continue to support the LEVP and through this partnership will provide a single point of contact for all bodies wishing to take forward EV initiatives in their area.**
- This Delivery Plan contains a wide range of activities that need to be implemented in order to significantly increase the number of EVs on London's roads. This is a challenging, yet important task. The successful execution of this Delivery Plan will require a dedicated team responsible for implementing those elements under its control and co-ordinating other actions amongst the various delivery partners. We are committed to sharing knowledge more widely to assist others wishing to take forward similar policies.
- **We will set up a dedicated EV “centre of excellence” within the GLA Group that will be responsible for ensuring delivery of this Plan, and to work with other cities wishing to take forward similar plans. The group can be contacted at [ev@london.gov.uk](mailto:ev@london.gov.uk)**

A photograph of the London skyline featuring the Tower Bridge and the City Hall building. The Tower Bridge is a suspension bridge with two towers, and the City Hall is a modern, curved glass building. The scene is set against a clear blue sky.

**ev@london.gov.uk**

**<http://www.london.gov.uk/mayor/priorities/transport/electric-vehicles.jsp>**