

OLEV Chargepoint Installation Workshop

St James the Less, London

8th March 2018





Welcome

Jacob Roberts

Technical Project Manager, Energy Saving Trust



Agenda

10:00 – 10:10	Welcome	Jacob Roberts, Energy Saving Trust
10:10 – 10:40	Update on ULEV policy and incentives	Ross Jones, Office for Low Emission Vehicles
10:40 – 11:05	ORCS and other ULEV support available to local government	Jacob Roberts, Energy Saving Trust
11:05 – 11:15	Break & refreshments	
11:15 – 11:45	Introductions from chargepoint industry representatives	
11:45 – 12:45	Q&A	All
12:45 – 14:00	Networking lunch	



Onstreet Chargepoint Workshop

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Moving Britain Ahead



The Office for Low Emission Vehicles



Greg Clark - BEIS



Chris Grayling- DfT



Richard Harrington - BEIS





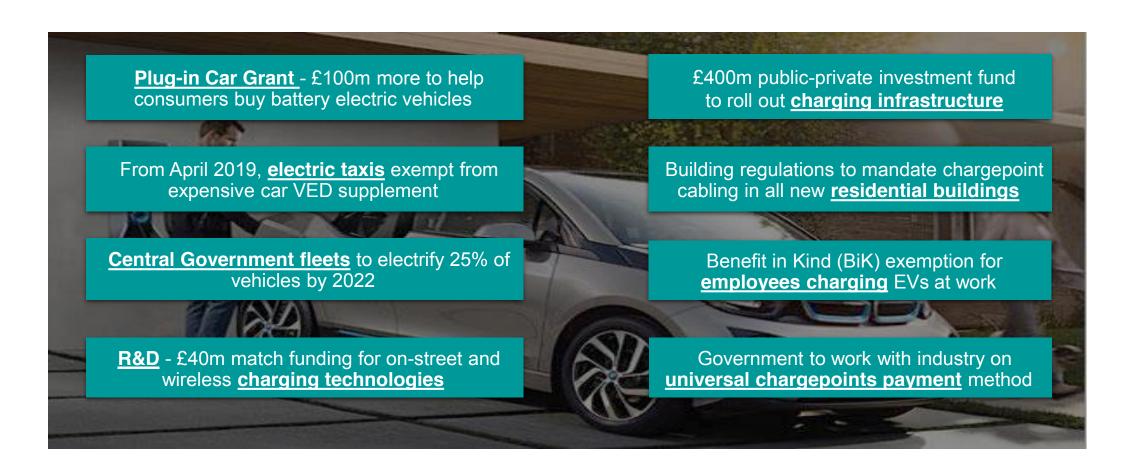


Total Government investment is now nearly £1.5 billion until 2020/21

Infrastructure Investment Fund	~£1.5 billion 2015/16-2020/21 PROGRAMME	Research & Development		
Plug-in Car Grants	Domestic Chargepoint Grants	Go Ultra Low campaign		
Plug-in Van and Truck Grants	Other Infrastructure Grants	Go Ultra Low Cities		
Plug-in Motorcycle Grants	Highways England Rapids	Zero and Low Emission Buses		
Plug-in Taxi Grants	Taxi Infrastructure Grants	London		
Hydrogen Fuel Cell EV Grants	Hydrogen Refuelling Stations	Public Sector Fleet support		
2020 3-7% new cars ULEVs 2040 100% new cars and vans ZEVs 2050 Almost all cars and vans ZEVs + £100m Fiscal Incentives (HMT) + £500m Advance Propulsion Centre (BEIS)				



£540 million package for ULEVs announced at Autumn Budget 2017





State of the Infrastructure Market

- UK now has over 11,500 public chargepoints. +900 rapids which makes UK's rapid chargepoint network one of the largest in Europe.
- Continued support scheme in place for domestic charging (EVHS): +85K chargepoints have been installed.
- Chargepoint industry is in its infancy and there is challenging business case, private investment is emerging in the public and destination markets.





Electric Vehicle Homecharge Scheme



- Grants of up to 75% (capped at £500) to install a chargepoint at a domestic address
- Ownership of electric vehicle and access to off-street parking
- EV drivers must use an OLEV authorised installer
- Installer claims grant on behalf of consumer



Workplace Charging Scheme



- Open to businesses, charities, and public sector organisations
- £300 for each socket up to a maximum of 20 across all sites
- Organisations apply to DVLA for voucher. Voucher then redeemed by OLEV authorised installer following installation
- Scheme has approved over 1300 sockets since launching in November last year; mix of public and private sector.



On-street: What is the problem?

- Over 30% of households in England lack access to off-street parking. This increases in densely populated urban areas (44% in London).
- Local Authorities have been slow to mobilise due to costs and a lack of resources and political will.
- Technical solution needed to reduce costs and deliver a scalable and attractive solution for users.
- Key strategic global challenge to EV uptake.





On-street Residential Chargepoint Scheme



- Administered by the Energy Saving Trust
- 75% of capital funding, up to £7,500 per chargepoint
- Funding for Local Authorities on a first come, first serve basis.
- Single or multiple chargepoints in multiple locations £100k per project
- Further funding of £4.5m over the next two years (18/19 + 19/20)
- Raising political will within Local Authorities
- Installation in LA owned car parks now eligible
- Further consideration of EST's role.



Other support

Go Ultra Low city scheme - £40m to Milton Keynes, Nottingham, Bristol and London to roll out pioneering initiatives to assist them in becoming internationally outstanding examples for the promotion of ultra-low emission vehicles.

Plug-in Taxi scheme - £64 million of investment to promote the use of electric taxis. £14 million of investment will deliver new dedicated chargepoints for electric taxis in all 10 cities that bid for funding in its recent Taxi Infrastructure competition.

Highways England target – Chargepoint every 20 miles along **95%** of the Strategic Road Network and futureproof demand for charging as EV uptake increases.

Enhanced Capital Allowances - businesses installing infrastructure can set 100% of the cost of the assets against taxable profits in financial year the purchase was made.

National Planning Policy Framework (NPPF) - provides direction to Local Authorities. Stipulates that developments should, where practical, incorporate facilities for charging EVs.



Autonomous and Electric Vehicle Bill

My government will work to attract investment in infrastructure to support economic growth.

Legislation will be introduced to ensure the United Kingdom remains a world leader in new industries, including electric cars and commercial satellites.



Infrastructure Provisions









Access and connection

Information

Fuel retailers/MSAs

Smart capability



Thank you!

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ORCS & Other ULEV Support for Local Authorities

London Workshop

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Jacob Roberts

Technical Project Manager, Energy Saving Trust



Presentation contents



Introduction to EST Group Transport

The past, present and future of ULEVs

OLEV On-street Residential Chargepoint Scheme

Other services and funding available











Air quality



Efficient fleet management



Freight and NRMM



Efficient driving



Ultra-low emission vehicles



Ultra-low emission vehicles

Past, present and future

Electric vehicle development











2011	2016	2018	2020-2025?
109 miles	124-155 miles	180-250 miles	>300 miles
24kWh	33kWh	40kWh	>80kWh

Charging infrastructure development











2011	2016	2018	2020-2025?
<3kW	50kW	150kW	350kW
12 hours	20-30 minutes	10-20 minutes	5-10 minutes

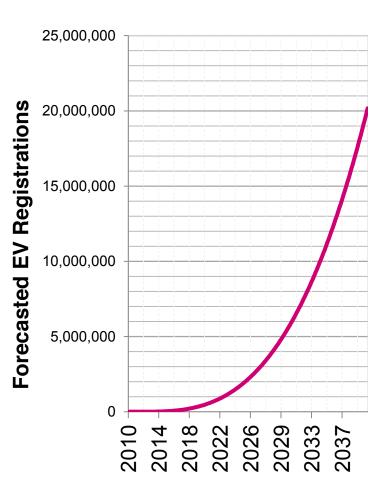








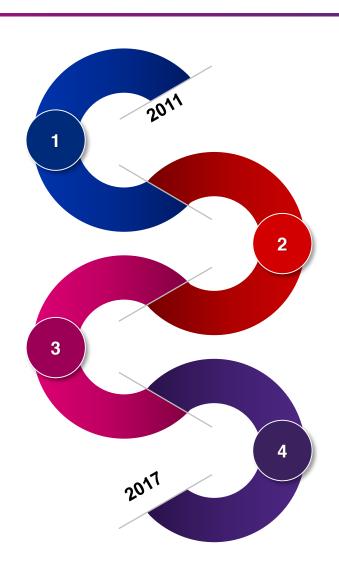




Our ULEV journey















OLEV On-street Residential Chargepoint Scheme (ORCS)

Why is this scheme important?







- In many parts of the UK especially in urban areas – off-street parking is not available to most residents.
- Potential EV owners living in these areas don't have access to home charging
- By installing on-street chargepoints in these locations, residents can enjoy the convenience and value of charging their plug-in vehicles at home.

What is the purpose of the scheme?





Offer funding to local authorities towards the purchase and installation of on-street electric vehicle chargepoints for their residents

Provide convenient and cost-effective home charging to residents without access to off-street parking

Unlock demand for ULEVs where this was previously a barrier to purchase







- £2 million funding made available for 2018/19 and further £2.5 million in 2019/20
 - ➤ Up to £7,500 per double header chargepoint
- Maximum of £100,000 funding per application
 - Applications can be for more than one chargepoint
 - Applications can be for more than one location
 - More than one application can be submitted
- Allocated on a first come, first serve basis

What does the funding cover?





Purchase cost of charging unit

Purchase cost of electric components

Labour cost of installation

Hardware cost of installation

Civil engineering costs

Chargepoints for shared use with car club users

EV parking bay and traffic orders (if applicable)

What does the funding NOT cover?















Chargepoints for fleet operators

Chargepoints for taxi and private hire operators

Upgrade and/or maintenance of existing chargepoints

Revenue costs, including salary

Rapid chargepoints







Chargepoints must...

- ✓ be located in residential area.
- ✓ be accessible to local residents.
- ✓ adhere to OLEV's technical specifications
- ✓ Proposed location(s) lacks off-street parking
- ✓ Publicly owned car parks accessible to residents 24/7 are eligible locations
- ✓ Location will meet current or anticipated future demand
- ✓ Project will adhere to LGA's own procurement process, state aid rules and value for money considerations
- ✓ Project will be delivered in reasonable timescales (6 months)







LAs identify demand for onstreet residential chargepoints

LAs prepare and submit application to EST for review

OLEV approval and Grant offer letter issued

LAs install chargepoints and funding released







Identify areas where off-street parking not available

- Terraced houses, flats
- Use local knowledge

Avoid thoroughfares and main roads

Previous enquiries/requests from residents

Confer with insight and/or corporate research teams

Considerations



1. Grid implications

- Increased electricity demand from EVs can have an impact on the grid
- Power upgrade can be the most significant cost element to chargepoint installations
- Installation of standard (3.5kW) chargepoints unlikely to have a significant impact
- Lamp post chargepoints an option to avoid power upgrades
- Early engagement with DNOs is required to assess the sites and choose the most cost efficient solution

Considerations



2. Procurement

- Importance of soft market testing
- Engagement with different operators to understand available solutions/products

3. Parking pressures

- Central car parks
- Traffic Regulation Orders (TROs)
- Provision of more than one chargepoint per request to ensure availability of chargepoints

Case study

Royal Borough of Kensington and Chelsea

- Successful trial undertaken in 2017
- Following the trial 44/50 lamp post chargepoints already installed under ORCS
- Chargepoints located next to pay and display bays
- Residents can join the scheme by purchasing a SimpleSocket cable
- Installations part of the Council's commitment to improve Air Quality









At present, Energy Saving Trust...

- Advises and supports LAs who wish to explore their application for funding.
- Provides LAs with feedback on their draft application before it is submitted to OLEV

Next financial year:

Potential for EST to provide more intensive, practical support to LAs

In any case...

- EST can be contacted via mailbox: onstreetchargepoints@est.org.uk
- Alternatively, LAs can also refer to the <u>OLEV Guidance and FAQs</u>



Other ULEV support and funding available





Grey Fleet Reviews

- Public sector clients
- Benchmark grey fleet and look at alternatives



ULEV Reviews

- Available for any organisation considering, or expanding use of, ULEVs within their fleet
- Includes whole life costing, charging considerations, operational parameters



Air Quality Reviews

- Supporting fleets in CAZ areas
- Understand implications of CAZ on fleet
- Compliant/non-compliant vehicles
- Advice on how to reduce impact









Plug-in Car Grant



Plug-in Van Grant



Home Charge Scheme



Workplace Charging Scheme



On-Street Residential Charging Scheme

Thank you for listening





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