



ELECTRIC VEHICLES:

ACCESSING, CHARGING AND SUPPORT

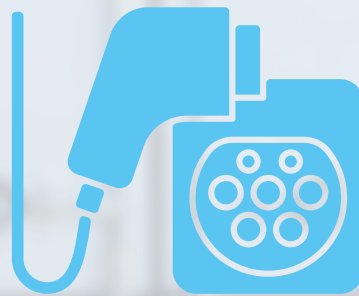
The UK's electric vehicle (EV) market is growing and constantly adapting to suit the needs of EV drivers. Transport is a fundamental requirement of modern life, more importantly a cleaner method of travel is vital in promoting sustainability and better air quality.

Did you know?

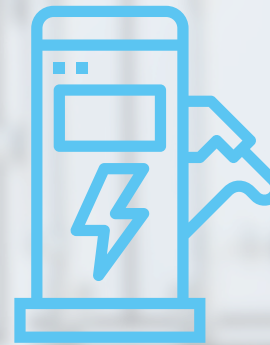
As of February 2024* across the UK there were:



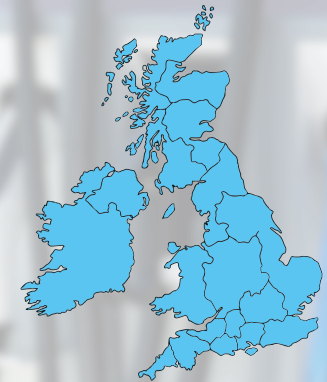
**57,290 charge points
across the UK**




**87,421 connectors
across the UK**



**10,967 Rapid or Ultra
Rapid charge points
across the UK**



**32,575 charging locations
across the UK**



As of the end of February 2024, there are over 1,000,000 fully electric cars on UK roads and a further 620,000 plug-in hybrids.

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ELECTRIFICATION FOR BUSINESSES OVERVIEW

In 2020, the UK government announced their plan to end the sale of new petrol and diesel cars and vans by 2030, with all new vehicles being fully zero emission from 2035. Helping to deliver carbon reductions, improved air quality and secure a green recovery from Covid-19.

GRANTS AND FINDING FOR BUSINESSES

Workplace Charging Scheme (WCS) (1)

- Under the Workplace Charging Scheme organised by the UK government's Office for Zero Emission Vehicles (OZEV), you can claim up to £350 for each EV chargepoint you install for your staff - up to £14,000 in total.

Electric vehicle charge point and infrastructure grants for landlords, including car parks (2)

- Grants for landlords to install electric vehicle charge points and support infrastructure in rental and leasehold properties.

Charge point and infrastructure grant for business staff and fleets (3)

- Provides small and medium-sized businesses money off the cost of installing EV charge points and support infrastructure for their staff and fleet vehicles.

Electric Vehicle Charge Point and Infrastructure Grant for Installers (4)

- Office for Zero Emissions (OZEV) guidance for installers about OZEV electric vehicle charge point and infrastructure grants.

Electric Vehicle Charge Point and infrastructure grants for landlords (5)

Two grants available for landlords to install EV infrastructure at own property:

- An electric vehicle charge point grant (EV charge point grant).
- An electric vehicle infrastructure grant (EV infrastructure grant)



EVs aren't just cleaner, they also come with a number of tax incentives to help individuals and businesses drive electric.

TAX INCENTIVES

Benefit in Kind Tax (BIK) (7)

- Often referred to as company car tax, calculated by a vehicles CO2 emissions and P11D value (list price of vehicle, including VAT and delivery charges).

Tax on Company Benefits (8)

- Information on both employee and employer tax on company benefits

Discounts and exemptions (9)

- Find out if you can get a discount or even drive in the congestion charge zone free of charge

Lower or zero vehicle exercise duty (10)

- This measure will equalise the Vehicle Exercise Duty (VED) treatment of all emission and internal combustion engine vehicles from April 2025.

Vehicle tax rates (11)

- Find out your vehicle tax rate, based on your vehicles CO2 emissions



INTRODUCTION

As part of our Defra-funded Smarter Greener Logistics programme to encourage sustainable logistics across London, CRP has designed this leaflet to provide local authorities, businesses and residents with the key benefits associated with transitioning to electric vehicles. Helping to identify available funding opportunities and schemes associated with an electric vehicle use and EV charging^(1,2)

WHO ARE WE

Cross River Partnership (CRP), is a partnership delivering environmental, economic and community-focused projects. We support public, private and voluntary organisations to address creatively challenges around Air Quality, Transport, Placemaking and Wellbeing.

(13)

WHY USE AN ELECTRIC VEHICLE?

Fully electric vehicles (EV) have zero tailpipe emissions and are much better for the environment. As the UK's EV infrastructure continues to grow and with faster charge points becoming more accessible there has never been a time to invest into EV's more than ever. Here are some more reasons why EVs are a great alternative to conventional petrol and diesel vehicles.



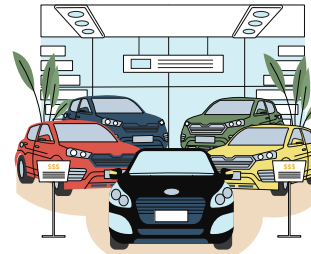
Lower running costs



Lower maintenance costs



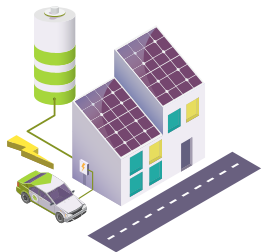
Tax and financial benefits



More EV choices available



Advancements in battery technology



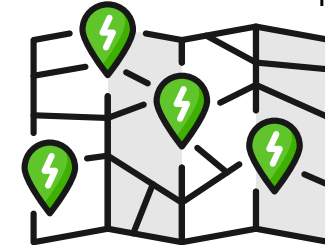
Convenience of charging at home



Reduced noise pollution



Reduced emission impact on the environment



Accessible growing network of charge points across the UK

FUNDING OPPORTUNITIES

FUNDING FOR LOCAL AUTHORITIES & RESIDENTS

On-street residential charge point scheme (ORCS) ⁽¹⁴⁾

- Supports local authorities in the UK to deliver electric vehicle (EV) charging infrastructure for residents with off-street parking.

Low-emission vehicles eligible for a plug-in grant ⁽¹⁵⁾

- Information for the types of vehicles eligible for a grant from the UK government, allowing for cheaper purchase cost.

ULEZ car and motorcycle scrappage scheme ⁽¹⁶⁾

- Mayor of London scrappage scheme provides financial assistance to help London residents scrap cars, motorcycles and wheelchair accessible vehicles that do not meet the Ultra Low Emission Zone (ULEZ) emission standards.

ULEZ van and minibus scrappage scheme ⁽¹⁷⁾

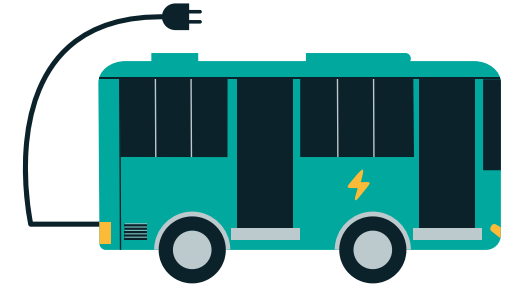
- Mayor of London scrappage scheme provides financial assistance to help sole traders, small businesses, micro businesses and charities to scrap or retrofit vans and minibuses that do not meet the Ultra Low Emission Zone (ULEZ) emission standards.

Charge point grant for renters and flat owners ⁽¹⁸⁾

- Provides EV drivers who rent or own a flat with support towards cost of purchasing and installing EV charge points.

Electric vehicle charge point grant for households with on-street parking ⁽¹⁹⁾

- Provides EV drivers with support towards costs of purchasing and installing EV charge points at residential properties when also installing a cross pavement charging solution.



VEHICLE CHARGING AND CHARGE SPEEDS

HOME CHARGING VS ON-STREET CHARGING

According to the [Society of Motor Manufacturers and Traders \(SMMT\)](#) a fully-electric car is registered in the UK every 60 seconds. Clearly identifying the appetite for the growth in EV's⁽²⁰⁾

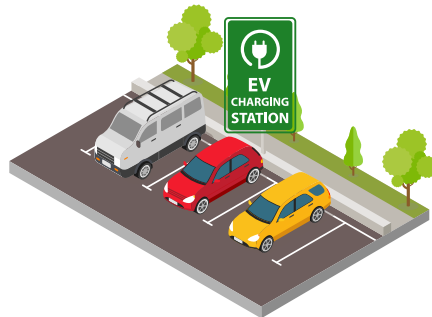
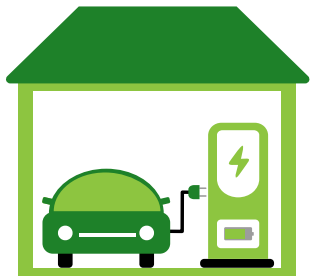
Home EV Charging



On-Street EV Charging

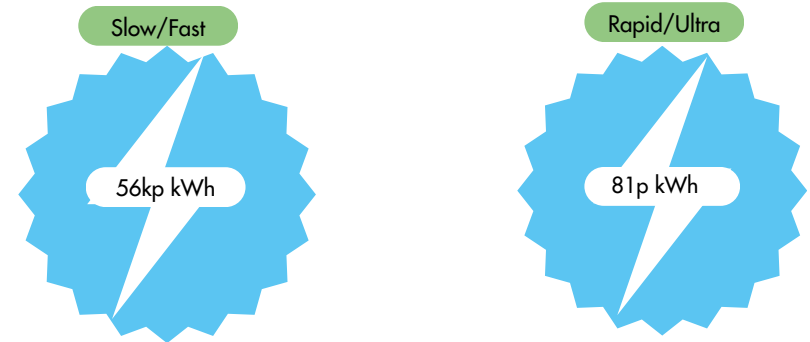
- Charging overnight at home is usually the cheapest way to recharge your EV.
- Charging at home can take several hours due to slow charging speeds
- Will always be available for personal use.
- Installing EV charge point at home can boost property values.
- Octopus Energy, [Intelligent Octopus Go service](#) can help automatically schedule home charge during cheapest time.⁽²¹⁾
- Can rent EV charger through [Peer-to-Peer \(P2P\)](#) charging schemes.⁽²²⁾
- May require installing own accessible charge point or using a cable
- May require installing an [EV charging gully](#), to safely store the cable and prevent serving as a trip hazard.⁽²³⁾

- Charge point costs vary, some are more expensive than others.
- Multiple lamp columns on public highways with EV charging sockets available.
- Local authorities are installing more fast and rapid charge points in key areas.
- Dedicated EV charging only bays
- [Zapmap provides an map of all charge points across the UK](#) and can identify nearby available charge points.⁽²⁴⁾
- Can take several hours at lamppost with slower charging speeds.
- Charging cable can be a trip hazard for pedestrians.
- [Can suggest where on-street EV charging is provided in your area.](#)⁽²⁵⁾



ELECTRIC VEHICLE CHARGING INFORMATION

⁽²⁶⁾ According to the [Zapmap Price Index](#), the weighted average price to charge an electric car on the public charging network in February 2024 was:



You can find out more about charging prices on [Public EV Charging Networks](#) here.

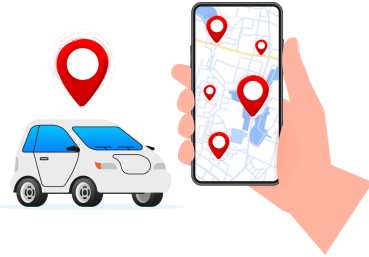
Vehicle charging speeds

Subject to vehicle type

EV Charge Type	EV Charge Speed (kW)	EV charge time (approximate)	Where it can be found
Slow	2.3 - 3.6	18 - 36 hrs	<ul style="list-style-type: none"> • At home • Public parks • Residential streets • Workplace car parks
Fast	7, 11, 22	1 - 6 hrs	<ul style="list-style-type: none"> • At home • Workplace • Supermarkets • Shopping centres
Rapid	43 - 50	1 hour	<ul style="list-style-type: none"> • On street • Petrol stations • Retail car parks
Ultra rapid	50 - 350	20 mins	<ul style="list-style-type: none"> • Petrol stations • Motorway service stations

CAR CLUBS AND CAR SHARING

Not ready for your own EV yet?
Check out the below information on car sharing opportunities



Zipcar⁽²⁸⁾

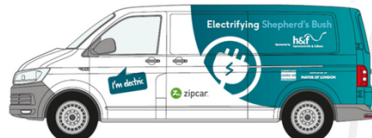
- Zipcar for personal use: flexible or roundtrip usage⁽²⁹⁾
- Zipcar for business: up to 30% off standard rates⁽³⁰⁾

Enterprise⁽³¹⁾

- Enterprise Car Club⁽³²⁾
- Enterprise Business Car and Van Rental Programme⁽³³⁾

Co Wheels⁽³⁴⁾

- Co Wheels Car Club⁽³⁵⁾
- Co Wheels for businesses⁽³⁶⁾



Ford Drive Vehicle Subscription⁽³⁷⁾

- Fully maintained service vehicles available for monthly subscription.
- Flexible subscriptions available (short term or long term)
- All the costs of running a vehicle combined into one fixed monthly payment.
- Business required to insure and fuel vehicle.

SUPPORTING INFORMATION



What is a Car Club?

Car clubs are short-term car rental services that allow members access to locally parked cars and pay by the minute, hour or day.

Benefits of Car Clubs⁽³⁸⁾

- Sustainable travel
- Benefits for businesses
- Aiding the transition to EV
- Environmental.
- Economic and safety benefits



Car Club Toolkit for Local Authorities⁽³⁹⁾

How local authorities can support, introduce and expand car club operations.

Vauxhall Electric Streets Campaign⁽⁴⁰⁾

- Supports 40% of households without off-street parking make the switch to electric.
- Working with charge point operators and local councils to accelerate installation of on-street residential charge points across the UK.

CASE STUDIES

Implementing a Shared Electric Van Scheme for local businesses⁽⁴¹⁾

- London Borough of Lambeth, Zipcar, Brixton BID and Cross River Partnership (CRP) worked together to implement London's first shared electric van scheme.



Sharing Cities: Electric vehicles sharing schemes⁽⁴²⁾

- Sharing Cities is a project to improve the lives of citizens across Europe, testing smart solutions for cleaner, more efficient cities

Piloting charge point cable pavement gullies in Oxfordshire⁽⁴³⁾

- Funded by the Office for Zero Emission Vehicles (OZEV), the GULO pilot enabled a small group of residents living on terraced streets in Oxford to install a home chargepoint unit on their property and feed a charging cable through a dedicated channel in the pavement to reach their vehicle.



FUTURE CONSIDERATIONS

EV CHARGING ASSET SHARING



- What: EV charging asset sharing is when a business with private EV charging infrastructure enters into an agreement with another business, allowing use of on-site charge points for X amount of hours, when they are not being used by the host business.
- How: Businesses with multiple on-site charge points can develop an agreement with another business(s) to agree hours of use and make contact with their charge point operator (CPO) to advise.
- Why: As a response to the scarcity of space across London, EV charging asset sharing serves as a great answer to allowing multiple businesses access to charge points, maximises use of private charge points, frees up usage of public charge points for business vehicles at public charge points, and a CPO may be willing to reduce costs due to multiple usage.
- Example: Business A has on-site charge points and charges it's vehicles overnight for business use during the day. Business B does not have access to on-site charge points, and uses multiple public charge points during the day for business use during the night. Business B enters agreement with Business A to allow for use of charge points during the day to re-charge vehicles.

HGVs



- Battery powered HGV's and charge point availability: Further investment is required to encourage more transition in UK fleets. HGV's account for under 20% of the UK's transport CO2 emissions. A potential to save 18.6Mt CO2e, equivalent to providing energy for two million homes, if 400,000 HGVs were switched to EV.
- GRIDSERVE to deliver the UK's first charging network for battery electric heavy goods vehicles as part of Electric Freightway project.⁽⁴⁴⁾

Technology



- Battery Technology: Developments within EV battery technology are imperative for widespread adoption of electric vehicles. Lithium-ion batteries continue to evolve, with the assurance of increased energy density and lengthy lifespan. Additionally, solid-state batteries are forthcoming, offering even greater potential for EVs.⁽⁴⁵⁾

Autonomous Driving



- Autonomous Driving: Electric vehicles are at the forefront of autonomous driving technology. As self-driving capabilities improve, EVs are likely to become the preferred choice for shared mobility services, reducing the overall number of vehicles on the road.

Sustainability



- Sustainability: Beyond their zero-emission qualities, electric vehicles are becoming more sustainable in their production. Manufacturers are exploring ways to reduce the carbon footprint of EVs by using recycled materials and sustainable manufacturing processes.

USEFUL CONSIDERATIONS AND CASE STUDIES

[How to Charge an Electric Car without a driveway](#)⁽²³⁾

How to charge electric cars without off street parking.

[Map of electric charge points in London and the UK](#)⁽²⁴⁾

UK-wide map of electric car charging points that helps electric car drivers locate and navigate to their nearest EV charging point.

[Making the Switch: A Guide for Fleet Owners](#)⁽⁴⁶⁾

Processes, challenges and solutions to having an EV fleet and what going electric could mean for your business.

[Implementing local Electric Vehicle Charging infrastructure](#)⁽⁴⁷⁾

The processes, challenges, and solutions in setting up EV charge points.

[Implementing a Shared Electric Van Scheme for local businesses](#)⁽⁴⁸⁾

A step-by-step, through the processes, challenges and solutions to setting up the Brixton shared electric van scheme.

[TfL London's 2030 Electric Vehicle infrastructure strategy](#)⁽⁴⁹⁾

TfL's vision, addressing recent trends and policy changes, estimating the infrastructure requirements to be zero emission by 2030.

[Electric Vehicles Sharing Schemes](#)⁽⁵⁰⁾

Sharing Cities was a major international smart cities project that addressed some of the most pressing urban challenges facing today's cities such as energy use, low carbon transport and buildings, and harnessing data for the good of the city.

[UK Electric Fleets Coalition 2023 Policy Paper](#)⁽⁵¹⁾

Presenting a series of policy recommendations that will enable fleets to continue to drive the EV transition in the UK.

[Meeting the Challenges of Electrifying your Vehicle Fleet](#)⁽⁵²⁾

Industry leaders from the public and private sector gathered to share their challenges and hear from organisations at different stages in their EV journeys.

[The Fast Lane to Electric Vehicles](#)⁽⁵³⁾

An adoptable approach to electrify your fleet.

[Pod Point DPD Fleet Charging](#)⁽⁵⁴⁾

Parcel delivery firm DPD making the gradual transition to a fully EV fleet fleet.

[Pod Point EDF Fleet Charging](#)⁽⁵⁵⁾

EDF installing electric vehicle (EV) charge points across its estate as part of its commitment to the EV100 initiative.



