

ESB Energy's **EV Solutions**

Quickstart Guide





Congratulations!

You're now the proud owner of an electric vehicle (EV), helping to **power Great Britain towards a low carbon, net zero future.**

ESB Energy EV solutions owns and operates an EV charging network across England, Scotland and Wales.

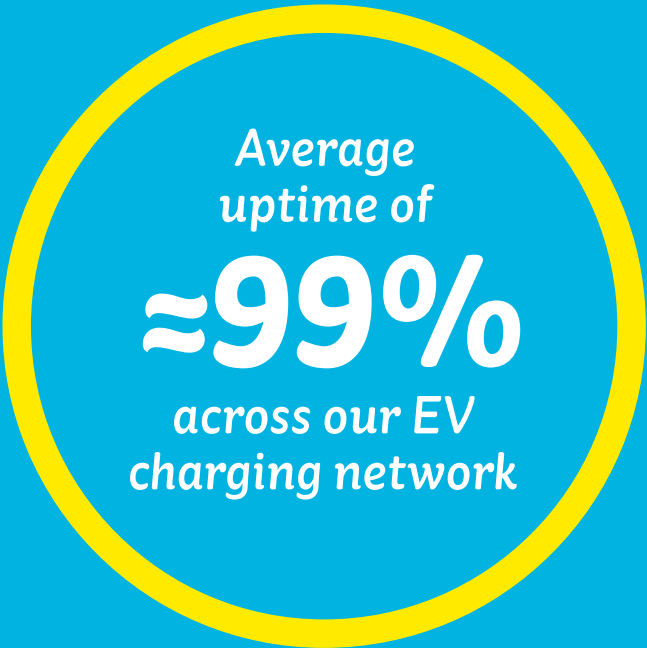
Here is everything you need to know to get set up to use our network.



Our EV Charging Network

Access to quick and easy charging is essential for EV drivers. That's why ESB Energy are installing a network of reliable, easy to use EV chargers across Great Britain. You can find our chargers in Birmingham, Coventry and London as well as on motorway service station sites across the country.

At ESB Energy, we're driven to make a difference, that's why we're constantly adding new chargers to our network. Follow us on  @ESBEVSolutions to track all of our updates to the network.



Average
uptime of
≈99%
across our EV
charging network



Our Chargers



There are three types of chargers across our network; fast, rapid and ultra rapid. Although charging rates vary depending on car type and battery, here's how long you can usually expect each one will take.

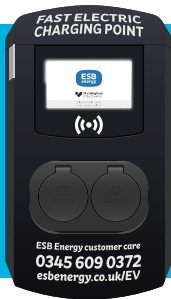


Did you know that EVs charge at different speeds? Charging rate (measured in kilowatts (kW)) the higher the kW of the charger, the faster the charge, vehicle dependent. You may notice that your EV might not pull the maximum amount of power. This is because your EV controls the amount of power it pulls from the charger.

Other factors such as battery size and ambient temperature also affect the charging speed. All EVs are different but typically they charge fastest up to 80%, after that the rate of charge slows down considerably.

A step by step guide to help you use each charger is available at esbenergy.co.uk/ev or in the [EV Plug In App](#)





Fast charging

Fast chargers (up to 22kW alternating current (AC)) can charge your car in approximately one to six hours. These chargers are typically found on-street or in car parks.

Rapid charging

Rapid chargers (up to 100kW direct current (DC)) can charge a car up to 80% in as little as 30 minutes. Our rapid chargers can be found in multiple locations including car parks, train stations, highway sites and parks.



Ultra rapid charging

Ultra rapid chargers (≥ 150 kW direct current (DC)) can provide up to 66 miles of driving range in as little as six minutes. Our ultra rapid hubs can be found on motorway and national road sites across Great Britain.

Charger types

Tethered (cable provided) Vs Untethered (cable needed)

Our network includes both tethered and untethered chargers. Tethered chargers will have the different cable types attached, whereas you'll need your own cable to connect to an untethered charger.

All of our ultra rapid and the majority of our rapid chargers, are tethered. All of our fast (up to 22kW AC) chargers are untethered, so all you have to do is plug in your own cable and you're ready to go.



Your EV will come with a charging cable to use with your home charger and public fast (22kW AC) chargers. Always keep your charger cable in your EV.



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ESB

RAPID ELECTRIC CHARGING POINT

ESB customer care
0345 609 0372
esb-resolutions.co.uk

esb-resolutions.co.uk

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Electric vehicle charging point only
No 15-16 1.1.2018

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Connectors

There are three types of connectors used by EVs. These are CCS, CHAdeMO and AC22/AC43. Make sure you know what connector is right for your vehicle.



You can filter by connector type using our EV Plug In App.





Combined Charging System (CCS) Combo

This connector is the most common connector type used by car brands.



Charge de Move (CHAdeMO)

This connector is used to charge Nissan Leaf and Mitsubishi vehicles.



AC 22 and AC 43

The AC22 connector can charge all EVs. The AC43 connector can charge all EVs and is a legacy connector. Most EVs can connect to this connector but may not be able to draw full power. The majority of EVs rapid charge on CCS or CHAdeMO.

The EV Plug In app

The EV Plug In app is free to download from the App Store and Google Play.

Using the app is the easiest way to:

- Quickly find your nearest charger and check if it's available
- Start and stop a charge at a public charger
- Plan your journey
- Sign up to use the network
- Track your usage and view your charging history.



Take a look at the EV Plug In app to see if a charger is available or in use.



Getting Started

To use the ESB Energy charging network, simply sign up by following the steps below.

1. Create an account via our EV Plug In App or esbenergy.co.uk/EV
2. Choose your plan; Membership, Taxi or PAYG (Pay as You Go).

If you'll be using our network a lot (more than five times a month), you might benefit from the Membership plan. With this plan, you pay a monthly fee to enjoy a discounted rate on every charge.

Electric taxi drivers can avail of our free subscription and free charge point access card, all while benefitting from pay per use at a lower per kWh rate with our Taxi plan.

If you're using it a little less, you might be better suited to the Pay As You Go option (PAYG.).

To find out more about price plans, go to: esbenergy.co.uk/ev/pricing

3. Add your personal details
4. Add your payment method

Contactless is available across the majority of our chargers. Where contactless payment is used, a 50p connection fee will be applicable.



Remember to check to see if an overstay fee applies when using our chargers. Details available on our website.

Charge Point Access Card

As well as using the EV Plug In app, we recommend all EV drivers should have a charge point access card which also allows you to charge on our EV charging network.

If you sign up to a Membership or Taxi Subscription package via our website or via the EV Plug In app you'll receive a free card. A charge point access card is available to PAYG customers for a once off fee of £10.



Remember to always bring your **ESB Energy** charge point access card when you travel. It might be best to keep it in the vehicle so you always have it to hand.







Driver Etiquette

Now that you're part of a new community of drivers, it's important to be mindful of other people using the ESB Energy public charging network. Here are some things to remember when charging:

- Always bring your ESB Energy charge point access card or have your EV Plug In app to hand.
- **Pay the local parking fee if there is one. This is determined by individual local councils and parking enforcement teams.**
- Be careful not to drop the connector and remember to replace it securely on its holster.
- **Don't leave cables trailing on the ground as they may cause a trip hazard.**
- Don't attempt to unplug somebody else's car when they are charging.
- **Make sure to swipe to finish your charge and double check that your charge has ended.**
- After charging please vacate the space to allow the next driver to recharge.
- Check to see if an overstay fee applies when using our chargers. Details available on our website.

Report any faults or safety concerns to our 24/7 customer care helpline: **0345 609 0372.**

Get in Touch

Now you are all set and ready to join the world of electric motoring, please do keep in touch.

Talk to us

Our customer care team are available 24/7 365 days a year on 0044 345 609 0372.

You can also contact us at EVsupport@esbenergy.co.uk.

We want to hear from you on any feedback about our chargers, network or anything that will improve your EV charging experience with ESB Energy.

For more information, including video guides on charging your EV, using our EV Plug In app and more, visit esbenergy.co.uk/EV and follow us on  [@ESBEVSolutions](https://twitter.com/ESBEVSolutions).



EV Glossary

There is a lot of terminology in the EV world. Below are some of the more common terms you may hear:

AC (Alternating Current)

Electricity that regularly changes direction many times a second, which is the kind of power that comes from the power plant to homes and businesses. It is the most common form of electrical power used in residential and commercial settings.

BEV (Battery Electric Vehicle)

A 100% battery-powered EV - therefore, must be plugged into an external electricity source in order to recharge.

Charge Point Access Card/RFID Card

An ESB Energy charge point access card is a credit card sized card that allows you to start and stop a charge on the ESB Energy public charging network. Also known as an RFID card.

DC (Direct Current)

Electricity that maintains a constant flow in one direction and is the type of power that comes from a battery.

FCP (Fast Charge Point)

A charge point that delivers an AC charge at less than or equal to 22kW.

ICE (Internal Combustion Engine)

A vehicle powered by a petrol or diesel engine.

ICE'D

EV charging space blocked by a petrol or diesel car.

kW (Kilowatt)

A unit of electrical power used to refer to the power delivery of an EV charger.

PHEV (Plug-In Hybrid Electric Vehicle)

A vehicle which is powered by both a traditional combustion engine (petrol/diesel) and an electric motor with the ability to also plug-in to charge.

Range

The distance you can travel on pure electric power before the battery requires a recharge.

Rapid Charge Point

A charge point that delivers power from 22kW - 100kW.

Single Phase Electricity

This type of electricity is found in most homes and is characterised by the delivery of electricity through 1 live conductor. Most EVs charge from AC connectors in this way, and it typically allows for either 3.7 kW or 7.4 kW of power through a normal charge point.

Smart Charging

A broad term for the way an intelligent, connected charge point can perform. This can include things like energy monitoring, power reduction in response to energy or price signals, or managed charging, i.e. shifting the time or power at which charging happens.

Socket

Receptacle on an untethered charger where you plug your connector in, located behind a flap or cover.

Three Phase Electricity

This type of electricity is found in larger commercial premises and all ESB Energy public chargers. It is characterised by the delivery of electricity through three live conductors at the same time and can deliver more power to a vehicle equipped for three-phase charging. These include the Renault Zoe, all Tesla vehicles, the BMW i3 and a small number of other cars. These cars can charge from three-phase electricity at power levels of 11 kW to 22 kW, depending on the car's internal electronics.

Ultra Rapid Charge Point

A charge point that delivers a charge at a power greater than or equal to 150kW direct current (DC).

