



Energy for
generations

Electric Vehicle Quickstart Guide for Fleet Drivers





Congratulations!

Your business has now made the transition to electric vehicles, helping to **power Ireland towards a cleaner, brighter future**. We're driven to make a difference and your choice will **help Ireland work towards a Net Zero future**.

ESB owns and operates **the biggest and most extensive EV charging network** on the island of Ireland. Here's everything you need to know to use our network.



Our EV Charging Network

Access to quick and easy charging is essential for EV drivers. That's why **ESB** has installed over **1,600 charge points** across the island of Ireland – including more than **50 high-power charging hubs** – with many more on the way.

You'll find our charge points distributed across the **whole island of Ireland**, for convenient charging wherever you are.

And as the leading provider of public EV charging, we're constantly upgrading and adding new chargers, as well as new locations to our network.

Average
uptime of

98%

across our EV
charging network



1,600
Charge Points





There are three types of chargers across the network; standard, fast and high power. 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 kilowatt (kW)) is a good guide to knowing how fast your EV will charge - 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 esb.ie/ecars or in the ecar connect App.





Standard charging

Standard 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.

Fast charging

Fast/rapid chargers (>22 - 100kW direct current (DC)) can charge a car up to 80% in as little as 30 minutes. They're usually found in motorway service stations and selected car parks.



High power charging

We are ramping up our installations of high power (>=150kW DC) hubs on motorway and national road sites across the country. These hubs can provide up to 100 kilometres (km) of driving range in as little as six minutes.

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 high power chargers, and the majority of our fast chargers, are tethered. All of our standard 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 standard chargers. Always keep your charger cable in your EV.

Connectors

There are three types of connectors used by all EVs. All three can be found at the majority of **ESB** fast and high power charge points. **Make sure you know what connector is right for your vehicle.**



You can filter by connector type using our ecar connect App.

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FAST
CHARGE
POINT





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.

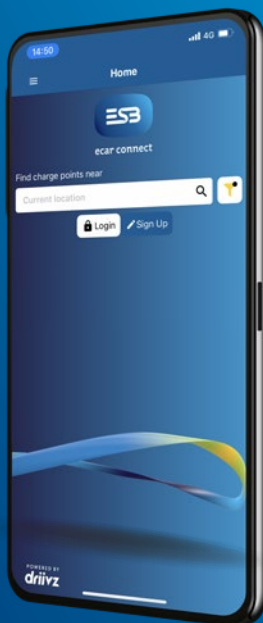


AC 22 and AC 43

The AC22 connector is the most common connector type on our network and 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 now fast charge on CCS or CHAdeMO.

The ecar connect App

The ecar connect 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
- Plan your journey



Take a look at the ecar connect app to see if a charger is available or in use.

Getting Started

Your fleet manager has recently made the switch from traditional vehicles to electric vehicles. Your account will be managed centrally by your company, so there is no need to worry about payment plans.

- For the best user experience, download the ecar connect app to check out chargers near you.
- Always keep your charge point access card on your person or in your vehicle. To sign in, you will require an email address and a password.
- The email address will take the form **cardnumber-companyname@esbecars.com**
The card number will be the visible number on your assigned charge point access card, and the company name will be the company name that was registered with us.
- The default one-time password is **'ESBEcarsFD1\$!'**. Drivers will be prompted to change this upon first sign in.

Now you're ready to hit the road!

Overstay fees apply when using our chargers.
Details available on our website.



Charge Point Access Card

As an ecars customer, each driver will receive a charge point access card which allows users to charge your EV on our charging network.



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



VEHICLE POWER CHARGE POINT





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 public charging network. Here are some things to remember when charging:

- Always bring your ESB charge point access card.
- Pay the local parking fee if there is one. (This is determined by individual local councils).
- 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.

**Report any faults or safety concerns to our
24/7 customer care helpline: +353 1 258 3799.**

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 **+353 1 258 3799**.

You can also contact us at **ecars@esb.ie**.

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

For more information, including video guides on charging your EV, using our ecar connect app and more, visit **esb.ie/ecars** and follow us on

 facebook.com/ESBecars.



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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 charge point access card is a credit card sized card that allows you to start and stop a charge on the ESB 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 a charge at a power greater than 22kW and up to 100kW direct current (DC).

HPC (High Power Charge Point)

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

ICE (Internal Combustion Engine) Vehicle

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.

kWh (Kilowatt Hour)

A unit of energy equivalent to the energy transferred in one hour by one kilowatt of power. EV battery size is measured in kilowatt-hours.

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.

SCP (Standard Charge Point)

A charge point that delivers an AC charge at up to 22 kW.

Single Phase Electricity

This type of electricity is found in most homes and is characterised by the delivery of electricity through one 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 public charge points. 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.



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