Energy for generations

ELECTRIC VEHICLE QUICKSTART GUIDE

CONGRATULATIONS!

You're now the proud owner of an electric vehicle (EV), helping to **power Ireland towards a cleaner, brighter 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 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** have installed **over 1,400 charge points, with many more to come**.

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.

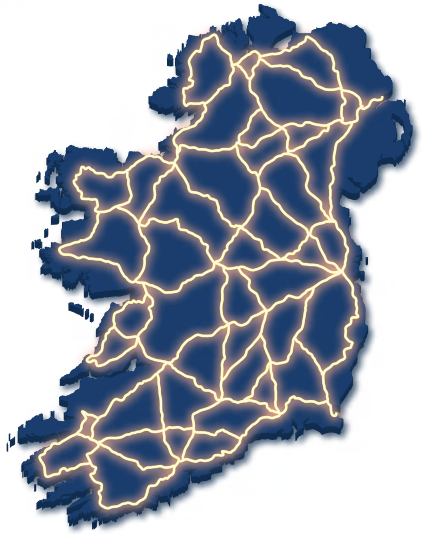
AVERAGE UPTIME OF

98%

ACROSS OUR EV CHARGING NETWORK (OCT 2021)

1,400

CHARGE POINTS



Our Chargers

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

Standard charging

Standard chargers (up to 22kW AC) can charge your car in approximately 1-6 hours. These chargers are typically found on-street or in car parks.

Fast charging

Fast chargers (up to 50kW 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 (from 50kW to 350kW DC) hubs on motorway and national road sites across the country. These hubs can provide up to 100km of driving range in as little as six minutes.

Did you know that EV's charge at different speeds? Charging rate (measured in 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.

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.

CCS COMBO

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

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
- Start and stop a charge at a public charger
- Plan your journey
- Sign up to use the network
- Manage your account
- Track your usage and view your charging history.

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

Getting Started

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

1. **Create an account via our ecar connect app or esb.ie/ecars**
2. **Choose your plan: Membership vs PAYG**

If you'll be using our network a lot (more than 5 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. To find out more about Membership go to:
esb.ie/ecars/price-plans/membership

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 PAYG, go to:
esb.ie/ecars/price-plans/pay-as-you-go

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

Now you're ready to hit the road!

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 ecar connect app, we recommend all EV drivers should have a charge point access card which also allows you to charge on our EV charging network.

As a member, you'll receive a free card when you sign up via our website or the ecar connect app. PAYG customers can purchase a card or get one free with a €20 top up.

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.

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 or have your ecar connect app to hand.
- **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: 01 258 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 (**facebook.com/ESBecars**).

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 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 a 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.

HPC (HIGH POWER CHARGE POINT)
A charge point that delivers a charge at a power greater than 50kW.

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 22kW.

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 public charge points. It is characterised by the delivery of electricity through 3 live conductors at the same time and can deliver more power to a vehicle equipped for 3-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 3-phase electricity at power levels of 11kW to 22 kW, depending on the car's internal electronics.

Energy for generations