Energy for generations

EV GLOSSARY

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

01

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.

02

BEV (BATTERY ELECTRIC VEHICLE)

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

03

CARD READER

Where you tap your card on the charger to authorise payment.

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CHARGE POINT

A piece of electrical infrastructure which electric vehicles can be plugged into and recharged, whether at home, work or in a publicly accessible location.

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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.

06

DC (DIRECT CURRENT)

Electricity that maintains a constant flow in one direction and is the type of power that comes from a battery. All energy stored in batteries is stored as DC.

07

EV CONNECTOR TYPES:

CCS Combo

The CCS plug supports AC and DC charging power. Cars such as VW, BMW, Hyundai, Ford, Mercedes etc use this connector type. This plug/socket combines AC charging and DC charging in one unit, using different pins.

CHAdeMO

CHAdeMO is an exclusively DC-oriented connector and is only used only for fast-charging. It is mostly found on Japanese cars i.e. Nissan and Mitsubishi. Cars with CHAdeMO connectors will have a second socket for AC charging

Fast AC

Used by older Renault Zoe vehicles, this standard is increasingly being replaced by CCS charging on newer cars.

08

EV (ELECTRIC VEHICLE)

A broad category that includes all vehicles that are fully powered by Electricity or an Electric Motor.

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FCP (FAST CHARGE POINT)

A charge point that delivers a charge at a power greater than 22kW.

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HOME CHARGING

Plugging your electric car in to charge while it is parked at home, typically overnight. A dedicated home charging point is the best and safest way of doing this.

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ICE (INTERNAL COMBUSTION ENGINE)

A vehicle powered by a petrol or diesel engine.

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ICE'D

EV charging space blocked by a petrol or diesel car.

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Kw (KILOWATT)

A unit of electrical power.

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KwH (KILOWATT HOUR)

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

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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.

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RANGE

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

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RANGE ANXIETY

Worry or stress that is caused due to the fear that an electric car will run out of battery power before the destination is reached.

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SCP (STANDARD CHARGE POINT) *ALSO CALLED AC CHARGER/STANDARD CHARGER

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

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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 Electric Vehicles 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.

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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.

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SOCKET

Receptacle on the chargers where you plug your connector in, located behind a flap or cover.

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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.

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For more information, visit: **esb.ie/ecars**