EV for Beginners

Your EV starter guide in five parts

Choosing, charging and driving an electric car, explained in plain English by someone who drives one.





WELCOME

Hi, I'm Wayne

I drive an electric car in Devon, and I built EV for Beginners because I remember how confusing it all felt at the start. Plugs with odd names, chargers that wanted three different apps, numbers like kW and kWh that nobody explained.

I learned some of it the hard way. On one of my first trips I plugged in at a motorway services, saw the charger start and went inside for a coffee. Somewhere in the first few minutes the session failed, and I didn't know. I came back expecting 80% and found the battery had gone up by just 5%. Now I always wait a minute or two to check the charge is properly under way, and I keep the network's app open so it tells me if anything stops.

This guide is everything I wish someone had told me on day one. Read the five parts in order, one a day if you like. Each one points you to a longer guide on the website if you want more.

How to use this guide

Anything **in green** is a link to the website, where you can look up your exact car, find chargers near you and compare charging networks.

What's inside

1. **Which kind of electric car is right for you**
   BEVs, hybrids and plug-in hybrids, and the one question that matters most
2. **kW and kWh: the two numbers that matter**
   Speed versus size, and how to work out what a charge costs
3. **Charging at home (and if you can't)**
   Wallboxes, 3-pin plugs, cheap overnight tariffs and no-driveway options
4. **Your first public charge**
   Step by step, plus the tips that save time and money
5. **Your first week behind the wheel**
   One-pedal driving, the range figure and looking after the battery

Plus: a first-charge checklist and the words you'll hear, on the last pages.

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PART 1

Which kind of electric car is right for you

"Electric" gets used for several quite different cars. Only some of them plug in.

Type	Plugs in?	What it means
Battery electric (BEV)	Yes	Runs only on its battery. No petrol, no exhaust. This guide is about these.
Plug-in hybrid (PHEV)	Yes	A petrol engine plus a smaller battery for shorter electric-only trips.
Range extender (REEV)	Yes	Drives on electricity; a small engine only makes power to top up the battery.
Self-charging hybrid (HEV)	No	A petrol car helped by a small battery that charges itself as you drive.
Mild hybrid (MHEV)	No	A petrol or diesel car with a tiny battery. It can't drive on electricity alone.

The one question that matters most

Most new electric cars manage 200 miles or more on a charge, and longer trips just need a rapid-charging stop. So range is rarely the problem people expect. The big question is **where you'll charge**.

- **At home or at work?** An electric car will suit almost everyone.
- **Near home, on the street or at the supermarket?** It can work well with a bit of planning.
- **Nowhere regular, and lots of long trips?** A plug-in hybrid may suit you better for now.

Next step

Pick a car you like the look of and open its page. It shows exactly how long it takes to charge, at home and on the road, for your version.

Browse electric cars | Read: EV types explained

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PART 2

kW and kWh: the two numbers that matter

kWh = how much

Kilowatt-hours measure **energy**. A battery's size is in kWh, like the size of a fuel tank. A bigger number means more range.

kW = how fast

Kilowatts measure **power**. A charger's speed is in kW, like how fast a pump flows. A bigger number means quicker charging.

Your car decides the speed, too

A charger and a car each have a top speed, and you always get the **slower of the two**. Plug a car that takes 100 kW into a 350 kW charger and you'll get about 100 kW, at best. At home it works the same way: most cars and wallboxes top out at about 7 kW on a normal UK house supply.

Working out what a charge costs

Electricity is sold per kWh, at home and at public chargers. So the cost of a charge is simply:

kWh you put in × price per kWh = cost

A little energy is lost as heat while charging, especially on slower AC chargers, so the real figure is usually a few per cent higher.

A handy rule of thumb

Most electric cars travel about 3 to 4 miles for every kWh, less in winter and at motorway speeds.

Charging cost calculator **Read: kW vs kWh, explained**

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PART 3

Charging at home (and if you can't)

Most EV drivers who can charge at home do most of their charging there, overnight, a bit like charging a phone. You wake up with a full battery and rarely visit a public charger.

A home charger (wallbox)

The safest and quickest way to charge at home. It needs off-street parking and must be fitted by a qualified installer. Most are about 7 kW, enough to fill a typical battery overnight.

A normal 3-pin plug

Fine for occasional use, but slow (about 2.3 kW) and the socket can get warm over long sessions. Use an outdoor-rated socket and **never an extension lead**.

Cheap overnight electricity

Many energy suppliers offer EV tariffs with a much cheaper rate for a few hours at night. Set the timer in your car or charger to start in that window and home charging costs far less than public charging.

No driveway?

Lots of people charge at lamp-post or on-street chargers near home, at the supermarket while they shop, or at work. Check what's near you on the charger finder before you buy.

Find chargers near you **Read: Charging at home**



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PART 4

Your first public charge

1. **Find a charger** that suits your car on the charger finder. Rapid chargers (50 kW and up) are for quick stops; slower AC posts suit longer stays.
2. **Check the plug.** Almost every new car uses **CCS** for rapid charging. Some older Nissan Leafs use CHAdeMO instead.
3. **Plug in.** Rapid chargers have the cable attached. On slower AC posts and lamp-posts you usually use your own **Type 2** cable, which normally comes with the car.
4. **Pay.** Most newer chargers take contactless: just tap your bank card. Or use the network's app, which is often cheaper, especially overnight.
5. **Watch it start, then check again.** The charger screen (and your car) shows the speed and how much you've added. Wait a minute or two to see it climbing before you walk away, and keep the app or your car's app open so you'll know if it stops.
6. **Stop, unplug and move on.** End the session on the screen or app, put the cable back and free the bay for the next driver.

Save time: unplug at 80%

Charging slows right down after about 80%, so on a rapid charger it's usually quicker to unplug at 80% and carry on. It's kinder to the driver waiting behind you, too.

In cold weather, warm the battery first

A cold battery charges slowly. Many cars warm it up automatically if you set the charger as your sat-nav destination (this is called preconditioning). Each car page on the website shows how yours does it.

If a charger won't start

Try another bay or the network's app, and note the charger ID printed on the unit before you ring the helpline. Every network page on the website lists its phone number.

Charging networks | Read: Using a public charger

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PART 5

Your first week behind the wheel

It's an automatic, and it's quick

There's no clutch or gears. Electric cars pull away smoothly and quickly, and they're very quiet at low speed, so keep an eye out for pedestrians in car parks.

Lifting off slows you down

When you lift your foot off the accelerator, the motor slows the car and puts a little energy back into the battery. This is called **regenerative braking**. Many cars have a "one-pedal" setting where you hardly need the brake at all. It feels odd for a day, then natural.

The range figure moves about

The miles-left number on the dash is an estimate based on recent driving. It drops faster on the motorway, in the cold and with the heater on, and recovers around town. That's normal, not a fault.

Looking after the battery

For most cars, charge to about 80% day to day and to 100% before a long trip. Some cars, especially those with **LFP batteries** (such as standard-range Teslas), are designed to be charged to 100% regularly, so **check your handbook**. Try not to leave the car sitting at 100% or nearly empty for days.

Warm or cool the car while it's plugged in

Most EVs let you heat or cool the cabin from an app before you set off. Do it while plugged in and the energy comes from the charger, not your range.

Read: Your first drive

Read: Battery care



KEEP THIS HANDY

Your first public charge checklist

- [ ] I know which plug my car uses for rapid charging (CCS or CHAdeMO)
- [ ] My Type 2 cable is in the car, for slower AC posts
- [ ] I've found a charger on my route, and a back-up nearby
- [ ] I have a contactless card, and one charging app as a back-up
- [ ] In winter, I've set the charger as my sat-nav destination to warm the battery
- [ ] I'll wait a minute or two to check the charge is climbing before I walk away
- [ ] I'll unplug at about 80% on a rapid charger and move on
- [ ] I know where to find the network's helpline if it won't start

Words you'll hear

AC / DC	AC is slower charging (home, lamp-posts, posts). DC is rapid charging, straight into the battery.
CCS	The rapid-charging plug used by almost every new car in the UK.
Type 2	The standard plug for AC charging. Your own cable usually has one on each end.
Preconditioning	Warming the battery before rapid charging so it charges faster.
Regen	Regenerative braking: slowing down puts energy back in the battery.
SoC	State of charge: how full the battery is, as a percentage.
WLTP	The official range test. Real-world range is usually lower, especially in winter.

Every term, explained: **evforbeginners.co.uk/guides/glossary**

EV for Beginners

Carry on at evforbeginners.co.uk

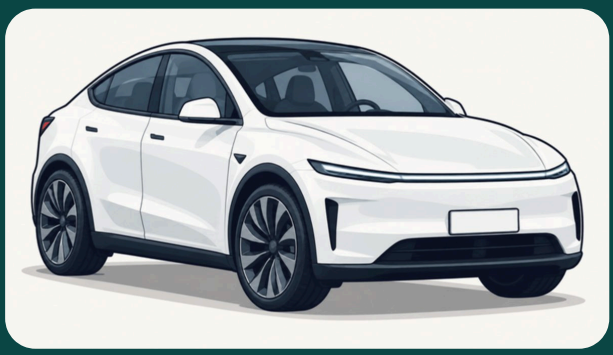
Everything in this guide is on the website, with tools built around your exact car.

Your car, explained
Pick your make, model and version to see its plugs, which chargers you can use and how long charging really takes. **evforbeginners.co.uk/cars**

Find a charger
Search any UK postcode or town, filtered to chargers that suit your car.
evforbeginners.co.uk/find-a-charger

Charging networks and prices
All 46 UK networks: where they are, how to pay and what they cost.
evforbeginners.co.uk/networks

EV news, explained
What the latest news actually means for you, twice a week. **evforbeginners.co.uk/news**



General information only, correct as of October 2026. Charging speeds, prices and rules change; always check your car's handbook and the charger before you plug in. Car illustrations are artist's impressions, not photographs. © 2026 EV for Beginners.