

EV Range Explained: Everything You Need to Know



What Does EV Range Mean?

EV range refers to how far an electric vehicle can travel on a full battery charge.

It works similarly to how people think about miles per tank in a petrol or diesel car.

For example:

- a smaller electric car may offer around 100-200 miles of range

- mid-range EVs often achieve 250–350 miles
- premium electric vehicles can now exceed 400 miles on a single charge

The exact range depends on the vehicle, battery size, driving style, weather conditions and road type.

How Far Do People Actually Drive?

One of the biggest misconceptions about EV range is that most people regularly drive huge distances.

In reality, the average UK driver travels less than 25 miles per day.

That means many modern electric vehicles can comfortably handle several days of driving before needing to recharge.

For businesses operating:

- company cars
- workplace vehicles
- local fleets
- sales teams
- commuter staff parking

EV range is often more practical than expected.

What Affects EV Range?

Just like petrol and diesel vehicles become less efficient under certain conditions, EV range can vary depending on how the vehicle is used.

Some of the biggest factors include:

Driving Speed

Driving at higher motorway speeds uses more battery power than city driving.

Weather Conditions

Cold temperatures can reduce battery efficiency slightly, particularly during winter months when heating systems are used more frequently.

Vehicle Weight

Carrying heavy loads or passengers can impact energy consumption.

Driving Style

Aggressive acceleration and constant high-speed driving will reduce range faster.

Terrain

Hilly routes generally use more energy than flatter roads.

Most modern EVs now include intelligent systems that help drivers monitor battery usage and optimise efficiency in real time.

EV Range Has Improved Dramatically

Early electric vehicles were often criticised for limited range, but modern EV technology has advanced quickly.

Many newer models now comfortably exceed:

- 250 miles per charge
- 300+ mile motorway ranges
- rapid charging capabilities

Manufacturers are also investing heavily in:

- larger battery capacities
- more efficient motors
- improved battery chemistry
- faster charging speeds

As a result, EV range continues improving year after year.

Charging Infrastructure Is Expanding Rapidly

Another reason range anxiety is starting to disappear is the growth of EV charging infrastructure across the UK.

Drivers now have access to:

- home charging
- workplace EV charging
- public charging stations
- rapid motorway chargers
- destination charging at hotels and retail parks

Businesses are increasingly installing workplace EV chargers to support employees, visitors and fleet vehicles as EV adoption grows.

For many drivers, charging is becoming as routine as plugging in a phone overnight.

Fast Charging Is Changing Everything

Modern rapid chargers can add significant range in a short amount of time.

Depending on the vehicle and charger type:

- some EVs can gain over 100 miles of range in around 15-20 minutes
- many batteries can charge from 10% to 80% in under 30 minutes

This has made long-distance travel far more practical than many people expect.

As ultra-rapid charging networks continue expanding, charging times are becoming less of a barrier for both drivers and businesses.

EV Range vs Petrol & Diesel Cars

Petrol and diesel vehicles still offer quick refuelling and widespread fuel station availability, which remains convenient for long-distance travel.

However, electric vehicles are becoming increasingly competitive thanks to:

- lower running costs
- improving battery range
- expanding charging networks
- lower maintenance requirements
- smarter route planning technology

For many businesses, EVs now offer a realistic long-term alternative to traditional fuel vehicles.