

The Electric Car Lady



BUSINESS



### **HOW TO CHOOSE AN ELECTRIC CAR**

Whether you are a business owner looking to reduce your carbon footprint and become more environmentally friendly or an individual thinking about driving an electric vehicle, there will be lots of questions as we make the transition to this new form of driving.

We hope this guide will help you to decide whether an electric car or van will work for you and your business

Switching to electric will save you money on fuel and protect the environment. Electricity is a much cheaper fuel than petrol or diesel, so if you chose to drive an **ALL ELECTRIC** vehicle you will see a reduction in your fuel bills.



**Nissan Leaf** the best selling EV in the world

#### **FIRST THINGS FIRST**

There are 3 types of **ELECTRIC VEHICLES** on the market:

ALL ELECTRIC BATTERY ELECTRIC VEHICLES (BEVs) PLUG IN HYBRID ELECTRIC VEHICLES (PHEVs)

CONVENTIONAL, NON-PLUG IN HYBRID ELECTRIC VEHICLES (HEVs)

It is important to decide which will best suit your lifestyle and beliefs (i.e. environment).

Here is a brief summary of the differences:

**BEVs** Pure electric ONLY. Must be plugged in to charge - without charge it simply won't go!

These are the best for the environment as they have Zero tailpipe emissions and are also currently the most tax efficient for Company Car Drivers (and Business Owners).

**PHEVs** Part electric (must be plugged in to charge) and part traditional ICE engine.

Good for the environment when driving on pure electric (between 30 and 70 miles on a single charge).

Brilliant for short runs and to improve local air quality with petrol or diesel engine to fall back on for longer runs. These are not as economical on fuel as a **BEV**, but for high mileage drivers this could be the solution if a pure electric vehicle doesn't quite have the range.

**HEVs** often advertised as "self charging hybrids". These can not be plugged in and have very little electric miles at low speed only.

They are like a traditional petrol or diesel fuelled vehicle with a small battery to support the engine and improve efficiency.





## IS AN ELECTRIC CAR RIGHT FOR ME OR MY BUSINESS?



#### **DRIVING HABITS AND MILEAGE**

With technology constantly improving, the majority of electric cars now have a range of between 200 and 300 miles, with the latest Tesla Model 3 long range boasting over 370 miles on a single charge (Sept 23).

#### **THINGS TO CONSIDER:**

#### **MILEAGE AND CHARGING**

The next step when making the decision is to think about the drivers' journeys and driving style.

#### What will the annual mileage be?

What sort of **range does the driver need** on a regular basis?

Does the driver have the **off road facilities to charge** at home overnight?

Imagine the commute to work is about 60 miles, or the car is used for the school run, shopping, going to the gym etc. In both cases most of the new electric vehicles on the market today will have sufficient range on a single charge.

However, if the driver regularly drives 250 miles or more a day, you may need to consider whether a pure electric vehicle is going to be tricky in terms of availability of charging and the time taken to do so.

Where are the journeys? Do they include motorway/re-charging facilities for longer runs? It may not be practical for high mileage drivers working in rural areas to make the change yet.

If the driver is high mileage, choose an EV with the **highest range** or a **Plug In Hybrid** could offer a better solution.

The **average commute** in the UK is estimated to be **less than 20 miles per day**, with the majority of drivers doing longer runs rarely or on holiday.

Longer runs definitely need to be planned for. Many electric car manufacturers have apps to help you locate charging facilities, or you can use www.zap-map.com

#### **CHARGING**

#### Where will the EV be charged?

The most convenient way to charge an electric car is at the **driver's home overnight** to start the day topped up.

Electric cars can be charged from an **ordinary domestic socket**, but depending on the car and the size of the battery, this can take a long time as it is the slowest form of charging. My Vauxhall Corsa takes about 19 hours.





**HOME CHARGING POINT -** most EV drivers with off street parking fit a charging point at home and top up overnight.

**WORK PLACE CHARGING -** many businesses with parking have charging points on the premises that Directors and staff can use to top up.

On longer journeys, **top up at motorway services** on "rapid" high speed charging points where – depending on the car you have and speed of the charger – you can top up to 80% in as little as 30-40 minutes.

Charging at home is the **cheapest**, rapid chargers are the **most expensive**. See our Charging Guide for more details.

#### **RANGE**

How far an electric car will go when fully charged depends on a number of things:

- Which car you have decided on
- The size and efficiency of the battery
- · The outside environment
- Driving style, speed and terrain.

Manufacturers of BEVs will advertise the maximum range based on laboratory testing (WLTP), which is how the range of all BEVs are measured. You are

unlikely to achieve the advertised range but it will give you a comparison.

The range will drop in the winter when it also takes longer to charge the battery.

#### **ENVIRONMENT**

All BEVs emit Zero tailpipe emissions. This makes them very good for the environment as they are not polluting with gases like CO2, NOx and other particulates.

To improve the impact on the environment even further, choose to charge using clean electricity from wind or solar. Many providers now offer renewable energy tariffs and some have special rates for EV drivers to cut fuel bills even further.

For Businesses, a sustainable, eco-friendly fleet can enhance your reputation amongst potential clients, suppliers and employees as companies' focus turns to working with partners with viable sustainability policies.

By making some initial investigations into converting to a zero-emission fleet, you can take the first steps to introducing a future-proofed fleet that will ultimately be cheaper and cleaner to run.

Even if you believe you are not currently ready to make a total transition to an electric fleet, through being better informed and making small changes to your fleet now you will be taking the first steps on the road to Zero.

# WHAT NEXT?

For more information, please get in touch with our friendly team.

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