A RACE TO NET ZERO – Part 3
A guide to the environmental benefits of electric cars and hybrids.

There is no doubt that many of us across the UK have consciously introduced behaviours into our lifestyle that have had a positive environmental impact, whether it be limiting household waste, decreasing energy consumption or reducing carbon footprint.

In the movement to bring sustainability to the heart of the UK, the Government aims to bring forward the end of the sale of new petrol and diesel cars to 2035 or potentially sooner.

Unsurprisingly, this has resulted in a huge shift from petrol and diesel cars, to **electric vehicles (EV) and hybrids**, which are far more environmentally friendly. At the end of September 2020 there were more than 164,100 purely electric cars, and over 373,600 plug in models, including plug-in hybrids (PHEVs) on UK roads.

But not only do they provide a greener upside, they also offer a plethora of other advantages. Here are some of the reasons that you should make your swap to an EV or hybrid car.

- Finance is arguably the most significant component to consider when switching to an electric car. Compared to the price of fuel, **electricity is heaps cheaper**. In fact, one of the main benefits of a fully electric vehicle is that it can cost as little as 1p per mile to run, in contrast to the 8-17p per mile petrol and diesel cars can cost. Hybrids can also save the burning hole in your bank, as they have greater fuel economy, using up to 30% less fuel per mile than the conventional fuel-powered vehicles.
- Trips to the garage will become less frequent when owning an EV as they have much **lower maintenance** and service costs, resulting in greater savings.
- The government even offers **financial incentives** to encourage people to swap to an EV. The subsidy has given more than 160,000 drivers a discount, such as the **Plug-in-Car £3000 grant** when purchasing a brand new eligible electric car. Grants for electric vans and motorbikes remain at £8000 to £1500 respectively. They even offer incentives towards the cost of home charging points for both new and used electric and plug-in hybrid cars.
- According to Enel X, over a five year period, the maintenance of a regular car would cost a minimum of £1475. Electric vehicles don't require the replacements of oil changes, timing belts, fuel filters or mufflers. Effectively, **you'll be saving nearly £1500** every five years, plus any other relevant issue that crops up that an EV wouldn't require any attention to.
- Not to worry if you are not looking to buy brand new, as EVs are also growing in the second-hand market as they become increasingly popular, making them an even more affordable option.
- Not only are they good for your bank, they are also good for the environment. Electric cars **emit no carbon emissions**, which in turn, **improves air quality**, particularly at the roadside and in urban areas where air quality can suffer most. Even when taking into account the impact of generating the electricity used, electric cars produce lower greenhouse gases than petrol or diesel cars. So potentially, from 2030, the air will be much cleaner and more likely better for everyone's health.

- You are also able to smart charge your EV at home, to support the renewable transition, which can help to decrease the impact of EV's on the electricity system and maximise the use of clean **renewable energy**.
- Another major bonus for electric vehicles is that they are simply a lot nicer to drive than regular cars. They are smoother to drive as regular engines vibrate constantly when driven, especially when changing gear. Remember turning up the music so you just so happened to ignore those noises your car is making? No need to have that worry with an electric vehicle.
- Many people worry that if they purchase an electric vehicle, they will run out of charge on a journey. However, purchasing the right electric vehicle will prove otherwise. Many EVs claim they have **mileage ranges of 250 miles** plus, per full charge. Obviously the more expensive vehicle, such as the Tesla Model S Long range has a range of 379 miles. But Kia, Nissan and BMW offer cheaper alternatives with shorter mileage range between 250-300 miles.
- There are also many arguments about how electricity still has carbon emissions. However, the carbon emissions from electricity generation for an EV is **17%-30% lower** than a regular vehicle. And with all the other contributions of an electric vehicle, the carbon emissions are much lower for an EV, which is far greater for the environment than petrol/diesel cars.
- A huge bonus to switching to an EV is that fully electric vehicles don't require road tax as they have no tailpipe, therefore emitting no carbon dioxide. However, if the car costs over £40,000, there will be a charge of £350 per year for the first 5 years. Which is **£150 cheaper** per year than regular petrol/diesel cars.

This makes them cleaner, greener, and all around better for the planet, causing an influx of people to opt for an Electric vehicle to obtain a more sustainable and economical lifestyle. Therefore, to accelerate the road to a greener future, make the switch to an EV or hybrid!

About this resource

The Race To Net Zero is a feature of the Race Against Climate Change with Amy and Ella; an educational series created by Kids Against Plastic in collaboration with Envision Virgin Racing.