



Changing the way we move around

By John Hall and Dave Green

This is the next article in a series that look at how we can all reduce our carbon footprint based on a series of articles by John Hall former CEO of Essex Wildlife Trust who was awarded an MBE for services to the environment.

News from around the world gives a stark warning that we have to act quickly to curb our carbon emissions: horrendous fires in Australia, Greece and California, searing heat in Canada and Turkey, ice melt in Greenland and Antarctica, serious floods in Europe. World leaders met at COP 26 in Glasgow in November 2021 to cooperate to keep global temperature rise down to +1.5 degrees C. Progress was made but currently nowhere near enough to achieve + 1.5 degrees. We must all eventually aim to reduce our carbon footprint from the around 10 tonnes of carbon emissions per year for an average citizen, to 1 tonne to avoid the worst impacts of climate change. As an interim goal it is estimated that we all need to reduce our carbon emissions by 50% by 2030 to ensure the world does not heat up beyond the +1.5 degree increase target over pre-industrial levels.

In the first two articles we looked at our food choices and our energy choices, which, if we were really determined, could save 1.5 tonnes and 2 tonnes respectively. This month we look at how we get around. Most of us are still wedded to our petrol or diesel car. The media is full of information about electric vehicles (EV's) and the UK Government has legislated to stop the production of petrol and diesel cars by 2030. All car manufacturers are bringing out EV's, hybrid and plug-in hybrid models and electric car sales are increasing rapidly. So how much of your carbon footprint would it save? If you change to a fully electric vehicle this would save about 2 tonnes of carbon; a plug-in hybrid would save about 0.6 tonnes; a full hybrid would save very little carbon (disappointing as I have a 9 year old Yaris Hybrid). As people wrestle with the decision, they rightly raise concerns about EV's.

"I'm concerned about the range." Early EV's like Nissan Leaf with a 30kWh battery (1 kiloWatt hour is 1 unit of electricity) would do about 130 miles; more recent models will do up to 300 miles and a Tesla up to 400 miles.

"How quickly will it charge up?" This depends on how you charge it. From a 13amp plug charging at 2.5kW it would take about 12 hours or overnight; but if you are on a journey then fast charging areas can fill your battery in under 45 minutes.

“What if all the chargers are occupied?” An App will tell you where the nearest chargers are and also which are occupied.

What you do need to do is change the way you think about using the car. You must think ahead – you can’t just fill the tank when the warning light comes on. If you get over your early fears, there is the capital cost: an EV is more expensive than the petrol equivalent but much cheaper to run. So, are you prepared to help ensure a liveable planet or not? If so, the extra cost will reduce your carbon emissions by about 2 tonnes.

EV’s are not the silver bullet. If we all moved to EV’s overnight this would produce an enormous reduction in carbon emissions, but a massive strain on the National Grid and we would still demand the increase in roads that can plague the countryside, towns and villages. We also need to shift our culture by doing fewer miles by car. 60% of journeys by car are less than 2 miles and these could be undertaken on foot or by bike. Many families have bikes in the shed but don’t use them. It takes determination to get on your bike or walk to the shops or school with the kids even though the rewards for better health are well documented. What we need to do is to encourage good safe paths and cycle ways - so press your local Councils.

Improved public transport is also a crucial option to enable all abilities to get around reliably without always resorting to the car. Use the bus for short journeys and the train for longer ones. Even if you don’t switch to an EV, using cycling, walking and public transport could save you about 1 tonne.

Air travel is the biggest concern for carbon emissions. One long distance return flight to Tokyo or Perth would count for 6.5 tonnes of carbon: even a short haul return flight in Europe would count for 1 tonne per person. Many residents might be content with 1 flight per year but 15% of us are taking several flights a year. Being blunt, that is totally unsustainable in the current crisis. And before you write me off as a killjoy, stopping holidays or family visits just reflect on what future you want for you and your family. The latest IPCC Report that summarises all the scientific evidence gathered over decades is out. No ifs, no buts: “Climate Change is here, it is here to stay and it is caused by us (and it is getting worse)”. We each must change course or serious fires, violent storms, flash floods, sea level rise and unbearable hot spells will increasingly be the norm – not the exception (with adverse knock on effects to food and water security, world economies, mass migration of people and collapse of eco-systems). Recent weather in North America has broken all records. We have just had the mildest January day on record (not a cause for celebration but deeply worrying).

In summary, if we significantly change the way we get around we can each reduce our carbon footprint by at least 2 tonnes.