







You and your car

WHY?

Transport accounts for a fifth of all global CO2 emissions, with passenger vehicles contributing to nearly half of that figure. Motorised transport, of all types, is heavily fossil-fuel dependent.

The emissions are the same whether from cars, aeroplanes or motorbikes: an unhealthy mix of carbon dioxide, carbon monoxide, nitrogen oxides, sulphur oxides, hydrocarbons, benzene and sooty particulates. These complex emissions damage air quality and are suspected carcinogens. We are not doing ourselves, or the environment, any favours by adding large amounts of these gases into the atmosphere.

HOW?

DRIVING

Before thinking about changing the car, might you want to revisit how you drive? It is well known that car manufacturers market 'mpg' having measured it at the magical 55 mph not in real driving conditions. Here are some tips to emulate the test conditions and improve your fuel efficiency:

Your driving:

- Avoid sudden braking and unnecessary acceleration.
- Drive more slowly. A car driven at 60mph uses 15% less fuel than one driven at 70mph.
- Don't use the air conditioning. At speeds below 40mph having the windows open does not affect the car's aerodynamic efficiency.
- Turn the engine off when idling if you expect to be idling for more than ten seconds.

The car:

- Remove wind resistance and weight; the top box left on when it's not needed and 'stuff' kept in the boot which both reduce efficiency.
- Keeping tyres inflated and maintaining the car can save 10% of fuel costs.







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Planning your trips:

- Plan to drive outside of rush hours; stop/start is very inefficient.
- Add short drives together, cars are more efficient when the engine is warm.
- Google Maps has pledged to start to show the most eco-friendly route by 2030. Other apps and online maps may follow suit or be in advance so do look out for these developments.
- If possible, use other forms of transport which are more energy efficient:

https://energysavingtrust.org.uk/advice/ecodriving/

https://www.rac.co.uk/drive/advice/emissions/11-ways-to-reduce-your-car-emissions/

ELECTRIC CARS

Fossil fuel cars contribute significant air pollution from a variety of exhaust emissions, and brake dust, as noted above. Electric cars don't have exhaust emissions and use the brakes much less frequently. The UK government plans a ban on sales of new petrol and diesel cars from 2030.

Critics will say, 'The greenest car is the one you already have' and that the infrastructure is not ready for a large-scale shift to electric vehicles. So, should you change now to an electric vehicle or wait until nearer the time? The RAC looks at what needs to change here: https://www.rac.co.uk/drive/electric-cars/choosing/2030-is-it-worth-buying-an-electric-car-now/

As always, these things are not straightforward and the answer will depend on your car usage as well as the efficiency of the car you already own. You will certainly reduce carbon emissions in your travel by switching to electric or hybrid. On the other hand there is embodied energy in the new car, (much of which will have been made using carbon–emitting, fossil–fuel dependent processes), and in the car you scrap. How many miles you do and whether those journeys are mostly local or mostly long distance will affect your decision. How old and inefficient your current car is will also be a factor.







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If you are thinking of changing your car in any case, then choose either one with a high mpg, or seriously consider an electric or hybrid car. You may need to adapt your lifestyle to ensure the range and recharging possibilities match your needs. The AA explain the basics of electric and hybrid cars here: https://www.theaa.com/driving-advice/electric-vehicles/electric-hybrid-car-guide

Next Green Car, a commercial company, provides a guide to economical and environmentally friendly cars. The recommendations are regularly updated and new technologies, such as hydrogen cell cars also profiled: https://www.nextgreencar.com/

Unfortunately, electric cars have several other ethical problems. Rare earths are required in the batteries and many of these come from parts of the world which are environmentally sensitive or renowned for human rights abuses. A UN study in 2020 found child labour is used to extract cobalt in the DRC (where two thirds of global cobalt is produced) and 65% of the water in one of the driest areas of Chile is used to extract lithium leaving local farmers and herdsmen without. As yet no straightforward solutions have been identified: https://news.un.org/en/story/2020/06/1067272

LONGER READS & OTHER RESOURCES

The site https://www.zap-map.com/ shows you electric charging points in the UK and includes a route planner indicating places to charge on your journey.

In 2019, Sustrans wrote a report with the evidence and solutions people find most compelling to reduce personal car use. Entitled 'What do people who live and drive in towns and cities think?', you can read it here: https://www.sustrans.org.uk/media/5501/final-reducing-car-use-report.pdf



