

# Climate Change Action – What can I do?



## Why do I need to reduce my carbon footprint?

Governments and scientists have agreed that if we are to avoid the worst impacts of climate change, **we need to restrict global warming to well below 2C - preferably 1.5C<sup>1</sup>**. For this to happen, we need to radically reduce emissions of greenhouse gases (CO<sub>2</sub>, methane etc.).

The Climate Change Act established a target for the UK to reduce its emissions by at least 100% from 1990 levels by 2050<sup>2</sup>. This target is broken into steps, including a 37% reduction in emissions by 2020<sup>2</sup>.

**On average, each person in the UK has a carbon footprint of 13.56 tonnes** of carbon dioxide equivalent<sup>3</sup>. This figure includes our portion of the UK government's consumption of energy – what is used for road building, hospitals, defence, etc. Lower per capita emissions figures, typically in the **6 to 10 tonnes<sup>4,5</sup>** range, are calculated using different methodologies based on household emissions.

According to WWF, **“if everyone on the planet were allocated a ‘fair share’ of carbon emissions, each person should have a footprint of 1.05 tonnes by the year 2050”<sup>3</sup>**. Other studies put this figure at between **1.1 and 2 tonnes<sup>4,5</sup>**.

## How can I make significant reductions in my carbon footprint?

To find out which actions are most effective in reducing our impact, we read many articles and websites that suggested ways to reduce your carbon footprint, and tested different ideas using the rigorously researched carbon calculator at [footprint.wwf.org.uk](http://footprint.wwf.org.uk).<sup>3,6</sup>

For the areas of **Food, Travel, Home and Buying & Waste**, we've suggested the most effective ways to reduce your footprint, together with other actions that, especially cumulatively, will also have a positive effect. Use a carbon calculator to check your existing carbon footprint and use the *weblinks* provided to help you research the actions you choose to take.

As well as these individual actions, **ask your local councillors and your MP to act on climate**, putting sustainability at the heart of all the decisions they make for your local area. If they receive feedback from constituents, they are much more likely to make climate action a priority. To find your local councillors visit: [centralbedfordshire.gov.uk/directory/14/your\\_councillors](http://centralbedfordshire.gov.uk/directory/14/your_councillors) and to contact the South West Bedfordshire MP see [parliament.uk/get-involved/contact-your-mp](http://parliament.uk/get-involved/contact-your-mp)

## Food:



### Top Action: Move towards a plant-based diet.

The WWF carbon calculator showed that, all other things being equal, someone who eats meat at every meal has a carbon footprint that is **0.6 tonnes<sup>6</sup>** of carbon dioxide **higher** than that of someone who is vegan. At [carbonfootprint.com](http://carbonfootprint.com) we calculated that changing from eating 100g meat/day to being vegan would save **1.05 tonnes<sup>4</sup>** of carbon (based on a food spend of £1300/person/year<sup>8</sup>).

Simply reducing the amount of meat you eat would significantly help to lower your carbon footprint. For example, based on a food spend of £1300/year, a person eating <50g meat per day would have a carbon footprint **0.62 tonnes<sup>4</sup>** lower than a person who ate 100 g of meat a day. You could start by cutting out meat one day a week.

### Other useful food actions:

**Reduce your food waste. In the UK, we waste an average of 30% of all the food we buy<sup>6</sup>!** Our carbon calculator shows that by reducing our food waste from 10-30% to 0-10% we can save **0.3 tonnes<sup>6</sup>** of CO<sub>2</sub>. To reduce waste, plan meals ahead, try not to overbuy, batch cook if you can store leftovers and buy 'ugly' fruit and veg. For more tips see [bbcgoodfood.com/howto/guide/how-reduce-food-waste](http://bbcgoodfood.com/howto/guide/how-reduce-food-waste)

**Source most of your food locally and in season.** This could **save up to 0.2 tonnes<sup>6</sup>** CO<sub>2</sub>/year when compared to food that is transported by long haul air freight. Try growing your own fruit and veg, buying from local farmers' markets and box schemes, and check packaging in shops to see the origin of your foods. Supermarkets and online grocers often have tips for eating in season.

**Make more meals from raw ingredients** - this reduces emissions from packaging and processing foods.

**Buy less food from cafes, restaurants and take-aways.** Their overheads (heating, lighting) and additional packaging mean greater carbon emissions.

## Travel:



### Top Action: Fly less!

Airline flights are one of the top sources of harmful emissions and have even more impact because they release greenhouse gases at high altitude<sup>7</sup>. Using conversion factors provided by DEFRA, a return flight to a destination 5500 km from the UK (roughly the distance from London to New York or Dubai) adds **2.47 tonnes<sup>3</sup>** of CO<sub>2</sub> to your carbon footprint! That's equivalent to **18%** of the average UK person's carbon footprint, so could easily negate other efforts you are making to cut carbon. Our carbon calculator shows that even a shorter return flight, for example London to Rome, releases **0.8 tonnes<sup>6</sup>** of CO<sub>2</sub> into the atmosphere.

**Consider ways you can avoid flying.** Could you travel by train or ferry instead? Would it be possible to teleconference rather than travel abroad for a meeting?

### Other useful travel actions:

**Walk, cycle or use public transport as much as possible, and reduce your car use.** For a medium sized petrol or diesel car, reducing driving time from 5-15 hours to 2-5 hours per week leads to a carbon emission **reduction of 1.9 tonnes<sup>6</sup>** over a year. For regular journeys, like commuting to work or college, consider a lift share or car share. For short journeys, can you walk or cycle instead, or combine several activities if you have to use the car?

**Research driving in a greener way.** For tips on greener driving, visit: [rac.co.uk/drive/advice/emissions/11-ways-to-reduce-your-car-emissions/](http://rac.co.uk/drive/advice/emissions/11-ways-to-reduce-your-car-emissions/) and [vehicle-certification-agency.gov.uk/fcb/smarter-driving-tips.asp](http://vehicle-certification-agency.gov.uk/fcb/smarter-driving-tips.asp)

**Next time you change your car, choose an electric or hybrid one.** The carbon calculator showed that for 5-15 hours of driving per week, an electric car **saves 2.7 tonnes<sup>6</sup>** of CO<sub>2</sub> compared with a medium sized petrol or diesel car. A hybrid car **saves over one tonne<sup>6</sup>** of CO<sub>2</sub> and a plug-in hybrid **almost 2 tonnes<sup>6</sup>**.

## More actions we can all take:

**Start a discussion with family and friends** about what we can all do to reduce our carbon footprints. Use social media to spread the message.

**Find out if your savings, pension and insurance are invested in fossil fuel companies.** If so, consider divesting from these, and let your provider know your wishes. Look for providers offering ethical savings or investment plans. See [gofossilfree.org/divestment/what-is-fossil-fuel-divestment/](http://gofossilfree.org/divestment/what-is-fossil-fuel-divestment/) for information.

## Home:



*Top Action: Make energy efficiency improvements to your home.*

As well as adding to your comfort and potentially saving you money on bills in the longer term, these improvements offer big savings in CO<sub>2</sub> emissions. Here's their potential CO<sub>2</sub> reduction impact (using WWF carbon calculator and assuming gas central heating and 100% renewable electricity):

Loft insulation: **0.7 tonnes<sup>6</sup>**

Cavity/solid wall insulation: **0.5 tonnes<sup>6</sup>**

Solar water heater: **0.5 tonnes<sup>6</sup>**

Low flow fittings to taps and showers: **0.4 tonnes<sup>6</sup>**

Double glazing: **0.2 tonnes<sup>6</sup>**

Condensing boiler: **0.2 tonnes<sup>6</sup>**

That's a total reduction of CO<sub>2</sub> emissions of **2.5 tonnes<sup>6</sup>**. You can do a home energy check at [energysavingtrust.org.uk](http://energysavingtrust.org.uk) (go to Resources).

Simple actions like using energy saving lightbulbs, having a curtain across your front door, using draught insulators on doors and putting reflective film behind radiators can save a lot of energy too.

*Other useful home actions:*

**Keep your home at a slightly lower temperature in the winter.** Our carbon calculator shows that reducing your average home temperature from over 21C to 18-21C cuts **0.7 tonnes<sup>6</sup>** of CO<sub>2</sub> for a gas heated home. Could you reduce your thermostat and put on a jumper instead?

**Switch to a 100% renewable energy provider:** prices for 100% renewable electricity are increasingly comparable to tariffs from other providers. Do your research to ensure your chosen provider supplies 100% renewable electricity. This is a useful guide: [simplyswitch.com/energy/guides/compare-green-energy](http://simplyswitch.com/energy/guides/compare-green-energy)

**Switch away from gas and oil powered heating to electric heating with a 100% renewable energy provider.** On our carbon calculator, heating a home with 100% renewable electricity reduced emissions by **2.7 tonnes<sup>6</sup>** of CO<sub>2</sub> compared with gas heating. It's a big investment to switch central heating fuel, but it's likely that in the coming years, there will be a transition away from gas in homes.

**Research smart meters:** these monitoring devices provide you with information that you can use to reduce energy use in your home.

*Other useful links*

- [meatfreemondays.com](http://meatfreemondays.com)
- [vegsoc.org](http://vegsoc.org) (Vegetarian Society)
- [vegansociety.com](http://vegansociety.com)
- [liftshare.com/uk](http://liftshare.com/uk)
- For cycling info. visit [buzzcycles.org.uk](http://buzzcycles.org.uk) and [sustrans.org.uk](http://sustrans.org.uk)
- [ethicalconsumer.org](http://ethicalconsumer.org) (some info. subscription only)
- [which.co.uk](http://which.co.uk) (some info. subscription only)
- We used the free to use carbon calculators at [footprint.wwf.org.uk](http://footprint.wwf.org.uk) and [carbonfootprint.com](http://carbonfootprint.com)

*References*

1. [ipcc.ch/2019](http://ipcc.ch/2019)
2. [theccc.org.uk/tackling-climate-change/reducing-carbon-emissions/carbon-budgets-and-targets](http://theccc.org.uk/tackling-climate-change/reducing-carbon-emissions/carbon-budgets-and-targets)
3. [footprint.wwf.org.uk/#/methodology](http://footprint.wwf.org.uk/#/methodology)
4. [carbonfootprint.com/calculator.aspx](http://carbonfootprint.com/calculator.aspx) (Secondary Footprint and Results tabs and Calculator FAQ)

## Buying & Waste:



*Top Action: Buy less!*

Every item we buy new takes energy to produce. So it makes sense to ensure that what we purchase is necessary, fit for purpose and produced in as energy-efficient way as possible.

Our research shows that buying a larger electronic item like a TV, laptop or PC adds **0.1 tonne<sup>6</sup>** to your carbon footprint. The same is true of a large item of furniture like a dining table, bed or wardrobe. Buying large 'white goods' like an oven, fridge-freezer or washing machine adds **0.3 tonnes<sup>6</sup>**.

For smaller items, consider the cumulative effect of your purchases. For example if you as an individual spend £60+ per month on internet, phone & TV contracts, £50+ a month on health & beauty and £150+ a month on clothes & footwear, your carbon footprint will be **2.4 tonnes higher<sup>6</sup>** than someone who spends £1-30, £10-50 and £1-£50 on those categories respectively.

When you are shopping, in a store or online, try to ask yourself:

**Do I really need this item?** Could your existing TV/wardrobe etc. be useful for another year or more? Could you share it with a friend or neighbour (for example a strimmer or lawn mower)?

**Could I buy it second-hand?** Try charity shops, vintage and antique shops, markets and auctions, including online. Ask family and friends if they have the item you need and could sell or give it to you.

**Is it made in an energy-efficient way?** You could research the manufacturer to look at their energy policies and where the products are produced.

**For electrical items: Is it the most energy efficient model you can afford?** Check the energy rating stickers and compare products.

*Other useful buying & waste actions:*

**Remember the 5 R's:**

**Refuse:** We don't always choose what comes into our homes. Try a 'no junk mail' notice, request to be taken off mailing lists, don't take the freebies at the shop or conference and talk to family and friends politely about exchanging fewer gifts.

**Reduce:** See all the tips above and talk to your children about their choices too.

**Re-use:** Before you throw something out, think if it can be mended or if it has another use. A jam jar could be used for storage; a torn scarf could be repurposed into a cushion cover.

**Rot:** If you can use compost, try making it. There are many good websites and books that demystify the process.

**Recycle:** As a last resort. Learn what can be recycled locally (charity shops, schools and supermarkets take some items that the council cannot) and wash materials before recycling to avoid food contamination. See [centralbedfordshire.gov.uk/info/2/waste\\_and\\_recycling/610/recycling\\_diff erent\\_types\\_of\\_waste](http://centralbedfordshire.gov.uk/info/2/waste_and_recycling/610/recycling_diff erent_types_of_waste)

5. [bbc.co.uk/news/science-environment-48596775](http://bbc.co.uk/news/science-environment-48596775) (Household emissions graphic within the article)
6. [footprint.wwf.org.uk](http://footprint.wwf.org.uk) (see **Methodology**, below, for how we used the calculator)
7. IPCC, *Aviation and the Global Atmosphere: A Special Report of the Intergovernmental Panel on Climate Change* (1999), Cambridge University Press
8. Based on average UK household size of 2.4 people and average household spend on food of £60.60/week (see [ons.gov.uk](http://ons.gov.uk) reports *Families and households in the UK: 2017* and *Family spending in the UK: April 2017 to March 2018*).

*Methodology*

For the [footprint.wwf.org.uk](http://footprint.wwf.org.uk) data we used a baseline carbon footprint (the researcher's own of 11 tonnes) and changed one variable at a time, to see the effect it had on the resulting carbon footprint. Where assumptions were made (e.g. in energy efficiency section) these are stated in the text.