

## What size is your carbon footprint?

Carbon Dioxide (CO<sub>2</sub>) is a greenhouse gas, defined as ‘a gas that contributes to the greenhouse effect by absorbing infra-red radiation’. Our carbon footprint is ‘the amount of CO<sub>2</sub> released into the atmosphere as a result of the activities of a particular individual, organization, or community’.

Our carbon footprint is affected by factors such as:

### What we eat

Meat and dairy production have a massive carbon footprint. This is partly due to the clearing of rainforests to produce food crops such as soya and maize and to provide grazing land. In addition, ruminants (cows and sheep) also produce methane, which is a greenhouse gas 28 times more powerful than CO<sub>2</sub>. The manufacture and distribution of ultra-processed foods consumes energy all along the production line, from the use of fertilisers and pesticides when growing the crops, transport of the raw materials to the factory, the production process itself, packaging and transport to retailers.



Graphic taken from “An evaluation report on online Carbon Calculators in the UK” written by Amit Rastogi and Gareth Williams. The report provides detailed information on a number of carbon footprint calculators in the UK and is interesting reading if you want more information.

<u>How we travel</u>	<u>What we buy</u>	<u>How we heat our homes and our choice of energy provider</u>
<p>The burning of hydrocarbons in cars and planes produces huge amounts of CO<sub>2</sub>. We can reduce our dependency upon the car by using public transport more and take fewer flights, but cycling is by far the most environmentally friendly mode of transport.</p>	<p>It sounds obvious, but by simply buying less stuff, we can reduce our carbon footprint. We can shop for second hand clothes in charity shops or if buying new clothes buy better quality items which will last. We can also buy from companies who are actively reducing their carbon footprint either by reducing the amount of carbon dioxide they produce or by carbon offsetting.</p>	<p>Gas boilers are the commonest method of heating our homes but the burning of gas produces CO<sub>2</sub>. Air- and ground-source heat pumps are more environmentally-friendly alternatives, although not all homes are suitable and the initial cost is expensive. By insulating our homes to prevent heat loss and signing up to 100% renewable energy tariff, we can reduce our carbon footprint.</p>

It is a bit of a minefield trying to work out how much CO<sub>2</sub> our lifestyles are releasing, but fortunately there are a number of online carbon footprint calculators available. The most straightforward calculators derive a carbon emission value based on energy-related activities alone. More detailed calculators consider lifestyle or consumption choices such as food and travel. A few members of the Greener St. Peter's group have tried out the WWF calculator and agree that it is a straightforward, simple tool which gives a taster of how much CO<sub>2</sub> we are producing per year. It can be found at [www.footprint.wwf.org.uk](http://www.footprint.wwf.org.uk). There are sections on food, travel, home and stuff and each question gives a brief explanation as to how our choices affect our carbon footprint. The questionnaire only takes about 5 minutes to complete and at the end you get a breakdown of how you have done. There are tips on where you can improve and you can challenge yourself to get your carbon footprint even lower if you download the app.

It's a bit of an eye opener! I consider that our household tries quite hard to be as eco-friendly as we can, as we have solar panels, run an electric car, subscribe to an organic fruit and veg box, buy second hand clothes and try to eat less meat, but we still generate a staggering 9.23 tonnes of CO<sub>2</sub> per year. This is reassuringly lower than the UK average, but we can still do better. I will be downloading the app to see how we can improve.