



## Your carbon footprint - home, transport and lifestyle choices

Each of us has a carbon footprint, made up of everything we purchase for use in the home, in travel or lifestyle choices. In the UK that footprint amounts to 9.62 tonnes of CO<sub>2</sub> per annum. To reduce the effects of global warming each of us has to walk more lightly on this Earth that God has lent us, lest we destroy the climate stability for all. Individual actions which achieve even small reductions can collectively add up to a huge savings. And when these are done purposefully and with others, emboldened by a faith commitment, then real transformation can take place.



Out of our average annual footprint of 9.62 tonnes (9,620 kg), each of us is directly responsible for 5.5 tonnes used in our homes, our car and other travel. The balance comes from indirect costs of manufacturing, services and freight over which we have some control through our lifestyle choices. We can start by tackling things we can control - in our homes through our use of gas, electricity and oil.

### Step 1: Switch to renewable energy (more fully described in Your Church's Footprint)

Every person who uses renewable energy could help save about 1.3 tonnes of CO<sub>2</sub> and encourage the green energy market. However, since the supply of renewables is only 4% of total energy consumption, although we may choose renewables we will continue to use energy from traditional sources, so it remains essential to cut your total energy usage.

### Step 2: Eliminate waste.

People in the UK have become wasteful in their energy using habits. 71% leave appliances on standby, 63% do not turn lights off in unoccupied rooms. In total about 7 per cent of our heat and light is wasted. By 2010 we will have wasted enough energy to have produced around 43m tonnes of CO<sub>2</sub> - equivalent to the annual CO<sub>2</sub> emissions of 7 million homes - costing £11 billion.<sup>1</sup> Changing wasteful habits can make a significant difference.

- Turn off the lights in unoccupied rooms. Switching off 5 lights in hallways and rooms in your house when you don't need them can save around £40 a year and avoid about 400kg of CO<sub>2</sub> emissions per year.
- Reduce the temperature of your home by 1°C and save up to 300 kg CO<sub>2</sub> per household per annum and cut your heating bill by 5-10 percent.
- Ensure that appliances like the TV /computers and stereos are not left on stand-by. Standby uses between 40-70 percent of the energy they use when switched on. It is estimated that appliances, including mobile phone chargers, left on standby pump one million tons of carbon each year - enough to power 400,000 homes.<sup>2</sup>
- Change to energy saving light bulbs, which use 70 per cent less electricity and last 6-8 times longer. Each, energy saving bulb could avoid 400kg of CO<sub>2</sub> emissions over the

<sup>1</sup> 'Habits of a Lifetime' survey conducted by the Energy Savings Trust October 2006

<sup>2</sup> [www.carbonfootprint.com/energy\\_consumption.html](http://www.carbonfootprint.com/energy_consumption.html) gives detailed information on steps you can take and figures of power consumed by different appliances.





lifetime of the bulb and reduce your lighting costs by up to £9 a year. The normal sized 60w and 100w equivalent energy saving bulbs can be found in shops for as little as £1 to £1.50.<sup>3</sup> The Australians are phasing out the sale of traditional incandescent bulbs by 2010 - saving 16 billion tons of CO<sub>2</sub> over the next 25 years.

- Don't fill the kettle with more water than you need. The energy wasted by unnecessarily boiling one litre of water per day could power over three-quarters of the UK's street lights. Half-filled dishwashers/ washing machines again waste energy.
- Washing clothes at 40°C or even 30°C (rather than 60°C) can reduce carbon emissions by a third and prolong the life of your clothes. The tumble drier, the power shower, the plasma TV (consuming four times the power of a normal TV) and the air conditioner are all energy guzzlers - to be used with care.
- Look for the highest A++ rated Energy Efficiency rating for any machine you buy. On average these use 60% less energy than older D/E category goods. And stay warm without using so much energy by putting on another layer of clothing! Next step is to improve your insulation (see [www.est.org.uk](http://www.est.org.uk)). Replace your boiler if it is more than 15 years old to a condensing one which will be 20 percent more efficient.

We all have some habits we need to change as we adjust to a low carbon future. This is not about pointing to your neighbour's faults and omissions, but a gentle removal of the plank in your own eye - before prompting your nearest and dearest.

### Step 3: Rethink your transport

Use of private vehicles accounts for a quarter of all CO<sub>2</sub> emissions and produces nearly 63.5 million tonnes of CO<sub>2</sub> (2003). That is an average of 3.3 tonnes of CO<sub>2</sub> each year from our personal car usage. We also use an average of 1.3 tonnes from our air travel. Road traffic continues to rise by around 2 per cent a year. We need to reverse this trend if we are going to avoid the worst effects of global warming.

Reducing the number of car journeys we make will make a difference. If we try to eliminate one journey a week, it would make us think which journeys are unnecessary or could be done differently. Sharing journeys could also be good neighbourly<sup>4</sup>. You might start by car sharing to church on Sunday; particularly because short journeys with a cold engine produce 60% more fumes and more fuel than when warm. The websites below give plenty of advice on improving energy efficiency in cars.

Walking or cycling for short journeys might bring the additional benefit of making you fitter and healthier. Or use public transport - and encourage others to follow suit.

[www.eta.co.uk](http://www.eta.co.uk), the Environmental Transport Association, the ethical alternative motoring organization, helps individuals and organisations to make positive changes in their habits.

<sup>3</sup> More specialist retailers can supply the small bulbs [www.Ryness.co.uk](http://www.Ryness.co.uk) or [www.efficientlight.co.uk](http://www.efficientlight.co.uk)

<sup>4</sup> [www.carplus.org.uk](http://www.carplus.org.uk) [www.liftshare.com](http://www.liftshare.com) [www.shareajourney.com](http://www.shareajourney.com)





[www.transport2000.org.uk](http://www.transport2000.org.uk) the national environmental transport body, which campaigns to make the connection between transport and climate catastrophe

[www.whatyoucando.co.uk/travel](http://www.whatyoucando.co.uk/travel) has information on hybrid, electric and LPG cars, low-carbon taxis, and includes an on-line car calculator so you can measure what it costs to run your car.

## Step 4: Air Travel

Air travel is set to double or even triple by 2030 and is likely to become one of the most significant causes of man-made global warming. Aircraft at high altitude produce a cocktail of gases more lethal to our climate than carbon dioxide alone.<sup>5</sup> Recent studies have shown that *'the UK will be unable to meet its targets for reducing climate change impacts without action to curb the demand for air travel.'*<sup>6</sup>

One long-haul flight could radically alter your carbon footprint (e.g. a trip to Australia produces over 3.6 tonnes of CO<sub>2</sub> per person)

The unfair thing is that the richest nations, the USA and Europe, are responsible for 70-80 per cent of all flight. The top 10 per cent of income earners fly the most while the poorest 10 per cent hardly fly at all. It is time to rethink our flying habits NOW

## Step 5: Lifestyle issues:

The choices we make on food, water and waste also impact indirectly on the CO<sub>2</sub> we produce. We need to adopt more environmentally friendly habits and lifestyle, because it all counts towards your carbon footprint.

### FOOD - a climate change issue<sup>7</sup>

The growing of food, transporting it by road (and worse still by air) and selling it in the supermarkets make up a significant portion of our footprint. Supermarkets are convenient, but it comes at a climate-change price for they have helped create the all year round globalised food culture, supported by the car culture, at the expense of local small-scale production. It is down to us to decide our choice of food and where we buy it, and to look for alternatives, once we see the impact on our carbon footprint.

**Try eating what's in season in the UK.** Out of season greens, asparagus and cherries, avocados, mangos, kiwi fruit are air freighted in. Similarly out of season food grown in the UK might have huge embedded energy - e.g. tomatoes grown in UK greenhouses.

**Eat local food** -try to buy the product that travelled the least distance. Flying 1 kilo of asparagus from California to the UK uses 900 times more energy than the home-grown equivalent. New Zealand apples shipped here produces 8 times more emissions than British apples. Farmers markets, farm shops, and organic box schemes offer a pleasant way to support traditional farming and local production. [www.localfoodworks.org](http://www.localfoodworks.org) for box schemes and Friends of the Earth Shop Local First Campaign [www.foe.org.uk](http://www.foe.org.uk)

<sup>5</sup> "The Plane Truth: Aviation and the Environment" Prof John Whitelegg and Nick Williams, Ashden Trust and Transport 2000 Trust.

<sup>6</sup> 'Predict and Decide: Aviation, climate change and UK Policy', ECI, Oct 2006

<sup>7</sup> Thanks to George Marshall, for his work, [www.coinet.org.uk/projects/challenge/consumption.php](http://www.coinet.org.uk/projects/challenge/consumption.php)





**Eat organic.** Fertilizers release nitrous oxide, a powerful greenhouse gas, so there are strong climate reasons for buying organic, especially when it's local and seasonal.

**Minimise meat** - especially beef and lamb, because of the methane (a powerful gas that is over 20 times more damaging than CO<sub>2</sub>) produced in rearing cows and sheep.

**Use the LOAF principle** - **L**ocally Produced, **O**rganically grown, **A**nimal-friendly and **F**airly-traded. Ask Christian Ecology Link have their short leaflet<sup>8</sup> and try it at harvest.

**Grow your own** - enjoy the wonderful taste of your own produce and live within the rhythms of the seasons. Make your own compost to fertilise your crops. Explore new recipes for seasonal cooking. Support city allotments. Grow vegetables in window boxes.

### 5.2 Water - as a climate change issue

Large parts of the world may experience significant shortages of water as the climate gets warmer. In this country we currently have enough water for everyone, provided we look after this precious resource - although a growing population, wasteful habits and hotter summers undoubtedly place an increasing strain on our water supplies.

On average in the UK we use 130 litres of water a day - 70% more than we did 40 years ago. Many people in the world exist on just 10 litres a day. Thank God for the luxury of piped clean water, and take a few measures to reduce your water consumption which will reduce the burden on industry to pump water to, and chemically clean waste water from, our homes. Conservation will also reduce damage to wildlife habitats in wetlands and rivers and reduce the possibility of water shortages and rationing in the summer. Cutting down on water use can save us money (everyone should be on a water meter).

### 5.3 Waste and recycling as a climate change issue

Waste represents lost energy and natural resources - as well as the increasing problem of landfill. The best way of managing our waste is not to produce it in the first place. In the UK we know we have room for improvement as we have one of the poorest records of recycling in Europe (UK recycles 18% of domestic waste, France 28%, Germany 58%, Netherlands 65%). It is time to change our culture on waste.

- \* A recycled **aluminium can** saves enough energy to run a television for three hours.
- \* Recycling one **glass** bottle saves enough energy to light a 100-watt bulb for four hours.
- \* Production of **recycled Paper** uses 80% less water, 65% less energy than virgin paper.
- \* 17% of our waste is kitchen waste - which we could compost and avoid producing methane in the landfill as it rots down, and lessen demand for commercial compost.

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Website to visit: [www.reuze.co.uk](http://www.reuze.co.uk) or [www.frn.org.uk](http://www.frn.org.uk) the Furniture Re-use Network  
[www.freecycle.org](http://www.freecycle.org) - Freecycle is an email recycling scheme where dispose of unwanted goods to other local members - a growing network of local groups.  
[www.wastewatch.org.uk](http://www.wastewatch.org.uk) - a national organisation promoting and encouraging action on waste reduction, reuse and recycling, working with community organisations, and others.

<sup>8</sup> [www.christian-ecology.org.uk/use-your-loaf.pdf](http://www.christian-ecology.org.uk/use-your-loaf.pdf)

