

Carbon Footprints

What are carbon footprints?

MEA factsheet #1c



Carbon footprints are quite simply a measure of carbon dioxide emissions (CO₂) over the course of a year. These emissions come from things like burning petrol or diesel in our cars and trucks, using electricity made in coal or gas fired power stations and using gas, oil or coal to heat our buildings.

A carbon footprint can be calculated for almost anything, for example, a country, a building, an organisation, a household or an individual. Calculating a carbon footprint is often the first step in attempts to reduce CO₂ emissions. By knowing what your baseline is, you are well equipped to plan out how to reduce it.

The size of our feet

Domestic CO₂ emissions make up about 40% of the UK total. The size of household carbon footprints can vary greatly, however. While the average is about 10 tonnes, the highest emitting households produce 60% more carbon than the lowest. This variation is caused by lifestyle and technology choices. The decisions we make can also influence emissions from transport and industrial activities.



The challenge ahead

In order to stabilise CO₂ levels in the atmosphere and prevent irreversible and potentially catastrophic climate changes, CO₂ levels need to be stabilised at around 1.85 tonnes per person – quite a significant reduction from the UK's average of 10.9 tonnes per person, but certainly something that is within reach. Take a look at the boxes below for examples of the choices households make that affect their carbon footprints. Note that the first choice in all examples given is always the one with the lower carbon footprint. More ideas can be found in some of the books and websites listed in the 'further information' box overleaf.

Electricity choices

- Lighting – low energy or old style incandescent?
- Kitchen appliances – A* rated or ancient?
- Entertainment appliances – rarely used or on all the time?
- Standby button – switched off or left on?
- Electricity source – household solar panel or mains supply?
- Electricity supplier – green tariff or normal tariff?*

*Some green tariffs spend profits on building new renewable energy capacity for the UK and so are a great way of reducing your carbon footprint. See our factsheet 'green energy'



Food choices

- Origin -
 - local or abroad?
- Farming method -
 - organic or industrial?
- Shopping method -
 - locally or out of town?
- Packaging -
 - fresh unpackaged food or prepacked meals and snacks?



Heating choices

- Curtains – thick and closed at dusk or thin and left open?
- Winter clothing – many layers or t-shirt and extra heating?
- Boiler – condensing or ancient?
- Heating controls – on a timer or on all the time?
- Fuel used – gas or oil? Wood or gas?
- Hot water – solar panels or electric/gas?

Transport choices

Home location – close to work or long commute?

Travel to work – public transport/bike or car journey?

Shopping trips – weekly big shop or many short shops

Type of car – electric hybrid or gas guzzler?



Waste choices

Household waste – recycle or landfill?

Kitchen waste – compost or landfill?

Packaging – buy things with less packaging or with lots of packaging?

Keeping track of footprint changes

In order to keep track of how household actions are affecting your carbon footprint, the easiest method is to use a carbon footprinting tool.

These come in either paper format (see our factsheet - 'Calculating Your Carbon Footprint') or as interactive online web tools (see 'Further Information' box). By answering a few simple questions, households or individuals can find out where their CO₂ emissions are coming from and what level they're at.

As different lifestyle choices are made in order to shrink your carbon footprint, the changes can be tracked simply by using the footprint tool again and making a note of the difference.

It is important to note that all footprinting tools can only give an estimate of a carbon footprint. Measuring them precisely would be an incredibly complex task and for most purposes is certainly not necessary.

The global target footprint per person is:

1.85 tonnes by 2050

Many countries still have a long way to go:

UK footprint per person = 10.9 tonnes

USA footprint per person = 19.9 tonnes

France footprint per person = 6.2 tonnes

China footprint per person = 4.6 tonnes

India footprint per person = 1.3 tonnes



Further Information:

Online carbon footprinting tools:

Act on CO₂

The government's carbon footprinter.

www.dft.gov.uk/ActOnCO2/

Carbon Control

A website designed for children.

www.carboncontrol.org.uk/default.aspx

Books

Carbon Counter, Collins Gem

Carbon Calculator, Mark Lynas

How to Reduce Your Carbon Footprint,

Joanna Yarow

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www.me.a.org.uk
info@me.a.org.uk

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