

2. ENERGY IN YOUR HOME

Accounts for greenhouse gas emissions from fossil fuel use.

First estimate your heating score.

If you have central heating and:

you live in a detached house, score 4800kg
you live in a semi-detached house, score 3200kg
you live in a terraced house 2200kg
you live in a flat..... 1600kg

If you don't have central heating and just heat the room you're in, score .. 800kg

How warm is your home? For each degree above 17°C **add 10%**; for each degree below, **subtract 10%**.

If your home is well-insulated (e.g. a modern house with 200mm loft insulation, cavity wall insulation and double glazing), **subtract 30% from your score so far**.
If you have a new condensing-flue boiler **subtract another 20%**. If your boiler is over 15 years old **add 15%**.

These figures are for gas. Otherwise: if you use electric heating, multiply your total by 2.5; but if you use green electricity, multiply by only 0.25; if you use oil add 40%; for coal, add 80%; for wood, divide by 8.

Now **divide by the number of people living in the house to get your personal heating score:**

Next estimate your score per person for hot water.

If you have a bath or long shower every day, score 300kg

If you have a combination boiler (no hot water cylinder) and mostly have quick showers (not a power shower), score 200kg

If you have solar panels, subtract one third from your score.

This assumes you heat your water with gas. If you use oil add 40%. For electricity multiply by 2.5; but for green electricity multiply by only 0.25.

Your personal hot water score

And now, your score for **appliances**. Start with a score of..... 1600kg

If you have only "A"-rated appliances and efficient light bulbs, subtract..... 400kg

If you use electricity frugally (switching off lights, only using the washing machine when full, no dishwasher or clothes drier) subtract 200kg

If you have a house full of energy-hungry people, with TVs on all the time and daily use of a washing machine and dryer, add 1400kg

If you have an oil-fired Aga or similar range cooker, add..... 5000kg

If you use renewable electricity, divide by 10.

Divide by the number of people in the house for your appliances score:

Now add up your score for heating, hot water and appliances to get your home energy score

3. FOOD

Accounts for energy use in agriculture, fertilisers, food transport, processing, storage, retail and catering. Also includes methane and nitrous oxide from animals, animal wastes and agricultural soil, and notional credit for soil carbon take-up in organic farms.

For a typical British diet, 38% animal-based score 2000kg

For serious meat diets (50% animal-based diet) score 2250kg

Lacto-vegetarians (meat in typical diet replaced with dairy) score 1400kg

Vegans (0% animal-based) score 1000kg

If you only eat organically produced food subtract 50% from this score.

About 75% of UK food is imported and/or processed (including frozen & canned).

If **nearly all** your food is processed and/or imported add 100kg

If **very little** of your food is processed and/or imported..... subtract 400kg

About 25% of meals in the UK are eaten away from home.

If you **hardly ever** eat in restaurants or canteens subtract 100kg

If you eat **half your meals** in restaurants or canteens add 100kg

Your food score

4. MATERIALS AND WASTE

Accounts for energy and material use in manufacturing and construction, as well as greenhouse gas emissions in waste disposal.

If you produce the UK average of 23kg/week of waste (one dustbin-full or two black bags of mixed waste including glass, food waste etc.) score ... 1400kg

If you produce more or less than this, scale your score accordingly.

This initial figure assumes all your waste goes in the standard refuse collection, usually for landfill so if you:

- compost all kitchen and garden waste (typically 7.5kg/week), subtract 20% of your initial figure
- recycle all paper, glass and metal (typically total 7.5kg/week) subtract 10%
- recycle all plastic apart from bags (typically total 1.5kg/week) subtract 20%

About 50,000kg of CO₂ are emitted providing materials to build a typical family house. **If your home is under 50 years old** add to your household score:

4 bed detached 1500kg, 3 bed semi 1000kg, 2 bed terr. 750kg, 1 bed flat 500kg

For a one-room extension or loft conversion in the last 50 years, add 250kg.

If you filled a skip this year with building or DIY waste, add..... 1000kg

Divide the total by the number of people in your house to get your materials and waste score

5. EVERYTHING ELSE

Accounts for greenhouse gas emissions linked to providing other goods and services.

The items included above account for 60-65% of national GHG emissions. We can make a very rough estimate of your share of the rest, based on your household spending on other goods and services.

Work out how much your household spends per year in £ on durable items such as clothing, furniture and electrical appliances, and on services such as entertainment, telephone and healthcare. Don't include food, travel, home energy, or your mortgage, rent, tax, pension, savings and investments. **Divide by 2** to get your household's contribution to emissions in kg CO₂-equivalent. **Divide by the number of people in your household** for your personal contribution.

To allow for government activities on our behalf (hospitals, schools, road building, emergency services, the military etc.) add a further 2400kg

Your "everything else" score

6. AT LAST – ADDING IT ALL UP

Add up your score for:

Transport

Energy in your home

Food

Materials and waste

Everything else

To get your total:

How do you compare?

UK total emissions (including international aviation) amount to 13,000kg per person of CO₂-equivalent greenhouse gases.

USA national emissions (including international aviation) average about 21,000kg per person

India's national emissions average about 1,300 kg per person.

The global average is about 5,800kg/person

If the world is to avoid the worst effects of climate change, global emissions will need to be reduced by 60% or more, to below 1,500kg/person, over the next 40 years.

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Your contribution to climate change

What is the climate impact of your lifestyle?
How could you reduce your greenhouse gas emissions?
This sheet is divided into parts looking at:

- 1) transport; 2) energy in your home; 3) food;
- 4) materials and waste; 5) everything else.

We will calculate your emissions in kg of CO₂-equivalent gases. Some activities produce gases including methane and nitrous oxide which have a much larger climate impact per kg than CO₂.



This sheet is not precise. It may not fit your lifestyle perfectly.

Please do be creative and make guesses – but be honest with yourself!

1. TRANSPORT

Accounts for energy use, non-CO₂ exhaust emissions, emissions in car manufacture.

a) If you are a regular car driver please score:

For typical drivers (8,500 miles/year in a petrol car with average fuel consumption of 8.5 litres/100 km) 3500kg
For high mileage drivers (15,000 miles) 6200kg
For very low mileage drivers (2,000 miles/year) 830kg

But if most of your car trips are local (3 miles or less) **add 25%** to this figure to allow for extra energy use for cold starts.

If you drive a 4x4, **add another 40% (2 litre diesel engine Land Rover Freelander) to 100% (4.4 litre petrol Discovery 3) of your score so far.**

For a small car (e.g. Clio or new Mini), **subtract a third.**

Your car score:

b) If you use public transport:

For a weekly 150 miles return trip by rail or bus, or a daily return commute of 30 miles score 700kg

c) If you walk 2 miles/day or cycle 5 miles you need to eat more! Though this also applies if you get ½ hour/day of exercise some other way. (Food is treated in detail in section 3) Score 100kg

d) For each hour per year you spend flying, add 350kg

Your transport score (a+b+c+d) in kg CO₂-equivalent