

# What's your footprint?

Do you know what a 'carbon footprint' is? Imagine stepping in a muddy puddle, and then walking over a clean, white carpet. Not only would you be in trouble, but you would also leave a trail of footprints behind you.

## Footprint trail

A carbon footprint trail is an imaginary trail that we leave when we use electricity, oil and gas in our homes, schools and workplaces, and petrol in our cars and vehicles. Every time we use a 'carbon' energy (coal, oil or gas), it gives off CO<sub>2</sub>, and adds to the problem of climate change (see page 11). We are leaving a 'muddy' carbon footprint on the Earth, which can be measured in kilograms of CO<sub>2</sub> released into the air every year.



You can check your carbon footprint by using a footprint calculator on the Internet.



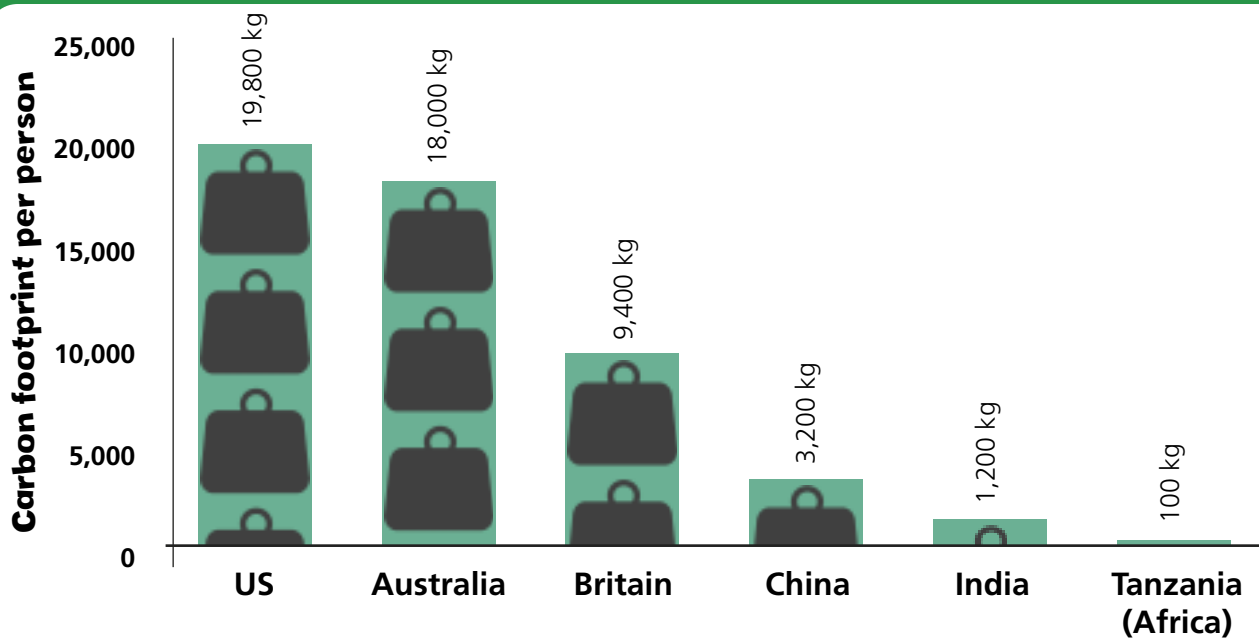
To make and deliver one computer uses over 200 kg of fossil fuel – about the same weight as a fully-grown American black bear!

## Direct and indirect

We each have a direct carbon footprint – that's the actual electricity, gas or petrol we use ourselves. But we also have an indirect carbon footprint. That's the energy that has gone into making or transporting something that we use. For example, to make a computer and deliver it to the shop where it will be sold uses over 200 kg of fossil fuels.

## A BIG DEMAND

**Countries in the developed world, such as the UK and USA, make up about 20% of the world's population, yet they use about 80% of the world's natural resources. This is because where people are richer they tend to buy and use more things, so make more demands on the Earth's resources.**



## One elephant or two?

In the UK, every person has a carbon footprint of nearly 10,000 kg of CO<sub>2</sub>. That is the weight of two fully-grown Indian elephants! To stop the Earth heating up any more, this needs to be no more than 3,000 kg per person (less than an elephant each). Each one of us needs to reduce the amount of energy we use.



**Developed countries** such as the US, the UK and Australia have a much bigger carbon footprint than **developing countries** such as Tanzania.



# Glossary

**Carbon dioxide** A gas in the air around us.

**Carbon footprint** The amount of 'carbon' energy (coal, oil or gas) we each use and the amount of carbon dioxide we then contribute to the air.

**Climate change** Longterm changes to the world's weather patterns.

**Developed countries** Countries with well-developed economies, where most of the population work in factories and businesses.

**Developing countries** Countries with less-developed economies, where most of the population work in farming.

**Drought** A shortage of rain over a long period of time.

**Emissions** Substances, such as the gas carbon dioxide, that escape into the air.

**Energy** The power to make or do something.

**Energy efficiency** Where an appliance, such as a washing machine, does its job in the most efficient way, using the least energy.

**Fossil fuels** Fuels such as coal, oil or gas, which have developed under the ground from rotting animal and plant life over millions of years.

**Global warming** The gradual heating up of the Earth's atmosphere.

**Greenhouse gas** A gas, such as carbon dioxide, that creates an invisible layer around the Earth, keeping in the heat of the Sun's rays.

**Heat wave** Unusually hot weather in an area over a long period of time.

**Industrialised** Countries that rely on factories and businesses to create the country's wealth, rather than farming.

**Insulate** To add an extra layer of material to something to help it keep in heat or keep out cold.

**Natural resources** Materials, such as water and wood, that are found in nature.

**Non-renewable** When there is only a certain amount of something, so it will eventually run out.

**Materials** What something is made from, such as cotton, wood or metal, for example.

**Population** The number of people living in a place.

**Renewable** Something that is in constant supply and will not run out, such as the wind.

**Thermostat** The controls that set the temperature for a heating system.

# Useful information

## Further reading

*How Can We Save Our World?*  
*Sustainable Energy* by Angela Royston  
(Franklin Watts, 2009)

*Science on the Edge: Alternative Energy Sources* by Sally Morgan  
(Heinemann, 2009)

*Green Team: Using Energy* by Sally Hewitt (Franklin Watts, 2008)

## Websites

[www.biggreenswitch.co.uk](http://www.biggreenswitch.co.uk)

News, views and advice on all things green.

[www.eco-schools.co.uk](http://www.eco-schools.co.uk)

An awards scheme set up to help UK schools save energy.

[www.energysavingtrust.org.uk](http://www.energysavingtrust.org.uk)

Tips and advice on saving energy.

## Dates to remember

Earth Hour – 28 March

Earth Day – 22 April

World Environment Day – 5 June

Clean Air Day – June

Walk to School Campaign – May and October

World Food Day – 16 October

Buy Nothing Day – 28 November

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