

# More about emissions and climate

## The difference between weather and climate



The **weather** is what's happening right now and how it's likely to vary over the coming hours, days and weeks. The **climate** is the average of all the weather that happens, measured over at least 30 years and across the globe.



Climate scientists look at long term trends to work out how the climate is changing. The trend is clear, our planet is getting hotter and hotter.

Global temperature shows a well-documented rise since the early 20th century and most notably since the late 1970s. This is known as '**global warming**' and is caused mainly by our use of fossil fuels and the consequent pumping of heat-trapping gases into the air.

Global warming is fuelling extreme weather events, melting sea ice, rising sea levels and long term changes in living conditions for all life on earth.

Global warming and its effects are referred to collectively as '**climate change**'.



Watch a BBC explainer on weather and climate  
<https://www.bbc.co.uk/news/av/science-environment-53608338>



Discover the link between global warming and extreme weather from Carbon Brief  
<https://www.carbonbrief.org/mapped-how-climate-change-affects-extreme-weather-around-the-world>



See how the global temperature has increased in this Nasa video  
[https://climate.nasa.gov/climate\\_resources/139/video-global-warming-from-1880-to-2020/](https://climate.nasa.gov/climate_resources/139/video-global-warming-from-1880-to-2020/)

## PHOTO ME

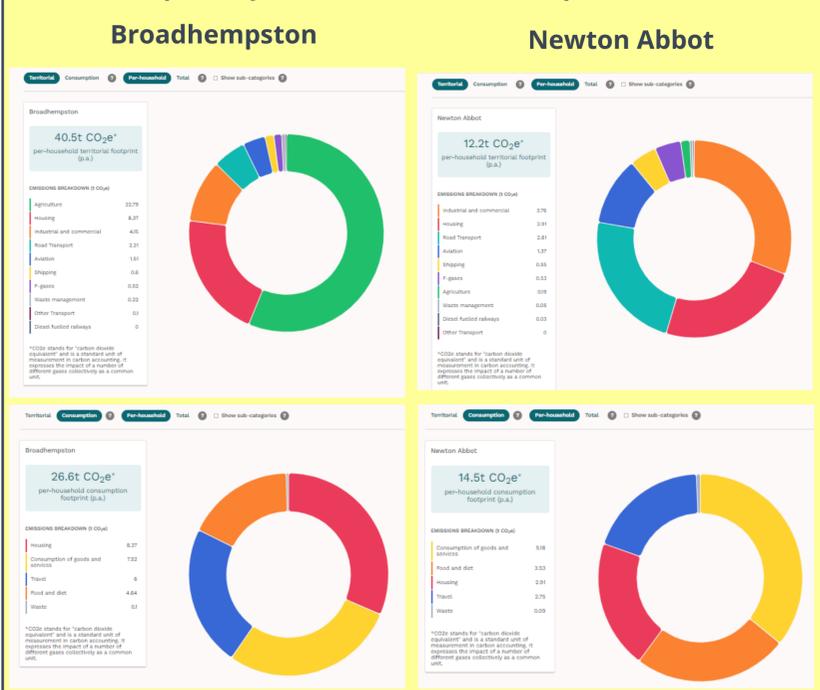
## The difference between territorial and consumption emissions

Territorial emissions arise within the boundaries of a country or region. They include exports but not imports nor, for the UK, its share of international aviation and shipping emissions (this is set to change). They are the emissions used in government reports on meeting climate targets and measuring emission reductions. Consumption emissions come from all the stuff we buy and the services we use. They include imports but not exports. They are generally higher than territorial emissions for the UK because we import a lot. They are used to measure our carbon footprint.



Use the **Impact Tool** to measure the carbon footprint for your parish and see the difference between territorial and consumption emissions  
<https://impact-tool.org.uk/footprint/search>

Carbon footprint by territorial and consumption emissions for:



## How to find suppliers of genuinely renewable electricity

There is no shortage of renewable energy deals. Nine million British households are on green tariffs and more than half of all new electricity tariffs launched are labelled '100% renewable' or 'green'. But they are not all what they seem and the government has launched a review into 'greenwashing' in the energy market.



Renewable sources of energy are wind, solar, wave and hydro power. Nuclear is not renewable.

Whichever tariff you are on, your energy will still be a mix of clean and dirty as it is delivered via the national network. Buying a 100% green tariff encourages investment in more renewable generation.

Providers have to disclose their fuel mix and you should be able to find the information on their websites.

Watch for how much comes from Renewable Energy Guarantees of Origin certificates. Using REGOs is a form of offsetting against existing renewable generation. It does not help expand renewable generation.

Look for suppliers that own and invest directly in wind and solar farms, or other renewable generation. Examples include Good Energy, Ecotricity and Green Energy.