

Green Living

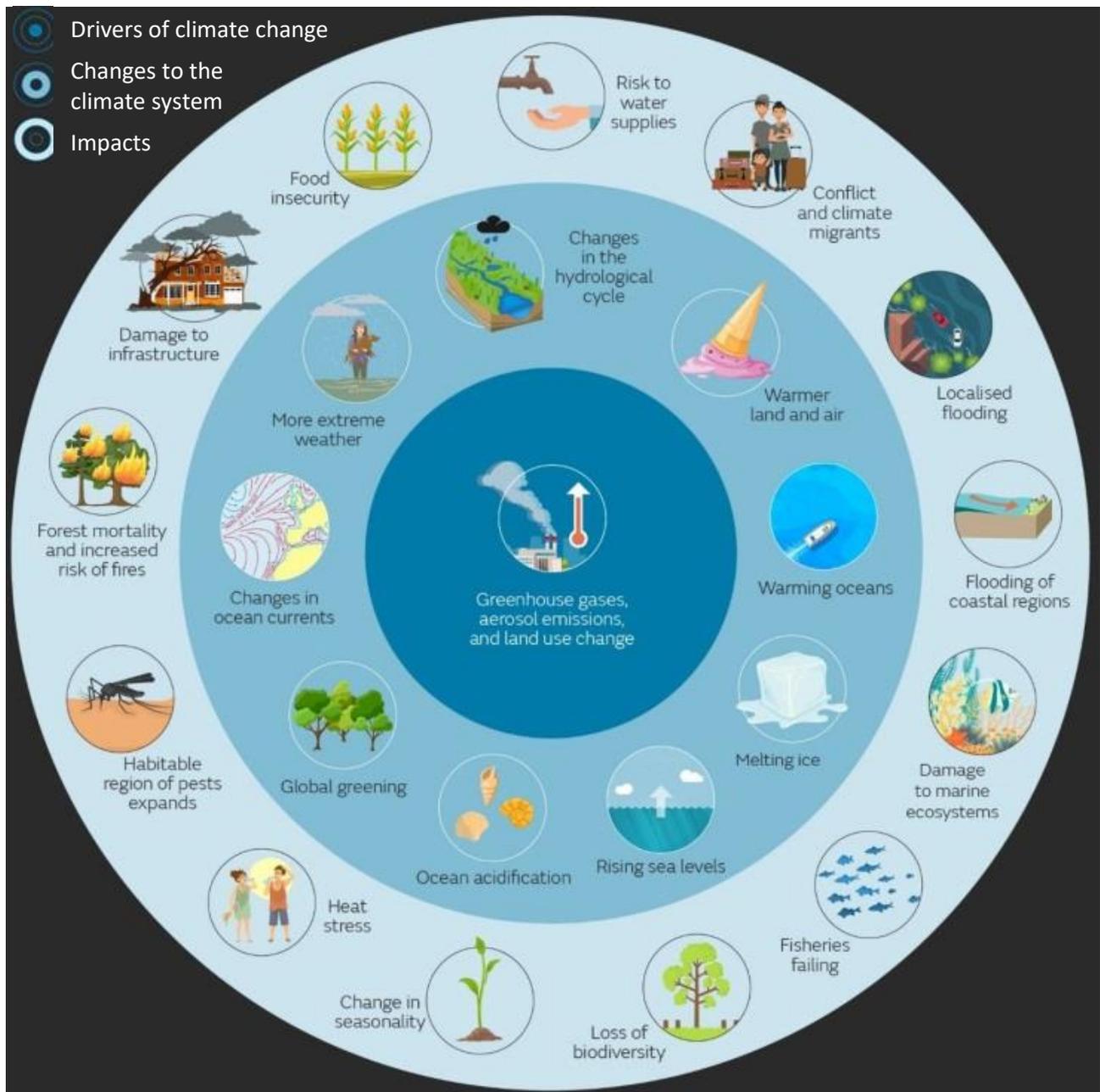
The first leaflet in a series produced in September-November 2021 by the Green Living groups of Avenue St Andrew's United Reformed Church, Southampton, and its ecumenical partners, from material in *The Dorset Green Living Guide* and current versions of related websites
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Good introductions to the facts and impacts of climate change are:

- David Attenborough's programmes available on BBC iPlayer
<https://www.bbc.co.uk/iplayer>
 - Climate Change: The Facts
 - Seven Worlds, One Planet
- gov.co.uk websites on
 - Guidance: climate change explained
<https://www.gov.uk/guidance/climate-change-explained>
 - Met Office: what is climate change?
<https://www.metoffice.gov.uk/weather/climate-change/what-is-climate-change>

From that Met Office website come the following diagram and text:

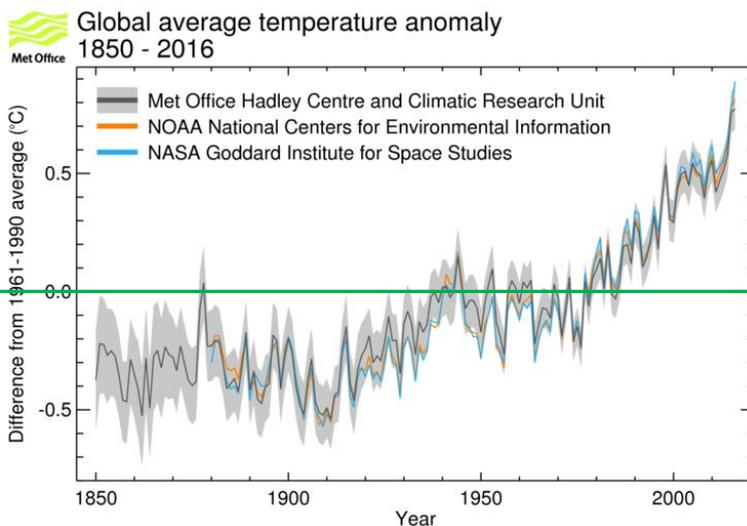


Climate change can affect people and ecosystems. For example:

- **Flooding of coastal regions** – Coastal cities are at risk from flooding as sea levels continue to rise. [Go to <https://coastal.climatecentral.org/>; choose Water Level map; drag and zoom to see what could happen to the Hampshire coast and other areas of interest.]
- **Food insecurity** – High temperatures, extreme weather events, flooding, and droughts can damage farmland. This makes it difficult for farmers to grow crops and means that their yield of crops each year is uncertain.
- **Conflict and climate migrants** – Climate change is a stress multiplier – it can take existing problems, such as lack of food or shelter, and make them worse. This can cause people to fight over resources (food, water, and shelter), or to migrate.
- **Damage to marine ecosystems** – Rising ocean temperatures, acidification and reduced oxygen in the ocean are damaging to marine life such as fish and coral reefs.

How are humans changing the climate?

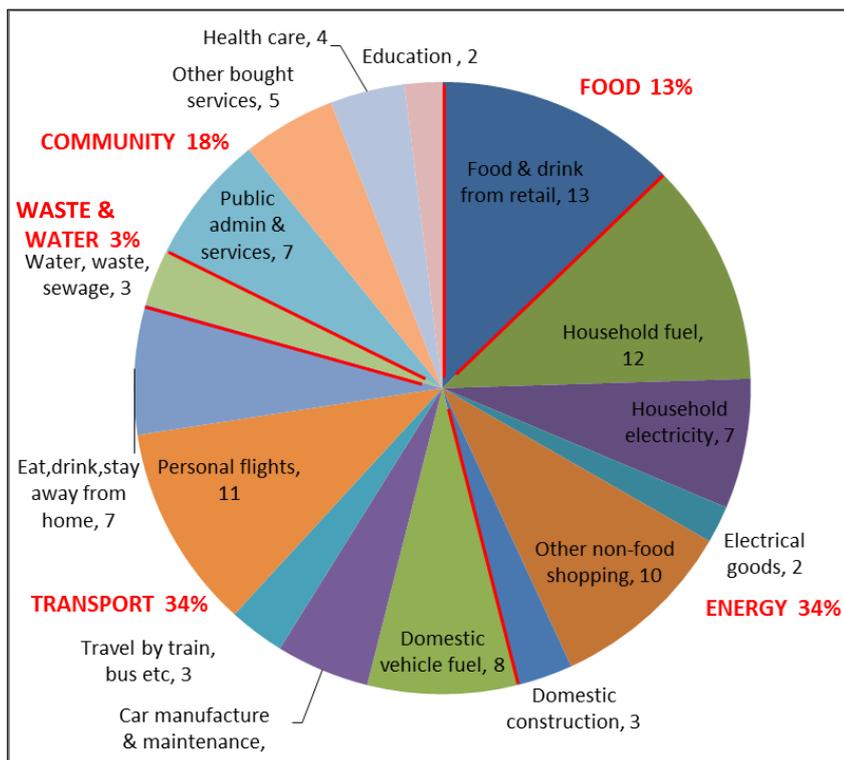
For 11,000 years the average temperature across the world was stable at around 14°C. Then in the Industrial Revolution since the mid-1800s humans have burned fossil fuels such as coal, oil, and gas. This gave energy but also released greenhouse gases such as carbon dioxide, methane, and nitrous monoxide into the air, which have built up into large quantities. E.g. the level of carbon dioxide in the atmosphere rose by 40% during the 20th and 21st century. It is now higher than at any time in at least 2 million years.



This shows global temperature change from 1850 to 2018, compared to 1961-1990 average temperature

So, what can we do about it?

Make changes to reduce harmful emissions into the atmosphere:



This diagram is based on one (compiled by Berners-Lee et al, 2011, Open University) in *The Dorset Green Living Guide*. It shows the ‘carbon footprint’ of typical UK residents.

What have you been able to change in recent years?
 What more could you do?
 What could you encourage others to do to save the planet?

More leaflets to help will follow the consumption categories in red (six of the chapters in *The Dorset Green Living Guide* <https://greenliving.sustainabledorset.org/>)

Try measuring your carbon footprint at <https://zero.giki.earth/> or www.resurgence.org/resources/carbon-calculator.html