



Unchecked emissions growth would lead to very severe and widespread climate change at 4°C or more by 2100.

The world is moving towards a low-carbon future, reducing some risks. We are currently on track for around 3°C of warming by 2100.

Damaging climate impacts are already being felt today.

Reducing global emissions faster will hold warming to lower levels.

Every degree matters.

3°C (1.5°C

The world has committed to reduce emissions faster to keep warming 'well-below' 2°C. This would help limit the most damaging effects of climate change.

Climate change is here today:

- The frequency of heatwaves has increased around the world. Many extreme events are being made more likely due to climate change.
- Sensitive ecosystems, such as cora reefs, are being damaged due to extreme heat.
- Animals on the land and the ocear are shifting their territories in response to climate change.

Damaging climate impacts are already being felt today at 1°C of warming.

Keeping below 1.5°C would limit many important risks further, helping to protect key ecosystems and reducing impacts on poorer people around the world.

UK action to address climate change can have an international impact



The UK can and should act as a leader in the global response to climate change - UK emissions contributed to causing it, and its leadership can have an international impact.



4°C

The UK has been a leader on climate change action. The UK has the opportunity to continue its leadership and join other countries already pursuing net-zero emissions targets.



The UK has committed to act by signing the Paris Agreement. This provides many options for countries to collaborate to reduce their emissions and prepare for the impacts of climate change.

Annual costs of achieving net-zero emissions are between 1-2% of GDP in 2050, comparable to those estimated in 2008 for achieving an 80% target.



80% reductions in emissions relative to 1990 levels

100% reduction in emissions in 2050 estimated today



Innovation has driven down the costs of key technologies, such as offshore wind & battery storage.



Some costs to consumers, such as increased heating bills, can be offset by cheaper transport costs (thanks to a widespread shift to electric vehicles) and cheaper electricity bills (thanks to low cost renewable electricity).

UK:
Net Zero by 2045

UK:
Net Zero greenhouse gas emissions by 2050

Wales:
-95% by 2050

There are many benefits of phasing out harmful emissions



For the economy

New green industries with new jobs and export opportunities for the UK.



For the individual

Quieter streets, cleaner air, less congestion.

Smarter cities and more comfortable homes.

Healthier lifestyles, with more active travel and healthier diets.



For the country

More biodiversity, cleaner water, more green space to enjoy.

Reduced global warming, avoiding climate damages like flooding.





Power

Emissions today

A Tob Do

Remaining emissions

GHG removal

Any remaining emissions in 2050 <u>must</u> be offset

This transition will require a concerted effort and action by all