ADDRESSING CLIMATE CHANGE

Causes

Scientists attribute the global warming trend observed since the mid-20th century to the human expansion of the "greenhouse effect" - warming that results when the atmosphere traps heat radiating from Earth toward space.

Over the last century, the burning of fossil fuels like coal and oil has increased the concentration of atmospheric carbon dioxide (CO_2). Other contributors include the clearing of land, industry and manufacturing and many other day-to-day human activities.

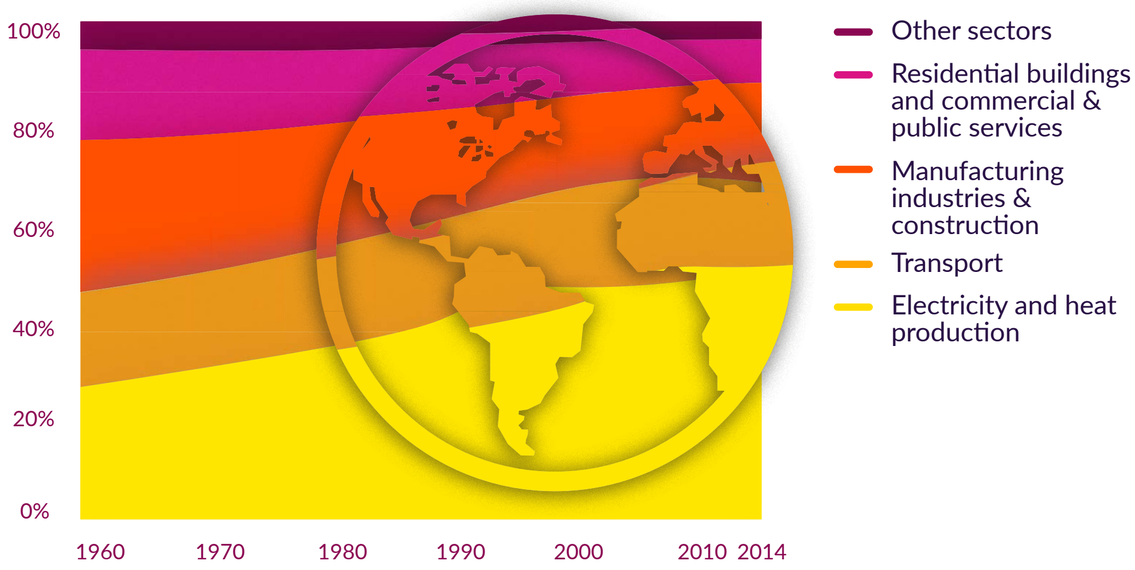
Impacts

"Taken as a whole, the range of published evidence indicates that the net damage costs of climate change are likely to be significant and to increase over time."

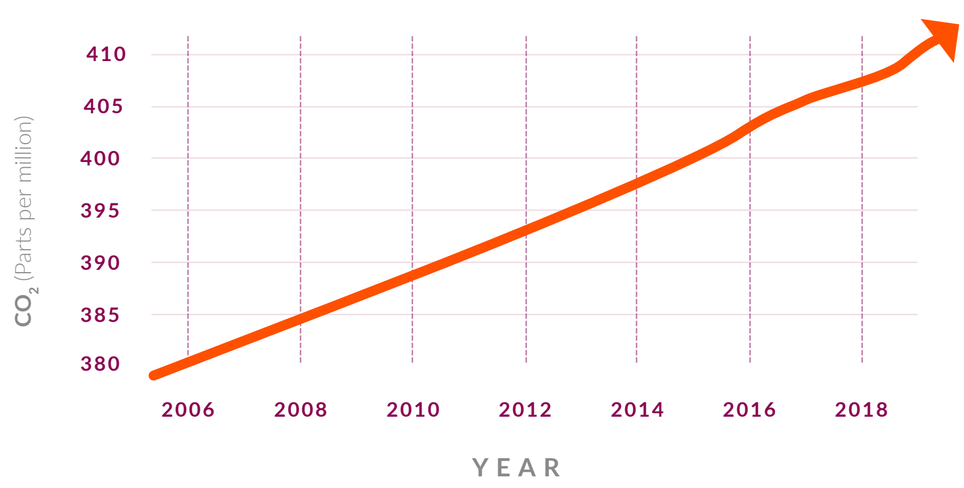
- Intergovernmental Panel on Climate Change

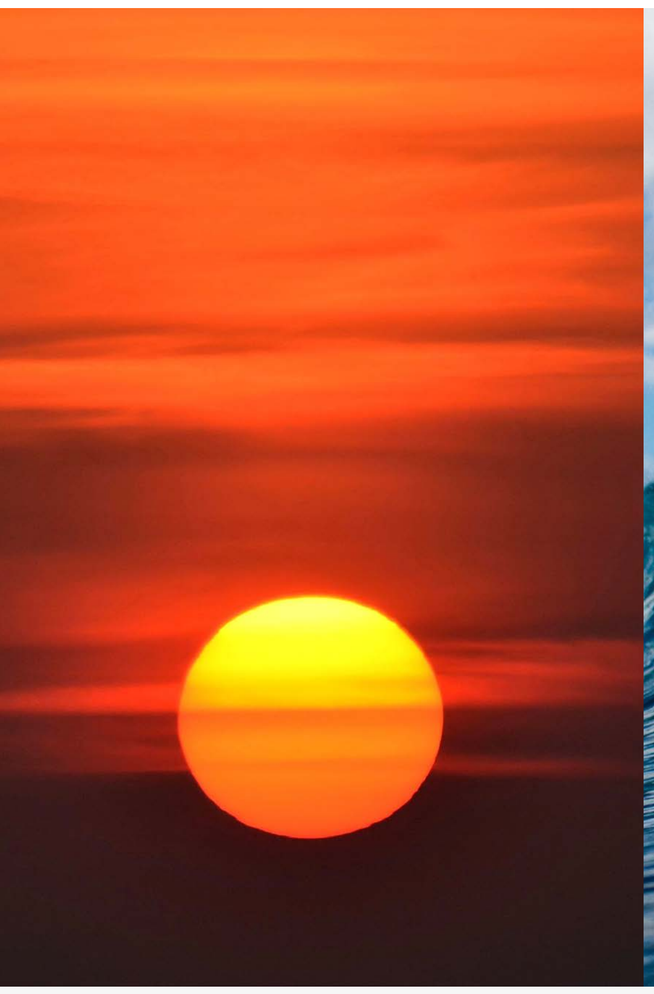
Carbon dioxide (CO_2) emissions by sector or source (global)

Share of carbon dioxide (CO_2) emissions from fuel combustion by sector or source

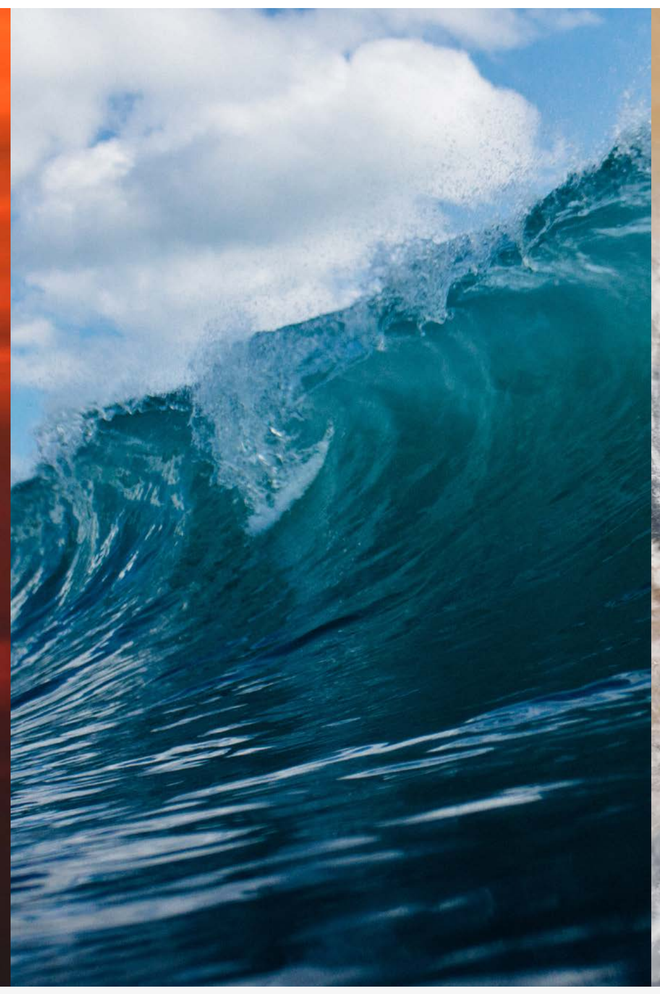


Scientists have high confidence that global temperatures will continue to rise for decades to come, largely due to greenhouse gases produced by human activities. The Intergovernmental Panel on Climate Change (IPCC), which includes more than 1,300 scientists from the United States and other countries, forecasts a temperature rise of 2.5 to 10 degrees Fahrenheit over the next century.

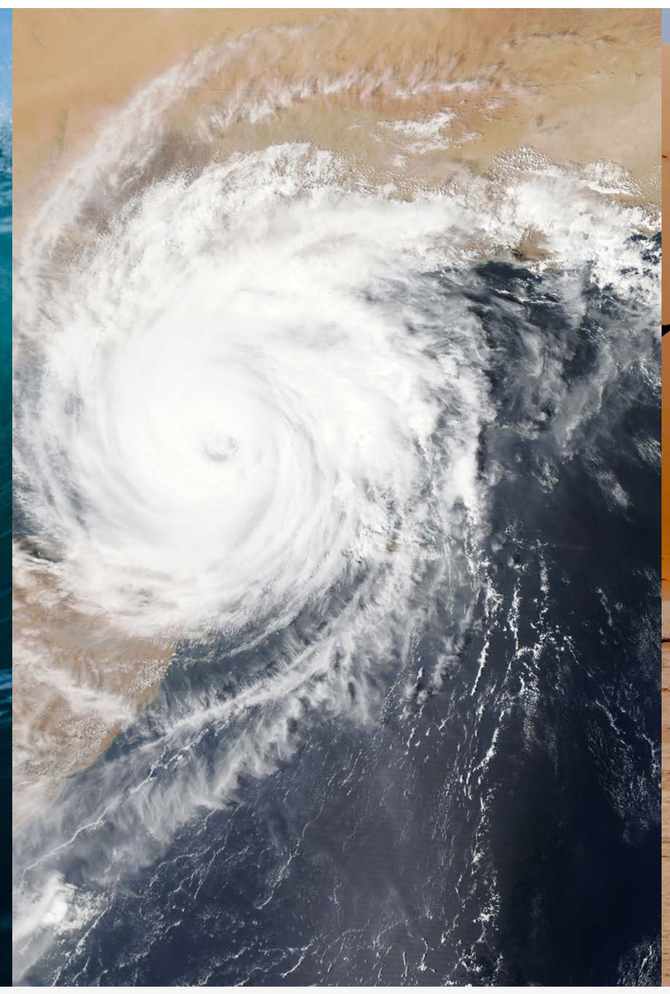




Temperatures will continue to rise



Sea levels will rise 1-4 feet by 2100



Hurricanes will become stronger and more intense

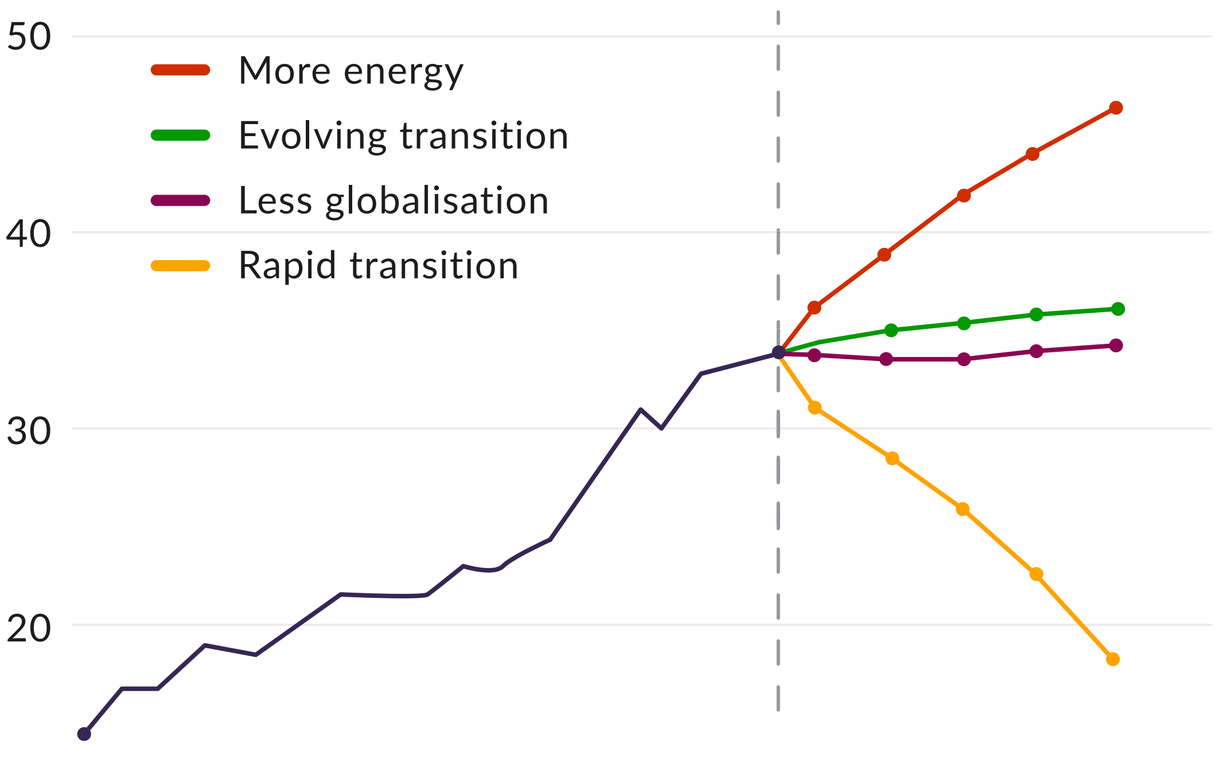
More droughts and heat waves

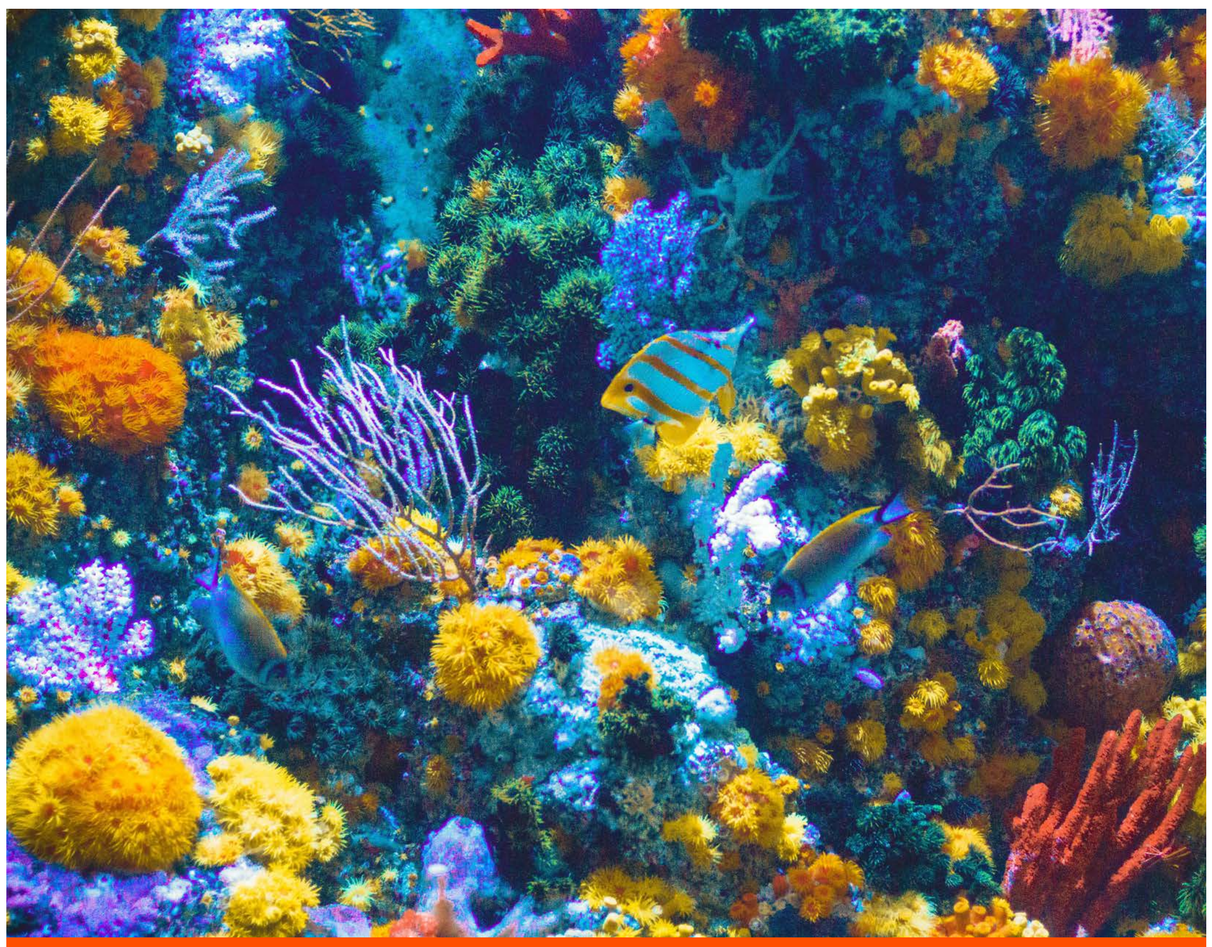
ADDRESSING CLIMATE CHANGE

Doing our part.
More power, zero [lesser] emissions

We are now facing a dual challenge – the world needs more energy, but we need to lessen our carbon emissions. The energy system needs to make a transition to cleaner sources and renewables has to play a key role in order to address climate change.

This graph, from bp's Energy Outlook 2019, sets out various scenarios based on the rate of the energy transition. A rapid transition from traditional energy sources to renewables could see levels of carbon emissions back to below the rates in 1980 in just 20 years.





Climate change is an urgent issue that will affect us all, but if we all work together to take the necessary steps to counter rising global temperatures, we will be able to limit the damage over the coming years.

Why solar? It's scalable, flexible, quick to deploy and minimally intrusive

No pollution

The generation of solar energy generation results in no emissions or harmful waste products.

A renewable source

The sun is an infinite resource.

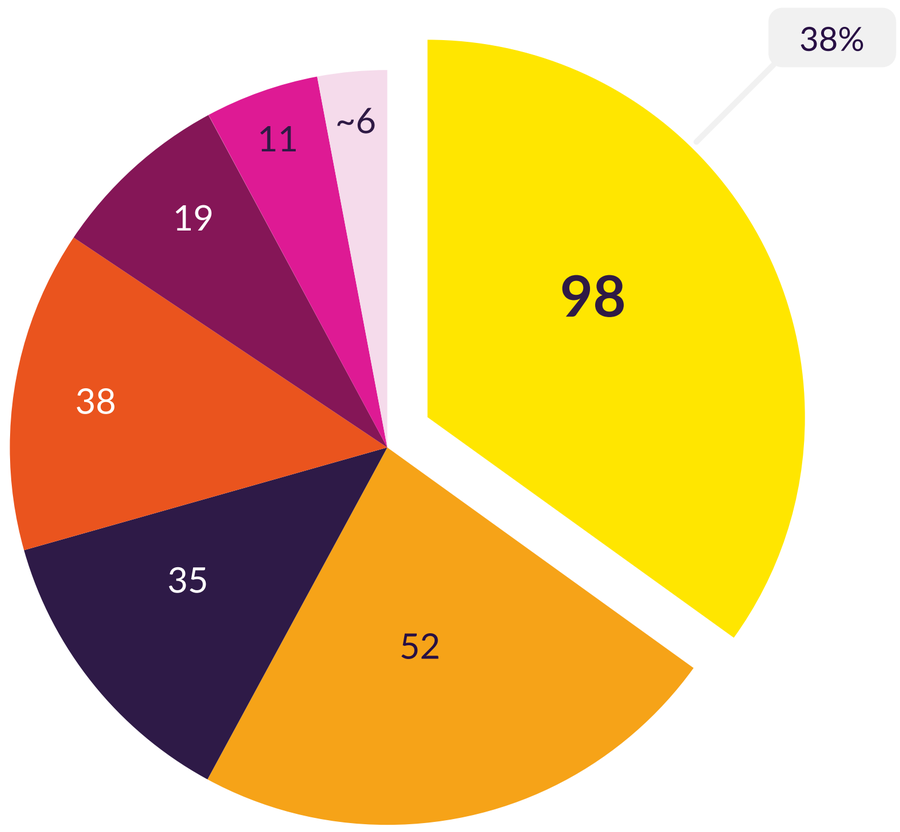
Agricultural & biodiversity benefits

The land around and beneath solar arrays can be used for grazing and creating homes for wildlife where appropriate.

A light footprint

When a solar installation has reached the end of its lifespan (which can be upwards of 30 years), the panels are easily removed from the ground and the land can be returned to its original state with very little impact.

Solar was the biggest single sector for new global power capacity additions for the 2nd year in 2017.



Net new power after retirements (GW)