

What Are the Major Impacts of Global Warming?

Introduction

Two questions have plagued the debate about climate change over the years:

- Isn't climate change a force of nature beyond our control?
- Does a temperature rise of one or two degrees make that much difference?

The first question has been answered in the most emphatic terms by the IPCC in its latest report. "It is unequivocal that human influence has warmed the atmosphere, ocean and land," it says. The chart illustrates the comparative impact of human and natural causes since the Industrial Revolution.

The second question has also been answered and in this fact sheet we assemble some of the research to list the impacts of the rising temperature, both now and into the future.

It doesn't make for happy reading but the antidote to despair is ACTION! If you haven't already, we urge you to involve yourself in our 100 Days of Action campaign in the lead up to the most important UN climate conference of them all, being held in Glasgow this November.

Climate change - it's due to humans

Global temperature anomaly from the pre-industrial average

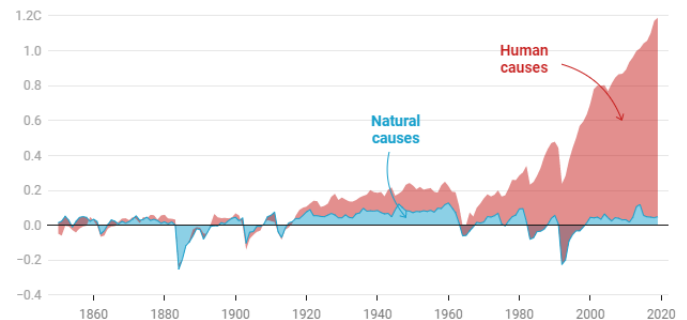


Chart: Greg Jericho - Source: IPCC SPM.1 - Get the data - Created with Datawrapper

The major impacts of a rise in temperature - happening right now

- Longer and more intense fire seasons and heatwaves as witnessed in Australia in recent years particularly 2019/20 and in Greece, Turkey, Italy, Russia, America and others in 2021
- Intense rainfall and flash flooding as we saw in Germany in 2021
- Rising sea levels - 40 cm globally in the last 20 years vs 20cm in the last 100 years
- Increasing acidity and salinity of the oceans affecting reefs including our own Great Barrier Reef
- Shrinkage of the ice sheets in Greenland and Antarctica and loss of glaciers
- Hazards resulting from the increasing intensity and frequency of extreme weather events are already causing an average of 20 million+ people to leave their homes and move to other areas p.a.

The likely future impacts

As well as an intensification of the current impacts already being experienced, scientists have a high certainty that the following effects, amongst others, will occur in the next decades:

- Extinction of species - polar bears, snow leopards, Adelle penguins to name a few
- Loss of animal, insect, plant and marine biodiversity, and ecosystems with consequences on agriculture, forestry, fisheries and other human activities
- Increased numbers of invasive species into new areas
- Further sea level rises of up to 77 cm by 2100 causing coastal flooding and erosion
- Health impacts on all species - increased heat-related deaths, increased water borne, rodent borne, and insect borne diseases such as malaria and dengue fever as well as increased spread of diseases into new regions.
- Climate refugees - it is likely that an increased number of migrants will arrive in Australia during the next decade because of the effects of environmental change in Pacific Island countries. A relatively modest sea-level rise may pose a threat to the very existence of Tuvalu and Kiribati. And of course, this will apply to many regions
- Decreasing availability of fresh water and increasing desertification, particularly in the tropical zone and dry regions
- Increasing poverty and greater impacts for disadvantaged and vulnerable populations, some indigenous peoples, and local communities dependent on agricultural or coastal livelihoods
- If resource distribution is going to change, then there will be political threats -for example, territorial or resource wars
- Changes to employment in different industries as people won't be able to work outside
- Most of the climate impact will be on the Arctic, Africa, South-East Asia and islands.. If climate change increases the value of northern land and resources, while leaving nations near the equator hotter and wracked by storms or droughts, it is a severe setback to world globalisation and improving standards of living