

KEY FINDINGS FROM THE 2021 IPCC REPORT



There's no doubt that we are changing the world's climate.

“It is unequivocal that human influence has warmed the atmosphere, ocean and land.”



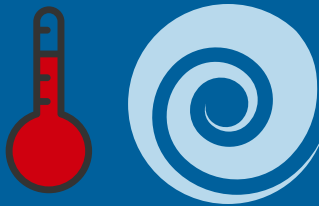
The climate is changing fast.

“Human influence has warmed the climate at a rate that is unprecedented in at least the last 2000 years.”



We keep breaking records.

“Each of the last four decades has been successively warmer than any decade that preceded it since 1850.”



Extreme weather events have become more common.

“It is virtually certain that hot extremes (including heatwaves) have become more frequent and more intense across most land regions since the 1950s.”

“It is likely that the global proportion of major (Category 3-5) tropical cyclone occurrence has increased over the last four decades.”



Even something as big as the ocean is feeling the effects.

The ocean is getting warmer...

“It is virtually certain that the global upper ocean (0-700 m) has warmed since the 1970s and extremely likely that human influence is the main driver.”

...and more acidic...

“It is virtually certain that human-caused CO₂ emissions are the main driver of current global acidification of the surface open ocean.”

...and losing oxygen...

“There is high confidence that oxygen levels have dropped in many upper ocean regions since the mid-20th century.”

...and it's rising up.

“Global mean sea level has risen faster since 1900 than over any preceding century in at least the last 3000 years.”

KEY FINDINGS FROM THE 2021 IPCC REPORT

Possible Climate Futures



The planet is going to keep warming for at least a few decades.

“Global surface temperature will continue to increase until at least the mid-century under all emissions scenarios considered.”

How long it keeps warming depends on the choices we make now!



Heavy rainfalls will get worse as the planet warms.

“It is very likely that heavy precipitation events will intensify and become more frequent in most regions with additional global warming.”



The ocean and plants and soils on land won't be able to keep absorbing CO2 like they have been.

“Under scenarios with increasing CO2 emissions, the ocean and land carbon sinks are projected to be less effective at slowing the accumulation of CO2 in the atmosphere.”



Some changes cannot be undone at this point.

“Many changes due to past and future greenhouse gas emissions are irreversible for centuries to millennia, especially changes in the ocean, ice sheets and global sea level.”

Is there any good news?

Yes. The causes of climate change today—burning fossil fuels and the ways we use land—are under our control.

We can make different choices, and many of them will have benefits beyond slowing climate change.

“Scenarios with low or very low greenhouse gas (GHG) emissions lead within years to discernible effects on greenhouse gas and aerosol concentrations, and air quality, relative to high and very high GHG emissions scenarios.”