

# [Global warming (wikipedia)](https://assignbuster.com/global-warming-wikipedia/)

Global warming is the increase in the average measured temperature of the Earth’s near-surface air and oceans since the mid-20th century, and its projected continuation. Global surface temperature increased 0. 74 ± 0.

18 °C (1. 33 ± 0. 32 °F) during the 100 years ending in 2005. [1][2] The Intergovernmental Panel on Climate Change (IPCC) concludes “ most of the observed increase in globally averaged temperatures since the mid-twentieth century is very likely due to the observed increase in anthropogenic greenhouse gas concentrations”[3][4] via an enhanced greenhouse effect. Natural phenomena such as solar variation combined with volcanoes probably had a small warming effect from pre-industrial times to 1950 and a small cooling effect from 1950 onward.

[5][6] These basic conclusions have been endorsed by at least 30 scientific societies and academies of science,[7] including all of the national academies of science of the major industrialized countries. [8][9][10] While individual scientists have voiced disagreement with these findings,[11] the overwhelming majority of scientists working on climate change agree with the IPCC’s main conclusions. 12][13] Climate model projections summarized by the IPCC indicate that average global surface temperature will likely rise a further 1. 1 to 6. 4 °C (2. 0 to 11.

5 °F) during the twenty-first century. [3] This range of values results from the use of differing scenarios of future greenhouse gas emissions as well as models with differing climate sensitivity. Although most studies focus on the period up to 2100, warming and sea level rise are expected to continue for more than a thousand years even if greenhouse gas levels are stabilized. The delay in reaching equilibrium is a result of the large heat capacity of the oceans. [3] Increasing global temperature is expected to cause sea levels to rise, an increase in the intensity of extreme weather events, and significant changes to the amount and pattern of precipitation, likely leading to an expanse of tropical areas and increased pace of desertification.

Other expected effects of global warming include changes in agricultural yields, modifications of trade routes, glacier retreat, mass species extinctions and increases in the anges of disease vectors. Remaining scientific uncertainties include the amount of warming expected in the future, and how warming and related changes will vary from region to region around the globe. Most national governments have signed and ratified the Kyoto Protocol aimed at reducing greenhouse gas emissions, but there is ongoing political and public debate worldwide regarding what, if any, action should be taken to reduce or reverse future warming or to adapt to its expected consequences.