

Is there a scientific consensus on climate change and what is causing it?

There is of course a debate about climate change. The debate is carried on amongst politicians and a variety of interested parties, including large corporations, some economists and even some scientists. This debate is reported in the media. The existence of a debate encourages the belief that there is no agreement that climate change is real and factual, or that the causes of it are industrial emissions of greenhouse gas.

However, the world's most distinguished centres of climate change research, scientists who have studied climate change, scientists whose reports on climate change are considered sufficiently rigorous and scholarly to be published in scientific journals agree. There is a consensus among the experts that climate change is real and has a human cause.

The scientific consensus is clearly reported in the publications of the Intergovernmental Panel on Climate Change (IPCC). The IPCC is unequivocal in its conclusion that most of the observed warming during the last fifty years is likely to have been caused by the increase in greenhouse gas concentrations caused by human activity. Major scientific institutions such as the American Meteorological Association, The US National Academy of Sciences and the UK Hadley Centre for Climate Prediction and Research agree.

Dr Naomi Oreskes, from the University of California, conducted a survey of scientific articles about climate change, and published the results in the highly respected journal *Science* in 2004. She analyzed all 928 abstracts, published in refereed scientific journals between 1993 and 2003, and listed in the International Science Index database with the keywords "climate change". She concludes:

This analysis shows that scientists publishing in the peer-reviewed literature agree with IPCC, the National Academy of Sciences, and the public statements of their professional societies. Politicians, economists, journalists, and others may have the impression of confusion, disagreement, or discord among climate scientists, but that impression is incorrect. (Oreskes, 2004: 1686 <http://www.sciencemag.org/cgi/content/full/306/5702/1686/>)

In the debate on climate change, there is opinion on one side and real evidence on the other. GAMUT prefers evidence.

This is why GAMUT bases its research into the future of urban transport on the assumption that climate change is real and that the world's policy makers will have to act in concert to avert it, reducing emissions from every industrial sector by at least two thirds by 2050. The urban transport cannot be exempt from that action. We must be ready with fair and practical policies.

Oreskes, Naomi (2004) 'Beyond the Ivory Tower, The Scientific Consensus on Climate Change' *Science* 306 (5702), p.1686, 3rd December 2004

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