

1956:

Plass calculates that a doubling of CO₂ would cause the planet to warm 3.6°C.

1957:

Revelle finds that CO₂ produced by humans won't be readily absorbed by oceans

1960:

Keeling measures annual rise of CO₂ in the Earth's atmosphere. Current level is 315ppm.

Mean global temperature is 13.9°C.

Human population reaches three billion.

1965:

Conference on natural climate change held in Colorado. Climate system is seen as unpredictable.

US President's Advisory Committee warns of the risks of carbon pollution.

1968:

Studies suggest a possibility of collapse of Antarctic ice sheets, which would raise sea levels catastrophically.

1969:

Budyko and Sellers present models of catastrophic ice-albedo feedbacks.

Nimbus III satellite begins to provide global atmospheric temperature measurements.

1970:

Creation of US National Oceanic and Atmospheric Administration, the world's leading funder of climate research.

1971:

SMIC conference reports danger of global change caused by humans, calls for organized research effort.

1972:

Droughts in Africa, Ukraine, India cause world food crisis, spreading fears about climate change.

First UN environment conference, in Stockholm. Climate change hardly registers on agenda.

1974:

Cooling suspected to be as likely as warming; scientists are doubtful as journalists talk of a new ice age.

1975:

Warnings about effects of airplanes leads to investigation of trace gases and discovery of danger to ozone layer.

Human population reaches four billion.

1976:

Studies show that CFCs and also methane and ozone can make a serious contribution to the greenhouse effect.

Deforestation and other ecosystem changes are recognized as major factors in the future of climate.

1977:

Scientific opinion tends to converge on global warming, not cooling, as the chief climate risk in next century.

1978:

Attempts to coordinate climate research in US end with an inadequate National Climate Program Act

1979:

Strengthened environmental movement encourages renewable energy sources, inhibits nuclear energy growth.

US National Academy of Sciences report finds it highly credible that doubling CO₂ will bring 1.5-4.5°C global warming.

The first World Climate Conference takes place. World Climate Research Programme launched to coordinate international research.

1981:

Election of Reagan brings backlash against environmental movement. Political conservatism is linked to skepticism about global warming.

Scientists predict greenhouse warming „signal“ should be visible by about the year 2000.

1982:

Strong global warming since mid-1970s is reported, with 1981 the warmest year on record.

1983:

Reports from US National Academy of Sciences spark conflict, as greenhouse warming becomes prominent in mainstream politics.

1985:

Ramanathan announces that global warming may come twice as fast as expected.

Villach Conference declares that some global warming seems inevitable, calls on governments to consider international agreements to restrict emissions.

1986:

Meltdown of reactor Chernobyl cripples plans to replace fossil fuel with nuclear power.

1987:

Montreal Protocol of the Vienna Convention imposes international restrictions on emission of ozone-destroying gases.

Human population reaches five billion.

1988:

News media coverage of global warming leaps upward following record heat and droughts.

UK Prime Minister Thatcher is first major leader to call for action.

Intergovernmental Panel on Climate Change (IPCC) is established.

1989:

Fossil-fuel and other U.S. industries form Global Climate Coalition to tell politicians and the public that climate science is too uncertain to justify action.

Carbon emissions from fossil fuel burning and industry reach six billion tonnes per year.

1990:

First IPCC report says world has been warming and future warming seems likely.

1991:

Global warming skeptics claim that 20th-century temperature changes followed from solar influences.

1992:

Conference in Rio de Janeiro produces UN Framework Convention on Climate Change, but US blocks calls for serious action.

1995:

Second IPCC report detects „signature“ of human-caused greenhouse effect, declares that serious warming is likely in the coming century.

Reports of the breaking up of Antarctic ice shelves and other signs of warming in polar regions begin affecting public opinion.

The first Conference of the Parties (COP 1) takes place in Berlin.

1997:

Kyoto Protocol devised, setting targets for industrialized nations to reduce emissions. The US, China and India are not part of the treaty.

1999:

Human population reaches six billion.

2000:

Global Climate Coalition dissolves as many corporations grapple with threat of warming, but oil lobby convinces US administration to deny problem.

2001:

Third IPCC report states that global warming, unprecedented since the end of the last ice age, is „very likely“, with highly damaging future impacts.

The Marrakesh Accords are adopted at COP7, detailing the rules for implementation of the Kyoto Protocol

2003:

Numerous observations raise concern that collapse of ice sheets can raise sea levels faster than believed.

Deadly summer heat wave in Europe accelerates divergence between European and US public opinion.

2004:

Kyoto Protocol saved from collapse after ratification by Russia.

2005:

Kyoto treaty goes into effect. Work to retard emissions accelerates in Japan, Western Europe, US regional governments and corporations.

2006:

„An Inconvenient Truth“ documentary persuades many but sharpens political polarization.

China overtakes the United states as the world's biggest emitter of CO₂.

Stern Review concludes that climate change could damage global GDP by up to 20% – curbing it would cost about 1% of global GDP.

2007:

Greenland and Antarctic ice sheets and Arctic Ocean sea-ice cover found to be shrinking faster than expected.

At UN negotiations in Bali, governments agree the two-year „Bali roadmap“ aimed at hammering out a new global treaty by the end of 2009.

2008:

Climate scientists recognize that even if all greenhouse gas emissions could be halted immediately, global warming will continue for millennia.

2009:

Experts warn that global warming is arriving at a faster and more dangerous pace than anticipated just a few years earlier.

Copenhagen conference fails to negotiate binding agreements: end of hopes of avoiding dangerous future climate change.

2010:

At COP16, countries made their emission reduction pledges official, in what was the largest collective effort to reduce emissions.

2011:

Human population reaches seven billion.

2012:

Studies find recent disastrous heat waves, droughts, extremes of precipitation, and floods were made worse by global warming.

2013:

The IPCC says it's „extremely likely“ that human influence is the dominant reason for warming since the mid-20th century.

2015:

Researchers find collapse of West Antarctic ice sheet irreversible, will bring meters of sea level rise over future centuries.

Paris Agreement: nearly all nations pledge to set targets for their own greenhouse gas cuts and to report their progress.

Mean global temperature is 14.7°C, the warmest in thousands of years.

Level of CO₂ in the atmosphere reaches 400ppm, the highest in millions of years.