

Canadian View of Global warming: Summary of Scientific Arguments

Science-based analyses of America's key environmental issues

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Claim: Man-made release of CO₂ is causing catastrophic climate change.

Problems with the CO₂ - Global Warming Hypothesis

An examination of published scientific data show many inconsistencies between the climate record and the CO₂ - Global Warming hypothesis. Some of these are:

- The major greenhouse gas is water vapour, and the nature of CO₂ / water vapour interactions is not clearly understood. Moreover, James Hansen (2000) downplayed the role of CO₂ as a greenhouse gas.
- Antarctic ice cores in one study show carbon dioxide concentrations increased by 80 to 100 ppm about 600 years after the warming of the last three deglaciations, while in another study Antarctic ice core data show that CO₂ levels lag an increase in temperature by 900 to 1200 years.
- World Climate Report (2002) shows that annual growth in concentrations of CO₂ in the atmosphere have remained essentially flat from 1975 to the present - during a time of maximum production of CO₂ from fossil fuels. This casts doubt on the claim that rapid and dramatic build-ups of CO₂ will occur in the future.
- We know that CO₂ from the burning of fossil fuels was not the cause of dramatic historical climate changes, for example, 1000 years ago, in the Medieval Warm Period or in the Little Ice Age that followed from about 1350 to about 1860. We are still emerging, in an oscillating fashion, on the warming trend that came after the Little Ice Age.

In the 20th century, there was little correlation between temperature changes and CO₂ levels. Some surface temperature measurements show a 0.5°C rise over the past 100 years. However, that average hides some significant details. From 1905 to 1940, a rise of about 0.5°C was measured, during which time there was an imperceptible rise in CO₂. From 1940 to 1975, the temperature decreased about 0.2°C, while CO₂ levels started to increase more rapidly. The out-of-sync relationship is obvious.

Why you should be sceptical of the Kyoto claims:

1. There has been a natural warming and cooling of the earth during its evolution (geologic time), and more recently during the Medieval Warm and Little Ice Age Periods. The overall warming of the planet over the last 10,000 years has not been caused by human production of CO₂.
2. In the last 100 years temperature increased noticeably from 1905 to 1940, with little change in CO₂. From 1940 to 1975 global temperatures cooled while CO₂ increased noticeably. The lack of correlation between CO₂ and temperature change is clearly evident.
3. Astrophysical factors (the variation of solar radiation reaching the earth), and variations in global deep and shallow ocean currents are in large measure responsible for changes in the planet's climate.
4. The supposed main "greenhouse" gas, carbon dioxide, constitutes 0.035 % of the atmosphere. As different scientists have commented, the dominant heat trapping mechanism is water vapour, accounting for 97 % of the so-called greenhouse effect. Moreover, it can be seen in the record of past climates derived from Antarctic ice cores, that increase in CO₂ followed temperature increases, rather than preceding them, or causing them.

5. The arguments claiming man as a cause of Global Warming are based on computer programs that are incapable of modelling world climate: many of the millions of parameters can only be defined in ranges with arbitrary skewing.
6. Examination of weather disasters (floods, droughts, etc.) by scientists show no relevance to climate change.
7. Recognition of temperatures recorded by satellites and weather balloons show very minor temperature change in the last 50 years. As well, there is a bias in the geographical distribution of historical surface temperature measurements (so-called "urban heat islands"). It should be noted that the margin of error of temperature field observations is several times that of the average 0.6 degrees Celsius warming that has prevailed since the depth of the Little Ice Age around the year 1700 AD.
8. The Intergovernmental Panel (IPCC) with its Summary for Policymakers (SPM) is often quoted as an authoritative source on climate change. However, many climatologists, including scientists working on the IPCC, disagree strongly with some of the conclusions issued in the SPM. It is evident that the SPM information is often political in content. The widely distributed and referenced SPM was compiled by UN bureaucrats that fails to convey the uncertainty of climate change forecasts of the panel scientists.
9. The Kyoto Protocol, by focusing on attempts to curtail CO₂ at incredible cost, will not stop or reverse climate change.

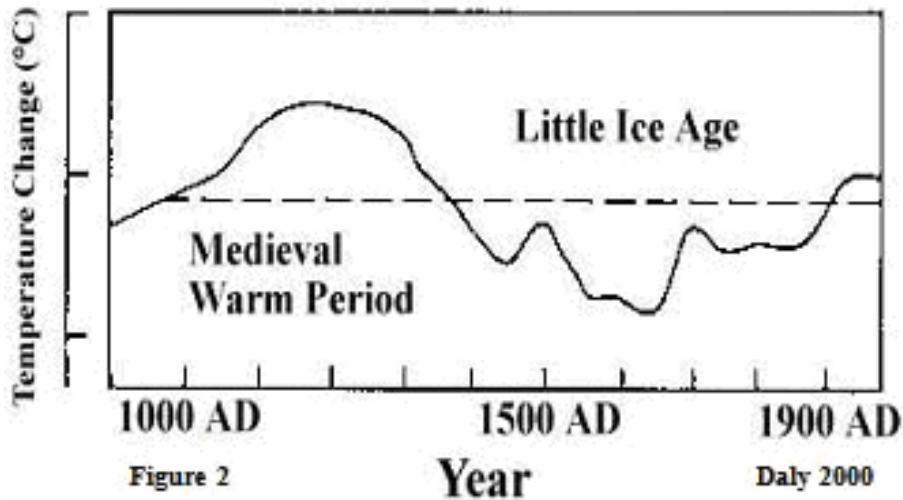


Figure 2

Year

Daly 2000

Source: Friends of Science

<http://www.friendsofscience.org/index.php>

Friends of Science is a non-profit organization made up of active and retired geologists, engineers, earth scientists and other professionals, not to mention concerned Canadians, who believe the science behind the Kyoto Protocol is questionable.