

# **The Evidence Against Human Causation in Global Warming**

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## **SUMMARY**

The following data does not fit the assumption that human activities result in global warming. It follows then that the assumption that anthropogenic CO<sub>2</sub> causes global warming is fundamentally flawed.

- Ice core data shows that there have been repeated heating and cooling events on the earth long before human activity was significant. Global warming is a naturally occurring event. Attempting to interfere in this process may have unpredictable consequences
- The Earth cooled between 1940 and 1975 while fossil fuel consumption rose dramatically. The Earth should have warmed if CO<sub>2</sub> emissions from fossil fuel consumption is a cause of global warming. The theory does not fit the data.
- Ignoring data that does not fit a theory is poor science. Only one inconsistent piece of data is necessary to negate a theory.
- Reducing CO<sub>2</sub> emissions and introducing carbon trading will not prevent global warming, but will make energy dramatically more expensive to the consumer.

## **INTRODUCTION**

The author is a geologist with 30 years experience in the metalliferous mining industry. He is currently Chief Operating Officer of a public listed gold mining company. Opponents of the following view will claim bias, but knowledge of, and training and practise in, the subject does not equate with bias.

There are strident calls for the reduction and elimination of carbon dioxide (CO<sub>2</sub>) emissions, based on the assumptions that (a) increasing carbon dioxide emissions are the cause of global warming and (b) that human activities are responsible for a rise in carbon dioxide emissions. The conclusion is then drawn that restricting human emissions of CO<sub>2</sub> will reduce global warming.

The basis of the scientific method is that a series of observations are made, a hypothesis is drawn up to explain the observations, then a series of tests are made to see if the hypothesis holds under all circumstances. If test results indicate the hypothesis is flawed, then the hypothesis must be altered to fit ALL data.

The following data DO NOT FIT the assumption that human activities result in global warming. It follows then that the assumption that anthropogenic CO<sub>2</sub> causes global warming is fundamentally flawed.

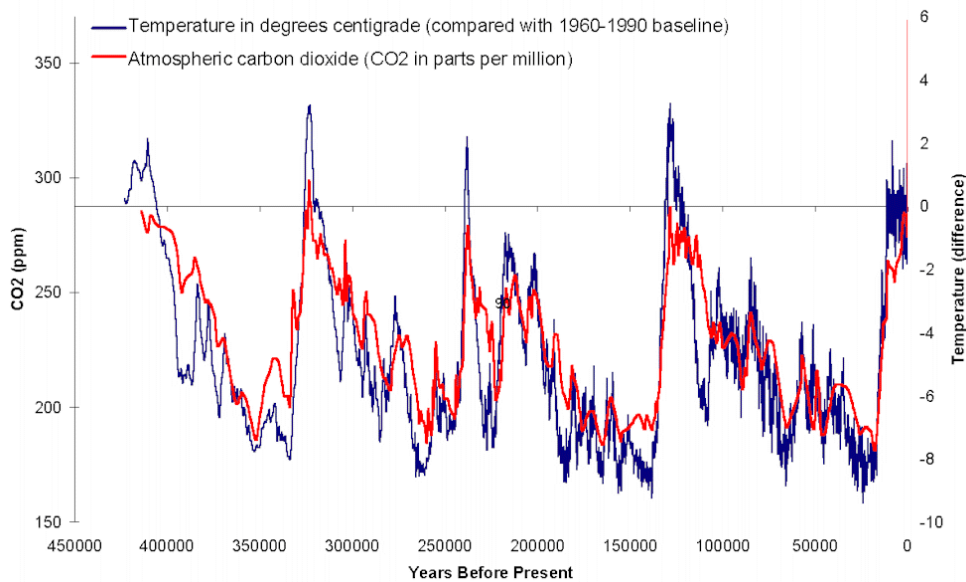
## 1) Global warming is a naturally occurring and recurring event

The Vostok ice cores are a key piece of information. In January 1998, the collaborative ice-drilling project between Russia, the United States, and France at the Russian Vostok station in East Antarctica yielded the deepest ice core ever recovered, reaching a depth of 3,623 m (Petit et al. 1997, 1999). Preliminary data indicate the Vostok ice-core record extends through four climate cycles, with ice slightly older than 400,000 years (Petit et al. 1997, 1999). An explanation of the project and the original data can be found at:

<http://www.ncdc.noaa.gov/paleo/icecore/antarctica/vostok/vostok.html>

This is the web site of NESDIS, the National Environmental Satellite, Data and Information Service, part of the US Department of Commerce's National Climatic Data Centre. The data produced the following graph that can be found at:

<http://www.brighton73.freemove.co.uk/gw/paleo/400000yrfig.htm>



This figure shows the temperature record from the Vostok ice core (dark blue), together with CO<sub>2</sub> (red) from the Vostok ice core, the Law Dome ice core, and from the Mauna Loa monitoring station in Hawaii. The near vertical line on the right represents the change in CO<sub>2</sub> associated with the industrial revolution. Vostok data are available from:

<http://www.ngdc.noaa.gov/paleo/icecore/antarctica/vostok/vostok.html>,

The Law Dome ice data are available from:

<http://www.ngdc.noaa.gov/paleo/icecore/antarctica/law/law.html>, and Mauna Loa data are available from <http://cdiac.esd.ornl.gov/trends/CO2/sio-mlo.htm>.

There is, overall, a good match between temperature and CO<sub>2</sub>. One important piece of information that can be determined from ice core data is that **changes in temperature PRECEDE changes in CO<sub>2</sub>, with a lag of around 800 years.**

The critical result from this work is that there have been **FOUR PREVIOUS WARMING EVENTS** at roughly 80,000 to 120,000 year intervals before the current cycle, **LONG BEFORE HUMAN ACTIVITY**.

Global warming is therefore a series of naturally occurring and regular events THAT **RESOLVE THEMSELVES WITHOUT HUMAN INTERVENTION**. That does not make dramatic news for the media, whereas the threat of a “global disaster” does.

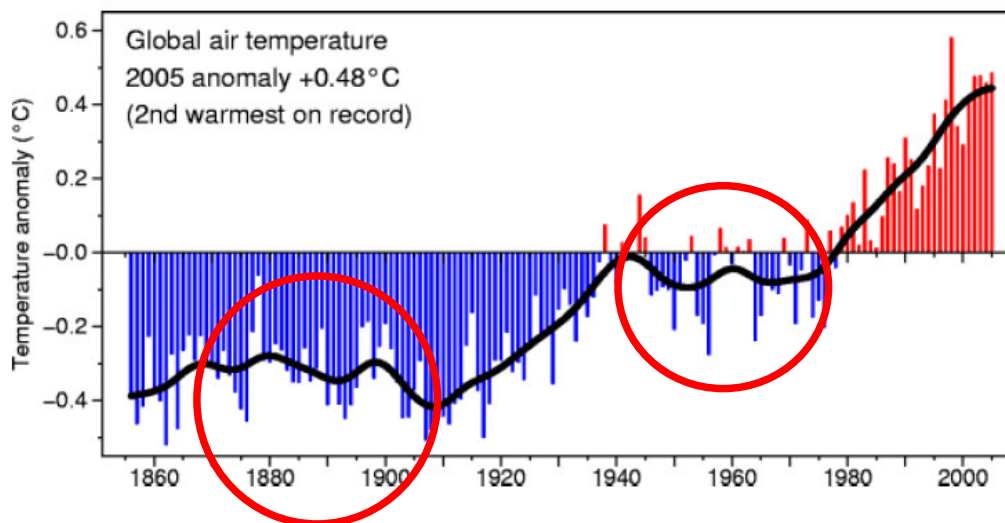
This is not to say that we shouldn't plan for the human and economic impact of this event. However, it makes a mockery of any attempt to **STOP OR CHANGE** it. We can't even stop a local thunderstorm let alone change the planet's weather. It's as useless as King Canute standing against the tide.

The evidence does not fit a human cause.

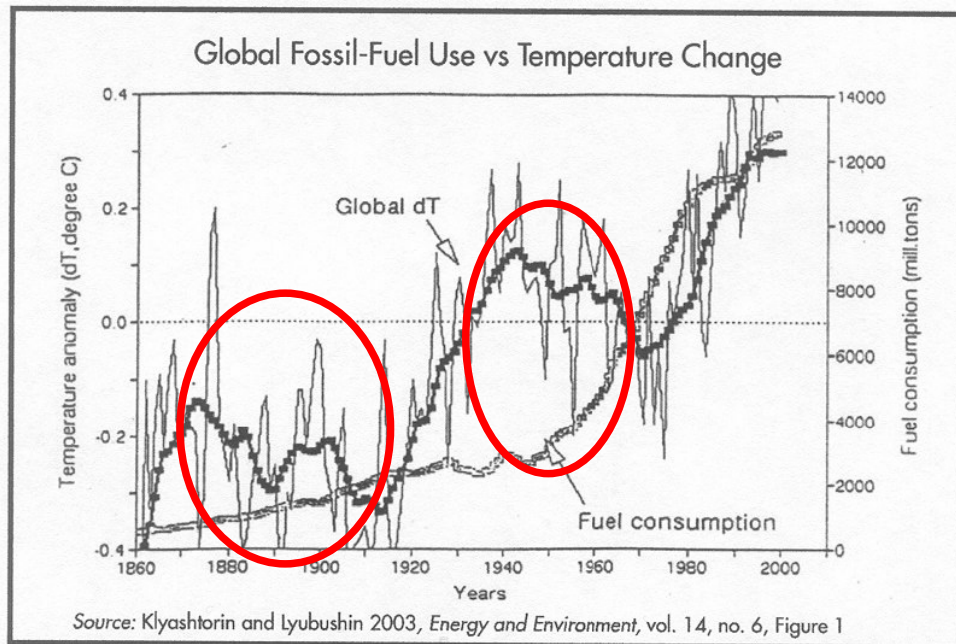
More importantly, if global warming is a naturally recurring event, then any attempt by humans to interfere with the progress of this natural cycle could have unpredicted and possibly dire consequences.

## 2) The Earth **COOLED** over 30 year periods while **CO2 emissions increased exponentially**.

The UN Intergovernmental Panel on Climate Change (IPCC) uses the following graphs of global temperature change from Jones & Palutikof (2006). It shows that global temperatures declined in two periods, over extended periods of 35-40 years from 1870 to 1910 and from 1940 to 1975. The Earth cooled during these times, not warmed.



What is really fascinating is that fossil fuel consumption and therefore the production of anthropogenic CO<sub>2</sub> **INCREASED EXPONENTIALLY** during these 35-40 year periods, as shown below, from Klyashtorin & Lyubushin, (2003):



The hypothesis does not fit the data. If fossil fuel consumption and resultant CO2 emissions increases, the temperature should increase. **It didn't. The Earth cooled.**

It would be far more useful for the IPCC to focus on this 35 year period to work out what happened to cool the Earth. If it was an anthropogenic cause, maybe we can reproduce it.

At the end of this 35 year cooling period, Newsweek magazine printed the following quotes on April 28, 1975 in an article headlined "*The Cooling World*" (reproduced from Walker, 2006),

*"There are ominous signs that the earth's weather patterns have begun to change dramatically"*

*The evidence in support of these predictions has now begun to accumulate so massively that meteorologists are hard-pressed to keep up with it."*

*"Climatologists are pessimistic that political leaders will take any positive action to compensate for the climate change, or even allay its effects"*

The fear here was that the world was cooling, but the call from the scientists to politicians to take action then is the same as now. How the scientific community has reversed its consensus view in just 25 years!

### **3) Humans have a minimal impact on the globe**

Dry land, where humans dwell, makes up only 20% of the Earth's surface. The other 80% is water. Water dissolves CO<sub>2</sub>. CO<sub>2</sub> is heavier than air and sits at the lowest

levels where it is accessible to be dissolved by rain and sea water. Corals and shelled animals extract the carbonate to form shells and coral skeletons. It's a self-cleaning system.

#### **4) Why is there an emphasis on trading carbon credits?**

Carbon credits are the perfect commodity. The carbon that is to be traded on the commodities and futures markets does not have to be mined, refined, processed, transported, stored, meet quality specifications, be produced profitably or marketed. It is an investment product without substance, an ephemeral nothing that has a value. No-one is ever going to ask to take delivery of their kilogram of black soot (carbon).

Trading of carbon credits is being pushed by the investment community as a new investment product from which they can make money for nothing. It's the best thing since public company shares (now with no authorized capital limit) were invented. A share is an ephemeral nothing, but can be sold for a dollar value. They are both mechanisms for creating money from nothing.

Carbon trading does not reduce carbon emissions – it simply allows emitters a financial penalty to continue operations unchanged. This penalty will be passed on to consumers.

It will make electricity more expensive, penalizing the lower socio-economic groups in all countries, the one group who can least afford it.

#### **5) What about the Stern Review?**

Chapter 1 of the Stern Review on Page 2, in the very first paragraph, states:

**“The Earth’s climate is rapidly changing, mainly as a result of increases in greenhouse gases caused by human activities.”**

*The Stern Review on the Economics of Climate Change* did not even question that human activities were the cause of climate change. The review was not a scientific treatise on the causes of global warming – it was an economic examination of the effects on society of climate change. Its non-questioning starting point was that climate change was directly related to human activity. Stern's brief was not to judge whether or not global warming had human causes, but simply to predict the economic impact of global warming, whether naturally occurring or not.

The Stern report is therefore irrelevant in the discussion on what causes global warming.

#### **6) The IPCC report concluded that human activities causing a rise in CO<sub>2</sub> are the most likely cause of global warming.**

The IPCC report (Intergovernmental Panel on Climate Change. *Climate Change 2007: The Physical Science Basis. Summary for Policymakers*) is an atrocious piece

of work masquerading as science. The IPCC report **SPECIFICALLY** excluded volcanic activity as a source of CO<sub>2</sub>, and as a source of aerosols and particulates that may cause solar reflection (and cooling) as it was “episodic” or intermittent (see Page 16 of the IPCC report, “Volcanic aerosols contribute an additional natural forcing but are not included in this figure due to their episodic nature.”).

Volcanic activity may be intermittent on a local scale, but is continuous on a global scale, and is a major source of natural CO<sub>2</sub> emissions, producing some 200 million tonnes of CO<sub>2</sub> per year (US Geological Survey, 15 Feb 2007 - [http://hvo.wr.usgs.gov/volcanowatch/2007/07\\_02\\_15.html](http://hvo.wr.usgs.gov/volcanowatch/2007/07_02_15.html) )

Interestingly enough, global atmospheric measurements of CO<sub>2</sub> are recorded at the Mauna Loa observatory in Hawai'i. Mauna Loa is an active volcano, producing CO<sub>2</sub>!

Most of the IPCC data focuses on the period since 1750, nowhere near long enough to take into account even the first 80,000 year cycle, let alone its four predecessors. The IPCC looked at ice core data, but only for the last 10,000 years – **IT SPECIFICALLY EXCLUDED THE WHOLE OF THE DATA, SELECTING OUT ONLY THE MOST RECENT DATA**, and only part of one cycle. To exclude evidence is a serious flaw in any scientific analysis.

The IPCC report **DID NOT EVEN CONSIDER** the weathering of rocks. A word search of the IPCC document for “rock”, “soil”, “erosion” and “weather” for “weathering” and its derivatives returned no hits at all. How do they think limestone caves formed? Limestone caves form from the action of acidic groundwaters on dissolving the calcium carbonate, releasing bicarbonate ions that convert to CO<sub>2</sub>. Rain is naturally acidic, from CO<sub>2</sub> dissolving in rain to form carbonic acid. Other groundwaters become acidic through humic acids in decaying vegetation.

As the world's biggest carbon reservoir, carbonate rocks contain about  $6.1 \times 10^7$  billion tons of carbon, which is 1,694 times and  $1.1 \times 10^5$  times larger than those of oceans and world vegetation respectively (Houghton & Woodwell, 1989). Carbonate rocks occupy an area of about 22 million square kilometers in the world (Yuan, 1997).

**If you exclude the two MOST COMMON NATURALLY OCCURRING sources of CO<sub>2</sub>, volcanic activity and the weathering of rocks, from the report, then obviously the conclusion will be drawn that CO<sub>2</sub> results from UNNATURAL (human) activity.**

The IPCC report was a self-fulfilling prophecy because it excluded or did not adequately consider NATURAL sources of CO<sub>2</sub>.

The IPCC Report can be found at the IPCC Website: <http://www.ipcc.ch> .

**7) Several thousand scientists contributed to the IPCC report.  
How can they all be wrong?**

Just because a large number of people hold a particular view does not make it correct. The world's leading scientists at one time were firmly of the opinion that the Earth was flat, and that the Sun revolved around a stationary Earth. These were earnestly held views by intelligent, highly educated people, the leaders in the scientific community of their time. It took Galileo and Christopher Columbus to prove otherwise. A simple observation by sailors that as a ship sailed into the distance, its hull disappeared from view, then its deck, then its rigging and finally its flag at the masthead, led Columbus to conclude that the Earth was a sphere. The evidence did not fit a flat Earth.

There are almost no geologists in the panel of IPCC scientists. The majority were climatologists and atmospheric physicists. If you want to know about the history of the Earth, talk to a geologist, not a climatologist, especially one who depends on government grants to fund his tenure or research.

The ABC TV program "The Global Warming Swindle" interviewed a number of scientists who did not agree with human causation of global warming but whose names were included in the 2,500 authors because in the words of the IPCC "they had contributed" to the research. These scientists were irate that their names had been included, one threatening the IPCC with legal action until they removed his name.

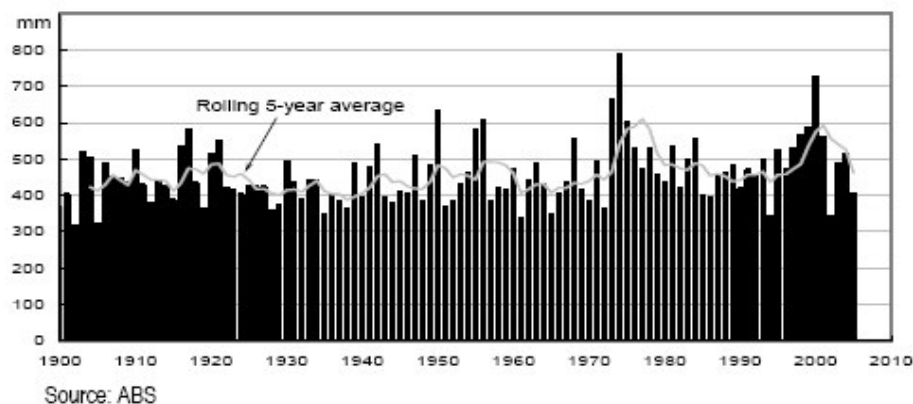
**8) The retreat of glaciers is not due to human activities**

The Illinois State Museum in the US is an independent scientific authority, not connected to mining interests. Its Ice Ages exhibit shows a map of the North American ice sheet over the last 20,000 years on its web site at: [http://www.museum.state.il.us/exhibits/ice\\_ages/](http://www.museum.state.il.us/exhibits/ice_ages/) During most of the last 1 billion years the Earth had no permanent ice. Polar ice caps are a rarity, not the norm. The exhibit shows that 20,000 years ago, at the height of glacial advancement, ice sheets covered most of North America as far south as Kentucky and Missouri. The graphic on their web site shows the ice sheets retreating for the last 20,000 years, long before humans were burning coal or petroleum products in any quantity.

**9) Australia is in the worst drought for a thousand years**

This comment has been bandied about the media and repeated by various politicians to suit their own purposes. It's another furphy. Look at the Australian rainfall figures below:

Australian Annual Rainfall



The data in the above chart shows that aggregate rainfall has actually **INCREASED** since the 1970s.

Based on the rolling 5-year average, there were more severe droughts in the mid 1920s, 1930s and 1960s. There was a period of low rainfall in 2002 but it was lower in 1994. However, the recovery from the 2002 drought has been weaker than both the 1994 and 1972 droughts.

The Australian climate in 2006 was only the 11th warmest since records began nearly 100 years ago, even though parts of the country were suffering their longest drought in history. In its Annual Climate Statement, the Australian Bureau of Meteorology said despite record warm daytime temperatures in the drought-hit south-east, 2006 was cooler than the previous year when averaged across the whole nation.

If global warming is constant, shouldn't **EVERY YEAR THEN BE HOTTER** than the preceding year? Certainly recent years should be hotter than 100 years ago, not cooler.

## **10) If the Earth warms, the polar ice caps will melt and flood coastal areas.**

A summary of the major climate statistics recorded at the Casey Antarctic Base is provided by the Bureau of Meteorology for the years 1989-2006 at:  
[http://www.bom.gov.au/climate/averages/tables/cw\\_300017.shtml](http://www.bom.gov.au/climate/averages/tables/cw_300017.shtml)

The Casey base is on the northern edge of Antarctica at an elevation of 40m above sea level. The average maximum temperature for the 18 year period from 1989-2006 was minus 6 degrees (-6°C) and the average minimum temperature was -12.6°C degrees.

The IPCC states, "The total temperature increase from 1850 – 1899 to 2001 – 2005 is 0.76 [with a range of 0.57 to 0.95]°C." That is, in 150 years, the temperature has risen by 0.76°C. To melt the polar ice in Antarctica, the temperature has to rise 7°C before ice will melt under maximum temperature conditions, and 13°C to stop it re-freezing under minimum conditions. At an increase of even 1°C per 100 years, it will take



1,300 years for this to happen, and even then, this is simply returning the Earth to its normal average state of not having any polar ice.

We can plan for the results of coastal flooding, but cannot prevent the event.

## **CONCLUSION**

The evidence does not support the commonly held view that human activities that produce increased levels of CO<sub>2</sub>, is a cause of global warming.

Global warming is a naturally occurring and recurring event unrelated to human activity.

Cutting CO<sub>2</sub> emissions therefore will not alter global warming. Trading carbon credits will have no effect on global warming.

It would be more useful to study the period from 1940 to 1975, when the Earth cooled while fossil fuel consumption skyrocketed, to find out why the Earth cooled. This period holds the key to the root cause of global warming.

The following newspaper article from Professor Lance Endersbee sums it up:

### ***Global warming not due to human activity***

***Emeritus Professor Lance Endersbee***

*reported in The Australian April 5, 2007 - 9:34AM*

*The global scientific report blaming carbon emissions for climate change is based on misconceptions about the Earth's behaviour, says an Australian academic who believes global warming is not caused by mankind. The respected Intergovernmental Panel on Climate Change (IPCC) report released earlier this year said it was very likely climate change was the result of greenhouse gases produced by human activity. Emeritus Professor Lance Endersbee has accused the scientific leaders of trying to stifle debate over the causes of climate change.*

*Professor Endersbee, a former dean of engineering and pro-vice chancellor at Monash University, says it is highly probable that increased electromagnetic radiation of the sun is behind global warming. "There are several disturbing aspects of the IPCC report which indicate that the conclusions are based on serious misconceptions about the behaviour of the Earth," Prof Endersbee said in the newsletter *New Concepts in Global Tectonics*. "The report reflects little understanding of the dynamic relation between the Earth, the Sun and the Cosmos. "In these circumstances it is incredible that some leaders of scientific societies and academies have tried to use their authority to demand acceptance of the IPCC report." Prof Endersbee said air pollution should be dealt with on a regional level as a separate issue to global warming. "It is ridiculous to assume that the health problems of smog in India and China have global causes, and can be solved by carbon trading in the City of London," he said. Carbon dioxide was not a pollutant and there was no need for a risky emissions market as advocated by the IPCC, Prof*

*Endersbee said. "If it comes to be recognised that global warming has a natural cause, and the fears subside, the value of carbon credits will then drop to zero, and the market in carbon trading will collapse."*

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