

The Great Global Warming Swindle

**Programme directed by Martin Durkin, on Channel 4
on Thursday 8 March 2007**

Critique by John Houghton, President, John Ray Initiative

Some **background on Martin Durkin** can be found on
<http://www.gmwatch.org/profile1.asp?PrId=39>
<http://www.monbiot.com/archives/2000/03/16/modified-truth/>

The programme purported to debunk the science of Global Warming describing it as ‘lies’ and an invention of hundreds of scientists around the world who have conspired to mislead governments, and the general public. The most prominent person in the programme was Lord Lawson, former Chancellor of the Exchequer who is not a scientist and who shows little knowledge of the science but who is party to the creation of a conspiracy theory that questions the motives and integrity of the world scientific community, especially as represented by the Intergovernmental Panel on Climate Change (IPCC).

The material presented was a mixture of truth, half truth and falsehood put together with the sole purpose of discrediting the science of global warming as presented by the main world community of climate scientists and by the IPCC.

For the best and latest statement of the science, you are referred to the Summary for Policymakers of the IPCC 4th Assessment Report published in February 2007 (see: <http://www.ipcc.ch/>).

You are also referred to a **2-page statement by the Academies of Science of the 11 largest countries in the world (the G8 plus China, India and Brazil)** addressed to the leaders at the G8 Summit at Gleneagles in 2005 giving a clear and urgent message about the reality of Global Warming and its likely consequences and also endorsing the consensus of the IPCC. This statement by the Academies is unprecedented. There could not be a stronger statement supporting the work of the world scientific community by the most eminent scientists in the world. (see <http://www.royalsoc.ac.uk/document.asp?latest=1&id=3222>)

You are also referred to **JRI Briefing Paper 14**, “Global Warming, Climate Change and Sustainability: Challenge to Scientists, Policy-makers and Christians” by Sir John Houghton, 2007. (see http://www.jri.org.uk/brief/Briefing14_Houghton.pdf)

Here I briefly point out the main **lines of evidence for human-induced climate change** and then address some of the main arguments presented in the programme.

1. First, it is important to note that the **main lines of evidence for human-induced climate change not addressed in the programme** were:

- growth of carbon dioxide in the atmosphere mainly due to fossil fuel burning to a level greater than for at least 600,000 years;
- observations of global warming at the earth's surface (in magnitude and pattern) consistent with the increase in greenhouse gases, the basic science of which has been known and understood for over 200 years.

2. **Climate is always changing – TRUE. However, the programme also argued that changes in global average temperature over the last 50 years and as projected for the 21st century are within the range of natural climate variability as observed over the last few millennia – NOT TRUE.**

Many of the prominent climate changes over past centuries have been regional in scale. Global Warming is concerned with global scale changes. The IPCC 4th Assessment Report Summary for Policymakers has a particular section summarising the conclusions of detailed studies using a wide range of paleoclimate data. It concludes that 'Paleoclimate information supports the interpretation that the warmth of the last half century is unusual in at least the previous 1300 years.'

3. **That carbon dioxide content and temperature correlate so closely during the last ice age is not evidence of carbon dioxide driving the temperature but rather the other way round - TRUE. The programme went on to state that this correlation has been presented as the main evidence for global warming by the IPCC – NOT TRUE.**

For instance, I often show that diagram in my lectures on climate change but always make the point that it gives no proof of global warming due to increased carbon dioxide.

4. **The troposphere is warming less than the surface – NOT TRUE.** This raises a debate that took place in the 1990s but which has now been resolved. There is now agreement among the scientists involved in measurements that trends in satellite observed tropospheric temperatures when properly analysed agree well with trends in surface temperature observations. The programme also stated that warming should continue to

higher levels. That is not the case. In fact, higher levels are observed to be cooling, consistent with the science of global warming that indicates that there is warming below and cooling above the 'blanket' of additional carbon dioxide.

5. Volcanic eruptions emit more carbon dioxide than fossil fuel burning – NOT TRUE.

In fact, none of the large volcanic eruptions over the last 50 years feature in the detailed record of increase in atmospheric carbon dioxide.

6. Changes in the sun influence climate – TRUE. They cited the Maunder Minimum in the 17th century when no sunspots were observed, as a probable example. Solar influences are the main driver of global average temperature in the 20th century – NOT TRUE.

Changes in solar output together with the absence of large volcanoes (that tend to cool the climate) are likely to have been causes for the rise in temperature between 1900 and 1940. However, the much more complete observations of the sun from space instruments over the past 40 years demonstrate that such influences cannot have contributed significantly to the temperature increase over this period. Other possibilities such as cosmic rays affecting cloud formation have been very carefully considered by the IPCC (see the 3rd Assessment Report on www.ipcc.ch) and there is no evidence that they are significant compared with the much larger and well understood effects of increased greenhouse gases such as carbon dioxide.

7. Climate models are too complex and uncertain to provide useful projections of climate change - NOT TRUE.

In the programme, this was illustrated by a statement made by a youthful Professor Smagorinsky, a pioneer in climate modelling, speaking in the 1980s explaining some of the inadequacies of early models. Climate modelling has developed enormously since then. Modern models include detailed coupling of the circulations of atmosphere and ocean and detailed descriptions of the interactions between all components of the climate system including ice and the biosphere. They have been tested thoroughly in their ability to reconstruct current and past climates. The 30 or more major modelling groups in the world regularly compare their methods and their findings. Contributors to the programme with their parodies of climate models just demonstrated their complete ignorance of the significance and capabilities of modern models.

8. The IPCC process stifles debate and is used by scientists to further their own self interest – NOT TRUE.

I chaired the main meetings of Working Group I during the production of the first three IPCC scientific assessments. I can say categorically that the process was very open and honest. The aim was to distinguish between what was reasonably well known and the areas where there is large uncertainty. The chapter groups had complete freedom to investigate and assess the scientific literature and draw their conclusions.

Contrary to the impression given in the programme, no one ever resigned from being a lead author in Working Group I because of their disagreement with the process or the final content of their chapter. In fact, no one ever communicated to me a complaint about the integrity of the process.

I should mention, however, a case of disagreement that occurred in Working Group 2 of the IPCC that dealt with the impacts of climate change – a more complex area to address than the basic science of Working Group I. Professor Reiter who appeared in the programme described how, unfortunately, his expert work on malaria failed to get recognition in the relevant IPCC chapter.

Even Professor Lindzen, who appeared at length on the programme, stayed the course as lead author within Working Group I, expressing his satisfaction with the report's chapters as good scientific documents. He has often, however, gone on to express his view that the conclusions of the Policymakers Summary did not faithfully represent the chapters. But he has never provided any supporting evidence for that statement – nor, to my knowledge, has anyone else who has quoted that statement originating from Lindzen.

It is important to note that IPCC Policymakers' Summaries are agreed unanimously at intergovernmental meetings involving over 200 government delegates from around 100 countries. This agreement is only achieved after several days of scientific debate (only scientific arguments not political ones are allowed) the main purpose of which is to challenge the scientific chapter authors regarding the accuracy, clarity and relevance of the summary and most especially its consistency with the underlying chapters. Agreement at such a meeting has ensured that the resulting document, so far as is possible, is scientifically accurate, balanced and free from personal or political bias.

Reference was made in the programme to an article in the Wall Street Journal in 1995 about the 1995 IPCC report accusing the IPCC of improperly altering one of the agreed chapters before publication. This was

a completely false accusation as was pointed out in the *Bulletin of the American Meteorological Society*, September 1996, **77**, pp1961-1966.

9. Action on climate change by developed countries may have a negative influence on development of the world's poorer countries – POSSIBLY TRUE.

A strong non scientific point made towards the end of the programme concerned the possible effect of pressure from the developed world on developing countries to develop without use of fossil fuel sources of energy. There is something inherently unfair in such pressure that could hamper growth of developing country economies especially when rather little is being done by developed countries to reduce their own fossil fuel emissions. Further, the greater proportion of the damage from climate change will tend to fall on developing countries. The responsibilities of developed countries therefore are clear, first to reduce their own emissions as rapidly as possible and secondly to assist developing countries with resources and skills to develop their energy and other requirements in sustainable ways.