The ETS: Completely Unnecessary

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Rudd has failed to see through the vested interests that promote anthropogenic global warming (AGW), the theory that human emissions of carbon cause global warming. Though masquerading as "science based", the promoters of AGW have a medieval outlook and are in fact anti-science. Meanwhile carbon is innocent, and the political class is plunging ahead with making us poorer because they do not understand what science really is or what the real science is.

The Renaissance began when the absolute authority of the church and ancient texts was overthrown. Science then evolved as our most reliable method for acquiring knowledge, free of superstition and political authority. Suppose you wanted to know whether big cannonballs or small cannonballs fell faster. In medieval times you argued theoretically with what could be gleaned from the Bible, the works of Aristotle, or maybe a Papal announcement. In the Renaissance you ignored the authorities and simply dropped cannon balls from a tower and observed what happened - this was science, where empirical evidence trumps theory.

From 1975 to 2001 the global temperature trended up. How do you empirically determine the *cause* of this global warming? It turns out we can learn a lot simply by observing *where* the warming occurred: each possible cause of global warming heats the atmosphere differently, heating some parts before others. The pattern of warming is the cause's "signature".

The signature of an increased greenhouse effect consists of two features: a hotspot about 10 km up in the atmosphere over the tropics, and a combination of broad stratospheric cooling and broad tropospheric warming. The signature of ozone depletion consists just of the second feature. These signatures are theoretically derived by the Intergovernmental Panel on Climate Change (IPCC), and are integral to our understanding of how the atmosphere works. [1]

We have been observing temperatures in the atmosphere for decades using radiosondes - weather balloons with thermometers that radio back the temperature as the balloon ascends through the atmosphere. The radiosonde measurements for 1979-1999 show broad stratospheric cooling and broad tropospheric warming, but they show no tropical hotspot. Not even a small one. [2]

Empirically, we therefore know that an increased greenhouse effect was not a significant cause of the recent global warming. (Either that or the signatures from the IPCC are wrong, so its climate models and predictions are rubbish anyway.)

Human carbon emissions were occurring at the time but the greenhouse effect did not increase. Therefore human carbon emissions did not increase the greenhouse effect, and did not cause global warming. So AGW is wrong, and carbon is innocent. Suspect exonerated - wrong signature.

Alarmist scientists (supporters of AGW) objected that the radiosonde thermometers were not accurate and maybe the hotspot was there but went undetected. But there were hundreds of

radiosondes, so statistically this is unlikely. They have also suggested we ignore the radiosonde thermometers, and use the radiosonde wind measurements instead. When combined with a theory about wind shear they estimated the temperatures on their computers - and say that the results show that we cannot rule out the presence of a hotspot. But thermometers are designed to measure temperature, so it's a bit of a stretch to claim that wind gauges are accidentally better at it. Serious alarmist scientists do not claim that the hotspot was found, only that we might have missed it. The obvious conclusion is that the hotspot was too weak to be easily detected. We cannot collect any more data from the past warming, and there is no sign of the hotspot in the data that was collected - so the occasional claims that appear on the Internet that the hotspot has been found are simply wrong. [3]

So can we tell from the observed warming pattern what did cause the global warming? Unfortunately we have little idea of the signatures of some of the suspects, such as cosmic rays or the Pacific Decadal Oscillation, so we cannot say except to note that ozone depletion was one of the causes.

Is there any observational evidence in favor of AGW? As of 2003, none at all.

The only supporting evidence for AGW was the old ice core data. The old ice core data, gathered from 1985, showed that in the past half million years, through several global warmings and coolings, the earth's temperature and atmospheric carbon levels rose and fell in lockstep. AGW was coming into vogue in the 1980s, so it was widely *assumed* that it was the carbon changes causing the temperature changes.

By the late 1990s ice core techniques had improved. In the old ice cores the data points were a few thousand years apart, but in the new ice core data they were only a few hundred years apart. In the early 1990s, *New Scientist* magazine anticipated that the higher-resolution data would seal the case for AGW.

But the opposite occurred. By 2003 it had been established to everyone's satisfaction that temperature changes *preceded* corresponding carbon changes by an average of 800 years: so temperature changes caused carbon changes - a warmer ocean supports more carbon in the atmosphere, after delays due to mixing. [4] So the ice core data no longer supported AGW. The alarmists failed to effectively notify the public.

After several prominent public claims by skeptics in 2008 that there is no evidence left for AGW, alarmist scientists offered only two points.

First, laboratory tests prove that carbon dioxide is a greenhouse gas. But that observation tells us nothing about *how much* the global temperature changes if extra carbon enters the real, complicated atmosphere. Every emitted carbon atom raises the global temperature, but the missing hotspot shows that the effect is negligible.

Second, computer models. Computer models are just huge concatenations of calculations that, individually, could have been performed on a handheld calculator. They are theory, not evidence

Governments have spent over \$50 billion on climate research since 1990, and we have not found any actual evidence for AGW. [5]

So if there is no evidence to support AGW, and the missing hotspot shows that AGW is wrong, why does most of the world still believe in AGW?

Part of the answer is that science changed direction *after* a large constituency of vested interests had invested in AGW. The old ice core data provided support from 1985, the IPCC was established by the UN in 1988 to look into human changes to climate, and the Kyoto Protocol was negotiated in 1997 to limit carbon emissions. By 1999 the western political class were doing something, the western media were rallying behind "saving the planet", and scientists were being paid by governments to research the effects of human-caused global warming.

But then the evidence took science off in a different direction: the new ice core data in 2003, the missing hotspot in 2007, and the global temperature has stopped trending up since 2001 [6]. Governments, the media, and many scientists did not notice.

The remainder of the answer for the current belief in AGW is darker and more political. An offbeat theory in the 1970s, AGW was adopted by a group of about 45 atmospheric modelers and physicists. That group dominated climate science journals, peer reviewed each others papers, and hindered competing ideas by underhand methods [7]. AGW gained political support from proponents of nuclear power, and vice-president Gore appointed AGW supporters to science positions in the USA.

AGW grabbed control of climate funding in key western countries. Lack of diversity in science funding has been a major problem since government took over funding science in WWII. Science is like a courtroom - protagonists put forward their best cases, and out of the argument some truth emerges. But if only one side is funded and heard, then truth tends not to emerge. This happened in climate science, which is almost completely government funded and has been dominated by AGW for two decades. Skeptics are mainly scientists who are retired or who have moved on to other areas - their funding no longer depends on allegiance to AGW. The alarmists are full time, well funded, and hog the megaphone.

AGW was always promoted as being supported by nearly all scientists (though polls and history do not support this). Counting numbers of supporters and creating a bandwagon effect by announcing you are in the majority is a *political* tactic.

AGW always advanced principally by political means; as a scientific theory it was always weak, and now the evidence contradicts it. It's like a return to medieval times, where authority rules and evidence is ignored. Notice how the proponents of AGW don't want to talk about evidence of the causes? Anything but evidence of cause - attack people's motives, someone else "has the evidence", theoretical models, evidence that global warming is occurring, how important they are, what credentials they have, how worthy they are, the dog ate my evidence, "the science is settled", polar bears, anything. Talking about the evidence of the cause of global warming does not advance their cause. Politics says AGW is correct; science says it is wrong.

Science demands evidence. Evidence trumps theory, no matter what the political authority of those promoting the theory, even if they dress up in lab coats and have job titles that say "scientist". The hotspot is missing and there is no evidence for AGW. The alarmists cannot ignore this and continue to play political games forever. They are entitled to argue the case for AGW, but they should also acknowledge the evidence and inform the political class that

AGW appears to be wrong - even if it means risking their status and their jobs (and yes, we scientists are also people who have kids and mortgages).

There are two central lies in the political promotion of AGW.

The first appears in Gore's movie. He gave the old ice core data as the *sole* reason for believing AGW (the rest of the movie presents evidence that global warming occurred, a separate issue). He said that increases in carbon caused increases in temperature in the past warming events. But Gore made his movie in 2005, two years after the new ice core data had established the opposite! Gore's weasel words when he introduced that segment show he knew what he was about to say was false. Who would have believed his pitch if he added "and each temperature rise occurred 800 years *before* the corresponding rise in carbon that caused it"? [8]

The second lie is the hockey stick graph, which presented the last thousand years of global temperature as the flat handle of a hockey stick and the next hundred as the sharply rising blade [9]. The hockey stick graph was heavily promoted by the IPCC in 2001, and the IPCC even adopted it as its logo before it got discredited. It is significant because most non-scientist AGW supporters seem to believe some version of the hockey stick. When the IPCC "scientists" who produced the graph were asked to show their data for past temperatures, they refused (true scientists share data). But one of those scientists was a British academic and subject to the British Freedom of Information Act, and after two years of stonewalling all was revealed. It showed they had grossly skewed the data (even omitting inconvenient data to a folder labeled "Censored"), and that the computer program used to process the data had the hockey stick shape built into it - you could feed it stock market data instead of tree ring data and you would still get a hockey stick! In reality it was warmer in the Middle Ages than today, and there was a mini ice age around 1700 from which we have since been warming ever since. [10] Finally, the sharply rising blade of the hockey stick is contradicted so far by actual temperatures, which from 2001 to 2008 have been flat - something all of the climate models got wrong.

Among non-scientists, AGW appeals strongly to two groups. Those who support big government love the idea of carbon regulations - if you control carbon emissions then you control most human activity. And those who like to feel morally superior to the bulk of their fellow citizens by virtue of a belief (the "warm inner glow" and moral vanity of the politically correct) are firmly attached to AGW. These groups are politically adept, are planning to spend your money and tell you how to eat, travel and how to live, and they are strenuously avoiding the evidence.

The media has avoided presenting information that undermines AGW, until recently. Instead they promoted alarmism, and discredited skeptics as being in the pay of big oil - while giving a free pass to Gore, who made a movie based on an obvious lie then made millions selling carbon offsets. The media is very keen to present evidence that global warming is occurring, but have you noticed how quiet it is on evidence that carbon emissions caused it?

In 2007 almost no one in the west knew that the hotspot was missing, that there was no evidence for AGW, that temperatures had been flat for six years, that the hockey stick was a fraud, or that Al Gore lied when he gave the old ice core data as a reason for blaming carbon. But due to the Internet the public is gradually finding out anyway, which risks further discrediting many media outlets. Why buy a newspaper if it's not going to tell you the actual

And as the public become generally aware, what politician is going to risk being so ideologically stupid as to unnecessarily wreck the economy by slashing carbon emissions? Hmmm, Kevin Rudd?

Endnotes

- [1] The IPCC published several signatures in IPCC Assessment Report 4, 2007, Chapter 9, Figure 9.1, page 675: http://ipcc-wg1.ucar.edu/wg1/Report/AR4WG1_Print_Ch09.pdf
- [2] The US CCSP published the observed changes in atmospheric temperatures for 1979 1999 in part E of Figure 5.7 on page 116 in 2006: http://www.climatescience.gov/Library/sap/sap1-1/finalreport/sap1-1-final-chap5.pdf
- [3] See http://sciencespeak.com/MissingSignature.pdf for links to debates, further commentary, and arguments from alarmist scientists.
- [4] Callion's 2003 paper is at http://icebubbles.ucsd.edu/Publications/CaillonTermIII.pdf, and a colorful but informative and link-filled presentation is at http://motls.blogspot.com/2006/07/carbon-dioxide-and-temperatures-ice.html.
- [5] The US has spent about \$30b (http://www.climatesciencewatch.org/file-uploads/USGCRP-CCSP_Budget_History_Table_2.pdf) and other western countries combined have presumably spent about as much again. The UK will not release its sending figures. See also http://joannenova.com.au/2008/12/02/biggovernment-outspends-big-oil-1000-to-1.
- [6] Look at the data from the four bodies that produce global temperature records. Satellite data is the only temperature data we can trust, but only goes back to 1979; satellites operate 24/7, measuring everywhere except the poles. Land based thermometer readings are corrupted by the urban heat island effect-and they show temperatures rising faster in areas with higher populations (see http://www.surfacestations.org/odd_sites.htm and http://wattsupwiththat.com/test/).
- 1. Remote Sensing Systems in California. Uses only satellite data: www.junkscience.com/MSU_Temps/RSSglobe.html.
- 2. University of Alabama in Huntsville (UAH). Uses only satellite data: www.junkscience.com/MSU_Temps/UAHMSUglobe.html.
- 3. The Hadley Centre in the UK uses a mix of satellite data and land-based thermometers: www.junkscience.com/MSU_Temps/HadCRUG.html.
- 4. The Goddard Institute for Space Studies (GISS) at NASA uses land-based thermometers (plus a few ocean thermometers), but no satellite data: www.junkscience.com/MSU_Temps/GISSglobal.html.
- [7] For many examples from an impeccable scientist in the trenches, see http://arxiv.org/ftp/arxiv/papers/0809/0809.3762.pdf.
- [8] A British judge ruled that when Gore presented the ice core graphs of temperature and carbon in his movie, "the two graphs do not establish what Mr Gore asserts". The nine errors found by the judge in Gore's movie are summarized in the graphic at http://www.thisislondon.co.uk/news/article-23416151-details/Judge+attacks+nine+errors+in+Al+Gore%27s+%27alarmist%27+climate+change+film/article.do.
- [9] The Australian Department of Climate Change still sports the hockey stick on its website in 2008: http://www.climatechange.gov.au/science/faq/question2.html. Hear from the scientist who uncovered the fraud: http://www.climatechangeissues.com/files/PDF/conf05mckitrick.pdf.
- [10] What the combined mass of independent researchers say about the historical past in 2007 is in Figure 3 at http://www.weatherquestions.com/Roy-Spencer-on-global-warming.htm (the last blue downtick seems to be due to using 30 year averages with the last period ending in about 1975, the end of the last cooling).