Gerrit van der Lingen essay

Published in Newsletter of the Geological Society of New Zealand, No 138, November 2005: 60-64.

The Anthropogenic Global Warming Doctrine

Dr Gerrit J. van der Lingen

Independent scientists

The major part of Phil Maxwell's "Paleo Potpourri" in July's Newsletter was a diatribe against Michael Crichton and Bjørn Lomborg, two people who dared to criticise certain beliefs of environmentalists, especially the doctrine of AGW (Anthropogenic Global Warming). No scientific arguments mind you, just gratuitous name-calling and insults. This is not uncommon in the debate on global warming. I have been collecting some of the insults levelled at AGW sceptics: cash-amplified flat-earth pseudo-scientists; the carbon cartel; villains; refuseniks lobby; polluters; a powerful and devious enemy; deniers; profligates; crank scientists. The list is endless. I remember the reaction of a Canadian scientist who dared to ask critical questions at a meeting on global warming. He was totally taken aback by the virulent reaction, "it was as if I was back in the Middle Ages and had denied the Virgin Birth". A common slur is also that all sceptics are in the pockets of the oil industry.

The global warming debate has left the realm of science a long time ago. It has become totally politicised. Any scientific criticism is not met with a scientific response, but with name-calling and a stepping up of the scare tactics. Some sceptics have even lost their jobs or are told to shut up or else. Many of the global warming doomsayers seem to be obsessed with a longing for Apocalypse. A good New Zealand example was the acceptance speech of Peter Barrett, when he received the (well-earned) Marsden Medal. He predicted the extinction of the human race by the end of this century due to AGW. Sir David King, the science advisor to the British Government has said that the threat of global warming is more serious that the threat of terrorism. I wonder if he would dare to repeat that in public after the recent London terrorist bomb attacks.

A favourite ploy by AGW alarmists is to repeat *ad infinitem* that the science about AGW has been settled and that there is consensus among scientists that it is happening and that it will have cataclysmic consequences for our planet. People using these consensus arguments forget that scientific truth is not determined by consensus. But apart from being unscientific, the consensus argument is also a myth. There are thousands of independent scientists who do not accept that the science behind Kyoto has been settled. "Independent" means not being dependent for one's livelihood on research funding from the public purse controlled by politicians for whom the AGW scare is a godsend. As Bob Carter recently told a Rotary group in Melbourne, each year between 3 and 4 billion dollars is being spent on climate research. Phil Maxwell makes the snide comment that "most of the Global Warming Deniers are elder members of the scientific community desperately carrying on a rearguard action". It is indeed true that a large proportion of these independent scientists are retired people. They can afford to be independent.

Of those thousands of independent scientists, hundreds are active in giving lectures, writing books, articles and letters to the newspapers, debating the science and discovering many flaws in it. I know of many New Zealand scientists who are AGW sceptics. I won't mention the names of those who have not spoken out publicly, but I can mention those who have been active in public: Bob Carter, professor of geology in Townsville Australia (originally from Otago University); Chris de Freitas, Associate Professor environmental sciences at Auckland University; Vincent Gray, retired chemist living in Wellington (who wrote a booklet "The Greenhouse Delusion", published in the UK); Augie Auer, the well-known meteorologist; and myself. Unfortunately, none of us is "in the pockets of the oil industry". Unfortunately, because I could do with some extra pocket money.

Scientific audits

In recent time, several people have started to carry out scientific audits of the science behind Kyoto. A good example is the audit of the "Hockey Stick" graph that forms one of the two major pillars for the conclusions in the "Summary for policy makers" in the 2001 Third Scientific Assessment Report of the United Nations Intergovernmental Panel on Climate Change. It can be found 5 times in that publication and has been used extensively by politicians and GLOWDISC (GLObal Warming DIsaster SCenario) promoters. On this graph was based the conclusion that the climate has been stable over the last Millennium and that the 1990s was the warmest decade in a thousand (later extended to two thousand) years and that 1998 was the warmest year in that decade.

The Hockey Stick graph was first published by Mann, Bradley and Hughes in 1998 in Nature (vol. 392: 779-787). It is now generally referred to as "MBH98". Two Canadian statistical experts, McIntyre and McKitrick set out to audit the Hockey Stick. They had great trouble getting the necessary information from Michael Mann. He put many obstacles in their path and even refused to release his computer code, saying that "giving them the algorithm would be giving in to the intimidation tactics that these people are engaged in" and that "if we allowed that sort of thing to stop us from progressing in science, that would be a very frightening world". He apparently was not willing to accept that one of the litmus tests of a scientific theory is its reproducibility. Anyhow, McIntyre and McKitrick found serious flaws and deliberate manipulation of data in the methods used by MBH98 to obtain their Hockey Stick. They even found that that the statistical methods used by MBH98 always produces a hockey stick shaped graph, even when random numbers are used. For those who want to acquaint themselves with this audit, details can be found at HYPERLINK "http://www.climateaudit.org" www.climateaudit.org. The MBH98 statistical methods have also been criticised

by the German Professor Hans von Storch, co-author of the book "Statistical analysis in climate research" (Cambridge University Press. But Mann still refused to release his computer code. The story of the Hockey Stick saga was then published in the Wall Street Journal (14th Feb 05). As a result of this, on 23d of June a committee of the US House of Representatives ordered Mann to release his code and to account for his activities in relation to the Hockey Stick. The same requests were made to the Chairman of the IPCC (not surprisingly, the IPCC is in total denial), the Director of the National Science Foundation, and to the two co-authors of the Hockey Stick paper, Bradley and Hughes. We now wait with baited breath for their answers..

The reason why the Hockey Stick is so important is the fact that it tries to do away with the Medieval Warm Period and the Little Ice Age (and further back with the Dark Ages Cold Period and the Roman Warm Period). Those natural climate fluctuations are an embarrassment to the hypothesis that mankind is mainly to blame for the present warming. In its first Scientific Assessment Report (1990), the IPCC still had a temperature graph showing the Medieval Warm Period and the Little Ice Age. It is now clear in the 2001 report that the IPCC has deliberately eliminated these natural climate fluctuations with sleight of hand.

The second pillar of the IPCC scientific assessment report is the analysis of world temperatures, mainly from land-based stations. On these analyses is based the statement that the global temperature has risen by 0.6 centigrade since the middle of the nineteenth century and that mankind is to blame. The main author of these analyses is Phil Jones (e.g. Jones and Briffa, 1992, *The Holocene, vol 2: 165-179*). The quality of these analyses has been strongly criticised, based mainly on the quality of some of the data, especially from third world countries and on the influence of the so-called "Urban Heat Island effect". The temperature of large cities with lots of tar seal and concrete can be as much as 5 centigrades above normal. I remember a good anecdote about this. Some time ago, Paul Holmes ran a TV program about the temperature in Wellington. He interviewed the then Mayor of Wellington, Mark Blumsky, who was concerned that the temperature, measured at Kelburn, showed Wellington in a bad light and was bad for tourism. He had noticed that it was generally much warmer in the inner city. He therefore had ordered the thermometer moved from Kelburn to the inner city.

Like in the MBH98 case, some independent scientists asked Jones for his basic data. He first said that "the data was on one of many diskettes at his office and he could not locate it without going to a lot of trouble". When Warwick Hughes (pers.com. Warwick is a geology graduate from Auckland working in Australia. His website HYPERLINK "http://www.wawickhughes.com/climate" www.warwickhughes.com/climate is worth a visit) also asked for those data he got the reply: "We have 25 or so years invested in the work. Why should I make the data available to you, when your aim is to try and find something wrong with it". No comment is necessary here.

I was recently invited to join a group of independent scientists in the Netherlands under the leadership of Professor Arthur Rörsch of Leiden University, which is preparing a submission to the Dutch Parliament asking for an independent scientific audit of the advice given to the government that made them decide to sign the Kyoto Protocol. It is high time that a similar request is made to the New Zealand government. I doubt if the Royal Society could fulfil that role, as it seems to have accepted the scientific validity of the AGW doctrine. It has become clear in recent weeks that the government's Kyoto sales pitch that it could make hundreds of millions of dollars from carbon credits has been phony and that the New Zealand public will now have to spend more than a billion dollars in buying credits. An audit is sorely needed but don't hold your breath that this will happen.

"Adolf" Lomborg

Phil Maxwell calls Bjørn Lomborg (author of the book "The Skeptical Environmentalist – measuring the real state of the world" - Cambridge University Press) "the darling of anti-environmentalists everywhere". The vilification of Lomborg is a long and sad saga. Lomborg is a statistician and an environmentalist. He was even a member of Greenpeace. However, when he started to collect material to counter arguments by the American economist Julian Simon, who had criticised many of the exaggerated claims by environmentalists, he found that Simon was right on many points. This led to his much-maligned book. The irony is that he based much of his book on official reports and statistics by international organisations such as the World Bank, Food and Agricultural Organisation, World Health Organisation, and many United Nations organisations. It is also ironic that he accepts that man-made greenhouse gases contribute to global warming. But his main criticism is that the Kyoto Protocol will have negligible effects on climate change and that the estimated cost of implementing Kyoto, 150 billion dollars per year (!), would be much better spent in providing clean water and sanitation to the third world. But by analysing many of the exaggerated claims of environmentalists and finding them to be often incorrect, he upset their profitable eco apple carts. Environmental extremists attacked him with all the weapons at their disposal, no holds barred. He has even been called the "Antichrist" and Dr Rajendra Pachauri, the chairman of the IPCC, compared him with Adolf Hitler.

CO2 not a pollutant

Talking about "polluting industries", Phil Maxwell is also perpetuating the myth that carbon dioxide is a pollutant. It does not matter how often independent scientists point out that CO2 is not a pollutant but a plant fertilizer and an essential ingredient for life on earth, they keep repeating this mantra. Hundreds of experiments with plants growing in an atmosphere with double the present level of CO2 have shown an increase in productivity of between 20 and 50 percent (references to these studies can be found on the excellent website HYPERLINK "http://www.co2science.org" www.co2science.org). Increased plant growth due to increased CO2 levels have been noted already in many areas.

2005 – the Year of the Great Awakening

I have been writing the occasional email newsletter, titled "Global Warming and Cooling". In Newsletter No 7 (June 2003) I wrote that the year 2005 would be "The Year of the Great Awakening". This was based on the Kyoto Protocol itself. In Article 3, paragraph 2, it states: "Each party included in Annex I [these are the developed countries who ratified the Protocol and who together account for 55% of all greenhouse emissions. Developing countries are exempt] shall, by 2005, have made demonstrable progress in achieving its commitments under this protocol." Well, we know by now that New Zealand will default. Emissions have risen more than 22 percent since 1990 (The Press, 12 July 2005). But other signatories to the Kyoto Protocol are not doing much better. The European Union has been one of the most enthusiastic supporters of the Kyoto Protocol and has been very scathing of the US for not signing Kyoto. However, emissions in Europe have risen by 16.4 per cent since 1990, while the US increase was 16.7 percent. Canada increased its emissions by 23.6 percent, and Japan 18.9 percent. Sobering figures.

Article 3, paragraph 9 states that subsequent Kyoto commitments (after 2012) have to be considered "at least seven years before the end of the first commitment period". That will be 2005 as well. As we know from last December's COP10 meeting in Buenos Aires, participating countries could not agree on any emission reductions after 2012. Future Kyoto targets will have to include developing countries. But countries like China and India, who are quickly developing into major greenhouse gas emitters, made it clear that they would not jeopardise their growing economies by any restrictive Kyoto agreements. But the biggest blow came from Italy, which declared that it would not sign up to any new agreements after 2012.

The big irony is the fact that economic growth and reducing greenhouse gas emissions are incompatible. This was also the big contradiction of the recent G8 conference in Gleneagles. Tony Blair had set two major items on its agenda: reducing poverty in Africa and tackling global warming. But as we can see from China and India, reducing poverty has to be accompanied by an increase in energy generation and thus an increase in emissions, unless all generation comes from nuclear power. And that would be anothem to environmentalists. New Zealand's economy is growing and the demand for electricity is growing by about 3 percent per year. Whatever the hype, wind power will only be able to make a small dent in that demand. The Green Party is against new hydro power, against coal-fired power stations and against nuclear power. Implementing their agenda will inevitably result in brown-outs and black-outs.

It is obvious that full implementation of the Kyoto Protocol would require a stop to any economic growth and the draconian plans for further drastic reductions in emissions (up to 60 to 80 percent for CO2) would require a substantial contraction of economies.

Even some politicians are waking up. Just before the G8 conference, on July 6, the Select Committee on Economics of the House of Lords in Britain released a report titled "The Economics of Climate Change". The report is highly critical of the British Government for not having carried out a proper costing of the implementation of the Kyoto Protocol. It is also highly critical of the policies and actions of the IPCC. It urges the government to take a different approach to climate change in the future than the one followed for the Kyoto Protocol and to emphasise adaptation to climate change rather than dubious emission controls. The full 86-page report can be found at HYPERLINK "http://www.publications.parliament.uk/pa/ld200506/ldselect/ldeconaf/12/12i.pdf" www.publications.parliament.uk/pa/ld200506/ldselect/ldeconaf/12/12i.pdf.

Geologists as independent scientists

It is clear that the politicising of climate science has resulted in an abandoning of good scientific practice and ethics. Any critical scientific discussion of the science behind the AGW doctrine is shouted down, ridiculed or ostracised. But fortunately there are sufficient independent scientists who keep the flame of good scientific practice burning, although not much of this is reaching the general public. As explained above, there are groups who are now carrying out proper scientific audits and are looking into alternative theories to the one-eyed IPCC hypothesis. More studies are coming out about the role of the sun in climate change and several groups are revisiting the theory of greenhouse gases, especially the role of carbon dioxide, which was first formulated by the Swedish scientist Arrhenius in the nineteenth century.

Geologist can play an important role in these independent assessments. Geologic history tells us how climate has changed naturally at all time scales, from the two "snow-ball earth" periods in the Precambrian, through the ice ages in the Ordovician and Carboniferous-Permian, to the Cretaceous warm period, to the ice-age period we are living in now, and from the 1500-year climate fluctuations in the Holocene through the century-scale fluctuations in the past millennia (of which the present "Modern Warm Period" is one), to the climate effects of the 11-year sunspot cycles. Glaciologists can tell the AGW alarmists that the retreat of some glaciers is not due to AGW. They can point out that many glaciers have been retreating since the Little Ice Age, while others have been static or are advancing. They can point out that many glaciers started to retreat already in the eighteenth century, long before any increase in man-made greenhouse gases. For instance, the Franz Josef Glacier started to retreat in 1750 and has had several advances since then as well, the last one starting in 1996. Another example is the large Gangotri Glacier in the Himalayas which has been retreating since 1780.

Sea level rise caused by man-made greenhouse gas emissions is another favourite scare topic of AGW alarmists. But geologists know that sea level has risen by 120 metres since the last ice age. They also know that there have been fluctuations in the Holocene. About 6000 years ago the sea level in this part of the world was about two metres higher than it is now. It went down after that and has been rising again for quite some time. It is also known that the rate of sea level change has not been accelerating since the middle of the nineteenth century, notwithstanding an

increase in atmospheric CO2. A real nail in the coffin of alarmism was the report on sea level change in the Maldives by a group of INQUA
scientists under the leadership of the INQUA president Professor Nils-Axel Mörner (Global and Planetary Change, vol 40: 177-182, 2004).
The Maldives in the Indian Ocean has been a favourite scare subject of AGW alarmists. They tell us that this island group is about to disappear
under the ocean waves due to our profligate energy lifestyle. But Mörner et al. found that sea level in the Maldives had been falling in the last 30
years.

We geologists can help to steer climate science away from the ideological hype and straight-jacket and return it to its proper functioning.

PAGE

PAGE 1