

## Submission on the Proposal for a National Policy Statement for Renewable Electricity Generation

Section 49 of the Resource Management Act 1991.

To: The Chairman  
Board of Inquiry

### **This is a submission on the Proposed National Policy Statement for Renewable Electricity Generation**

I support all reliable and secure generation sources, and a mix of generation types to provide resilience and redundancy for our electricity system.

#### **Regarding the proposal, my comments follow.**

The government has set a target for 90 per cent of electricity to be generated from renewable sources by 2025. To achieve this policy target the emissions trading scheme has been introduced, along with amendments to the Electricity Act 1992 to provide a ten year moratorium for any new baseload fossil fuel generation investment.

According to my investigations, this objective is unachievable because, due to a shortage of storage, hydropower will always need backup from thermal generation in all but an unusually wet year. On top of that, wind power is seasonal (it is at a maximum in the springtime and at a minimum in autumn and early winter) and it is intermittent, unpredictable and more expensive (more than 12c/kWh) than most forms of conventional generation. The chart below shows an analysis I have made of the outputs of the Te Apiti windfarm in the North Island and the White Hills wind farm in the South Island based on data from January to May 2008 (which was all that I had available). This shows that, although the installed capacity is 149 MW, the actual daily output was never above 123 MW and it was above 80 MW (60%) for only 20% of the time. A geothermal station, for comparison, can be expected to operate at close to full output for at least 90% of the time and is less than half the cost a equivalent wind farm.

From this diagram it is obvious that backup will be needed. The experience this autumn and winter when hydropower storage was low showed that during even a moderately dry year hydropower has little spare capacity to back up wind. Therefore thermal backup will be required. The backup generation will be operating for at least 40% of the time and it is obvious that it will need to provide more than 10% of the energy generation from the wind farm. Therefore the 90% objective is unachievable. It is surprising – it to say the least – that this simple fact has been ignored - or suppressed - for so long.

QuickTime™ and a  
decompressor  
are needed to see this picture.

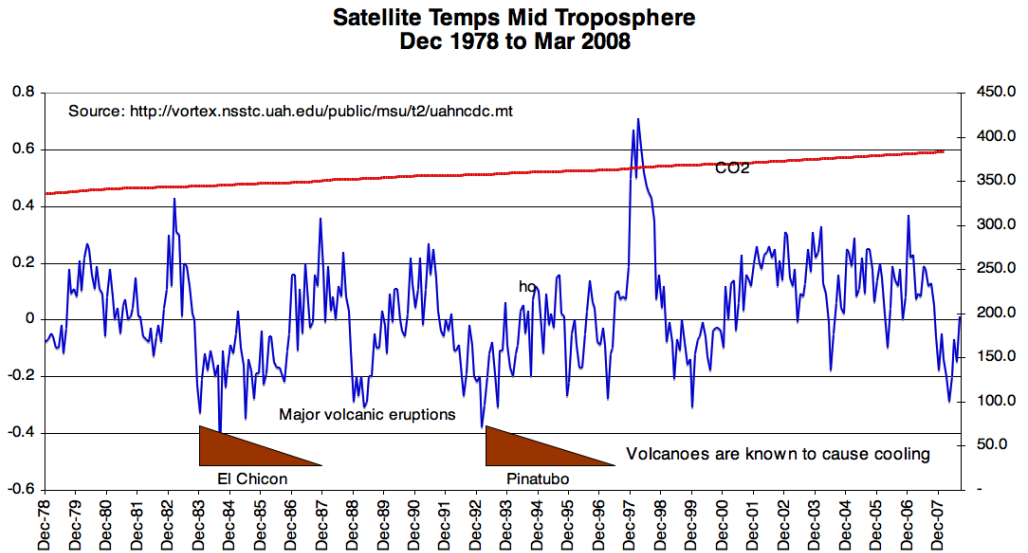
**“Climate change” (i.e. dangerous man-made global warming)**

The NPS is based on a belief that the world is warming due to man-made greenhouse gases -- which is not true: a belief that promoting renewable energy will make a substantial difference to New Zealand's greenhouse gas emissions - which is not true: a belief that if New Zealand reduced its greenhouse gas emissions it would affect the world climate - which is not true.

If we look at the evidence, it is unequivocal. Measurable - let alone dangerous - man-made global warming is not happening, and is not likely to happen in the future. The only cause for concern is the possibility of severe cooling.

Global climate has always changed and recent climate changes are not at all unusual. The world was warmer in the Mediaeval Warm Period, in the Roman warm period and on many occasions before then. During these periods agriculture and civilisations flourished. During cold periods like the Little Ice Age there was famine, plague and war.

Both the surface temperature records and the much more accurate records from satellite observations show that there was a brief warming period from 1975-1998: since then, the world has cooled. The world is now at the same temperature as it was in 1995.

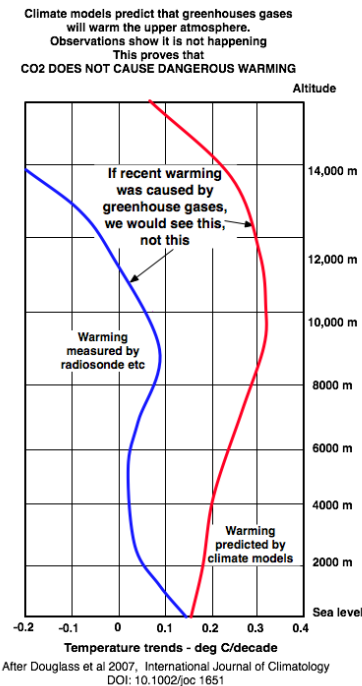


Nobody knows when - or if - world temperatures might increase.

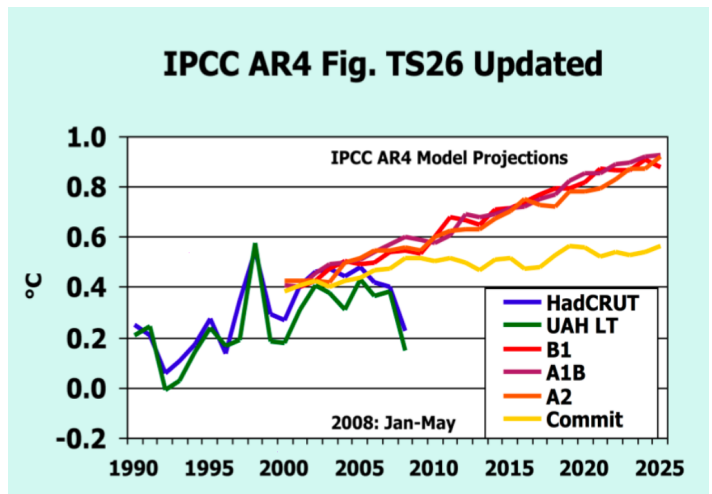
Since the research for the 2007 IPCC report was completed in mid-2006, researchers have discovered that any warming that has happened over the last 40 years is not caused by greenhouse gases. If it had been caused by greenhouse gases, the most significant warming would be at about 10,000 m above the tropics. Observations from balloons and satellites have shown that this warming is not happening. Therefore greenhouse gases such as carbon dioxide are not a major factor in the world climate. This fact alone is sufficient to sink the man-made global warming hypothesis.

Computer-based climate models provide the "evidence" behind claims that the world is warming, that it will be dangerous, that there will be rapid rises in sea levels and the like. These same models failed to predict that temperatures would peak in 1998 and that a steady cooling trend would set in from 2002.

The figure on the right



shows the model predictions compete with actual temperatures. The protection entitled “Commit” is based on no increase of manmade greenhouse gases



from 2000. It is obvious that the models have failed to predict major climatic events such as El Nino (1998) and La Nina (2007/8). The models are not an accurate representation of the world climate system and their input data is inaccurate. Therefore their outputs are worthless. This fact alone is sufficient to sink the man-made global warming hypothesis.

It is often claimed that because a "consensus" of scientists agree that man-made global warming is happening, it must be true. This is nonsense for two reasons. The first is that many distinguished scientists strongly disagree. So, by definition, there is no consensus. But even if a consensus did exist, it would make no difference to the real world. For instance, it would not be difficult to find a consensus of reverend gentlemen who firmly believe that the world was created a few thousand years ago. But no one would claim that the existence of this consensus would stop evolution in its tracks. Science is about evidence and facts, not beliefs.

Carbon dioxide is, most definitely, not a pollutant. It is as essential to life on earth as is oxygen or water. Pollutants are, by definition, something that we would be better off without. Without carbon dioxide most of the life on Earth would die within a few days or weeks. There is one fact that we can be sure of: the moderate increase in carbon dioxide in the last hundred years or so has benefited mankind because it has boosted plant growth and food production by at least 15%.

More and more evidence is accumulating that the sun, not greenhouse gases, drives our climate. Records going back thousands of years show a close correlation between sunspots and climate. The theory is that sunspot related effects influence the number of high energy cosmic rays reaching the atmosphere and that these cosmic rays affect cloud formation. Very soon, a major experiment will be set up to test this theory. If it is shown to be correct, that alone will be sufficient to sink the man-made global warming hypothesis.

There have been very few sunspots over the last few years and the next sunspot cycle, 24, is beginning but is weak. History tells us that such circumstances are associated with quite severe cooling - possibly similar to the Little Ice Age. If this happens, the present financial upheavals will be exacerbated by reduced agricultural output, stormy weather and, possibly, famine.

There is more authoritative scientific info in the Report, "Nature, Not Human Activity, Rules the Climate": [http://nzclimatescience.net/index.php?option=com\\_content&task=view&id=223&Itemid=32](http://nzclimatescience.net/index.php?option=com_content&task=view&id=223&Itemid=32)

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**CONCLUSION**

The proposed national policy statement is totally unnecessary. Man-made greenhouse gases do not cause global warming, the world is cooling and is likely to continue to cool. Therefore there is no need to spend money and effort on promoting renewable energy because it will simply be a futile attempt to solve a problem that does not exist.

I wish to be heard in support of my submission.

Bryan Leyland

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Signature of submitter Date: 31 October 2008

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