

ROBERT M. CARTER

The Futile Quest for Climate Control

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The idea that human beings have changed and are changing the basic climate system of the Earth through their industrial activities and burning of fossil fuels--the essence of the Greens' theory of global warming--has about as much basis in science as Marxism and Freudianism. Global warming, like Marxism, is a political theory of actions, demanding compliance with its rules.

Marxism, Freudianism, global warming. These are proof--of which history offers so many examples--that people can be suckers on a grand scale. To their fanatical followers they are a substitute for religion. Global warming, in particular, is a creed, a faith, a dogma that has little to do with science. If people are in need of religion, why don't they just turn to the genuine article?

Paul Johnson

Introduction

Climate change knows three realities. *Science reality*, which is what working scientists deal with on a daily basis. *Virtual reality*, which is the wholly imaginary world inside computer climate models. And *public reality*, which is the socio-political system within which politicians, business people and the general citizenry work.

The *science reality* is that climate is a complex, dynamic, natural system that no one wholly comprehends, though many scientists understand different small parts. So far, science provides no unambiguous evidence that dangerous or even measurable human-caused global warming is occurring. Second, the *virtual reality* is that computer models predict future climate according to the assumptions that are programmed into them. There is no established Theory of Climate, and therefore the potential output of all realistic computer general circulation models (GCMs) encompasses a range of both future warmings and coolings, the outcome depending upon the way in which they are constructed. Different results can be produced at will simply by adjusting such poorly known parameters as the effects of cloud cover. Third, *public reality* in 2008 is that, driven by strong environmental lobby groups and evangelistic scientists and journalists, there is a widespread but erroneous belief in our society that dangerous global warming is occurring and that it has human causation.

Bill Kininmonth (*Illusions of Climate Science*; Quadrant, Oct. 2008) has summarized well the nature of the main scientific arguments that relate to human-caused climate

change. Therefore, I shall concentrate here a little less on the science, except as background information that relates to how we got to where we are today. My main aim is to explain the need for a proper national climate change policy that relates to real rather than imaginary risk, a policy position that neither the previous nor the present Australian government has achieved. Instead - in response to strong pressure from lobby groups whose main commonality is financial or other self-interest, and a baying media - our present national climate policy is to try to prevent human-caused global warming. This will be a costly, ineffectual and hence futile exercise.

THE REALITIES OF CLIMATE CHANGE

Science reality

My reference files categorize climate change into more than 100 subdiscipline areas of relevant knowledge. Like most other climate scientists, I possess deep expertise in at most two or three of these subdisciplines. As Canadians Essex and McKittrick have observed "*Global warming is a topic that sprawls in a thousand directions. There is no such thing as an 'expert' on global warming, because no one can master all the relevant subjects. On the subject of climate change everyone is an amateur on many if not most of the relevant topics*". It is therefore a brave scientist who essays an expert public opinion on the global warming issue, that bravery being always but one step from foolhardiness. And as for the many public dignitaries and celebrities whose global warming preachings fill out our daily news bulletins, their enthusiasm for a perceived worthy cause greatly exceeds their clarity of thought about climate change science, regarding which they are palpably innocent of knowledge.

In these difficult circumstances of complex science and public ignorance, how is science reality to be judged? This question was first carefully thought through in the late 1980s by the senior bureaucrats and scientists who were involved in the creation of the United Nations Intergovernmental Panel on Climate Change (IPCC). Key players at the time were Bert Bolin (Sweden), John Houghton (UK) and Maurice Strong (Canada), the two former persons each going on to become senior office holders of the IPCC. The declared intention of the IPCC was to provide disinterested summaries of the state of climate science as judged from the published, refereed scientific literature. Henceforward, in the public and political eye, science reality was to be decided by the authority of the IPCC. Accordingly, in four successive Assessment Reports in 1990, 1995, 2001 and 2007, the IPCC has tried to imprint its belief in dangerous human-caused warming on politicians and the public alike, steamrolling relentlessly over the more balanced, non-alarmist views held by thousands of other qualified scientists. Inevitably, and despite the initial good intentions, what started in 1988 as a noble cause had by the time of the 4th Assessment Report (2007) degenerated into a politically driven science and media circus.

As Essex and McKittrick have accurately written: "*We do not need to guess what is the world view of the IPCC leaders. They do not attempt to hide it. They are committed, heart and soul, to the Doctrine (of human-caused global warming). They believe it and they are*

advocates on its behalf. They have assembled a body of evidence that they feel supports it and they travel the world promoting it.

There would be nothing wrong with this if it were only one half of a larger exercise in adjudication. But governments around the world have made the staggering error of treating the IPCC as if it is the only side we should listen to in the adjudication process. What is worse, when on a regular basis other scientists and scholars stand up and publicly disagree with the IPCC, governments panic because they are afraid the issue will get complicated, and undermine the sense of certainty that justifies their policy choices. So they label alternative views "marginal" and those who hold them 'dissidents'".

The basic flaw that was incorporated into IPCC methodology from the beginning was the assumption that matters of science can be decided on authority or consensus; in fact, and as Galileo early showed, science as a method of investigating the world is the very antithesis of authority. A scientific truth is so not because the IPCC or an Academy of Science blesses it, or because most people believe it, but because it is formulated as a rigorous hypothesis that has survived testing by many different scientists.

The hypothesis of the IPCC was, and remains, that human greenhouse gas emissions (especially of carbon dioxide) are causing dangerous global warming. IPCC concentrates its analyses of climate change on only the last few hundred years, and has repeatedly failed to give proper weight to the geological context of the 150-year long instrumental record. When viewed in historical context, and assessed against empirical data, the greenhouse hypothesis fails. There is no evidence that late 20th century rates of temperature increase were unusually rapid or reached an unnaturally high peak; no human-caused greenhouse signal has been measured or identified despite the expenditure since 1990 of many tens of billions of dollars searching for it; and global temperature, which peaked within the current natural cycle in 1998, has been declining since 2002 despite continuing increases in carbon dioxide emission.

Therefore, science reality in 2008 is that the IPCC's hypothesis of dangerous, human-caused global warming has been repeatedly tested and failed. In contrast, the proper null hypothesis that the global climatic changes that we observe today are natural in origin has yet to be disproven. The only argument that remains to the IPCC – and it is solely a theoretical argument, not evidence of any kind - is that their unvalidated computer models project that carbon dioxide driven dangerous warming will occur in the future: just you wait and see! It is therefore to these models that we now turn.

Virtual reality

The general circulation computer climate models (GCMs) used by the IPCC are deterministic. Which is to say that they specify the climate system from the first principles of physics. For many parts of the climate system, such as the behaviour of turbulent fluids or the processes that occur within clouds, our incomplete knowledge of the physics requires the extensive use of parameterisation (read 'educated guesses') in the

models, especially for the many climate processes that occur at a scale below the 100-200 km² size of the typical modelling grid.

Not surprisingly, therefore, the GCMs used by the IPCC have not been able to make successful climate predictions, nor to match the observed pattern of global temperature change over the late 20th century. Regarding the first point, none of the models was able to forecast the path of the global average temperature statistic as it elapsed between 1990 and 2006. Regarding the second, GCMs persistently predict that greenhouse warming trends should increase with altitude, especially in the tropics, with most warming at around 10 km height; in contrast, actual observations show the opposite, with either flat or decreasing warming trends with increasing height in the troposphere.

The modellers themselves acknowledge that they are unable to predict future climate, preferring the term “projection” (which the IPCC, in turn, use as the basis for modelled socio-economic “scenarios”) to describe the output of their experiments. Individual models differ widely in their output under an imposed regime of doubled carbon dioxide. In 2001, the IPCC cited a range of 1.4 to 5.8 deg. C warming by 2100 for the model outputs that they favoured, but this range can be varied further to include even negative outputs (i.e. cooling) by adjustment of some of the model parameters. Indeed, the selected GCM outputs that IPCC places before us are but a handful of visions of future climate from amongst the literally billions of alternative future worlds that could be simulated using the self-same models.

The confidence that can be placed on GCM climate projections is indicated by the disclaimers that CSIRO always includes in its climate consultancy reports. For example:

‘This report relates to climate change scenarios based on computer modelling. Models involve simplifications of the real processes that are not fully understood. Accordingly, no responsibility will be accepted by CSIRO or the QLD government for the accuracy of forecasts or predictions inferred from this report or for any person’s interpretations, deductions, conclusions or actions in reliance on this report.’

It is clear from all of this that climate GCMs do not produce predictive outputs that are suitable for direct application in policy making; it is therefore inappropriate to use IPCC model projections for planning, or even precautionary, purposes, as if they were real forecasts of future climate. Notwithstanding, it remains the case, amazingly, that IPCC’s claims of a dangerous human influence on climate now rest almost solely on their unrealistic, unvalidated GCM climate projections. Which makes it intriguing that during recent planning for the next (5th) IPCC assessment report, due in 2015, senior U.K. Hadley Centre scientist, Martin Parry, is reported in a recent *Nature* article as saying: “The case for climate change, from a scientific point of view, has been made. We’re persuaded of the need for action. So the question is what action, and when”. Well, the IPCC may be so persuaded, but the key question, of course, is what about the rest of us?

Public reality

The answer to that question is that opinion polls show that most of the rest of us have become severely alarmed about the threat of human-caused climate change. Therefore, public reality, as perceived by the Rudd administration at least, is that the Australian electorate now expects the government to “do something” about global warming, i.e. to introduce a carbon dioxide taxation system. This means that there exists a strong disjunction between climate alarm as perceived by the public and the science justification for that alarm. How come?

The means by which the public has been convinced that dangerous global warming is occurring are not subtle. The three main agents are the reports from the IPCC that I have already described; incessant bullying by environmental NGOs and allied scientists, political groups and business; and the obliging promulgation of selectively alarmist climate information by the media. Indeed, the combined alarmist activities of the IPCC, crusading environmental NGOs, some individual leading climate scientists and many science agencies and academies can only be termed a propaganda campaign. However, because all of these many interest groups communicate with the public primarily through the gatekeepers of the press, it is the press that carries the prime responsibility for the unbalanced state of the current public discussion and opinion on global warming.

NOBLE CAUSE CORRUPTION

It is part of the traffic of discussion about global warming that some of the participants are corrupt. Routinely, climate scientists employed at even the most prestigious institutions are accused of having their alarmist views bought by a need to maintain research funding. Equally, self-righteous critics make desperate attempts to link climate sceptics with what are claimed to be the vested interests of the coal and oil and gas industries. It is also obvious that commercial interests – including alternative energy providers such as wind turbine manufacturers, big utility companies such as Enron, financiers such as Lehmann Bros., and emerging emissions and carbon indulgences traders – have strong potential to become involved in corrupt dealings in the traditional meaning of the term. To varying degrees all of these accusations are true, but probably the strongest alarmist influence of all on the climate policy debate is the rather more subtle phenomenon of noble cause corruption.

In his book *Science and Public Policy*, Professor Aynsley Kellow explores the problem of noble cause corruption in public life in some depth. Such corruption arises from the belief of a vested interest, or powerful person or group, in the moral righteousness of their cause. For example, a police officer may apprehend a person committing a crime and, stuck with a lack of incriminating evidence, proceed to manufacture it. For many social mores, of which “stopping global warming” and “saving the Great Barrier Reef” are two iconic Australian examples, it has become a common practice for evidence to be manipulated in dishonest ways, under the justification of helping to achieve a worthy end. After all, who wouldn’t want to help to “save the Great Barrier Reef”?

Improper science

Regrettably, not all scientists within the climate community have maintained the dispassionate, disinterested approach that is necessary for scientific research. The most widely known piece of defective climate science is the famous 1998 hockey-stick paper in *Nature* by Mann, Bradley and Hughes, which was used extensively in the IPCC 3rd Assessment Report but discarded from the 4th. An earlier problem of the same type surfaced during the preparation of the 2nd Assessment Report, when a reviewer of part of the draft requested that he be supplied with some of the raw data on which the work was based. The author, Dr Tom Wigley, declined to supply the data, making the following astonishing statement (as quoted in *The Heat is On* by Ross Gelbspan):

“First, it is entirely unnecessary to have original “raw” data in order to review a scientific document. I know of no case at all in which such data were required by or provided to a referee Second, while the data in question (model output from the U.K. Hadley Centre’s climate model) were generated using taxpayer money, this was U.K. taxpayer money. U.S. scientists therefore have no a priori right to such data. Furthermore, these data belong to individual scientists who produced them, not to the IPCC, and it is up to those scientists to decide who they give their data to.”

This reply denies the supply of data to another scientist who wishes to check that the work can be replicated; denies data to a scientist on the grounds that he is from another country; and arrogates to the author the right to decide who, if anyone, would be supplied with data which was collected with public funds and which underpins an important international publication. Each one of these actions constitutes a fundamental breach of science etiquette, and were such attitudes to be promulgated widely, science as a value-free, objective, internationally agreed enterprise would collapse. Yet such attitudes are widespread within the alarmist climate science community.

Government agencies and reports

Equally regrettably, it is not just individual scientists who are involved in trying to control the climate change debate by the use of selective science. Scientists who work for major governmental science agencies in western countries are almost all under strict employer instruction as to public comments that they may make about climate change, always remembering that a substantial slice of their budget is provided for global warming research. For example, Australian science journalist Peter Pockley reported in 2004 that *“CSIRO’s marine scientists have been “constrained” on the scientific advice and interpretation they can provide to the government’s conservation plans for Australia’s oceans. Likewise, climate scientists have been told not to engage in (public) debate on climate change and never to mention the Kyoto Accord on greenhouse gas emissions”*. In this way, science policy advice is routinely corrupted by being tailored to suit the views of the government of the day. In turn, the government's views are often strongly influenced by noble cause corruption, whereby "saving the planet" is seen cynically as an effective way in which to garner votes quite irrespective of the lack of demonstrated, as opposed to advertised, risk. The inaccurate and alarmist advertisements that the federal government is currently running about climate change are a case in point.

In Australia, CSIRO is the government agency that makes most of the public running in the global warming debate, and that almost exclusively on the side of environmental alarmism. CSIRO's GCM modelling group, which acts as a "science" provider to the IPCC, exploits its resulting near-monopoly situation in Australia by acting also as the provider of climate change consultancy reports to state and federal governments, regional authorities and planning boards and large industrial organizations. These reports are based around regional CGM modelling that produces unvalidated projections of future climate, not predictions or forecasts. The subtlety of such a distinction escapes CSIRO's clients, who, together with CSIRO itself, make no attempt to correct or check the media's unvarying presentation of such model results as if they were firm predictions, and their association with rampant climate alarmism.

Most recently, public discussion on climate change in Australia has centred around the release on September 30 of Professor Ross Garnaut's government-sponsored report on carbon dioxide taxation (aka emissions trading). Garnaut's task, as formulated in his terms of reference, was to advise the Australian public on the issue of human-caused global climate change. Obviously, a judgement was then required as to whether significant human warming is occurring at all, or likely to occur soon. This being a scientific question, to appoint an economist to adjudicate upon it puts that person in the invidious position of having to base their substantive review upon science authority provided by others.

The convenient authority at hand was, of course, the IPCC, whose politically-tainted "science" advice Garnaut swallowed whole with nary a blink, the science in his report being simply a subset of that in the IPCC 4th Assessment Report. The policy prescriptions outlined by Garnaut are thereby predicated on two assumptions. First, that global temperature is rising (implicitly, at either an unusual rate or to an unusual magnitude); and, second, that adding more carbon dioxide to the atmosphere will result in dangerous warming. Both of these assumptions are self-evidently wrong - notwithstanding that global temperature does from time to time warm (and cool), and that carbon dioxide is a mild, minor greenhouse gas.

Because Garnaut's economic analysis is erected upon a faulty science edifice, his recommendations - like those of Professor Stern before him in the U.K. - have little relevance to the real world. The problem is exacerbated because Garnaut's report also ignores the pressing issue of hazardous natural climate change, and the contextual fact that global temperature is now cooling, and predicted by many scientists to continue to cool. Above all else, planning for future climate hazard has to be based on a thorough, realistic risk analysis, and this the Garnaut Report has utterly failed to provide.

Science academies and learned societies

Traditionally, governments wishing for dispassionate advice on a science issue have turned to their nation's science academy. Disturbingly, against this historic context, *Nature* reported that in appointing one of its former Presidents "a high-profile former government adviser (Lord Robert May), *the Royal Society is intensifying its moves into*

the public and political arena - and is taking a calculated risk. 'If you want to be more effective in engaging issues of public concern, then you really need to understand the rules of engagement', says May". The path being followed duly became evident when in 2001 Lord May helped organize a statement published in *Science* that there was a scientific consensus on the danger of human-caused global warming. The statement was headed "*17 National Academies Endorse Kyoto*", and May expressly commented that it had been "*partly provoked by (President George) Bush's recent rejection of the Kyoto treaty, along with resistance to the Kyoto terms by countries such as Australia*".

Against this unhappy background, it shouldn't be surprising, but is, to discover that in 2006 the Royal Society's Policy Communication Officer, Bob Ward, wrote an intimidatory letter to oil company Esso UK in an effort to suppress Esso's funding for organizations that in the Royal Society's view "*misrepresented the science of climate change, by outright denial of the evidence, or by overstating the amount and significance of uncertainty in knowledge, or by conveying a misleading impression of the potential impacts of anthropogenic climate change*". Mr. Ward's attempt to prevent free public discussion of global warming resulted in rapid condemnation, including a comment from the U.S. Marshall Institute that "*It is ... unfortunate that the Royal Society is advocating censorship on a subject that calls for debate. The censorship of voices that challenge and provoke is antithetical to liberty and contrary to the traditions and values of free societies. That such a call comes from such a venerable scientific society is disturbing and should raise concerns worldwide about the intentions of those seeking to silence honest debate and discussion of our most challenging environmental issue – climate change*".

Notwithstanding widespread condemnation of the Royal Society action, copycat attempts to intimidate other businesses soon followed. In U.S.A., Senators Rockefeller and Snowe wrote an intimidatory letter to Esso's partner company Exxon; and in Australia, a Labor shadow minister, Kelvin Thomson, basing his views on a showing of Al Gore's movie and the Royal Society letter, wrote in similar fashion to a number of leading Australian companies.

The Royal Society example of the corruption of scientific advice by politics is not an isolated one. Across the western world many other national science academies and major scientific societies have become similarly politicized over global warming and other contentious environmental issues. Thus governments and societies have now lost what used to be an important conduit of impartial and independent advice on technical matters of the day.

The influence of environmental organizations

Most readers will be aware of the activities of high profile environmental NGOs such as Greenpeace, the Worldwide Fund for Nature and the Australian Conservation Foundation. However, relatively few persons appreciate the size, scope, co-ordination and colossal financial resources that are now involved in environmental lobbying around the world. For example, at the centre of many climate policy debates is to be found the

Climate Action Network - a 20-year old umbrella organization with seven regional nodes which coordinates the advocacy of more than 280 separate environmental NGOs.

Driven by their addiction to alarmism, and a false belief that the causes of climate change are understood, environmentalists worldwide urge the adoption of the precautionary principle to solve the “global warming problem”. The reality that you can’t take precautions against a future that is unknown (i.e. may encompass either warming or cooling, or both) is ignored in favour of irrational feel-goodery, the aim being to move the world to a “post-carbon” economy by drastic curtailment of the carbon dioxide emissions that are alleged to be causing warming.

Environmental campaigners for the reduction of human greenhouse emissions remain blind to inconvenient facts such as: that no amount of precaution is going to stop natural climate change; that there is a 100% risk of damage from natural climate events, which happen every day; that we cannot measure, much less isolate, any presumed human climate signal globally; that extra atmospheric carbon dioxide causes mild warming at best, and overall is at least as likely to be beneficial as harmful; and that the causes of climate change are many, various and very incompletely understood.

Confusing the debate with rhetoric

When public doubts are raised about the legitimacy of a particular piece of climate alarmism - say that Tuvalu is being swamped by a rising sea-level – ensuing press discussion rarely deals with the science question at issue. Rather, rhetorical devices are used to counter the doubts or to challenge the integrity of the doubter. Irrelevant assertions that are commonly used in the media to negate sensible discussion of global warming, and especially to counter the views of climate rationalists (sceptics), include the following.

“The science is settled”; or, there is a “consensus” on the issue”. In reality, science is about facts, experiments and testing hypotheses, not consensus; and science is never “settled”.

“He is paid by the fossil fuel industry, and is merely repeating their desired story”. An idea is not responsible for those who believe in it, and neither is the validity of a scientific hypothesis determined by the character or beliefs of the person who funded the research. Science discussions are determined on their merits, by using tests against empirical or experimental data. It may be hard to believe in a post-modern world, but who paid for the data to be gathered and assessed is simply irrelevant.

“She works for a left wing/right wing think tank, so her work is tainted”. Think tanks serve an invaluable function in our society. On all sides of politics they are the source of much excellent policy analysis. They provide extended discussion and commentary on matters of public interest, and have made many fine contributions towards balancing the public debate on climate change. That all think tanks receive funding from industry sources is an indication that those that survive are delivering value for money, and does

not impugn their integrity.

“He is just a climate sceptic, a contrarian, a denialist”. These terms are used routinely as denigratory badges. The first two are amusingly silly. First, because most people termed climate “sceptics” are in fact climate “agnostics”, and have no particular axe to grind regarding human influence on climate. Second, because all good scientists are sceptics: that is their professional job. To not be a sceptic of the hypothesis that you are testing is the rudest of scientific errors, for it means that you are committed to a particular outcome: that’s faith, not science. Introduction of the term “denialist” into the public climate debate, with its deliberate connotations with holocaust denial, serves only to cheapen those who practice the custom.

“6 Nobel Prize winners, and 7 members of the National Academy say ...”. Argument from authority is the antithesis of the scientific method. That the Royal Society of London tried to restrict the public debate on climate change through intimidation of Esso U.K., for example, was a complete betrayal of all that the Society, and the scientific method, stands for.

“The “precautionary principle” says that we should limit human carbon dioxide emissions because of the risk that the emissions will cause dangerous warming”. The precautionary principle is oftentimes a moral precept masquerading under a scientific cloak. Adhering to moral principle through thick and thin is certainly a part of the precautionary principle as practiced by many environmentalists; it is a principle of the wrong type to be used for the formulation of effective public environmental policy, which needs rather to be rooted in evidence-based science. Scientific principles acknowledge the supremacy of experiment and observation, and do not bow to untestable moral propositions.

THE ROLE OF THE MEDIA IN FOSTERING CLIMATE ALARMISM

The media serve to convey to the public the facts and hypotheses of climate change as provided by individual scientists, government and international research agencies and NGO lobby groups. With very few exceptions, press reporters commenting on global warming are either ignorant of the science matters involved, or wilfully determined to propagate warming hysteria because that fits their personal “world view”, or are under editorial direction to focus the story around the alarmist headline grab; and often all three. In general, therefore, the media propagate the alarmist cause for global warming, and they have certainly failed to convey to the public both the degree of uncertainty that characterises climate science and many of the essential facts that are relevant to human causation of climate change.

It is a rare day now that any metropolitan newspaper fails to carry one or more alarmist stories on climate change, not least because all media proprietors learned long ago that sensational or alarmist news sells best. As one of Australia’s most experienced science journalists, Julian Cribb, has remarked *“The publication of ‘bad news’ is not a journalistic vice. It’s a clear instruction from the market. It’s what consumers, on*

average, demand. ... As a newspaper editor I knew, as most editors know, that if you print a lot of good news, people stop buying your paper. Conversely, if you publish the correct mix of doom, gloom and disaster, your circulation swells. I have done the experiment."

Thus climate change hysteria in the media has a life of its own. Ask a web search engine to supply you with references to "global warming" and it will provide a daily trawl-haul of 10-20 alarmist newspaper articles from throughout the world. Many of these stories have as their basis real scientific results from real scientists, but by the time the results have been processed through public relations staff and compliant media commentators, the result is group-think, political correctness and frisbee-science of a high order. A scan through headlines alone, which range from the silly to the ridiculous, will remove any doubt that media treatment of climate change is unbalanced. Reading the articles themselves simply serves to confirm intentional scaremongering and breathtaking scientific ingenuousness.

Alarmist climate writing invariably displays one or more of three characteristics. First, it may be concerned with the minutiae of meteorological measurements and trends over the last 150 years in the absence of a proper geological context. Second, it may raise alarm about things that are known to change naturally quite irrespective of human causation, such as ice melting, sea-level change and changes in species' ranges. Third, there is an almost ubiquitous over-reliance on the outputs of unvalidated computer model projections, i.e. untestable virtual reality is favoured over actual, real-world data.

On top of such slanted reporting, and in service of the third example just given, weasel words have become an invaluable aid for engendering public alarm about global warming. If, could, may, might, probably, possibly, perhaps, likely, expected, projected, modelled Wonderful words. So wonderful, in fact, that journalists and other writers scatter them through their articles on climate change like confetti. The reason is that – in the absence of hard evidence for damaging human-caused change – public attention is best captured by making assertions about “possible” change. Using computer models in support, virtually any type of climatic hazard can be asserted as a possible future change. As one example, a 2005 Queensland State Government report on climate change used these words more than 50 times in 32 pages. That's a rate of almost twice a page. A typical "could probably" run in this report asserted that Queensland's climate could be more variable and extreme in the future "*with more droughts, heat waves and heavy rainfall*" and probably with "*maximum temperatures and heavy downpours beyond our current experiences*". Reading further into the report reveals that these statements are all "*climate change projections ... developed from a range of computer-based models of global climate, and scenarios of future global greenhouse gas emissions*".

Overall, British commentator Melanie Phillips summarised it well when she said: "*The way global warming is being reported by the science press is a scandal. In selecting only those claims that support a prejudice and disregarding evidence that these claims are false, it is betraying the basic principles of scientific inquiry and has become instead an arm of ideological propaganda*".

Finally, for all the problems listed above, and much to the outrage of warming alarmists, it should be acknowledged that a handful of quality newspapers do provide a more balanced public discussion of global warming issues. Such papers include the *Wall Street Journal*, the U.K. *Telegraph* stable, the Canadian *National Post*, the *Melbourne Business Age* and *The Australian*. These publications, and a small number of others, are playing a vital role in keeping the public informed of both sides of the climate change issue. Tellingly, however, no Australian television station comes even close to providing equivalently balanced commentary; and neither does that paragon of broadcasting virtue, the British Broadcasting Corporation.

PRUDENT RISK ASSESSMENT: ACHIEVING A NATIONAL POLICY ON CLIMATE CHANGE

Despite the failure of the hypothesis of dangerous human-caused global warming from carbon dioxide emissions, everything that we know from the study of ancient climate indicates that a very real climate problem does nonetheless exist. It is the risk of *natural climate change*, both warmings and the much more dangerous coolings.

Study of the geological record reveals many instances of natural climate change of a speed and magnitude that would be hazardous to human life and economic well being were they to be revisited upon today's planet. For example, rapid temperature switches of several degrees within a few years to a decade have long been identified in ice core and other records, and similarly rapid changes are recorded in the modern instrumental data record. At the same time, human history records many examples of damaging short-term climatic hazards such as storms, floods and droughts. Many of these varied climatic events, whether they are abrupt or manifest themselves as longer term trends, remain unpredictable – even when viewed with hindsight. Human influence aside, therefore, it is certain that natural climate change will continue in the future, sometimes driven by unforced internal variations in the climate system and at other times forced by factors that we do not yet understand.

Climate change as a natural hazard is therefore as much a geological as it is a meteorological issue. Geological hazards are mostly dealt with by providing civil defense authorities and the public with accurate, evidence-based information regarding events such as earthquakes, volcanic eruptions, tsunamis, storms and floods (which are climatic events), and by adaptation to the effects when an event occurs. The additional risk of longer term climate change differs from other geological hazards only because it occurs over an extended decadal time-scale. This difference is not one of kind, and neither should be our response plans. Authorities planning national climate policy need to abandon the alarmist IPCC view of untrammelled global warming, and the illusory goal of preventing it. Instead, real climate change in both directions should be dealt with in the same adaptive way that we treat other natural hazards. Careful planning is needed to identify when a dangerous weather or climate event is imminent (or has started), and ongoing research is needed to foster the development of predictive tools for both sudden and long term climatic coolings and warmings. New Zealand already has such a national

monitoring and response system in place for earthquake, volcanic and flood disasters, called GeoNet, and it is linked appropriately to a parallel compensation and insurance system called the Earthquake Commission.

In dealing with the certainties and uncertainties of climate change, then, the key issue is prudent risk assessment. The main certainty is that natural climate change and variation are going to continue, and that some manifestations – droughts, storms and sea-level change, for example – will be expensive to adapt to. The real danger posed by current global warming hysteria is that it is distracting attention and resources away from the need to develop a sound policy of adaptation to those natural climate vicissitudes that are certain to occur in the future.

CONCLUSIONS

In 1990, the IPCC's 1st Assessment Report concluded that no human influence on climate was discernible. Despite the huge expenditure of research effort and money since that time, the boundary arguments to the debate have scarcely moved. We are now in possession of copiously more data and more powerful computers, have spent upwards of \$50 billion on climate research, and are the beneficiaries of 20 years of hard-thinking by some of the world's most accomplished scientists. Yet the protagonists in the debate remain in the same bunkers that they occupied in the early 1990s, and a clear human-caused climate signal continues to elude us.

Two years ago, I wrote: *“It remains a matter of faith whether reductions in carbon dioxide emissions, should they occur, will have any measurable influence on climate. My conclusion is that – irrespective of McCarthyist bludgeoning, press bias, policy-advice corruption or propaganda frenzy – it is highly unlikely that the public is going to agree to a costly restructuring of the world economy simply on the basis of speculative computer models of climate in 100 years time. Attempting to “stop climate change” is an extravagant and costly exercise of utter futility. Rational climate policies must be based on adaptation to climate change as it occurs, irrespective of its causation.”* Despite the present Australian government's manifest determination to introduce a penal carbon dioxide tax, I see little reason to change this view.

The IPCC experiment has failed, in large part because of the priority that has been given to policy advocacy over the accurate reporting of empirical science. Attempting to prevent (“mitigate”, in the lingo) climate change is indeed an expensive exercise in futility. Planning for inevitable future climate change, both natural and possibly human-caused, will best be undertaken in the same way as we plan for other natural disasters such as bushfires, earthquakes, volcanic eruptions, tsunamis and cyclones. Policies are needed which identify when a dangerous climatic event is about to occur, or has occurred; which then initiate any available, cost-effective mitigation measures; and which, finally, provide appropriate assistance to those individuals or communities affected by the change through no fault of their own. Towards this end, Australia would do well to restructure its greenhouse bureaucracies by dispersing their economic, energy,

and climate change response planning functions to the mainstream government agencies that have historically handled these topics.

Natural climate change being an important human hazard, research funding for climate change issues should be maintained at a healthy level. But the focus of the spending needs to be shifted from its present overemphasis on "greenhouse" alarmism and computer modelling research to a balance of: (i) documentation and analysis of modern weather patterns (earth observing systems), and patterns of past climate change (stratigraphic study); and (ii) deepening our understanding of all mechanisms of climate change, not just radiation theory.

Australia has a national Greenhouse Office, a Ministry of Climate Change, state greenhouse offices, specialist climate change sections within the Bureau of Meteorology and CSIRO, and an untold number of other climate change research groups, organizations and lobbyists. What it does not seem to have is human-caused climate change. Present public policy on global warming is about where the science was at in 1990 - looking for, and reacting to, ghosts. Almost twenty years on, it is time to develop a proper and realistic national climate policy for the good of all Australians, rather than continuing to pursue a fanciful global warming one.

Professor Bob Carter is a former Chair of the Australian Research Council's Panel on Engineering, Applied and Earth Sciences, and a former Director of the Australian Secretariat of the international Ocean Drilling Program. His website is at:
<http://members.iinet.net.au/~glrmc/>

Afternote: The question invariably asked by those who learn of the unlikelihood of dangerous human-caused global warming is: "how is it possible that our government is moving so rapidly towards the introduction of a costly emissions trading scheme?". I have only been able to touch on the answer to this complex social and political question in this essay. It is explored more thoroughly in the following sources.

Christopher Booker & Richard North. *Scared to Death*. Continuum, 2008.

Robert M. Carter. Public misperceptions of human-caused climate change: the role of the media. Witness Evidence, U.S. Senate Committee on Public Works & Environment, Dec. 6, 2006; 2006a. <<http://members.iinet.net.au/~glrmc/RMC US Senate 1b.rtf>>

Robert M. Carter. Human-caused global warming: McCarthyism, intimidation, press bias, censorship, policy-advice corruption and propaganda. Tabled paper, U.S. Senate Committee on Public Works & Environment, Dec. 6, 2006; 2006b. <<http://members.iinet.net.au/~glrmc/Carter McCarthyism 9zz.doc>>

Aynsley Kellow. *Science and Public Policy*. Edward Elgar, Cheltenham, 2007.

Richard S. Lindzen. *Climate science: is it currently designed to answer questions?*
arXiv:0809.3762v2 (Physics and Society). <http://arxiv.org/abs/0809.3762>, 2008

Dick Taverne. *The March of Unreason*. Oxford University Press, 2005.
