# **SUBMISSION**

# TO THE

# **JOINT STANDING COMMITTEE ON TREATIES**

# INQUIRY INTO THE KYOTO PROTOCOL

## BY

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#### **SUMMARY**

The Joint Standing Committee is to be congratulated on attempting to obtain an Overview of the national impact of the Kyoto Protocol on Australia. We have argued for some time that Australia's greenhouse strategies, both that of 1992 and that of 1998, are defective, non-Australian and decoupled from science. We have argued that the National Interest Analysis (or National Impact Analysis, NIA), promised as a precursor to ratification of the Kyoto Protocol, should instead be made urgently as an essential component of advance strategic planning, so that Australian impacts and options can be argued with full transparency and accountability.

Australia is arguably the Kyoto signatory on which the treaty commitments, if met or attempted, will have the greatest impact. We have argued that in the context of Greenhouse and Global Warming, Australia is to be regarded as a hybrid country, neither a "developed" country nor a "developing" country. While one can perhaps understand the political imperatives for Australia to sign the Kyoto Protocol, the nominated target on net emissions was needlessly set too low, and has no public accountability or justification.

Australia can ameliorate *global* emissions by being clever and using its natural resources, even while its *national* emissions increase. In 1990 we gave the example of Australia selling hundreds of millions of pot belly stoves to the Chinese, so that they burn coal far more efficiently, and reduce transport emissions. The populous call "Think globally, Act locally" needs changing to "Act globally, but Think Australian".

For this country which even the poets recognise as being a land of droughts and flooding rains, and scientists recognise as having the most variable rainfall of any country, the fears of global warming impacts over the next century or more are exaggerated. The flora and fauna have had millennia to adapt. The climate impact of Australia meeting its Kyoto target will be trivial, so that in 50 years any global warming that would have occurred without Australia's efforts will be reduced by only about one thousandth of a degree.

In any event, the scientific scenarios of global warming for Australia are such that, in 1988, CSIRO Division of Atmospheric Research predicted [it used the word "predicted"] that Australia would warm by between 2°C and 4°C by the year 2030. In 1990 my monograph *Postponing Greenhouse* described such figures as exaggerated. In 1992 CSIRO halved the estimate, thus "postponing" the year in which such a warming would occur. In 1996 CSIRO reduced the figure again, further "postponing" the benchmark warming of 3°C until about a century and a half after their original target year of 2030. International estimates have similarly been "postponed". The August 15, 2000 paper by Jim Hansen, who frightened America in 1988 with his claims, now admits that "The prospects for having a modest climate impact instead of a disastrous one are quite good." He also advocates focus on other gases than carbon dioxide.

In short, Australia should act on greenhouse and NOT RATIFY KYOTO knowing that:

- scientific estimates of greenhouse warming are uncertain but much less than early, alarmist figures
- natural climate variations in Australia will continue to dominate, so that adaptation instead of punitive national greenhouse measures is doubly effective and there is more time to adapt
- even if Australia met its Kyoto target this would cause only trivial reduction of global warming
- the economic, social and opportunity costs of attempting to meet its Kyoto target are severe.

Whether or not Australia ratifies the Kyoto Protocol, the Australian combination of bureaucratic determinism and "green-letter law" will likely ensure that the absence of legitimate heads of power will not halt the continued real and opportunity costs of flawed greenhouse governance impacting on Australia's future. Joint Standing Committee on Treaties could serve national interests well by pursuing the issue of greenhouse governance, national and global, which is more to be feared than climate change itself.

### 1 INTRODUCTION

Indicative examples of my publications relating to greenhouse are listed in Attachment 1 and

relevant qualifications to make this personal submission are summarised in Attachment 2. A current paper commenting on the implications of Dr Jim Hansen's "alternative scenario" is Attachment 3.

The Dot Points of the list of topics to be examined by the Committee are treated briefly in sequence.

# 2 IMPLICATIONS OF RATIFYING OR NOT RATIFYING THE KYOTO PROTOCOL

We do not attempt to comment here on trade, political or related implications of not *signing* the Kyoto Protocol. But we are firmly of the belief that Australia should **NOT** *ratify* the Kyoto Protocol.

## The recent publication by Jim Hansen that:

"The prospects for having a modest climate impact instead of a disastrous one are quite good".

has changed the scientific and political position in the USA so as to make it even more unlikely than previously for the USA to ratify the Kyoto Protocol. My reasons for this conclusion include:

- Hansen was the harbinger of doom when, in 1988 during a heat-wave and dust storms in the Mid-West, he testified to Congress that "greenhouse has already arrived", thus being given both credit and blame for the start of a frenetic pace of international action which led to the Kyoto Protocol
- Hansen was relied upon by Al Gore, so that even if Gore is elected President, he would be hard put to act against Hansen's conclusions
- the Hansen analysis that cooling from aerosols from burning fossil fuels largely offsets warming from greenhouse gases from burning fossil fuels, is not far from the latest draft conclusions of the Intergovernmental Panel on Climate Change (IPCC -draft Report 2000).

The potency of Hansen's paper, for all its flaws, is that (a) it takes a global view, whereas IPCC tended to regard cooling offsets as local or regional and (b) it takes the emphasis off carbon dioxide, and places it on methane and other greenhouse gases. It therefore has massive impacts on mitigation strategies and costs, and considerable firepower because of Hansen's previous widely-promoted advocacies in 1988.

Global warming in the twenty-first century: An alternative scenario, by James Hansen et al., pre-print from Proc. Natl. Acad. Sci. USA, 10.1073/pnas.170278997. See www.pnas.org/cgi/doi/10.1073/pnas.17028997

Study Proposes New Strategy to Stem Global Warming, by Andrew C. Revkin, New York Times, 19 August 2000

The tragedy is that Australia continues to act as if greenhouse science and policy/strategy are decoupled, as they have been here since 1990. We know of no response by the Australian Greenhouse Office to Hansen's publication. I greeted it with great glee<sup>3</sup> as further vindication of my previous publications.

The Australian National Greenhouse Strategy will certainly not be revised, because it is not science-based, is not focussed on Australia and is driven by legacies from the 1992 Strategy. It is a bureaucratic wish-list, independent of the magnitude or detail of any climate change. It relates to reality only in some aspects concerning energy efficiency or energy use, which are virtually independent of global warming, but driven by economics, as they were in the OPEC oil crises of the 1970s.(see Attachment 1).

Reasons for Australia NOT to ratify the Kyoto Protocol include, but are not limited to, the following:

- the economic and social impacts on Australia of meeting or attempting to meet the Kyoto target are likely to be greater proportionally on Australia than on any other signatory country
- the opportunity cost plus direct costs of attempting to meet or meeting the target will greatly reduce Australian international competitiveness. This would be contrary to the Prime Minister's statement of October 28,1997 and contrary to the Greenhouse policy of the former Government, which in October, 1989, attached a caveat relating to Australia's international competitors. Competitors for the natural gas from the NorthWest Shelf, for example, are largely countries that did not sign the Kyoto Protocol. Therefore, efforts by Australia to reach its Kyoto target, whether by emissions trading or other means, will increase the price of NorthWest gas and thereby provide a cost advantage to international competitors.
- the effects on global warming of Australia meeting the Kyoto target would be less than one thousandth of one degree in 50 years' time, a trivial effect
- the science of global warming and the foundations for Kyoto remain uncertain, as indicated by the Hansen paper of August 15, 2000, the IPCC draft of 2000, and views of some 15,000 scientific signatories (see < www.sep.org>). But early estimates were certainly exaggerated.
- Australia has the most variable climate in rainfall of any country, and is "the land of
  droughts and flooding rains". Its flora and fauna have evolved to survive such
  variability. Any global warming is likely to have much less impact than natural

Interview by Paul Murray, Radio 6PR, Perth, 15 August, 2000

variations for the next century or more, by which time engineering technologies and changes in community approaches to resource use will have reduced the necessity for mitigation by Government diktat.

- Australia should focus on adaptation to climate change, as well as on logical pursuits
  of cost-saving improvements in energy efficiencies and management of energy
  demand.
- a strong message needs to be sent to Government bureaucracies about faulty Greenhouse governance. They cannot impose greenhouse controls as if they have four legitimate heads of power which they do not have (Attachment 1)
- Australia probably cannot reach the 108% target, and should not have agreed to this number whose provenance lacks credibility and transparency. There exists no public justification of the calculations which led to the figures of 128%, 118% and finally, at Kyoto, 108%. (see Att.1, particularly O'Brien, Brian J. two 1998 papers on Australian Greenhouse Governance.)
- The Australian National Greenhouse Gas Emissions Inventory suggests that in 1998, ten years before the start of the first Kyoto commitment period, Australian emissions are already far above the nominal 108 % figure. While possible offsets such as emissions trading, joint implementation and other mitigation measures have not yet "kicked in", it is difficult to see how Australia can avoid severe impacts and few benefits from intensive pursuit of 108 per cent.

**Balanced against these arguments, there is no doubt that already some incidental benefits have been accrued in the name of greenhouse.** We have argued that some issues of energy efficiency and energy demand management have been hitched deceitfully on to the greenhouse band-waggon (see Attachment 1, O'Brien, Brian J. *Greenhouse governance: an Australian iconoclast's view*). However, achievements have improved Australian energy intensity in areas where simple arguments based on economics and international competitiveness may not have reached, for example in building designs.

Furthermore, there are collateral benefits that might result from effective emissions trading if a scheme is sufficiently argued to yield Australian environmental benefits through sequestration, eg in plantations and re-afforestation to relieve or re-mediate dryland salinity.

#### 3 THE VERACITY OF SCIENTIFIC THEORIES ON GLOBAL WARMING

We have reviewed the IPCC reports since 1990, including the Second Order Draft of the 2000 report.

In particular, the 1063 pages of Working Group I this year bears on the science of climate change.

In 1990, in Nature, the world's leading scientific journal, reviewing the first IPCC Report, I

wrote<sup>4</sup>:

Uncertainty is not the chief concern, for in principle that could be removed by further research. But the IPCC reports show that this has not yet been done. The more serious worry is the ease with which the prose text of documents such as these can be divorced from fact and real-world numbers by the ubiquitous word processor, with the danger that particular conclusions about greenhouse impacts will retain their currency and force even when the assumptions on which they are based have been changed or rendered irrelevant.

This in turn raises the concern that the greenhouse problem is not merely an inverted pyramid of knowledge based on a handful of facts, but that the facts may now be buried in a pyramid of much-manipulated reports. Indeed, the documents circulated in June, 1990 may represent the last identifiable connection between the supposed greenhouse impacts and the facts.

The scandals and controversies that surrounded the 1995 IPCC reports and the manner in which the final versions were edited, bear witness to the validity of my concerns. The fact that Hansen has published in August 2000 a controversial conclusion questioned by the new head of the IPCC, who worries about "a horrible distortion", indicates that the same facts can lead to very different conclusions.

It is clear that feared global warming impacts, such as the planet becoming 3 degrees hotter, have been postponed by at least a century. In 1988 this was expected to occur by the year 2030. The 1995 IPCC Report can be used to calculate that such a warming has been "postponed" to about the year 2200.<sup>5</sup>

This point can perhaps best be illustrated by quoting the evocative claim by Professor Ian Lowe in his book on greenhouse, published in 1989, that "by the time my son is my age [i.e. by the year 2030], the planet will have warmed by 3 degrees."

A few years ago, after an ABC debate with Professor Lowe, I suggested that if he accepted the

O'Brien, Brian J. *IPCC's climate change mindset*, in *Nature*, **348**, 9 (1990)

O'Brien Brian J. *Postponing Greenhouse*, (1990) and *Kyoto - Marching to the Drumbeat of Toronto*, Institute of Public Affairs, Review, October 1997, pages 18,19.

1995 IPCC reports, he should now issue a public statement to the effect that, by the time his great-great-great-grandchild was his age [i.e. by 2200], the planet may have warmed by 3 degrees. He declined.

In 1988, Dr Brian Tucker, then Chief of the CSIRO Division of Atmospheric Research, which led the drive to promote greenhouse issues in Australia, wrote in *Greenhouse: Planning for Climate Change*, page 33:

The potential importance of the greenhouse effect on the socio-economic impacts of national life has now been established with little doubt. The time-scale of significant impacts is recognized as being of the magnitude of one generation or less.

But in 1995, in IPA Review, Vol.48, Dr Tucker wrote:

The response of policy-makers to global warming has been more alarming than the prospect of climate change itself.

In 1988, when there was a scorching heat wave in the USA and widespread "dust bowls' in the Midwest, Dr James Hansen gave evidence before the USA Congress that "Greenhouse is here" and that human activities were already changing the climate.

It was not until 1995 that the IPCC drew the milder conclusion that:

.... the balance of evidence suggests that there is a discernible human influence on the global climate.

Indeed, while this milder conclusion by the IPCC in 1995 is popularly interpreted as concluding that the IPCC had found evidence of human influence as an enhanced greenhouse effect, in fact the detailed paper shows that what was found was a combination of atmospheric *patterns* that could be explained by a combination of two effects, cooling by aerosols and warming by greenhouse gases.

But now, in 2000, the same Dr Hansen who started the US and global alarms in 1988, has reported that:

"The prospects for having a modest climate impact instead of a disastrous one are quite good".

We could provide further examples along these same lines, of scientific agreement about the enhanced greenhouse effect being less alarming than thought when policies, including those of Australia, were formed in the late 1980s. Those policies led to the early sense of urgency, epitomised by the comments of Professor Lowe, Dr Tucker and Dr Hansen at the time.

And this sense of urgency led inexorably by sheer determinism of international politics and national fears about green voters, to the eager participation by Australia in the Framework Convention on Climate Change (FCCC) and thence to the Kyoto Protocol. It should not lead to ratification of Kyoto.

Despite new scientific findings, international and national greenhouse policies and

agreements have been pursued with unchanged frenetic urgency as if the 1988 exaggerated predictions still applied. Science and policy have been decoupled since 1990. Two major benefits from Hansen's paper are that the myth of scientific consensus and the myth of urgency are now debunked by the doomsayer himself. It follows that it is irrational to ratify the Kyoto Protocol which depends on such myths.

The media still talk of the same impacts. But they omit mention of the expected date they will occur.

Unfortunately, many scientists remain on the same band waggon. As I wrote in *Postponing Greenhouse*, page 18, in 1990:

....the scientific community has more cause for blame than credit in much of the chicanery to date.

The word "science" comes from the Latin "scientia" - knowledge. One of these days, scientists must once again rejoice in imparting knowledge, not fear.

They may then, of course, lose their research funds provided by pragmatic politicians.

In 1992, to counter such deprivation of research funds, I proposed that Australia switch its climate-research priorities to an intense program to study natural changes in climate, such as *El Nino* changes in the Pacific Ocean and relevant phenomena in the Indian Ocean. (For reference, see Attachment 1).

It is pleasing to report that there has been such a trend. In particular the WA Government, in response to my submissions and discussions, is funding a 5-year *Indian Ocean Climate Initiative* (IOCI), which is already yielding valuable information for northern and western Australia as a counterpoint to the early (and continued) emphasis on the Pacific Ocean and the east coast.

I recommend that the Standing Committee encourage such initiatives and focus on natural climate changes. Scientists may then well take a more rational approach to greenhouse issues<sup>6</sup>, because greenhouse "signals" can be sought as part or a sub-set of a continuing analysis of the total climate. The nation can benefit from improved seasonal forecasts and adaptive risk management.

### 4 DEFINITIONS AND CRITERIA

The scope of the Joint Standing Committee's Inquiry lists a number of issues, such as grandfathering, sequestration and definitions of "forest".

We do not go into any detail on such matters here, as many have been canvassed already in such documents as the 5 Technical Reports of the Western Australian Greenhouse Council, of which the writer is a member and contributor.

But some personal views of a generic nature, voiced at the Invited Symposium of the Australian Academy of Technological Sciences and Engineering in Melbourne in 1995, which reflect a national, patriotic concern expressed in other publications, seem a fitting guideline for treaty negotiations:

If [these recommendations are] done adequately, then one could look forward to fewer surprises and a more coherent, less costly and more logical approach to all aspects [of climate change], including adaptation to and management of change.

In other words, Australia could then have what is truly a **No Regrets** policy and one that is **Made in Australia**, for Australians of this generation as well as later generations.

# 5 IMPLICATIONS OF A PUNITIVE APPROACH AND AN INCENTIVE-BASED APPROACH

A discussion of the economic, environmental and social implications of a punitive approach and an incentive-based approach to any domestic regulation of industry and greenhouse gases can best be viewed in the context of all environmental controls by Australian governments.

I was appointed the first Chairman and Director of the Western Australian Environmental Protection Authority in 1971, a position held for a 7-year term. At about the same time, there was an increasing political awareness of environmental issues globally, as well as around Australia.

One of the major tasks in the early 1970s was to increase community awareness of environmental issues, and yet find a balance between conservation and development. Different places found different approaches to such issues.

Now, a generation later, a major concern is not alerting the community to environmental issues, but rather ensuring that the community is knowledgeable and informed with accurate information.

Industry and the community have a growing sense of a triple bottom line, of considering not only economic impacts of a proposed development but also social and environmental effects.

Yet, by and large, Australian environmental agencies and legislation tend to ignore the efficiency and effectiveness of such increased public awareness. In many areas of pollution control and environmental governance, it is punitive measures and penalties that are escalating, while follow-the-leader governments explore new aspects of the environment into which they can intrude.

The extraordinarily cumbersome *Environment Protection and Biodiversity Act 1999*, with its 528 Sections and 534 pages, and its 511 Amendments passed by the Senate in one night, together with further Amendments after Act No 91, 1999 was passed but before it came into force, tells the story. Add the fact that the Commonwealth Government posted on the Internet proposed bilateral agreements with the other governments before they were agreed, and one

has chaotic environmental governance.

The Australian Government and many State Governments have a shocking record of misinformation and poor governance in regard to Greenhouse. If they were commercial industries they would have been punished for publishing misleading information.

Even the Australian Bureau of Statistics was tainted in regard to its treatment of Greenhouse in its 1992 review *Australia's Environment: Issues and Facts*, Catalogue No 4140.0. After a vigorous written exchange between the Australian Statistician and me (*The Weekend Australian* July 25-26, 1992 *ABS checks green report bias*, and *The Weekend Australian* August 29-30, 1992 *ABS acknowledges environment errors*), the ABS issued a Corrigendum. While not complete, this at least alerted readers to the possibility that this book, promoted for adoption in schools, from an agency that must act like Caesar's wife, was flawed to exaggerate greenhouse effects in a systematically biassed manner.

The Australian Government misinformation on Greenhouse is a lengthy saga. For example, the Australian Environment Council stated in 1990, guided by CSIRO Division of Atmospheric Research, that Australia could meet the Toronto target, reducing Greenhouse gas emissions by the year 2005 to a level 20 per cent less than they were in 1988. This is a much more severe target than Kyoto, obviously. Yet the AEC also thought it possible it could do more, meeting a target 40% below 1988 levels. The Australian Mining and Energy Council reported it was unlikely it could meet the Toronto target.

Yet in 1989, Federal Cabinet and State and Territory Governments adopted the Toronto target, albeit with an economic caveat. The 1992 National Greenhouse Response Strategy was based on that target.

In 1991, CSIRO and I gave conflicting evidence to the Industry Commission Inquiry into Greenhouse Gas Emissions and the cost of meeting the Toronto target. CSIRO stated the Toronto target was a valid one that could be achieved. I showed that it was merely a number "drawn from the entrails of Toronto", and with many flaws. See Attachment 1 and also the Business Council of Australia Bulletin, June 1991.

In June 1992, a draft National Greenhouse Response Strategy was released for public debate. It contained no mention of the science of greenhouse, because that was to be treated in a separate publication on the actual science.

That book, *Grappling with Greenhouse*, which was supposed to inform the debate, was not released until mid-December, 1992. By that time, the debate had closed, because on 7 December, 1992 the National Greenhouse Response Strategy was endorsed by all nine Australian Governments.

To make this farce even more complete, not only was the book on the science of greenhouse, which was supposed to inform debate, released *after* debate had finished and the National Strategy had been set. The book was also out of date, because the month previously, in November, 1992, CSIRO had issued a revised scenario of climate change, virtually halving the expected warming. The book to inform the public, *Grappling with Greenhouse*, contained the previous, exaggerated and outdated figures.

These examples are typical of Australian greenhouse governance. Other examples are documented in O'Brien, Brian J., *Greenhouse Governance: An Australian Iconoclast's View*, ATSE 1995, and in more recent papers (see Attachment 1).

One feature that the Joint Standing Committee might usefully pursue is the lack of transparency and the absence of any published documentation behind the three targets of 128%, 118% and 108% for the national greenhouse emissions. The three targets, of which the latest was that put forward and agreed at Kyoto, were authoritatively used within a period of about 3 weeks before Kyoto.

The 1998 National Greenhouse Strategy continues the bureaucratic farce, endorsed by all nine Governments, in claiming it was based on the 1992 Strategy. Yet it differs completely, in three vital components, as discussed in my 1998 Governance papers.

Consequently, the Australian community is not only not informed reliably about greenhouse, it is actively misinformed by governments, both the present government and the previous governments.

To my knowledge, no Australian Minister, at Federal or State Government level, has actively proclaimed the reality that the Australian community has been so deceived about Greenhouse forecasts. The Prime Minister made a passing reference in response to a question at one press conference.

The publication of Hansen's "alternative scenario" in August 2000 has given a face-saving opportunity to redress this long-standing deception. This opportunity did not exist prior to the *signing* of the Kyoto Protocol by Australia.

This face-saving information would, in itself, be reason enough for Australia to justify a refusal to *ratify* the Kyoto Protocol.

Valid reasons for non-ratification can be derived from the August, 2000 publication by Dr Hansen, the original (1988) harbinger of doom. At the very least, Australia must delay ratification until uncertain issues are resolved, and until the Australian public is fully and accurately informed.

#### 6 CONCLUDING COMMENTS

In 1990 and in this discussion, I have put forward the view that Australia has particular needs with regard to global efforts in greenhouse and global warming. I have added that Australia also has particular assets with which it can assist in particular uses of energy, mitigation of global greenhouse emissions, and other matters so as to act responsibly on global issues (see Attachment 1).

To this Joint Standing Committee on Treaties I would now conclude with an even broader guideline covering all environment-related treaties and agreements, not merely the Kyoto Protocol.

I quote first from Nationalising the Australian Environment: The Agreements of '92, IPA

Policy Paper No 23, 1993 (111 pages). Page 88 puts the above comments into a more complete context. I wrote:

....if I had a single Term of Reference for new agreements, it would be to develop an ethos that is unashamedly and selfishly Australian. Future work must be tested against the simple criterion of relevance to Australia.

The call, "Think globally, act locally", should be reconsidered in the form of "Act globally, think Australian".

How sad it is that international and Australian investors should look at the Australian scene of environmental controls and be moved to write over this Great South Land, like medieval seamen poring over maps of a flat earth - **Here be Dragons**.

In a 1994 analysis of various environment-related treaties to which Australia is a party, I found:

[We particularly call] for a policy of national pride in Australia's environment, and a policy of considering Australia's interests first. If Australia does not give itself such a priority, it can scarcely expect other countries to do so.

[We find] that Australia usually will be in a lonely, even solitary minority in negotiations of global environmental treaties. [Reasons] include diverse and unique environments, the large island continent, its ranges of climates and resources, sparse settlement and yet heavy urbanisation, the geographic remoteness, and the fact that most neighbouring countries are listed as "developing" countries are all elements which require particular consideration rather than global uniformity. A pivotal economic reason for individuality is Australia's adolescence, fluctuating between being a developed and a developing country, and sufficiently vast that different States are at very different stages of industrial maturity.

At Kyoto in 1997 Australia succeeded in having such "particularity" recognised. Now it is timely to carry out the next thread of those 1994 arguments:

It is clear that there must be a change to Australia's attitude and objectives. Australia must approach international environmental treaties with an intense national pride, a sense of individualism and a deliberate policy of Australia first. It must ask what each treaty can do to benefit the nation. [A stronger Australia can contribute more effectively to global issues].

Such advocacies apply to the Kyoto Protocol, and I commend them to the Joint Standing
Committee on Treaties. When combined with the
scientific arguments in previous sections, it follows
that there is no justification for Australia to ratify the
Kyoto Protocol, and considerable reasons why it
should not do so.

#### **ATTACHMENT 1**

# **Summary of Relevant Publications on Greenhouse**<sup>7</sup>

### **INDICATIVE PUBLICATIONS (since 1990):**

- O'Brien, Brian J.: *The Greenhouse Effect and the Death of Mark Twain*, Notes of a talk to the Rotary Club of Perth, Feb. 16, 1990. Printed by EcoEthics, Feb. 1990, Reprinted Sept., 1994
- 8 O'Brien B.J. (1990): "IPCC's climate change mindset", *Nature* Vol 348, 1 Nov. 1990
- 9 O'Brien B.J. (1990): Postponing Greenhouse, Climate Change -Facts, Issues and Policies in 1990, 50pp, illust., EcoEthics, Perth, WA.
- O'Brien B.J. (1990): "Environmental Ethics A Partial Response to Public Concern About the Environment" IN *Minerals Outlook* 9 May 1990, The Chamber of Mines and Energy of Western Australia, Perth, WA. 17p
- O'Brien, Brian J. The Greenhouse Effect and the Inverted Pyramid, Land and Water Research News, Issue No 5, 1990
- O'Brien B.J. (1991): Report to Australian and New Zealand Environment Council: Environmental Ethics for Developers (Project 90/13), Brian J O'Brien and Associates, Perth, WA.
- O'Brien B.J. (1991): Stage 1 Report to Australian and New Zealand Environment Council: The Functions and Purposes of Environmental Assessments (Project 90/14), Brian J O'Brien and Associates, Perth WA.
- O'Brien B.J. (1991): Seven Scientific Flaws Shrouding the Toronto 20% Target A
  Submission to the Industry Commission Inquiry into Greenhouse Gas Emissions, Brian
  J O'Brien and Associates, Perth, WA.
- O'Brien B.J. (1991): Eleven Scientific Flaws Shrouding the Toronto 20% Target Submission #2 to the Industry Commission Inquiry into Greenhouse Gas Emissions, Brian J O'Brien
- O'Brien, Brian J. Seven Scientific Flaws Shrouding the Toronto 20% Target, Parts 1 and 2, published in Business Council Bulletin, May and June (resp.) 1991

Note that articles, Letters to the Editor and various debates and talks are not listed. A cross-section of articles in the press includes: Revising greenhouse goals, Letter in Aust.Fin.Rev., Sept.17, 1990;

Green 1: Let the readers judge, Letter in The Australian, Jan.4, 1991; Missing words in green critique, Letter in The Australian, Feb.5, 1991; Greenhouse cacophony just so much hot air, article in The Australian, Jan.20, 1995; It's time for all good geologists ... article in The Canberra Times, March 26, 1996.

- O'Brien, B.J. *Response to CSIRO article*, published together with CSIRO article, in *Business Council Bulletin*, June 1991
- O'Brien, Brian J. *Towards a Rational Approach to Greenhouse*, published in *Proc. International Off-Shore Symposium*, Melbourne, 1991.
- O'Brien B.J. (1992): Environmental Management and the Second Law of Thermodynamics in a Lucky Country, Presented at The Future of Australia's Mining and Energy Conference, Brian J O'Brien and Associates, Perth, WA. 14p
- O'Brien B.J. (1992): Progress Report An Environmental Policy for the Chamber of Mines and Energy of Western Australia, Brian J O'Brien and Associates, Perth, WA. 9p
- O'Brien B.J. (1992): *Some Suggested Tactics in Eco-Politics*, Cato Institute, Washington D.C., June 1992.
- O'Brien, Brian J. (1992), *The Pulse: Portent of Peace or Warning of War?* Omega, Science Digest, page 6-18, May/June 1992.
- O'Brien B.J. (1992): *Relative Environmental Impacts of Gas and Coal Fired Power Stations*, Brian J O'Brien and Associates, Perth, WA. 13p, Institute of Engineers.
- O'Brien B.J. (1992): From Greenhouse to ENSO Redirecting Australian Strategic Priorities, Brian J O'Brien and Associates, Perth, WA. (Reprinted 1995).
- O'Brien B.J. (1992): *The Greenhouse Holy War Notes for a panel discussion:*"Climate and Atmospheric Change and Brazil '92" at the Energy Forum '92, Victoria, BC, Canada, 12 May 1992. 13 pages.
- O'Brien, Brian J. Greenhouse Forecasts for Australia and The Australian Bureau of Statistics: Being an Analysis of Greenhouse forecasts in the ABS book "Australia's Environment: Issues and Facts", Brian J.O'Brien & Associates, Perth, July, 1992
- O'Brien B.J. (1993): *Green-Letter Laws: The Agreements of '92*, NELA Conference, Canberra, July, 1993, Brian J O'Brien and Associates. Perth, WA.
- O'Brien B.J. (1993): *Nationalising the Australian Environment: The Agreements of* '92, Policy Paper No. 23, Institute of Public Affairs, Victoria and West Perth, Australia (111 pages).
- O'Brien B.J. (1993): *Environmental Fears Versus Reality* Address to the 8th Australia-India Joint Business Council Meeting, Perth, WA 20 April 1994. 5pp
- O'Brien B.J. (1993): Green-Letter Laws: The Agreements of '92 in Significant Speeches The Best Current Thinking on the Environment, Spring 1993. 7pp
- 31 O'Brien B.J. (1994): Dreams of Rain-Forecasting: The Missing Tool in Agriculture,

- Eco Ethics, Perth, WA. (Invited address to Pastoralists and Graziers AGM)
- 32 The Proposed National Environment Protection Council (NEPC) Analysis and Criticism of the Concept by the Government of Western Australia, (Brian J O'Brien and Associates, Perth, WA, 1994).
- O'Brien B.J. (1994): *National Pride and Environmental Treaties*, The Government of Western Australia, Perth, WA. (Draft)
- O'Brien B.J. (1995): "East-West Tensions: The Missing Link in Australian Environmental Strategies" IN *Focus* No. 85 January/February 1995, Australian Academy of Technological Sciences and Engineering.
- O'Brien B.J. (1995): *Greenhouse governance: an Australian iconoclast's view* in The Proceedings of the 1995 Invitation Symposium *Greenhouse Abatement Measures No Regrets Action Now*, Melbourne, Australia, 17-18 October 1995, Australian Academy of Technological Sciences and Engineering.
- O'Brien B.J. (1995): *Diversity versus Uniformity Denial of 'East-West' Effects by National Strategies* IN Environmental Backgrounder, Institute of Public Affairs, Jolimont, VIC.
- O'Brien B.J. (1996): *Environmental Debates: Geologists can Contribute Much-Needed Intellectual Rigor*, Invited keynote address 13th National Geological Convention, Canberra, 19 February, 1996.
- O'Brien, B.J. (1996): Community Attitudes to Space and the Environment: From Gee Whiz to So What?, Keynote address at 10th Annual Australian ERSI and ERDAS Users Conference, Perth, 4 September 1996.
- O'Brien, B.J. (1996): *The Importance of Being Politically Incorrect on Science*, invited overview, The Coast Conference, Embassy of Italy, Geological Surveys of WA and Dept of Minerals and Energy, 4 June 1996.
- 40 O'Brien, B.J. (1996): *Environmental Science and Political Correctness*, invited address, University of Western Australia Convocation, 20 September 1996.
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- 42 Brian J O'Brien, *Kyoto Marching to the Drumbeat of Toronto*, APEC Conference, Canberra, August 1997 (also published in Institute of Public Affairs *IPA Review*, 50, No 1, October 1997).
- Brian J O'Brien, *Australian Greenhouse Governance: Real-politik, Benchmarks, Risks and Challenges*, Eco Ethics, Perth, June 5, 1998, reprinted July 8, 1998.
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Brian J O'Brien, *Australian Greenhouse Governance: The Twilight Zone*, Australian Academy of Technological Sciences and Engineering, March/April 1999

### ATTACHMENT 2 Dr Brian J. O'Brien FTSE

Dr Brian J. O'Brien is one of the best-equipped Australian scientists and strategists in the debate on greenhouse. He has extensive background in both physics and the environment, the two key technical fields, as well as in the two applications fields of Government policy-making and assisting industrial projects satisfy environmental approvals. He has made extensive analyses of State-Federal relations and international treaties, in papers and monographs such as strategic analyses *The Nationalisation of the Australian Environment: The Agreements of '92* and *Diversity versus Uniformity: Denial of "East-West" Effects by National Strategies.* He has drafted 10 major Acts of Parliament and is listed in *Who's Who in the World.* 

Dr O'Brien has published extensively on greenhouse since 1990, with his iconoclastic views being progressively validated and accepted. He vigorously promotes the view that the most important climate change for Australia for the next century is natural climate effects including those caused by *El Nino*, a view he put forward in his first greenhouse monograph *Postponing Greenhouse* in 1990 and in more detail in 1992 in *From Greenhouse to ENSO: Redirecting Australian Strategic Priorities*. At his instigation, the W.A. Government has established the \$1.7 million Indian Ocean Climate Initiative, to focus attention on climate on the western side of Australia to balance and establish synergies with the long-held focus on such Pacific Ocean phenomena as *El Nino* -Southern Oscillation (ENSO) effects.

He was elected Fellow of the Australian Academy of Technological Sciences and Engineering (ATSE) in 1993 and was a member of its Sustainable Development Committee for 4 years. His paper *Greenhouse Governance: an Australian iconoclast's view* at the 1995 Invitation Symposium of the ATSE identified 3 causes for Australian regrets in the so-called "no-regrets policy." He became a member of the W.A. Greenhouse Council on its foundation in 1998. He wrote the acclaimed *Australian Greenhouse Governance: Real-politik, Benchmarks, Risks and Challenges* and *Australian Greenhouse Governance: The Twilight Years* in 1998 and 1999.

Before becoming involved in environmental issues in 1971, Dr O'Brien had established an international reputation in space science. An Assistant and then Associate Professor of Physics and Astronomy at the State University of Iowa, he was appointed Professor of Space Science at the prestigious Rice University in Houston, Texas whilst still in his twenties. He was Visiting Professor of Physics in Harry Messel's department at the University of Sydney in 1964 and then again before being appointed foundation Director and Chairman of the Environmental Protection Authority in Western Australia in 1971-1977.

After more than a decade as a Professor and then seven years being the foundation head of a major Government department and authority, in 1978 he established his strategic and environmental consultancy. Indicative reports include *Overview of Broomehill '96 and SALTMAP*, the use of air-borne electromagnetic surveys, and an analysis of the use of Life Cycle Assessments in forestry issues. He made the environmental assessment for Hamersley's Marandoo iron ore mine, then the largest Australian resource project awaiting governmental approval, now operating very successfully and winning environmental awards. His technical arguments overturned a government ban on road transport of liquid sodium cyanide through metropolitan Perth. His *Statewide Waterways Management* provided a strategic overview of governance of W.A.'s 208 named rivers and 45 estuaries for the Water & Rivers Commission. His *Eco Ethics for Tourism Developments* was accepted as Government policy in 1988, a precursor of ecotourism.

During 1958-1970 he explored upper atmosphere and solar-terrestrial phenomena with planes, rockets and satellites, and ground-based instruments in the Antarctic and the Arctic. His discoveries about auroras and the magnetosphere received international acclaim at lectures such as in London, Warsaw, Bergen, Belgrade and Washington. He also discovered the artificial radiation belt from the high-altitude 1.4 Megaton nuclear explosion code-named Starfish, in July 1962. Principal Investigator for 6 Apollo experiments deployed on the moon, including a key instrument in the first lunar landing with Apollo 11, he was awarded the NASA Medal for Exceptional Scientific Achievement.

Dr O'Brien's first monograph on greenhouse "Postponing Greenhouse" in 1990 was controversial and criticised by CSIRO scientists and conservationists because it claimed forecasts of greenhouse impacts of temperature and sea-level rise were exaggerated. But by 1992 CSIRO had halved their estimates of temperature rise and greatly decreased estimates of sea-level rise. Their 1996 estimates were smaller still. Dr O'Brien took legal action against the Australian Conservation Foundation which published an Apology. He is currently working on increasing collateral benefits from greenhouse enthusiasms, in projects such as tree plantations to help resolve dry-land salinity problems. He is also Coordinator of the Rotary East Java Hearing Project, and has two awards in a Paul Harris Medal and Sapphire.

by

#### Brian J. O'Brien<sup>8</sup>

The scientist credited (or blamed) with alarming the world in 1988 about greenhouse warming is now arguing that it is "more practical to slow global warming than is sometimes assumed."

In 1988 Dr Jim Hansen of NASA's Goddard Institute for Space Studies testified to a U.S. Congressional committee that "the Greenhouse Effect is here". His calls for urgent actions were widely publicised, assisted by a heat wave and dust storms in the Mid-West. The Toronto Conference ranked global warming as a threat second only to a global nuclear war. *Time* magazine made an overheated, doomed planet Earth its "Man of the Year". Greenhouse hysteria and talk of imminent catastrophes were warmly embraced by the United Nations.

On August 15, 2000, Hansen and colleagues published "an alternative scenario" to the politically correct versions of global warming. Their 15-page article in the Proceedings of the US National Academy of Sciences, is available for US\$5 at <a href="https://www.pnas.org">www.pnas.org</a>. It should be compulsory reading for decision makers.

The article describes effects which "could lead to a decline in the rate of global warming, reducing the danger of dramatic climate change."

First, when fossil fuels such as coal and oil are burned, they produce both warming effects from the greenhouse gas carbon dioxide, and cooling effects from aerosols, especially sulphates and organic aerosols. Aerosols can reflect sunlight and also affect cloud formations.

Hansen claims that the warming and cooling effects offset each other. "The aerosol forcing .. has the same magnitude (1.4 Watts/ $m^2$ ) but a sign that is opposite that of the  $CO_2$  forcing." Reducing carbon dioxide emissions is an easier and less urgent task than previously thought. He states "there are opportunities to achieve reduced emissions consistent with strong economic growth."

Second, the authors consequently claim that most of any global warming over the past few decades is due to methane and other "non-carbon dioxide" greenhouse gases. And the good news is that "the growth rate [of these gases] has declined in the past decade."

Hansen and colleagues have not quite recanted in the manner of Galileo.

They now state that the global surface temperature has increased by about 0.5°C since 1975 in "a burst of warming". They claim this warming "is at least in part a consequence of increasing anthropocentric greenhouse gases."

One can validly argue with them about such an alleged "burst of warming" since 1975.

The total set of data, in reports of the Intergovernmental Panel on Climate Change (IPCC), shows little change in global temperature between 1940 and 1976. Were no methane-producing rice paddies planted in this period? Was there no industrial development after World War 2?

Their very own arguments question their conclusion. The annual growth rate of methane concentrations

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shows an overall decline that began about 1980, at the start of their "burst of warming". So the alleged effect, a "burst" of global warming, began after the alleged cause had started to get much smaller. The purpose of this article, however, is not to argue such scientific detail and other flaws in their paper, but to focus on strategy and policy. After all, greenhouse policies were decoupled from science in 1990.

First, the new Hansen conclusions must put an end to the popular urban myth that global warming policies are based on "consensus" views of "most scientists."

Second, the cloak of urgency and impending doom has now been lifted by the doom-maker himself. In 1988 Hansen argued "the time for waffling is over" and demanded urgent action. Now he and his colleagues want "equal emphasis on an alternative, more optimistic scenario." The climate scenarios of 1988 are now out-of-date with the IPCC internationally and CSIRO in Australia, yet they still drive frantic Government schedules.<sup>9</sup>

Australian greenhouse governance remains frenetic.<sup>10</sup> The Hansen paper should cause an audit of such governance. Perhaps climate science will become more relevant to climate policy.

But I doubt it. The forces of bureaucratic determinism and political timidity will simply continue to ignore any good news. And besides, it might all be a plot to elect Al Gore!

O'Brien, Brian J. Kyoto - Marching to the Drumbeat of Toronto, IPA Review, 50, p.18-19, October 1997

O'Brien, Brian J. *Australian Greenhouse Governance: The Twilight Zone*, in *Focus*, Australian Academy of Technological Sciences and Engineering, December 1998.