Climate ACTION Network AUSTRALIA

Secretary
Inquiry into the Kyoto Protocol
Joint Standing Committee on Treaties
Parliament House
Canberra ACT 2600

14 September 2000

Dear Secretary,

The Climate Action Network Australia (CANA) is the umbrella under which over 25 Australian environment groups and research institutes work together on climate change issues. A list of the CANA network member groups follows.

CANA members believe that the Kyoto Protocol is the first important step in the process of reducing greenhouse gas emissions globally. The development of a legally binding international instrument to reduce emissions has been ten years in the making, and this Protocol needs to be finalised and implemented as soon as possible if we are to make any progress in reducing the threat of climate change.

As you are no doubt aware, the Kyoto Protocol is still being finalised. In many ways this Inquiry can not fully assess this treaty as it is still being negotiated.

CANA members have a number of key concerns with the negotiations about the Kyoto Protocol's rules. If the rules are not drafted carefully, the Kyoto Protocol will allow nations with targets to pollute well above those targets. It is also possible that it will not deal adequately to prevent carbon dioxide emissions from the destruction of vegetation. The concerns CANA members have about the key Kyoto Protocol 'loopholes' are set out in the attached briefing paper on the Kyoto Protocol.

The accounting based approach to the Kyoto Protocol also allows emissions from landclearing to continue until the commitment period in 2008 – 2012. CANA members believe it is unacceptable for action in this sector to be delayed simply because the Kyoto Protocol is not activated till the commitment period.

CANA member groups are extremely concerned that the Committee appears to be lending weight to climate sceptics groups as part of this Inquiry. The second term of reference suggests that global warming is simply a theory rather than a reality. This is an extremely out-dated view and CANA groups recommend that in addition to receieving evidence from the CSIRO, the committee seeks a briefing from the Hadley Centre at the United Kingdom's Bureau of Meteorology and the United States equivalent. We would also strongly recommend that the committee seek evidence from Bob Watson, the head of the Inter-governmental Panel on Climate Change (IPCC). Attached is a CANA briefing paper about the problems with climate sceptic arguments.

CANA group representatives would appreciate the opportunity to provide evidence to the committee to expand on the views set out in this submission. You can contact me on 08 – 9192 7387 (phone) or a.reynolds@acfonline.org.au (email) to make arrangements or seek further information.

Yours sincerely,

Anna Reynolds
Co-ordinator

Climate ACTION Network

AUSTRALIA

Member groups

Aidwatch
Australian Conservation Foundation
Cairns and Far North Environment Centre
Centre for Education Research in Environmental Strategies
Conservation Council of the South East Region and Canberra
Conservation Council of South Australia
Conservation Council of Western Australia
Environment Centre of the Northern Territory
Environment Victoria
Friends of the Earth
Greenpeace Australia
Institute for Sustainability and Technology Policy
Institute for Sustainable Futures
Kimberley Land Council
Minerals Policy Institute
National Parks Association of NSW
Nature Conservation Council of NSW
North Queensland Conservation Council
Pacific BioWeb
Queensland Conservation Council
Sunshine Coast Environment Council
Tasmanian Conservation Trust
Tasmanian Environment Centre
Total Environment Centre
Urban Ecology Australia
The Wilderness Society
World Wide Fund for Nature

Climate Action Network Australia

Briefing Paper

September 2000

The Kyoto Protocol – make it work and make it law

This November 180 countries will meet in The Hague, Netherlands to determine the fate of the Kyoto Protocol on climate change. It is broadly seen as 'make or break' time for the international treaty.

Contrary to popular understanding the Kyoto Protocol is not a 'done deal - the rules for the operation of the treaty were not agreed to at the 1997 meeting that announced country targets. For the last 3 years negotiations have been occurring behind the scenes.

The Kyoto Protocol has the potential to be the boldest international environmental treaty ever written – it could drive a sustainable energy revolution. Unfortunately there are many things stacked against the Kyoto Protocol succeeding as a strong environmental treaty.

There are two priorities for a successful Kyoto Protocol –

- closing loopholes in the rules that allow for spiraling greenhouse pollution, and
- sufficient ratification of the Protocol to bring the treaty into force.

The Australian Government's stance on both of these issues has not been positive. There have been no commitments to ratify the Kyoto Protocol. Australia's negotiating position supports the key Kyoto loopholes rather than tightening the rules for the benefit of the atmosphere.

Australia needs to improve its Kyoto Protocol position and play a positive role in ensuring this treaty leads to real reductions of the greenhouse gases that cause warming of the atmosphere.

1. Closing the Kyoto loopholes – make it work

1.1 How the loopholes work to increase pollution

The Kyoto Protocol is an accounting treaty – each country with a target has to count its emissions in 1990 (the baseline) and again in the period 2008 – 2012 (the commitment period). There is a concern that loopholes in the Kyoto Protocol may allow nations to meet their targets on paper, while still see an overall increase in greenhouse gas pollution.

Table 1 provides an example of how Kyoto accounting loopholes may allow for a substantial increase in greenhouse gas pollution in Australia. The below scenario is based on official Government figures and could quite easily reflect Australia's Kyoto accounts if all the loopholes are allowed.

The Australian community is under the impression that the Government committed to an 8% increase target, and many people were very critical that that target was too easy. The loopholes allow the Government to play with numbers on paper rather than reduce our pollution.

If proposed loopholes are exploited by all nations with targets under the Kyoto Protocol, the treaty will achieve almost no result for reduced greenhouse gas emissions.

Table 1: Kyoto Accounting scenario

	1990		2010
Australian emissions - million tonnes of CO2			
(1998 AGO inventory)			
Energy emissions	299		403 * **36% above 1990 levels**
Industrial / waste	27		29 *
Agriculture	90		95 *
Land clearing	103		42 [1]
		Sinks under Article 3.3	- 17 [2]
		Sinks under Article 3.4	- 8 [3]
		CDM project credits	- 2 [4]
Total:	**519**		**542**
	Kyoto target – 8% above 1990 levels (519 M/t) =		**560**
	Excess credits for Australia to sell in Kyoto trading =		18

***** Business as usual projections for emissions from these sectors in 2010 (Australia's 2nd National Communication to the FCCC, Environment Australia 1997)
1 – The estimate of emissions from land clearing in 2010 (AGO 2000). This is a business as usual fall in land clearing emissions, about 2% fall per annum. Between 1990 and 1997 these emissions fell by an average of 4.7% per annum.
2 & 3 - The estimates of additional sink categories available to Australia under Articles 3.3 and 3.4. Taken from a Government submission to the United Nations Framework Convention on Climate Change, August 2000.
4 – Low estimate of potential CDM credits, based on International Greenhouse Partnerships program of 10 existing

The major Kyoto loopholes

1.2.1 Carbon sinks

Under the Kyoto Protocol, every tonne of carbon dioxide (CO2) absorbed from the atmosphere via tree planting (carbon sinks), permits a country to pollute an additional tonne of CO2.

This Kyoto accounting loophole allows countries to count tree planting activities (sinks) in the commitment period, which act as deductions on the national record. A nation can then increase greenhouse gas pollution to the level that the carbon sink supposedly stores.

The greenhouse pollution that the carbon sinks are meant to offset lasts in the atmosphere for over 100 years. The concern with carbon sinks is that they may not be a permanent offset for this long lasting pollution.

For example in 2010 a number of carbon sinks may be used in Australia's Kyoto accounts to offset increases in emissions from cars for that year. On paper we meet the Kyoto target with the use of carbon sinks offsets. In 2015 these trees may be harvested, die or be destroyed by fire. The original car emissions will remain warming the atmosphere for another 100 years and the sink offset will not exist.

Recommendations

- Keep tight definitions for the existing Kyoto sinks activities, and ensure there are strong rules that monitor the use of these carbon sinks.
- Do not allow "Additional Sink Activities" to be used in the Kyoto Protocol's first commitment period. These new activities include soil conservation, forestry and rangeland management. While these activities sound positive, unless they are not counted in both the starting year (1990) and the commitment years (2008 – 12), they will unbalance the accounts and allow for increased pollution.

1.2.2 Clean Development Mechanism

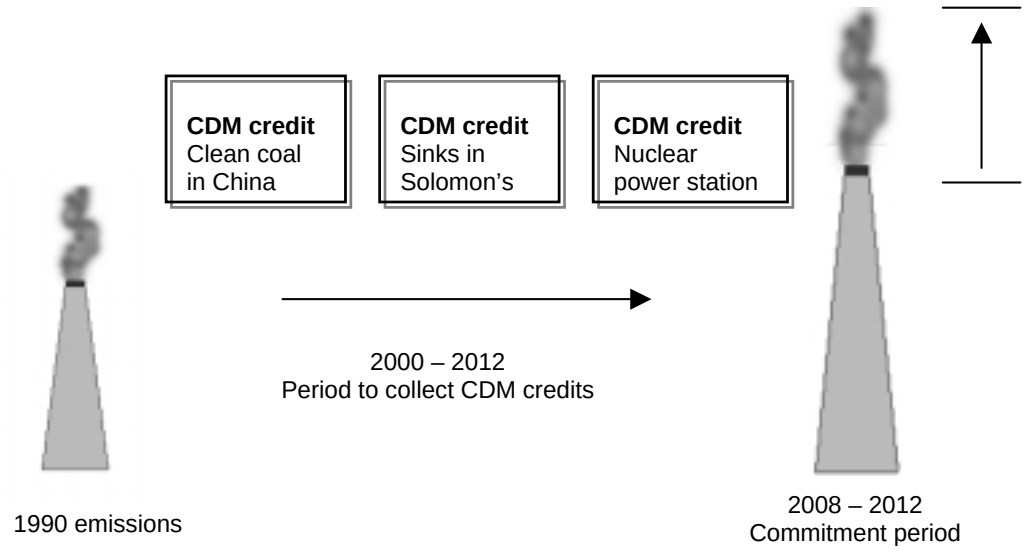
This allows developed nations to claim credits for greenhouse gas reduction projects undertaken in poor nations. The problem emerging with this program is that developing nations want to claim credits for dubious activities such as nuclear and coal fired power plants and forestry projects that lead to the destruction of old-growth forests. **Figure 1** illustrates how the Clean Development Mechanism (CDM) works.

Greenpeace International has calculated that if tree-planting activities are included in the CDM, there will be about 700 million tonnes of greenhouse pollution credits available for wealthy nations to buy in 2010. The OECD nations' total reduction commitment as part of the Kyoto Protocol is to reduce emissions by 770 million tonnes per year. This means that rather than take action to reduce pollution at home, many OECD nations could just buy CDM tree planting credits to meet their target.

Recommendations

- Limit eligible CDM activities to best practise renewable energy and energy efficiency projects.
- Ensure the CDM institution gives credits only for activities that are additional to what would have occurred under a 'business as usual' situation.

Figure 1: Clean Development Mechanism



1.2.3 "Hot air" emissions trading

The Kyoto Protocol allows nations to trade their pollution emissions. This means that countries that have polluted above their target can buy a pollution permit from a nation that has reduced emissions below its target. The “hot air” trading problem is illustrated in **Figure 2**.

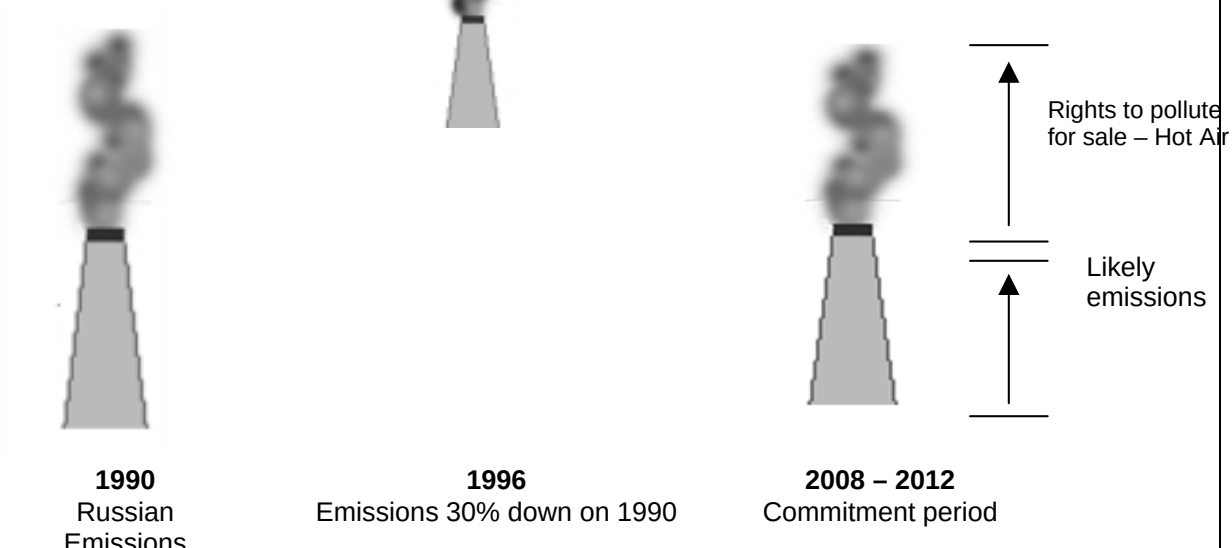
Russia is likely to have substantial pollution permits to sell because they were given a Kyoto target well above current emission trends. So these pollution credits have been created as a result of diplomatic talks rather than actual greenhouse gas reductions. It is possible that countries such as the United States will simply buy this “hot air” and continue normal pollution levels at home.

Russia's Kyoto target

Recommendations

- Place a cap on the amount of ‘ ıits’ that a nation can buy overseas.

Figure 2 – What is “Hot Air”



2. Ratification of the Kyoto Protocol – make it law

Unless a certain number of nations ratify the Kyoto Protocol, it will not succeed. The treaty needs to “come into force”, to be an instrument of international law, if it is going to generate reductions of greenhouse gases.

There is growing political momentum for ratification of the Kyoto Protocol by 2002, with or without the United States (US). Australia is currently resisting ratification of the Protocol by 2002. If this position is maintained, Australia, and its industries, run the real risk of being left behind and strongly disadvantaged.

Why ratification is needed

For the Protocol to enter into force, for its rules to have an impact, 55 countries equalling at least 55% of Annex 1 (industrial) country emissions have to ratify the treaty. It will enter into force if the European Union, Japan, the Russian Federation and eastern European countries ratify. It is possible for the Protocol to enter into force without the US, which accounts for 36.1% of Annex 1 emissions.

In 1999 over 60 countries including Japan, the European Union and New Zealand committed to ratify the Protocol so that it enters into force by 2002.

Why ratification is a positive step for Australia

"Kyoto has created a new business environment in which new industries, markets and technologies can flourish. Australian industry and Australia can benefit from first mover advantage."

Prime Minister's Science, Engineering and Innovation Council June 1999

The Protocol offers opportunities for Australia to meet it's Kyoto commitment with the use of the "flexibility mechanisms" and new domestic renewable energy industries. Participation in emissions trading, the clean development mechanism (CDM) and joint implementation (JI) projects - will only be permitted between countries that have ratified. Australia should commit to ratifying the Kyoto Protocol by 2002.

Climate Action Network Australia 2000
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Climate Action Network Australia
Briefing Paper
September 2000

Greenhouse sceptics - full of hot air

In the debate about reducing greenhouse pollution in Australia a few interest groups and newspaper columnists are using the tactic of denial to delay action. The attacks that sceptics make on the climate change science produced by bodies like the CSIRO are both flawed and outdated.

This briefing paper responds to the key arguments used by climate change sceptics.

Claim 1 - Discrediting the Inter-governmental Panel on Climate Change (IPCC)

Climate sceptics are a small number of vocal people that publish articles in lobbying documents and newspapers. They are critical of the formal United Nations sanctioned IPCC process that publishes scientific assessments of climate change. The IPCC made the crucial assessment in 1996 that *"there is a discernible human influence on the climate"*. The IPCC involves many people and a thorough process of peer review of work published in scientific journals.

The preface in the IPCC's Second Assessment Report demonstrates the process that is taken to come up with IPCC findings.

> *"The Second Assessment Report was compiled between October 1994 and November 1995 by 78 lead authors from 20 countries. Formal review of the chapters and the summaries by governments, non-governmental organisations and individual experts took place during May to July. Over 400 contributing authors from 26 countries submitted text and information to the lead authors and over 500 reviewers from 40 countries submitted valuable suggestions for improvement during the review process."*

Claim 2 - Satellite data shows cooling

A favorite argument of climate change sceptics is that satellite data measurements show a cooling trend in the troposphere (the lowest 8kms of the atmosphere) since 1979. About one year ago there were faults found with this data and the scientists were forced to update these records. These corrections to the data now indicate a warming trend in the troposphere as well as at the surface.

According to mainstream scientific opinion this issue has been laid to rest. For example John Zillman, who heads the Bureau of Meteorology and the World Meteorological Organisation stated to a Senate Inquiry in March 2000 that earlier discrepancies between satellite measurements and surface measurements have been debated and resolved.

Claim 3 - The sun's activity is more to blame for 20th century warming than increased levels of carbon dioxide

This claim overstates the effect of a natural process, which sees the amount of radiation emitted by the sun fluctuate with an 11-year cycle of sunspots.

NASA's Goddard Institute for Space Studies responded to sceptic's claims by making simulations with computer models of climate change in response to changes in solar radiation during the past 400 years. They then used the model results to compare with both pre-industrial and current climate trends to determine the role of the sun in heating the earth.

NASA found that while in pre-industrial times solar variations may have played a major role in decade-to-decade warming, it has not played a significant part in the warming climate change since 1900.

Claim 4 – Human's contribution to atmospheric CO_2 and global warming is small

"Both the present atmospheric concentration of carbon dioxide (CO_2) and its rate of increase during the past 420,000 years are unprecedented…the present concentration has probably not been exceeded during the past 15 million years"

(Professor John Zillman, Director, Bureau of Meteorology, 2000)

Human activities since 1800 have increased the amount of carbon dioxide in the atmosphere by 30 per cent. Fossil fuel burning and cement manufacture release 5.5 gigatonnes of carbon as carbon dioxide to the atmosphere per year and land clearing releases about 1.6 gigatonnes per year (CSIRO 2000)

The increase in greenhouse gas concentrations is consistent with the release of large amounts of carbon in fossil fuels, which have been released since the Industrial Revolution. While some CO_2 is released and stored by natural processes, this fossil fuel CO_2 is a new addition to the earth's carbon cycle.

The CSIRO Atmospheric Research stated to a Senate Inquiry in March that the human connection to increased levels of carbon dioxide is one of the clearest and most certain areas of climate science.

Claim 5 – Thousands of scientists have signed a petition

A "scientists' petition" from the United States challenging the validity of climate change science is often cited by sceptics. This sign-yourself-on Internet petition has been thoroughly discredited. It is full of fake non-scientists such as Dr Jerri Halliwell, better known as Ginger Spice. A selection of other signatories include "Michael J. Fox" (the actor), "John C. Grisham" (the lawyer-author) and Drs "Frank Burns" "Honeycutt" and "Pierce", the trio from M A S H who having finished their careers on television have apparently moved into the important field of global warming.

The article that begins the petition is laid out to look like a National Academy of Science document - right down to the typeface. The National Academy of Science in the US has disavowed any connection with the article and petition.