

**Northern Territory Government Submission
to the
Joint Standing Committee on Treaties
Inquiry into the Kyoto Protocol.**

September 2000

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Summary

The Northern Territory supports national and international efforts to implement actions to reduce human induced greenhouse emissions. The Territory is party to the National Greenhouse Strategy and is undertaking actions on greenhouse gases. At the same time, the Territory still has significant concerns regarding the potential of abatement policies and activities to stifle the early stage of the Territory's development.

The Territory Government strongly supports maintaining Australia's and the Territory's international competitiveness while still controlling greenhouse emissions. The Territory Government is very concerned that the current suite of abatement policies incorporated in the Kyoto Protocol are likely to distort investment and economic activity, particularly towards non Annex B countries. This will be very much to the detriment of the Territory, as many of these activities will be gas based manufacturing. There is currently in excess of \$11 billion of potential gas related investments being considered for the Territory and much of this will be threatened under the current proposed policies. All efforts should be made to ensure that any protocol ratified by the Australian Government ensures a level international playing field for investment and economic activity being maintained.

The Territory believes that further work is also required on the national arrangements. There is a need for differentiation within any Australian abatement strategy. The Territory is relatively undeveloped with very low historic levels of land clearing, a very small industrial base and relatively clean energy production. Hence the Territory's options for cost effective reductions in emissions are very limited. The Territory should not be unduly punished by national policies that do not take differentiation into account.

If Australia is to ratify the Kyoto Protocol, this should only be under circumstances where there is more clarity in the international and national arrangements (including any emissions trading system) and there are mechanisms that do not distort investment and economic activity at the expense of the Territory's development potential.

Background – Northern Territory commitment to greenhouse issues

In September 1988 the then Chief Minister, Hon Marshall Perron, established the Advisory Committee on the Greenhouse Effect to provide advice about the greenhouse effect, including possible implications of the greenhouse effect on the Northern Territory (NT), and recommend appropriate actions.

Membership of the Advisory Committee included representatives from the Territory Government, CSIRO, NT University, Northern Australian Research Unit of the Australian National University and the Bureau of Meteorology.

In 1990, the Northern Territory Government funded a 4-year CSIRO research program into the potential impacts of the enhanced greenhouse effect on the Northern Territory. A further 3-year consultancy project was undertaken from 1994 to 1996 to model climate change under enhanced

greenhouse conditions in Northern Australia. This project was conducted by CSIRO with support funding from the Governments of the Northern Territory, Queensland and Western Australia, and from the Commonwealth via the National Greenhouse Research Program.

Additionally, the Advisory Committee on the Greenhouse Effect developed the Greenhouse Strategy for the Northern Territory in 1993, prepared two public reports on the greenhouse effect and, in 1996, assisted in the development of Northern Territory reports on the implementation of the 1992 National Greenhouse Response Strategy. This strategy evolved into the 1998 National Greenhouse Strategy (NGS), a key mechanism through which Australia plans to meet its commitments under the Kyoto Protocol.

The Territory, along with other Australian jurisdictions, has been party to developing the NGS. In October 1998, the then Chief Minister supported NGS subject to the following reservations:

- *“Implementation of only those greenhouse abatement policies that do not compromise the creation of jobs and which do not diminish the competitive position of Territory industry;”*
- A recognition of *“differentiation within Australia;”*
- *“Implementation of the Strategy only to the extent that the Territory bears an equitable share of the burden of change given its special development needs; and*
- *Australia’s position at Kyoto was underpinned by assumptions about the 1990 level of emissions and the ability of certain measures to achieve Australia’s nominated targets. If, in the future, there are significant differences from what was assumed in formulating Australia’s position, then the Northern Territory reserves the right to reconsider its support.”*

The NT Government has developed and endorsed an Implementation Plan that will meet its jurisdictional responsibilities under the NGS.

Key Strategic Issues for the Northern Territory.

The Territory is a developing jurisdiction of Australia, with a small industrial base. It covers an area of 1.4 million km² of land and is sparsely populated with fewer than 200,000 people (ie less than 0.15 persons/km²).

While the Northern Territory comprises almost 17% of Australia's landmass, the NT is a minor emitter of greenhouse gases, producing around 2.1% of the total national greenhouse gas emissions¹ and 0.029% of all global emissions. The economy of the Territory is, however, growing rapidly with an average increase in Gross State Product of more than 5% over the last 2 years and an average growth of 4.5% over the previous five-year period. This raises some important strategic issues with regards to the greenhouse debate. These include - economic development of the Territory, energy use, land clearing, emissions trading, 2% renewables target, and integrated transport investment framework.

¹ Source: Australian National Greenhouse Gas Inventory 1996.

Economic Development

The Territory Government wishes to expand its economic base. Recognising that around 20% of the current NT Gross State Product derives from the resource sector, one of its visions is to build on its successful resource-based economy.

A number of gas based manufacturing proponents are currently considering establishing operations in the Northern Territory. The combined value of these projects exceeds \$11 billion and includes Liquefied Natural Gas (LNG) and Synthesis gas plants. The Australian Government approach to greenhouse issues has potentially far-reaching implications for these developments and hence for the NT's future economic development.

At US\$40 per tonne of carbon dioxide emitted, the greenhouse cost impost represents an unsupportable proportion of the revenue stream for a number of industries – 15% of LNG revenue, 20% of alumina revenue and 60% of aluminium revenue.² The Territory's economic development would suffer if emission reductions were imposed on these new industries. Whilst the Kyoto flexibility mechanisms may offer opportunities to exploit some greenhouse benefit in customer nations, there is a real possibility that resource-sector based jobs, regional development and investment would be lost to Australia in favour of developing countries, particularly Malaysia, Indonesia and Qatar, which are not signatories to the Kyoto Protocol.

The Federal Government has recognised the significance of this issue. The Minister for Industry, Science and Resources, Senator the Hon. Nick Minchin, announced on 23 August that while the Government remains fully committed to honouring Australia's international greenhouse obligations, it also recognises the imperative of maintaining the competitiveness of Australian industry. He added that sacrificing economic growth and jobs is not in Australia's interests.

The Northern Territory Government, industry associations like APPEA and companies such as Woodside welcomed that decision. Since then, the Minister has issued several more statements. A copy of these press releases is attached.

The rationale for the Northern Territory Government's support for this decision is easy to understand. The Territory has a small industrial base and thus any new developments are likely to produce dramatic increases in the Territory's emission levels. Such emissions however are likely to be insignificant on the national scale. For example, LNG and methanol developments currently being considered for the Northern Territory are projected to increase Australia's emissions by 2% yet double the Territory's emissions. These developments will, therefore, not be accommodated within the scope of Australia's greenhouse gas abatement commitment under the Protocol without mechanisms to ensure industry is able to maintain international competitiveness.

² Source: Industry and Waste Management Technical Report to WA Greenhouse Council

There is also a need to recognise differentiation within Australia. The arguments Australia strongly and successfully used at Kyoto, for differentiation between targets set for nations, should also be applied within Australia. The State and Territory circumstances within Australia, including their greenhouse response capacity must be recognised to prevent adverse impacts on their economies and future development. Setting targets without differentiation will be inappropriate as it would reinforce the actions of relatively high emitting jurisdictions and punish relatively low emitting jurisdictions by constraining clean development opportunities.

Energy Use

The Territory has been making a concerted effort to move away from a dependence on higher carbon based fuels for power generation for many years. This started in 1984 with the conscious decision to move towards gas based electricity generation as it provided a relatively clean domestic fuel source. With the exception of the Nabalco operated alumina refinery at Nhulunbuy, 96% of electricity in the NT is generated from natural gas with continuing efforts to increase this ratio.

Nabalco are also undertaking significant work to further reduce Northern Territory emissions. Nabalco's measured emissions could reduce by approximately 407,000 tonnes per annum through the conversion of existing generating capacity from fuel oil to natural gas. This conversion would reduce total Territory emissions by approximately 4.7%³. However, Nabalco's ability to utilise gas is dependent on other significant foundation customers being drawn to Darwin (most notably the proposed Methanex synthesis gas plant) to justify the investment required to bring gas to shore.

The "clean and green" status of the Territory can be further demonstrated by its relatively high level of uptake of solar energy. The Territory has more domestic solar hot water systems per capita than any other part of Australia. Switching from diesel generation to solar power generation is also becoming increasingly economic in remote areas as the cost of diesel and renewable technologies converge. The Power and Water Authority (PAWA) is the principal electricity utility in the NT and has had an active research and development program in place for many years, concentrating largely on renewable energy. PAWA is currently a participant in the Australian Co-operative Research Centre for Renewable Energy and a participant in the Northern Territory Centre for Energy Research.

Land Clearing

The Territory has experienced significantly less broadscale clearing of natural vegetation than the other States or Territories, with less than 2% being cleared to date.

Nationally, land clearing is contributing significantly to greenhouse gas emissions. The reduction in the rate of land clearing is considered a low cost option, particularly as in many areas of Australia clearing has contributed to

³ Based on 1995 Greenhouse Gas Inventory

significant land degradation (dryland salinity, loss of biodiversity). Consequently, land clearing will have a multiple effect. However, the NT is a developing economy and to achieve the sustainable agricultural development policies of the Northern Territory Government there will need to be some change in vegetation cover; eg - clearing of native vegetation to provide for horticultural uses.

Transport

Transport is a major issue for the Northern Territory. With a small population dispersed over a large landmass and a challenging physical environment, the ability for the Territory to reduce emissions in this area is limited.

First Term of Reference:

The implications for Australia of proceeding or not proceeding to ratify the Kyoto Protocol and meeting its target emissions levels by 2008 with regard to anticipated and/or predicted economic, environmental and social outcomes both nationally and in specific regional areas.

- The Northern Territory recognises that ratification of the protocol in an environment where national and international arrangements (eg emissions trading) provide a truly level playing field, there are likely to be significant economic, environmental and social opportunities in the long term.
- Should Australia proceed with the ratification of the Kyoto Protocol when the scope and coverage of international and national actions are not on a truly level playing field, the economic and social development of jurisdictions such as the Northern Territory could suffer serious adverse affects.

Through it's ratification of the protocol, the nation could lose out on potential regional development opportunities. The Territory Government is very concerned that the current suite of abatement policies incorporated in the Kyoto Protocol are likely to distort investment and economic activity, particularly towards non Annex B countries. This will be very much to the detriment of the Territory, as many of these activities will be gas based manufacturing.

There is currently in excess of \$11 billion of potential gas related investments being considered for the Territory and much of this will be threatened under the current proposed policies. All efforts should be made to ensure that any protocol ratified by the Australian Government results in a level international playing field for investment and economic activity being maintained.

Australia needs to examine the economic, environmental and social cost of not ratifying the protocol in the short, medium and long term. It may not be in Australia's best short to medium term interest to ratify the protocol as the cost of compliance may be higher than penalties potentially imposed by the international community or resulting from potential short term climate change impacts.

- At the national level, any ratification of the Kyoto Protocol should be based on a national recognition and acceptance of differentiation within Australia.

To set any specific State/Territory target, without differentiation, would be inappropriate, as it would reinforce the actions of relatively high emitting jurisdictions and unduly punish relatively low emitting jurisdictions by constraining clean development opportunities.

For example, electricity production in the NT is already "clean" compared to other Australian states. Without differentiation, the NT could be penalised as it has implemented measures (at considerable expense) which have provided it with minimal room to move in relation to further reducing greenhouse gas emissions, relative to its energy output.

- With regards Australia meeting its target emissions levels by 2008, based on current trends, it would seem unlikely that this target can be met without greater short-term economic costs.

Perhaps the greatest opportunities to reduce Australia's emissions in the short term are to: accelerate the switching of fuel from coal to gas in the stationary energy sector; to provide incentives and remove barriers to improving end use energy efficiency; reducing vehicle use in major urban centres and reducing land clearing. The Territory may be in a position to assist with the first measure above by providing gas to other jurisdictions and we will be a willing participant in programs to increase end use efficiency - however our ability to contribute significantly to reducing vehicle use in urban centres and reducing land clearing is limited.

Second Term of Reference:

The veracity of conflicting current scientific theories on global warming and any solutions proposed for it.

The Northern Territory Government recognises that there are high levels of conflict between current scientific theories on climate change. The Territory Government does not have the resources to research current theories related to global warming. Past contracted research has not provided certainty regarding the potential impacts of climate change on the Northern Territory.

However, not to take any action due to this scientific uncertainty would be inconsistent with the precautionary principle, to which all jurisdictions subscribe through the Inter-governmental Agreement on the Environment. Based on advice provided to Government, this submission makes the following observations:

- The ongoing debate in the scientific literature between eminent climate scientists indicates there are still uncertainties about the relative importance of different mechanisms of global warming (eg - radiative forcing of various greenhouse gases versus solar variability).
- The outputs of the various climate change models produce conflicting scenarios of future climate associated with global warming, and it is considered that planning for extreme events in the NT is not aided by the outputs from such models.
- Any impacts predicted by scenarios need to be placed in the context of natural climate variability and evidence from the palaeoclimatic record. Long term impacts may not all be negative.
- El Nino/La Nina events currently have the strongest influence on NT weather, and the ability to forecast these would be a welcome outcome from current climate research rather than a multitude of modelled scenarios.
- Observational evidence from rigorously tested and peer reviewed data sets appears to be the only way to validate claims of global long term changes in temperature and sea level. It will be important to resolve the differences between satellite measurements of lower troposphere temperature and surface level thermometer measurements.
- As a local example of discrepancies between global claims and the reality of local effects, the 1999 annual mean temperature for Darwin was one of the lowest recorded since the 1930s and 1940s. El Nino/La Nina events seem to have exerted a strong influence on mean temperatures in recent years.
- Additionally, a study by the National Tidal Facility of Flinders University examined 34 years of observations of sea levels at Darwin, and estimated there was a trend of -0.02mm per year; that is, there has been a sea level fall over that period. The study indicated that short term fluctuations were highly correlated with El Nino/La Nina events.
- Consequently the Northern Territory considers that observational evidence from rigorously tested and peer reviewed data sets should form the basis for resolving conflicting theories on global warming.

Third Term of Reference:

What definitions and criteria Australia should develop and actively pursue in its national interest with regard to:

Grandfathering

- The Territory is currently assessing the impacts of different methods of permit allocation. A policy position on this issue is currently being developed.

Trading credits

- Since Greenhouse is a global issue, the Northern Territory government supports the implementation of trading credits if trading is international. This mirrors the Commonwealth Government position as of 22 August 2000.
- Any international trading scheme that is supported should allow Australian industry to maintain its competitiveness. To ensure any adverse impacts on Australia's economy are minimised, and investment decisions between nations are not distorted, the Northern Territory Government believes both the Clean Development and Joint Implementation mechanisms should be included in any trading system. This will be vital for the NT to ensure competitive advantages are not lost to non-Annex B countries, while ensuring a wider range of cheaper emissions reduction projects are available.
- Efforts should be made to ensure the unit size for the trading of credits is optimised to prevent the exclusion of smaller trading participants from the market. This is of particular importance for smaller jurisdictions or where business units tend to be small such as the Territory.

Carbon credit, Forests and Sequestration

- The Territory does not have major concerns with the concept of carbon credits for each unit of CO₂-e sequestered over the commitment period (2008 to 2012). However, the definition of key terms such as forests is crucial to protect NT interests. This is because only specialised sinks would be taken into account, particularly those forest related activities which comply with the definitions of afforestation, reforestation and deforestation (ARD) since 1990 (Article 3.3) plus human induced activities (Article 3.4) agreed to by Council of Parties (eg - regeneration).

The Territory could be penalised in its efforts to develop its agricultural industry (horticulture and agro-forestry), as its native vegetation is largely intact. Under the current Australian negotiating position, these efforts would be covered under Article 3.4. However, as there may be a delay in resolving the eligibility of Article 3.4 activities, the definitions for ARD, particularly for reforestation, in terms of minimum time lags, should be reviewed.

- The allocation of carbon credits to carbon sequestration activities needs to provide for a diverse range of activities that may affect sequestration, such as varying fire management regimes, cattle management techniques and photosynthetic efficiencies of various species.

Land management

- Changes in fire regimes should be included as this represents a fundamental change in the management practices of Northern Australia – with the potential to prevent very significant levels of CO₂

emissions every year. Modified fire regimes may also have positive impacts on biodiversity.

Revegetation

- NT supports the proposed definition and accounting approaches related to revegetation under article 3.4 of the Kyoto Protocol, contained within Australia's August 2000 submission to the UN Framework Convention on Climate Change on Land Use, Land Use Change and Forestry . However, the NT believes that Australia should also push the Conference of Parties to increase the "eligible revegetation activities" list to also include changes in fire management regimes that encourage regeneration and maintain biodiversity.

Fourth Term of Reference:

The economic, environmental and social implications of a punitive approach to any domestic regulation of industry including such proposals as a carbon tax and an incentive-based approach.

- Encouragement through incentives based approaches are preferred to punitive approaches wherever possible . These should be applied at the margin so that organisations are receiving the appropriate signals to change their behaviour.
- Australian approaches should, however, be outcome focussed (ie. be aimed at achieving a reduction in emissions) rather than any form of prescriptive approach that controls inputs or result in imposts irrespective of any ability to bear the impost. Approaches such as the 2% renewables target for electricity and mandated generation efficiency standards are likely to be relatively more costly to implement in the Territory as our options are more limited than in other Australian jurisdictions.