

SUBMISSION OF THE WESTERN AUSTRALIAN GOVERNMENT

TO THE

INQUIRY INTO THE KYOTO PROTOCOL

INTRODUCTION

The Western Australian Government welcomes the Inquiry into the Kyoto Protocol by the Joint Standing Committee on Treaties. Western Australia has requested an analysis of the impact of the Protocol on Australia and consideration of whether ratification of the Protocol is in the national interest.

The Kyoto Protocol represents a global agreement to stabilise the increase in atmospheric concentrations of gases thought to be the cause of a general warming of the planet. Based on the precautionary principle, the Kyoto Protocol represents the principal weapon against continuing climatic change caused by human activity. The Protocol will require ratification by a majority (55%) of nations responsible for the majority (55%) of greenhouse gas emissions to bring the Protocol into force. However some nations (generally developing countries) that are parties to the Protocol are not required to meet quantified emissions limits, at least for the first commitment period.

It is expected that the Kyoto Protocol if ratified and enforced will dramatically change activities in virtually all sectors. As far as Australia is concerned these actions will impact across all major sectors of the economy, including transport, urban planning, industry, agriculture and forestry, and especially in the minerals and energy sectors.

This covers the full spectrum of activities from enterprises required to make major emission reductions, the sequestration of larger volumes of atmospheric carbon, to the community being required to be responsible for reducing its energy consumption.

The problem facing Australia's decision makers is the magnitude of change required to meet the yet unknown absolute volumes of Greenhouse gases that equate to Australia's 108% Kyoto Protocol target. It is becoming evident that Australia's 2010 allowable emissions are likely to be much lower in absolute tonnage terms than was assumed by our negotiators in Kyoto and will therefore be much harder to achieve.

In particular, the achievement of the Kyoto Protocol will require the adoption of significant "beyond no regrets" measures. Moreover these costly abatement measures are not required to be taken by many of Australia's competitors in key international markets.

For Australia to comply with the targets set out in the Kyoto Protocol, all Governments - Commonwealth, State and Local- will need to take hard decisions which will impact substantially on the future shape of the Australian economy and society. The Commonwealth has recognised the potential of climate change

policies to alter the Australian economy and has regularly stated its commitment to the maintenance of international competitiveness as a key consideration of ratification. The Commonwealth Cabinet decision of August 21 2000 to protect Australian industries from a reduction in international competitiveness reinforces this approach. The Western Australian Government fully supports this view.

Key sectors of Australian industry providing anticipated growth to the economy face strong competition from industries located in developing countries that have no obligations to reduce emissions under the Kyoto Protocol. A significant proportion of this growth is planned for Western Australia, giving this State a particularly keen perspective on this developing problem.

Although there are uncertainties in the science of climate change, the Western Australian Government acknowledges the international view that increasing levels of greenhouse gases will lead, on the balance of probability, to global climate change. It has also accepted that Australia's commitment to accept a fair share of the burden in a global response to climate change. While it accepts this responsibility, it is concerned about what subsequent actions towards Australia's Greenhouse abatement will mean for the State economy. In view of this, the Western Australian Government would expect Australia to approach climate change policy in respect of the Kyoto Protocol to be prepared in a careful and measured way to ensure there is full assessment and understanding of the implications and risks of Australian actions for the economy.

It is therefore vital for Australia to ensure any rules for the implementation of the Kyoto Protocol are fully assessed in respect of national interests. In view of this Western Australia supports a National Analysis program.

ECONOMIC IMPLICATIONS FOR WESTERN AUSTRALIA

Australia is addressing its international commitments to abate Greenhouse gas emissions through the National Greenhouse Strategy (NGS), which was endorsed by the Commonwealth Cabinet on 29 June 1998. It has received qualified endorsement by all Premiers and Chief Ministers and these qualifications generally include:

- maintenance of international competitiveness of Australian industry is made explicit;
- differentiation which fully reflects differences in State circumstances that may occur within Australia, including economic structure, trade patterns etc, so that there is a fair sharing of the compliance burden nationally;
- changes in assumptions about the 1990 level of emissions could mean changes to States and Territories' positions; and
- cost of achievement of greenhouse targets is recognised in the implementation of the NGS.

There is very limited information available in the NGS on the possible economic and cost implications of Australia's Greenhouse abatement plans. Consequently the Western Australian Greenhouse Council (WAGC) has recently undertaken specific-sector analyses of proposed actions set out in the National Greenhouse

Strategy, to assist the State Government to develop a meaningful response to the NGS.

Work by joint government/industry/community Technical Panels for the WAGC indicates that Greenhouse gas emissions from fuel combustion, fugitive emissions and industrial processes in Western Australia will double from 1990 to 2010. (This confirms ABARE's 1997 emission projections in its report "Australian energy consumption and production: historical trends and projections 2009-2010"). While there are opportunities for reduction in energy intensity through an emphasis on efficiency, this will likely be outweighed by increases in population and production. On the other hand, the WAGC also believes that Western Australia has the potential to offset some of these increased emissions through plantations and revegetation on farms.

Assessments recently conducted by the WAGC indicate that by 2010, anticipated growth in Western Australia alone will add more than 24Mtpa of Greenhouse emissions to the 1990 base. Translating this projected outcome to the national context suggests that the resource sector in Western Australia alone could take up most of Australia's likely allowable increase under the Kyoto Protocol. There is little reason to believe that Australia's competitiveness and economic growth outlook in the minerals and energy sectors in particular will not be severely compromised by Australia's Kyoto Protocol target. Industries and projects which might otherwise have contributed substantially to Australia's future export earnings could see dramatically lower levels of new investment because of Greenhouse abatement constraints.

The imposition of targets for abatement inevitably leads to a significant constraint on the development of individual downstream-processing projects in Australia. Projects such as HBI/DRI, where the market price is a relatively low \$130-140/tonne, are unlikely to be financially viable with a CO₂ trading impost of \$20-50/tonne. Thus new projects may relocate in countries that are not signatories to the Kyoto Protocol, with no benefit to the global environment but a real cost to the Australian economy.

It should be acknowledged that the Western Australian industry sector has already made major reductions in Greenhouse gas emissions since 1990 through activities directed at achieving best practice energy management. These reductions are due to a wide range of programs with collateral Greenhouse benefits initiated across the resources industry. Programs include:

- introduction of new higher energy-efficient processes;
- upgrading of other processes to achieve improved energy efficiencies of newer processes; and
- introduction of process efficiencies resulting in reduced greenhouse emissions, extensive energy audits to identify energy saving projects and monitor energy efficiency.

Whilst recognising Australia's potential obligations as an Annex I signatory to the Kyoto Protocol, the Government of Western Australia believes there are important issues to be considered before the agreement is ratified. It is essential that:

- Australia's position is viewed in a world context;
- The impact of a global agreement on trade and growth where there are different obligations on Annex I and non-Annex I nations, with respect to greenhouse gas emissions reductions, is recognised;
- Australia's economic reliance on its resources and potential loss of its competitive advantage is acknowledged;
- There is continued recognition that although Australia's growing use of natural gas and processing of LNG for export contributes to its Greenhouse emissions, it potentially results in global Greenhouse savings; and
- The potential benefits of the flexibility mechanisms to reduce the cost of abatement are realised by the adoption of rules and regulations by signatories to the Protocol.

The large projected increase in business-as-usual emissions, particularly from resources extraction and processing has significant social implications if stringent greenhouse gas abatement measures are enforced in Australia. For example, in 1997 there were 27 resource projects under consideration for development in Western Australia, worth around \$34 billion and with an annual output of \$11.2 billion per annum. If these projects were to proceed it would lead to the creation of an estimated 20,500 jobs during construction, 11,100 employed in the operation, and the creation of 44,500 indirect jobs. Although the impact of Australia meeting its 108% target on this investment and jobs growth is uncertain, ABARE's projection of a 20-30% reduction in investment due to increased costs relating to the Kyoto Protocol, translate to a loss of investment of between \$6.8-10.2 billion and a consequent reduction of between 11,100-16,700 operational and indirect jobs.

There are likely to be structural adjustment issues related to the switching of industry to new sources of fuel, and the rise in costs associated with energy use such as transport. This adjustment could impact on regional communities and industry, and involve relocation and large scale job losses.

ENVIRONMENT

The Kyoto Protocol and in particular Articles 3.3, 3.4, 6 and 17, offers the opportunity of tackling Greenhouse gas emissions in conjunction with several other major environmental problems in regional Australia. This could include the establishment of "Greenhouse sinks", specifically the establishment of plantations on farmland and management changes in the rangelands.

Carbon sequestered in these sinks could be traded, with sink investment underwriting the massive revegetation that is required for land and nature conservation in regional Australia.

Together, these Greenhouse activities would have the following benefits for Western Australia:

- Provide the capacity for Western Australian and Australian Greenhouse emitters to meet future emissions targets;
- Provide an economic basis for both land and water resource conservation and protection of rural infrastructure through the amelioration of salinity, erosion and land degradation;
- Improved nature conservation through habitat preservation and restoration;
- Increased regional development based on renewable resources; and
- An improvement of the aesthetic qualities of rural landscapes by revegetation around salt scalds, roads and rivers.

Thus sinks in Western Australia as in other parts of Australia, are consistent with the principles of ecologically sustainable development.

DEFINITIONS AND CRITERIA

The Western Australian Government considers that a high level of uncertainty complicates the preparation of appropriate actions to address and respond to Greenhouse gas abatement measures. Apart from the scientific uncertainty on the magnitude of the expected climate change from increased atmospheric Greenhouse gas concentration, the key issues are:

- how emissions levels for the 1990 baseline will be calculated;
- the influence of land clearing in the calculation of Australia's emission levels at the First Commitment period (2008-2012);
- what the Kyoto Protocol arrangements for international emissions trading, Clean Development Mechanisms and joint implementation will be;
- whether and when the Protocol will be ratified by the key Parties to enable it to come into force; and
- compliance verification and enforcement.

CARBON SEQUESTRATION

There is general Agreement that Australia should pursue a position, and definitions, that encourage private investment in carbon sinks and ensure their recognition in any global emissions trading regime. Ratification of the Protocol without incorporation of suitable definitions that suit Australia in relation to sequestration will significantly increase the cost of meeting the target set for the nation. As the science relating to sequestration and its legitimacy as a means of abatement has been acknowledged, then the particular climatic and land use conditions applying in Australia need to be recognised, particularly in definitions

used to define what constitutes carbon sinks for the purposes of meeting the Protocol.

The nature of suitable tree species for Western Australian conditions, and other objectives such as salinity control that require dispersed planting of trees across farmland, make it essential that the definition of forests under the Kyoto Protocol should be as flexible as possible. Specifically it is important that definitions of forest allow the inclusion of belts of oil mallees (*Eucalyptus spp.*) and 1-2 row timber-belts ("alley farming") in Article 3.3. rather than in Article 3.4, Australia's current negotiating position.

The Western Australian Government believes there should be a concerted effort to maximise the number and nature of eligible activities under Article 3.3, assuming there may be a delay in resolving the eligibility of Article 3.4 activities. A broad approach to the definition of activities in Article 3.4 should be pursued, including seeking the inclusion of these activities in the first commitment period. Irrespective of the approach, the aim should be to allow the inclusion of the widest possible range of revegetation activities as eligible activities.

Australia should also aim to include forestry activity in flexibility mechanisms of the Kyoto Protocol. There should be an unrestricted flow of tradeable permits and credits across international boundaries.

EMISSIONS TRADING

Permit Costs

While the Kyoto Protocol makes provision for the development of emissions trading and the ability of developed nations to gain credit for actions in other countries, employment of these arrangements is uncertain as the rules have not been agreed internationally.

The "rules" yet to be agreed include how the flexibility arrangements will be managed, audited and policed. It is envisaged that these will not be agreed at the earliest until late 2000.

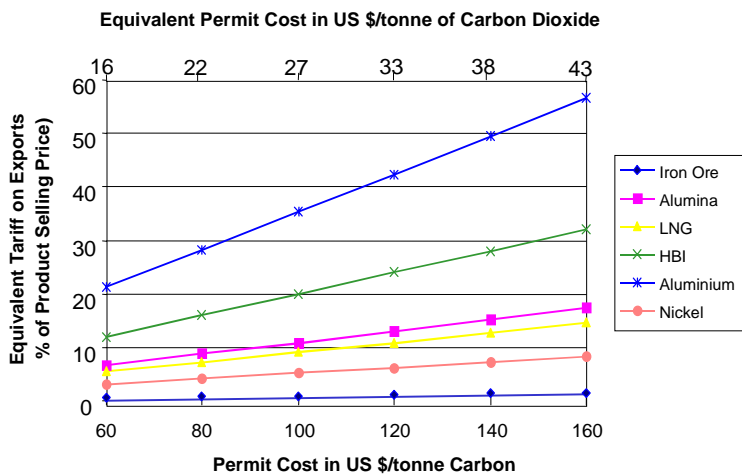
Industry could be expected to adopt the most economically efficient means of achieving greenhouse gas emission targets or requirements. A system of emissions permits has been discussed within the United Nations Framework Convention on Climate Change (UNFCCC) as a means of cost-efficiently constraining greenhouse gas emissions. Those discussions are based on the concept that where abatement technology was either unavailable or prohibitively expensive, a company would be allowed to emit greenhouse gases if it purchased emission permits (say, one permit for each tonne of carbon emitted).

The potential cost of such permits may vary widely, however, depending on the range of gases covered and the extent of trading between industry sectors (and countries). No reliable estimate has yet been proffered as to what permit costs might be and this is one area where further economic research is urgently

required. The impact of imposing such costs on Australian exports is identical in its economic impact as the imposition of import tariffs by foreign countries.

The cost of purchasing permits on an international market is likely to be less than undertaking abatement without such a market. Modelling (ABARE and others) and international simulations have indicated that abatement costs can be dramatically reduced with the availability of the flexibility mechanisms in the protocol.

Notwithstanding this relative reduction in the overall cost of abatement brought about by an effective and efficient emissions trading system, the cost of permits will still have impacts on the competitive position of Australia's energy intensive industries.



Source: WA Industry and Waste Management Technical Panel Report, 1999

Figure 1 Carbon Permit as a Tariff Equivalent

Figure 1, indicates the estimated cost impact that a carbon permit will have on processing in Annex I countries as a percentage of final product selling price. It is clear from the graph that having to buy carbon permits, or any other equivalent Greenhouse impost, would go straight to the bottom line and would severely erode Australia's competitive position relative to countries without such obligations. This inequity increases with the intensity of energy use in production. For example, purchasing permits costing US\$30 per tonne of CO₂ would take 10 per cent of the revenue from LNG and over 20% of the revenue from hot briquetted iron.

Allocation and Trading Issues

Notwithstanding the importance of the international flexibility mechanisms to the task of cost effective abatement, there are many issues that still need to be resolved before the Australian Government considers the detail of a domestic system of trading. The Western Australian Government believes that it is an essential precondition of an efficient domestic emissions trading system that an

international scheme be in place with well established rules and regulations. In this light the Western Australian Government has made it clear that the early introduction of a mandated emissions trading system is not warranted nor desirable.

Translation of the International Emissions Trading mechanisms provided for in the Protocol to the domestic (national) context raises important issues of allocation and units of trade. Many issues of implementation have been considered by the Western Australian Greenhouse Council.

The issue of allocation has provided fertile ground for debate. The adoption of a “cap” on emissions requiring that emissions permits be acquired to legitimise the right to emit, places a high value on a hitherto “free” resource. The question of whether permits are granted in recognition of existing emissions (grandfathering) or sold to emitters (auctioning) revolves around a number of key issues. In relation to grandfathering these issues relate to the whether past behaviour should be rewarded, whether new entrants are disadvantaged, and whether some foreign owned industries will take the permits off-shore at the earliest opportunity. In relation to auctioning there is a general wariness of the revenue raising aspects of such a process and how the revenue will be used.

The decisions on issues such as permit allocation are very important if the risk of perverse outcomes is to be avoided. For example the prospects for the LNG industry to contribute to domestic and international abatement are very good if markets can be secured in such a competitive sector. If the allocation process imposes a costly burden on the industry, such benefits will not be realised.

All trading whether domestic or international requires underpinning by a formal system of certification and valid measurement processes. In addition these processes need to be backed up by recognition of formal liability for purchasers and sellers. All of these processes have the potential to impose significant transaction costs on the trading of carbon. It is essential that the viability of establishing a trading system be assessed before the theoretical assumption of market efficiency is adopted as an alternative to regulation and imposition of mandatory policies.

CONCLUSION

Determination by Australia on whether or not to ratify the Protocol must reflect national strategic policy priorities. The Western Australian Government’s endorsement of the National Greenhouse strategy in 1998 was subject to several conditions, including that the international competitiveness of Australian industry must not be diminished in the effort to achieve compliance with the Kyoto Protocol. The Commonwealth Cabinet decision of 21 August 2000 to protect Australian industries from a reduction in international competitiveness is therefore welcome and this principal must remain paramount in the Commonwealth Government’s consideration of its Greenhouse obligations.

The characteristics of the Australian economy that make the nation vulnerable to the impact of a selective carbon constraint are particularly manifest in Western

Australia. One of the key imperatives for the Joint Standing Committee on Treaties Inquiry should be to highlight to the Commonwealth Government that if the Kyoto Protocol is ratified there needs to be recognition of Australia's particular circumstances. The Western Australian Government is particularly concerned that the Commonwealth will ratify and implement the Protocol without full consideration of the impact on the Western Australian economy.

The Government believes that the JSCOT Committee should recommend that a number of conditions be met before the Commonwealth moves to ratification. The establishment of these conditions should be the focus of the current Inquiry.

Proposed Conditions

- There should be access to the full potential of the flexibility mechanisms of the Kyoto Protocol, to provide least cost abatement options for Australia;
- Australia's particular climatic and land use conditions should be recognised, particularly in definitions used to define what constitutes carbon sinks for the purposes of meeting the Protocol;
- A timetable should be established for entry of developing countries into the Protocol;
- There should be a suitable framework for compliance; and
- The States should be fully consulted on implementation issues such as allocation of permits and a framework for allocation of a domestic emissions trading system.