Australian Government

Department of the Environment and Heritage

Submission to the Productivity Commission
Review of National Competition Arrangements

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INTRODUCTION

The Department wishes to comment on two areas in relation to this Inquiry:

- the first is a broadening of the role of NCP to include more specific focus on environmental issues.
- the second is the inclusion of market based instruments for environmental management within National Competition Policy (NCP), as discussed in the Issues Paper.

The main two areas where NCP has intersected with environmental issues in the past have been with water and energy reforms. While significant progress has been made on each of these issues each has now taken a direction that will see alternative processes determine future outcomes. In the case of water it will be through the National Water Initiative, and, with energy, through the Intergovernmental Agreement on Energy. In addition, the white paper, *Securing Australia's Energy Future,* released on 15 June 2004 seeks to integrate environment and energy policy objectives.

POTENTIAL FUTURE ROLE OF NCP

Potential inclusion of environmental issues

Many environmental issues are indifferent to state borders. For example, many of our river systems cross state borders and habitats for endangered species are not particular to one state. Issues related to salinity and water quality, greenhouse gas emissions and urban air pollution are concerns across all States and Territories. National and multi-national companies conduct business across jurisdictional borders.

In many cases, management of these environmental issues require a national response. It is only at this scale that policy options can be developed that are cost effective, simple, consistent, and provide certainty and avoid duplication. The potential costs of inconsistent approaches can be high, both in terms of transactions costs to industry of meeting different standards or requirements as well as broader costs to society.

A national response to environmental issues is already undertaken through a range of cooperative arrangements between the States and the Commonwealth, including existing Ministerial Councils and COAG. However, the Department believes that National Competition Policy objectives could be broadened to consider a whole suite of areas in relation to environmental protection that affect the efficiency and effectiveness of policy outcomes.

For example, at the macro level there remains a need for the National Competition Council to consider the case where many environmental impacts and assets are not being efficiently provided to the community because externalities in other production and service processes are not being internalised.

We believe the NCP could take a role assessing and guiding more efficient allocation of resources in various sectors. In particular, how State and local governments currently manage these issues and how an assessment of outcomes could be improved would be welcome.

Fertile areas for inclusion into NCP are land use planning, new urban developments, transport planning and allocation of rights to access natural resources such as forests and fisheries.

These areas primarily fall within State and Territory areas of responsibility but can involve resource allocation decisions that have national impacts and implications.

A practical example is the current debate in Sydney where a private firm has called for Sydney Water's sewer network to be opened to competition to enable recycling of effluent. Another area where potential competition issues will need to be addressed will be the imposing of levies for landfill in urban areas and competition between sites.

Current Commonwealth/State mechanisms such as the Intergovernmental Agreement on the Environment (IGAE) and Ministerial Councils on natural resource management and environment protection and heritage matters provide a useful framework to provide for national environmental policy and to address resource allocation issues. Consideration in NCP processes of broader environmental issues would add a further mechanism to support efforts within IGAE and Ministerial Councils to strengthen national environmental outcomes for Australia.

The Intergovernmental Agreement on the Environment (IGAE), signed on 1 May, 1992, acknowledges that there is benefit in establishing national environmental protection standards, guidelines, goals and protocols with the aim of ensuring:

- *That people enjoy the benefit of equivalent protection from air, water and soil pollution and from noise, wherever they live.*

The IGAE incorporated the potential for policies such as the NCP to assist the development of national environmental policies. This was primarily through Schedule 4 in relation to National Protection Measures that sought to ensure that:

- *the decisions by business are not distorted and markets are not fragmented by variations between jurisdictions in relation to the adoption or implementation of major environment protection measures.*

The current heterogeneous system where externalities are addressed differently in different jurisdictions provides a subsidy to some firms and results in less competitive outcomes between some States.

The use of market based instruments for environmental outcomes

There is currently a significant level of interest at all levels of government and from the private sector in the use of market based instruments for environmental outcomes in Australia. Both State and Australian governments are currently piloting or implementing a range of instruments including capping and trading, use of competitive tendering and the introduction of levies.

This Department is increasingly advocating and using market instruments in a range of policy responses. Some examples include:

- The use of tender mechanisms for licence buyout in the Great Barrier Reef Representative Areas Program Structural Adjustment Package.

- Co-funding agreements with the States to undertake water quality improvements through tradeable credits eg the Port River and Barker inlet in South Australia and the Great Barrier Reef lagoon.

- The establishment of management agreements for environmentally important areas through auctioning funds eg Norfolk Island under EPBC legislation.

- Supporting the establishment of revolving funds in each State to encourage environmentally important land to be transferred to owners/managers willing to maintain environmental values.

- The Product Stewardship for Oil Program comprises 2 parts, a levy - benefit system where a levy on domestic and imported petroleum-based oils and their synthetic equivalents offsets the cost of benefits paid to eligible oil recyclers as volume-based incentives to increase the quantity and quality of used oil recycling. The second part of the program, the Transitional Assistance element, provides funding over 7 years for strategic projects to address specific barriers to oil recycling such as those imposed by remoteness and isolation.

There is currently some national coordination and assessment of these mechanisms through the Natural Resources Management Ministerial Council. The Council is currently administering a $5 million National MBI Pilots Program with the aim to 'increase Australia's capacity to use market based instruments to deliver natural resource outcomes'.

However, there are a large number of projects being conducted that are outside of this framework. (see http://www.napswq.gov.au/about/mbi/pubs/review-full.pdf for further details). While some assessment is undertaken on a project-by-project basis, or within the NRMMC National MBI Pilots Program, these are by no means comprehensive processes.

The Department supports further consideration and a more thorough examination of the role that National Competition Policy could play in the assessment of market based instruments.

A range of issues are arising of as a consequence of the piloting of market based instruments that could be considered within a nation-wide assessment process. There is a need for further education of the role that market instruments can play within environmental policy. Areas to be examined include the identification and quantification of transaction costs associated with these new approaches; whether removal of perverse (or environmentally harmful) subsidies will achieve more cost effective outcomes, and whether existing institutional structures successfully manage

these mechanisms. As well, it is important to understand whether these market based approaches can be more efficient than more traditional policy approaches.

While supportive of the use of market based instruments, the Department is concerned to ensure that policy responses are effective. The Department notes that successful policy responses are those where:

- the appropriate approach is tailored to the problem;
- the policy responds to the nature of the market failure;
- there are clearly stated objectives;
- there is a good understanding of the market failure and justification for government intervention; and
- a cost benefit analysis is undertaken to determine the most efficient policy alternative.

Further detail on market based instruments can be found in Attachment A.

CONCLUSION

National competition policy could broaden its focus and become more closely involved in the identification, assessment and development of policy responses to address a broad range of environmental issues. While water and energy issues are being addressed in current policy frameworks and processes the Department sees possible areas for consideration as:

- biodiversity;
- natural resource management issues such as salinity and water quality;
- urban air pollution;
- land use planning;
- new urban developments;
- transport planning; and
- allocation of rights to access natural resources such as forests and fisheries.

This can occur either through developing approaches that result in more efficient use and management of resources in specific sectors or through further application of market based mechanisms to support wider environmental objectives and outcomes.

Attachment A

Further information on Market Based Instruments

Overview of the use of Market Based Instruments for environmental outcomes

Market Based Instruments (MBIs) are policy instruments that use market signals to bring about change. MBIs may be price based (taxes, levies and subsidies), quantity based (cap and trade or offset) or aim to make existing markets work more effectively (enhanced information). MBIs work best in a heterogeneous market where the lowest cost action for the targeted outcome can be revealed.

At present MBIs are being used to achieve environmental outcomes in a wide range of areas, by both Australian and State Governments. Levies have been used to reduce waste and pollution and product taxes have been implemented to encourage a change in behaviour such as recycling (eg product stewardship for oil program). MBIs have also been used for natural resource outcomes such as through input subsidies in the *Natural Heritage Trust* and *National Action Plan for Salinity and Water Quality* programs and outcome subsidies through projects such as BushTender in Victoria. MBIs are also being used to manage pollution management problems by capping environmentally damaging activities and allowing trading to most effectively undertake production within a cap eg the Hunter River Salinity Trading Scheme and Nutrient Trading Scheme in the Hawkesbury Nepean, both in NSW.

One of the more recent applications of an MBI in Australia is the BushTender trial in Victoria. The BushTender approach involves a discriminative price auction mechanism as a means to deliver a set amount of funding for intervention in native vegetation management on private land. A recent assessment of the trial revealed that a traditional grant (fixed price) scheme would have delivered 25% less biodiversity or native vegetation than with a discriminative price auction and a fixed budget (price based MBI) (Stoneham, Chaudrey and Strappazzon, 2002).

The application of MBIs to achieving cost effective and socially acceptable natural resource outcomes is being further investigated through the joint State and Australian Government funded National Market Based Instruments Pilots Program (NMBIPP) under the Natural Resource Management Ministerial Council. Pilots under the program are currently investigating ways to use innovative economic arrangements to encourage better land and water management and to reduce salinity in irrigation based agriculture. Pilots under the NMBIPP began in June 2003 and are expected to be completed in early 2006. The NMBIPP should provide an insight into the characteristics (operational and institutional) that result in the successful application of MBIs. (See http://www.napswq.gov.au/mbi/index.html for more detail on this program).

Issues in the application of MBIs

Despite the popularity of MBIs in current policy development, MBIs should not be viewed as a panacea for achieving environmental gains in all instances. Some issues that need to be considered and possibly researched by the Productivity Commission in a competition context when applying an MBI include:

- **Instruments need to be closely aligned to the policy objective**: Even with a potentially efficient market instrument applying it to a poorly defined environmental goal will not lead to efficient outcomes. For example, a range of MBIs including product taxes, recycling subsidies, deposit refund schemes and landfill levies are currently being applied to manage and reduce waste in most jurisdictions. The application in these situations has not proved as successful as the MBIs are not well targeted to the outcome that they want to achieve. Market failures and policy objectives should be well defined and understood before the instrument is designed (Whitten et al, forthcoming).

The issue of waste is being specifically examined through the EPHC. However, more generally it may be useful for the PC to undertake an assessment of the appropriateness of currently applied MBIs where they are supporting a policy objective that is addressing an identified market failure. This raises the question of whether improved competition would alleviate the market failure in the first place and should NCP reform be targeted to areas with a known and understood market failure?

- **Need to reform perverse incentives first:** Prior to embarking on the use of markets to bring about environmentally positive outcomes it is important to take stock and assess the number of incentives in place that are resulting in unintentional environmental harm.

Through a consistent framework an assessment of incentives currently in place needs to be undertaken. This assessment should analyse the original intention of the incentive, if the incentive is achieving the original intended purpose, positive and negative impacts of the incentive and if the incentive is still needed or objectives can be achieved through other means. Could institutions and frameworks that facilitate greater competition bring about desired change without the need for incentives? Could a more competitive market internalise the currently external cost of environmental impact? Could the NCP framework facilitate this change?

- **Measurement of outcomes and enforcement**: MBIs are currently being applied to manage both point and more recently diffuse source pollution. This is particularly important as many of Australia's environmental challenges have diffuse source characteristics (eg salinity and biodiversity). A critical issue in the use of MBIs to manage diffuse source pollution is the development of consistent, robust and cost effective performance metrics as well as effective enforcement of the instrument.

Metrics for MBIs are currently not well understood. What metrics are needed, how might these be developed? Could improved metrics facilitate more effective implementation of MBIs?

- **Institutional requirements:** MBIs are attractive to Governments as they appear to effectively perform complex allocative tasks. However, the successful operation of MBIs relies heavily on well defined property rights and an effective institutional setting to operate within. Schilizzi (2003) notes that in a number of cases water trading markets, despite having well defined

property rights, are too thin to provide any efficiency gains beyond what could be achieved with more traditional regulatory tools. Piecemeal use of MBIs will not replace fundamental institutional reform or the appropriate operation of well defined property rights.

What are the appropriate institutional arrangements required for the successful application of MBIs? What changes need to be made to current arrangements? How might these changes be made? Can NCP facilitate the allocation of well defined property rights?

- **Transaction costs:** There is a need for significantly further work to be undertaken to examine and assess the relative transaction costs incurred in the application of market based instruments for achieving environmental objectives compared to the benefits gained from improved efficiency of resource allocation and management.

What would be the most effective approach to determine the likely ratio of transaction costs over time as market mechanisms are adopted more extensively?

Conclusion

The support for the use of MBIs to bring about behavioural change and potential environmental gains is becoming widespread, occurring in both industrial and natural resource management settings. The success of MBIs both in terms of efficiency and equity is still being realised. BushTender demonstrated a 25% gain in biodiversity outcomes compared to a standard grant approach for a fixed funding level.

MBIs are not a panacea. To work effectively MBIs require the definition and understanding of the market failure and careful design and application for an efficient result. MBIs require, and certainly do not replace, effective institutional settings and well defined property rights and rules. In many cases, if the institutional arrangements are not effective an MBI will also not be able to achieve effective and desired outcomes. MBIs also need to be designed such that the approach and outcomes are equitable. An instrument that is not observed or even perceived to be equitable by those that the instrument targets will not be readily adopted.

There is still a lot to be learned about the application of MBIs. For many applications the design of the approach and the metrics required to manage, monitor and enforce the approach are resulting in high transaction costs. Whether these costs will reduce as the instrument is more widely used remains to be seen. The NMBIPP will shed some light on the benefits and costs of MBIs, where they are best applied and the potential market requirements (such as those that could be brought about by NCP) that facilitate their successful implementation.

Further research, analysis and assessment by a variety of organisations and consideration of broader use of MBIs by bodies such as the National Competition Council will continue to provide useful support for these mechanisms.

References

Schilizzi, S (2003). *Should equity concerns impose limits in the use of market based instruments.* Invited paper at the AARES National Symposium on market based policy instruments. Canberra, September 2003.

Stoneham G., Chaudrey V. and Strappazzon L, *Auctions for Conservation Contracts, an empirical examination of Victoria's BushTender Trial*, paper presented to the Australian Agricultural and Resource Economics Society annual conference, Canberra, 2002).

Whitten S, van Bueren M. and Collins D., An Overview of Market-Based Instruments and Environmental Policy in Australia, in Whitten S., Carter M. and Stoneham G. (eds), *Market-based Tools for Environmental Management*, Proceedings of the 6th Annual AARES National Symposium, RIRDC, forthcoming.