



**Submission to the
Garnaut Climate Change Review**

Emissions Trading Scheme Discussion Paper – March 2008

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Executive Summary

The Energy Users Association of Australia (EUAA) welcomes the opportunity to provide a submission to the Garnaut Climate Change Review (Review). This document represents the EUAA's response to the *Emissions Trading Scheme Discussion Paper* (Discussion Paper) released by the Garnaut Climate Change Review in March 2008.

The EUAA welcomes the broad remit of the Review, as given by the terms of reference, which is to consider the medium to long term policy options to mitigate climate change with regard to impacts on the Australian economy. The EUAA has previously outlined our views on the elements of a broadly based and economically responsible policy framework to emissions abatement in Australia in a submission to the Prime Ministerial Task Group on Emissions Trading (PMTG) in March 2007.

While we appreciate that much public policy discussion is focused on the most appropriate measures to adopt to create an explicit price for emissions (and being particularly focused on emissions trading as the means for achieving this), the EUAA views it as highly important that consideration be given to existing regulation which creates an existing price for emissions. This regulation comes in the form of duplicative State and Federal renewable energy targets, greenhouse abatement schemes and mandated energy efficiency schemes. These costs are significant, directly adding around \$4-5/MWh in Queensland, \$5-6/MWh in Victoria and \$9-11/MWh in New South Wales to the price of electricity. The price impact of all these various schemes are significant and depending on the jurisdiction, equates to a 10-20 percent increase in the price of generated electricity. **This is prior to an emissions price from an ETS and an expanded 20% Mandatory Renewable Energy Target (MRET) being introduced.**

Factoring into account these measures would raise costs significantly (with estimates that the 20% MRET would add \$6-8/MWh to the final delivered cost of electrical energy, although some of the cost would be subsumed in phasing out State-based renewable targets). Whilst an emissions price will be established by an ETS dependant on the ambition of the emissions reduction trajectory (not yet known), it is noted that Professor Garnaut has put forth the view in various public fora of climate change as "...an urgent and worse problem than initially envisaged."¹

It is the EUAA's strong view that the removal of inconsistent and costly schemes is a necessary precursor to any new policy developments and will help to reduce business uncertainty about climate change policies. The positive impact of clear and consistent policy settings should not be underestimated. Failure to do this would seriously compromise a policy approach to deliver abatement at minimum cost and risk imposing greater compliance burdens of regulations (which EUAA members report to be growing at an alarming rate).

In previous submissions on the design of an ETS, the EUAA has emphasized the introduction of any such scheme risks inequitable, distributional impacts between energy suppliers and end users, and the risk that

¹ Garnaut, R. *Will Climate Change Bring An End to the Platinum Age?* Paper presented at the inaugural S.T. Lee Lecture on Asia and the Pacific, Australian National University, 29 November 2007.

this uneven playing field will be perpetuated for as long as the policy exists. For example, we previously argued that a poorly designed mechanism could unfairly distribute cost impacts on end users, while non-trade exposed electricity suppliers could receive a windfall profit and higher revenues from being able to pass through the cost of carbon. Such a policy would skew the balance of power between suppliers and end users towards suppliers and put the competitiveness of Australian industry (already under pressure from rising production input costs) at risk. This is a fundamental concern of EUAA members.

The EUAA supports a low cost, balanced and measured approach to reducing emissions. We have outlined our preferences for a broadly-based policy framework that takes into account a range of policy measures in a submission to the PMTG in March 2007. In this submission, we focussed on the role of an ETS in the transition to a carbon constrained economy and how it will interact with other key policy measures to address climate change.

Whilst emission reduction trajectories have not been established, it has been stated by the Review that Australia should aspire to emissions reduction targets as set by other developed countries. An emissions reduction target of a magnitude such as that adopted by the European Union (60-80 per cent reductions in emissions by 2050) is sizable and highly ambitious will not be easy to realise and if transposed to Australia, will have significant impacts on energy intensive industries that underpin the Australian economy. It is also higher than the 60% reduction already announced by the Rudd Government. To the extent that developing countries, which are now responsible for most of the growth in emissions, do not adopt quantified targets, any commitment by Australia to targets of such magnitude will do little to address emissions as a global policy problem. Efforts to secure participation of major emitters, particularly developing countries with high emission growth trajectories, in effective bilateral efforts (such as development of low cost abatement technologies and other abatement opportunities) are central to the task of reducing emissions. Any policy to address emissions should be cognisant of the risk that Australia may adopt policies that contribute little to addressing a global problem whilst causing significant economic harm.

It is also likely that a more ambitious target for reduced emissions will require that Australia must adopt additional technologies that we feel less comfortable about, such as nuclear energy.

Overall, the proposals in the Discussion Paper and the Review more broadly have added an independent and highly public perspective to policy ideas about the design of an ETS. This is welcome.

The EUAA considers it positive that the proposed design places emphasis on auctioning as the method of releasing permits to the market, sanctions on the use of permit revenues and a judicious approach to compensating those worse affected. Broadly, the Review's approach is rightly wary that emissions trading, despite its market based virtues, can be corrupted in design and implementation. The non-traded sector can pass on increased costs in energy prices, whereas the competitive position of businesses in trade-exposed, emissions intensive industries would be undermined by their inability to pass on costs.

The EUAA considers that the principles of simplicity, transparency and credibility to guide the design of the proposed ETS are well-founded and agrees that a policy instrument that is administratively less complex to administer, has allocation permit rules that are less prone to market manipulation, market power abuse and

gaming is preferable. Additionally, we see it as important that the design of any scheme minimize scope for parties like traders and the finance sector who will have an incentive to act on self interests to do so, and express some concerns about some elements of the design proposal in the Discussion Paper to address this.

With respect to the key design aspects of an ETS, the elements that the EUAA view positively are:

- **Coverage:** The EUAA supports the Discussion Paper’s proposal that the “coverage should be as broad as possible, within practical constraints imposed by measurability and transaction costs.”
- **Auctioning:** The EUAA supports the approach that is to favour auctioning of permits to covered sectors. This would be consistent with the principles of simplicity, transparency and credibility in scheme design that the EUAA sees as important. In particular, we recognize that providing free permits to non-trade exposed, power generators did not prevent the pass through of increased electricity costs to energy end users under the EU ETS.
- **TEEIs:** The EUAA welcomes that the Review has identified Trade Exposed Emissions Intensive Industries (TEEIs) as needing treatment under an ETS to avoid detracting from our competitive position in international markets. Any evaluation for compensation, however, will inevitably be subject to best assessments by the administrative authority. The EUAA considers it important that the process of assessment be conducted fairly and transparently, and with minimal administrative complexity, with opportunity for those assessed to respond to the evaluating body’s determinations. Compliance costs should also be taken into account in designing the frequency and processes for evaluation. Importantly, even though an approach to determine the most trade exposed, emissions intensive firms is proposed, recognizing the case for compensation as stronger in some cases, the demarcation would be arbitrary and will result in disadvantages to firms that fall outside the definition of TEEI, resulting in inevitable additional costs to these energy users.
- **Governance:** The EUAA views positively the proposal for an independent carbon bank authority to oversee the implementation of an ETS.
- **Emissions Trajectories:** The EUAA welcomes that further work, including economic modelling is being done to inform the emissions reduction trajectories for the ETS, given the significant and widely dispersed economic impacts of the introduction of such a scheme. The community should be provided with robust information about the costs on climate change policies and the costs of business-as-usual. The need to prescribe circumstances for which the emission trajectories will be considered for change is also important to the credibility of the scheme and market certainty. Assumptions used in this modelling and draft results should be shared with those affected to ensure the most robust results possible.

With respect to the key design aspects of an ETS, the elements that the EUAA views as requiring further assessment and consideration are:

- **Price ceilings:** No price ceiling or cap being applied would result in greater uncertainty about the emissions price established by the market, which can be volatile. A pure cap and trade approach without a price cap has the problem of setting the quantity of emissions reductions with the marginal costs to the economy unknown, which makes the economic costs more uncertain. The price

certainty feature can be designed into an emissions trading market through the setting of a ceiling on the permit price or ‘safety valve’, as previous proposals have suggested. Particularly as the introduction of an ETS creates significant opportunity for financial institutions and traders to act in self interest, the EUAA is concerned about the risks of not having a safety net price for emissions in an untested and unproven market.

- **Allowance for borrowing and unlimited hoarding:** Particularly in the absence of a price ceiling on permits and the proposal to allow covered entities to borrow permits to meet their emission liabilities for current periods, the EUAA is concerned that unlimited hoarding is allowable. The EUAA expresses the concern that private sector traders, acting on self interest, may have incentive to hoard permits or withhold trade of permits held to keep their prices higher than would otherwise be the case.

The EUAA is also concerned about the potential market consequences of lending by authorities. While there may be a role for institutional lending as a last resort in a market not functioning as it should, any intervention in the market place by the injection of lending by authorities only introduces more market uncertainty and appears to represent the assumption of some level of financial risk by the Government.

- **Penalties and make-good provisions:** The EUAA considers that the concept of an additional ‘make good’ provisions applying to the non-compliant parties, requiring them to rectify any overrun of emissions, is not clear given that a financial penalty is proposed. The additional requirement to make good appears excessive, in view of a financial penalty which presumably would be set at a level that takes into account the cost of acquiring permit shortfalls. There is also a need to ensure that the market is working well before an onerous penalty regime is imposed.
- **Recognition of early action abatement:** The Discussion Paper does not address the issue of early action credits from the covered sectors in any detail, though the Climate Change Group, as part of the Department of Prime Minister and Cabinet issued a Discussion Paper on Early Abatement Incentives in December 2007. In its response to that paper,² EUAA emphasised the need to recognise those who had undertaken proactive steps to reduce their emissions and the importance of the approval process for early action credits and offsets to be such that administrative and transaction costs are streamlined and kept to a minimum.
- **Interaction with an expanded MRET:** The MRET would effectively cut across an ETS and impede its ability to deliver least cost abatement through carbon pricing. The proposed 20% MRET would impose a substantially higher economic path to reducing a given level of emissions (compared with an ETS alone) and would have significant implications for the generation mix, including the crowding out of lower emission generation such as gas fired plant and cogeneration. The EUAA considers it important that there be a rigorous examination of the policy thinking underpinning the target, its costs and impacts as this has implications for not only price but also security of supply, and welcomes the fact that the Review is further considering the policy interaction of MRET with an ETS.

² EUAA’s “Submission to the Climate Change Group, Department of Prime Minister and Cabinet” dated December 2007.

- **Demand management:** The EUAA considers it important that the Review examine the benefits of demand management to offset supply side dominance in electricity markets – as we believe that it has application in the emissions reduction policy framework. Activating demand side response through means such as facilitation efforts, capacity building, the introduction of smart meters (combined with price signals for peak use) would go some way to obviating the ever-increasing ‘need’ to build generation plant borne out of the growth in peak demand. In effect, demand management could reduce the size of the future investment needed for Australia’s stationary energy sector to keep pace and hence, contribute to reducing the stock of emissions.
- **Energy efficiency:** The Discussion Paper suggests the use of part of the auction revenue to address market failures that impede the take up rate of energy efficiency and energy conservation by consumers. This is welcome and should be given priority. Existing schemes for mandated energy efficiency, however, overlap and impose multiple obligations on energy users. There is a need for rationalisation and focus at the national level, preferably around the Energy Efficiency Opportunities scheme. The EUAA supports the view that the price effects of an ETS would render energy efficiency more attractive, and provide an additional incentive for uptake. The need for separate schemes should also be assessed in this context.

1. Introduction

The Energy Users Association of Australia (EUAA) welcomes the opportunity to provide a submission to the Garnaut Climate Change Review (Review). This document represents the EUAA's response to the *Emissions Trading Scheme Discussion Paper* (Discussion Paper) released by the Garnaut Climate Change Review in March 2008 and a number of other papers released by the Review.³

The EUAA welcomes the Review, including the broad remit as given by the terms of reference, to consider the medium to long term policy options to mitigate climate change with regard to impacts on the Australian economy. The EUAA has previously outlined our views on the elements of a broadly based and economically responsible policy framework to emissions abatement in Australia in a submission to the Prime Ministerial Task Group on Emissions Trading (PMTG) in March 2007.⁴ We also welcome the independence of the Review, its public processes and the wide range of issues that are being canvassed. This has opened up significant opportunities to assess, debate and discuss a range of significant issues concerning the adoption of an ETS. Hopefully, this will improve the architecture of the final ETS adopted for Australia, as well as the estimation of its costs.

The EUAA understands that the process of releasing the Discussion Paper and other papers is a public policy consultation measure in advance of the draft report of the Review due for release in June 2008, and a final report of the Review, due to the Federal, State and Territory Governments in September 2008.

While we appreciate that much public policy discussion is focused on the most appropriate measures to adopt to create an explicit price for emissions (and being particularly focused on emissions trading as the means for achieving this), the EUAA views it as highly important that consideration be given to existing regulation which creates an existing price for emissions. This regulation comes in the form of duplicating State and Federal renewable energy targets, greenhouse abatement schemes and mandated energy efficiency schemes.

The EUAA welcomes the Council on Australian Government (COAG) intention to 'ensure an effective national response to climate change' based on a national ETS and nationally consistent greenhouse measures, as well as intentions to remove duplicitous energy efficiency reporting.⁵ However, insofar as the phase out of the duplicative reporting burdens remain unimplemented, and the processes for achieving this remain opaque, it is imperative that consideration be given to their impact on energy end users, both in terms of direct costs and the indirect compliance costs of these schemes. With the introduction of emissions

³ The Garnaut Review had also recently released three preceding papers: Paper # 3: Climate Change and Emissions Stabilisation, Paper # 4: R&D: Low Emissions Energy Technologies and Paper # 5: Transport, Planning and the Built Environment. As the points in the above three papers are largely subsumed in the Discussion Paper, EUAA has incorporated its response to Papers 3, 4 and 5 in this submission.

⁴ *EUAA Submission to the Prime Ministerial Task Group on Emissions Trading*, 19 March 2007.

⁵ COAG meeting, December 2007.

pricing, it can be expected that the cost of energy will increase (probably substantially) over time and this will encourage greater energy efficiency in any case.

1.1 EUAA Interest in Climate Change Policy

The EUAA is a non-profit organisation focused entirely on energy issues with membership of 100. Members determine the EUAA's policy and direction; and our activities cover both national and state issues. Our membership represents a wide spectrum of end users located in all states, and is predominantly comprised of large business users of energy with activities across all states and many sectors of the economy.

EUAA members have a strong interest in regulatory developments associated with climate change and emissions trading policy. In addition to price impacts that would fall on all end users in an environment where carbon pricing exists, the majority of EUAA members are likely to have a direct obligation under any resultant emissions trading scheme. As such, EUAA members have a significant interest in the chosen policy instrument, and its efficiency in establishing an emission price.

Some EUAA members are extremely energy intensive and have exposure to international competition, including from countries that do not have enforceable emission reduction goals under the Kyoto protocol.

1.2 Review's Guiding Principles for an ETS

At this stage, the Review is seeking comment on the proposed general principle approach to an ETS. The paper's basic scheme design proposal is for an emphasis on auctioning as the method of releasing permits to the market, the judicious use of revenue and a judicious approach to compensating those worse affected (and excluding the non-traded sectors claims for compensation), all predicated on the principles of simplicity, transparency and credibility. Overall, the EUAA considers that the principles to guide the design of the proposed ETS are well-founded and agrees that a policy instrument that is administratively less complex to administer, has allocation permit rules that are less prone to market manipulation, market power abuse and gaming is highly desirable. Additionally, we see it important that the design of any scheme minimize scope for gaming by parties like traders and the finance sector, who will play an important role in the success of an ETS but who also have an incentive to act on self interests, and we express some concerns about some elements of the design proposal to address this. Our concerns are discussed in further detail in Section 3.6 of this submission.

In previous submissions on the design of an ETS, the EUAA has emphasized that the introduction of any such scheme risks inequitable, distributional impacts between energy suppliers and end users, and the risk that this uneven playing field be perpetuated for as long as the policy exists. For example, we previously argued that a poorly designed mechanism potentially will unfairly distribute cost impacts on end users, while non-trade exposed electricity suppliers could receive a windfall profit and higher revenues from being able to pass through the cost of carbon. Such a policy would redistribute wealth from end users towards suppliers and put the competitiveness of Australian industry at risk.

Beyond the principle of design, the details and rules will be a key determinant of how energy end users will be impacted. We emphasise to the Review the importance of consultation with energy users on all aspects of an ETS.

1.3 Objective of the ETS (Page 12)

The stated objective “To provide a transactional space that enables the transmission of permits to economic agents for whom they represent the greatest economic value” is, in layman’s terms, the creation of an efficient market in permits.

However, this objective of an ETS should be enlarged to include an explicit sub-ordinate objective such as “to eliminate the need for the current plethora of regulations relating to renewable energy, energy efficiency and voluntary reporting schemes so that the policy space is not congested with duplicating regulations.”

In the absence of this, an ETS would act as an extra layer of policy initiative on top of disparate initiatives, all of which add transactional costs to consumers in general, and the businesses in particular.

1.4 A Pure Cap and Trade Approach – Price Implications

We are acutely aware that in an environment of heightened community concerns about climate change, there are pressures to act and the emphasis at the political level has been on emissions trading as the most logical way to do so. Some have justified the support for a cap and trade approach with the argument that countries are converging on this as a common approach. However, apart from the established schemes in the EU and US (the latter limited to sulphur dioxide only), the recent start up of cap and trade emissions trading in New Zealand, and consideration of similar approaches in California and ten north-east states in the US, many countries continue to explore or have implemented alternative policy instruments to control emissions. These options include taxes, emission limits and technology standards.

The starting premise of the Discussion Paper in Page 10 is that the ETS is the “most efficient means to achieve the mitigation required as compared to other market instruments such as the carbon tax”. We acknowledge that Prof Garnaut has publicly acknowledged the need for a well designed ETS, the risks of a corrupt ETS, and are encouraged by the emphasis on good design. However, we are concerned that, despite the significance of the climate change issue and the substantial impacts on the economy, any real debate about other policy approaches, including the feasibility of an emissions tax have been bypassed. An examination of the different policy options to reducing emissions would have at least provided an informed basis to choosing the optimum policy approach. The EUAA considers there is scope for the positive elements of the emissions tax approach to be encompassed in the chosen design parameters of any ETS. These are further discussed in [Appendix 1](#).

In addition, depending on how policy approaches in other countries proceed, the Federal Government may be confronted with alternatives in negotiations within a global framework, and should take this into account in domestic policy making on climate change policy.

From a business customer viewpoint, the price certainty feature of a carbon tax approach is attractive. This feature could be designed into an ETS through a ceiling price or a 'safety valve'. EUAA considers that a ceiling price provides some price and investment certainty. This is needed at least until the ETS market has matured in operation.

2. Costs of Existing Policies

Existing greenhouse gas measures introduced by Commonwealth and State Governments already impose a significant carbon cost on end users. These include a Commonwealth Mandatory Renewable Energy Target, various State renewable energy targets (eg New South Wales, Victoria, South Australia and Western Australia), other greenhouse gas abatement measures in both New South Wales and Queensland, energy efficiency obligations at the national level, and in New South Wales and Victoria (with Queensland following suite). These measures raise the cost of energy to large end users directly and also indirectly, as a result of compliance costs to meet the requirements of a multitude of inconsistent schemes. They are also inconsistent with and work against the ‘cut red tape’ policy of the Council of Australian Governments and individual Governments.

The EUAA has estimated the cost impacts of a number of large scale greenhouse gas abatement schemes already in force. The cost of these schemes and likelihood of their discontinuation are important to the consideration of future policy responses. One of the attractions of an ETS is that it should make the need for such policies superfluous in terms of the goal of reducing emissions.

Table 1 outlines details of existing Commonwealth and State based greenhouse gas abatement schemes and their indicative cost impacts modeled at the peak of targeted abatement.

Table 1 – Cost Impacts of Federal and State Greenhouse Gas Abatement Schemes

Initiative	Duration/ Target	Additional cost
Renewable Energy Targets		
Commonwealth Mandatory Renewable Energy Target (MRET)	2001 - 2020 9,500 GWh by 2010	\$1-2/MWh
	This target is to be expanded to 60,000 GWh by 2010-2020.	\$6-8/MWh
Victorian Renewable Energy Target (VRET)	2007 – 2030 3,274 GWh by 2016	\$4/MWh in VIC (10%)
New South Wales Renewable Energy Target (NRET) ^a	2008 – 2030 7,250 GWh by 2020	\$5-6/MWh in NSW (15-20%)
Queensland Renewable and Low Emission Energy Target ^b	Requirement to increase renewable and low emission technologies for energy generation by 10% by 2020	Not yet known
Greenhouse Gas Abatement		
Emissions Trading Scheme	Emission trajectories being modeled	Not yet known
New South Wales Greenhouse Gas Abatement Scheme (GGAS)	2003 - 2020 ^c Obligation on retailers to meet predetermined greenhouse gas abatement target.	\$3/MWh in NSW
Queensland Gas Electricity Certificate	2005 – 2020 18% of wholesale electricity purchased in Queensland to be derived from eligible gas fired sources ^d	\$3/MWh in QLD

Energy Efficiency Schemes		
Commonwealth Energy Efficiency Opportunities (EEO)	Mandatory requirement for energy users who use over 0.5 PJ per annum to complete detailed 'corporation-wide' assessments of energy use	Compliance costs
NSW Energy Savings Actions Plan/Energy Savings Fund	Energy users in NSW who use more than 10 GWh per annum at a site are required to provide binding plans to reduce energy consumption, or peak demand	\$1/MWh in NSW and compliance costs
Queensland Smart Energy Savings Program/Energy Savings Fund ^a	Medium-to-large energy users to complete energy conservation audits and develop energy management plans detailing actions that reduce energy use.	Not yet known
Victorian Environment and Resource Efficiency Plans (ERP)	Requires site based integrated energy, water and waste assessments. Mandatory for the largest 250 energy users in Victoria and mandatory to implement saving with a <3 year pay back.	Compliance and implementation costs
Notes:		
<p>(a) Bill introduced to NSW Parliament in June 2007.</p> <p>(b) Policy announced by Queensland Government as part of <i>Climate Smart 2050</i> strategy.</p> <p>(c) In 2007, the NSW Government indicated that it would abolish GGAS with emissions trading, however , it released a consultation paper in April 2008 indicating that the scheme will operate in parallel with an ETS between 2010-2012.</p> <p>(d) The Qld Government has announced in increase in the scheme target from 13 to 18 per cent and also an extension in its life to 2020. This cost is based on the existing 13 per cent target.</p> <p>(e) Policy announced by Queensland Government as part of <i>Climate Smart 2050</i> strategy.</p>		

These costs are significant, adding around \$4-5/MWh in Queensland, \$5-6/MWh in Victoria and \$9-11/MWh in New South Wales. This is prior to an ETS and an expanded 20% MRET being introduced. The price impact of all these various schemes are significant and, depending on the jurisdiction, equates to a 10-20 percent increase in the price of generated electricity.

These costs will already have a dramatic impact on energy prices as a production cost for end users, and come on top of other cost pressures in production, a decline in productivity growth in the economy and increasing challenges to the competitiveness of our industries from overseas.

The existing carbon related imposts already provide a quasi carbon price and should already be having an impact in reducing emissions from the stationary energy sector, but we believe that this is being muted by the inefficient and duplicative policies being used at present.

It is the EUAA's strong view that the removal of inconsistent and costly schemes is a necessary precursor to any new policy developments, including an ETS, and will help to reduce business uncertainty about climate change policies. The positive impact of clear and consistent policy settings should not be underestimated. Failure to do this would also seriously compromise the Federal Government's policy objective to deliver abatement at minimum cost.

In the EUAA's view, it would certainly be less costly per emission reduced to have a single national ETS than the plethora of duplicative inefficient and costly measures that have developed over the past decade. In introducing an ETS, any policies that do not perform a useful role should be abandoned as quickly as possible and should be subsumed in an ETS.

3. Key ETS Design Proposals

This section looks at the key design elements of an ETS outlined in the paper. These design aspects of the ETS will be critical in terms of how well and efficiently the scheme operates, how workable it is and what costs it imposes on energy users. Page references in brackets refer to the scheme design discussion paper released by the Review.

3.1 Coverage (Page 14, 27)

In its submissions to the PMTG in March 2007, the EUAA had advocated that the scheme should cover the widest range of direct and indirect emitting sectors and include all measurable greenhouse gases.⁶ As such, the EUAA supports the Discussion Paper's proposal that the "coverage should be as broad as possible, within practical constraints imposed by measurability and transaction costs."

The EUAA supports the paper's approach of including all six greenhouse gases included in the Kyoto Protocol. It is important that all gases contributing to climate change be included in the ETS.

EUAA also agrees with the Discussion Paper's principle that "a sector should be included in the ETS if the costs of distortions in abatement allocation decisions associated with its exclusion from the ETS would exceed the costs of measurement and verification".

It is proposed that "emitters in covered sectors will have an obligation to acquit permits under the scheme" but does not discuss the mechanism by which permit allocation to individual sectors, and the emitters within sectors, will be determined. EUAA's members would want to know how their individual obligations to acquit permits will be decided, and what role they would have in such a process. EUAA would recommend this aspect to be fully covered in the Review's draft report in June 2008.

EUAA accepts that some sectors may not be quite ready to be included in an ETS but would stress that difficulties in measurement and verification of emissions in some sectors should not be used as an 'excuse' to indefinitely postpone bringing them into the covered sector. The Review should clearly specify the time frame for such sectors to become part of the ETS, so that the principle of widest possible coverage becomes a reality in a reasonably short time frame. It should also emphasise the importance of beginning work as soon as practicable to overcome any impediments, such as fair and workable measurement, preventing the inclusion of a sector. This includes the period before the implementation of the ETS in 2010.

3.2 Auctioning (Pages 15, 31 – 34) and Use of Revenue (Pages 18-19, 53-56)

It is proposed in the Discussion Paper that all permits be auctioned on a fixed, regular schedule, and at the earliest instance to promote price discovery. Free allocation is not favoured as it is argued that this would be complex, have high transaction costs and require judgments susceptible to rent seeking.

⁶ EUAA *Submission to the Prime Ministerial Task Group on Emissions Trading* dated 19 March 2007.

In the main, the EUAA supports the approach of auctioning of permits to covered sectors. This would be consistent with the principles of simplicity, transparency and credibility in scheme design that the EUAA sees as important. Potentially permits could be auctioned by sector, with unsold permits available for general auction. In particular, it recognizes that providing free permits to non-trade exposed, power generators did not prevent the pass through of increased electricity costs under the EU ETS and also limits assistance to those most affected (trade exposed, emissions intensives and low income households). Importantly, we consider that auctioning reduces the scope for generators to benefit from windfall profits as a result of being compensated for increased production costs, and higher revenues from being able to raise wholesale energy prices in a non-trade exposed environment. The EUAA understands that affected generators, mainly coal-fired, should be able to pass on most of the increased costs of the ETS, perhaps 80 per cent or more. This alone suggests that they do not have a strong case for substantial compensation via the allocation of free permits. This is an area where the NETS and PMTG seem to have erred.

Affected generators have also argued that they will suffer a loss of asset value and should be compensated for this as it is due to a change in government policy. However, the change in asset value will not be immediate and will depend on the trajectory adopted. There could be a significant period of transition and this will cushion the impact of lost asset values. The plants most impacted are generally also the oldest coal fired plants and it is debatable how long they would have continued to operate in the absence of an ETS?

In any case, the principle behind compensation for loss of value should be carefully considered by the Review (and the Government). There are many changes that take place in the economy that are due to a change in Government policies that affect the asset values of companies, eg changes in industry protection, changes in interest rates, changes in tax, budget decisions, changes in franchise, and affected companies do not necessarily receive compensation. Decisions taken in relation to ETS will also be 'high profile' and may be used as a precedent in other cases in future.

Some affected generators have also claimed that the introduction of an ETS will cause them to close early and that this could be soon after the ETS start-up, thus raising the spectre of power supply reliability issues. The Review should examine any such claims closely to test their veracity. Naturally, energy users would be extremely concerned if the ETS resulted in power reliability problems, but we note that this will not necessarily be the case. To begin with, the ETS trajectory will play a big role in determining when existing coal fired plant is retired. This is likely to provide some cushion. Furthermore, it can be assumed that new lower emission generation plant will be built under an ETS but that this will not happen immediately. Existing generators will not necessarily close until new plant is built as they will still be dispatched into the market (most likely at higher prices) and will still be earning a commercial return on their asset.

It is noteworthy that within the Discussion Paper, it is suggested that there should be scope to use the proceeds of auction revenues to compensate for changes in income distribution, including that of a structural nature. From the perspective of a reduction in wealth and income of shareholders of firms in the non-traded sector, it is suggested that assistance to communities facing decline should receive support in the form of financial assistance to affected firms (eg those predominantly generating electricity from coal). The EUAA

supports the principle that revenue from an ETS should partly be used to assist those who are made worse off by the change and are least able to afford it. However, we note that the provision of regional assistance in the past has a mixed track record and care will be needed to ensure that any such assistance is well targeted and efficiently allocated. In view of our belief around the risks of compensation and need for it to be done judiciously, the EUAA cautions that this not be used as a possible 'back door' means of compensating coal fired generators.

The above suggest that claims by generators for free permits (or other compensation) need to be carefully assessed and in the broader context of the case for compensation for the effects of government decisions.

Our support for auctioning, however, needs to be prefaced with our strong view that adequate safeguards are put in place to ensure specific appropriation of permit revenues by Government to help reduce emissions or compensate/provide adjustment payments to those most adversely affected. It would be inappropriate for auction permit revenue to be used to increase the Government's revenue base, and also detrimental to public support for the introduction of an ETS.

Free allocation raises complex questions about defining the parameters to assess those that are the most adversely affected parties and provides scope for rent seeking behavior. It requires careful design to take into account distributional impacts. Generators are not trade exposed, and whilst they could see some indirect negative impacts of load adjusting to higher energy prices, they would be in a position to pass through the increases in higher power costs. Therefore, a critical factor in any compensatory approach that will determine the 'balance of power' between electricity suppliers and end users is the rules governing the assessment of adverse impacts and how broadly this is applied. Given the revenue at stake, the interest of energy producers to game scheme design will be high, and asymmetries in information will compound issues in compensation that policymakers face. Any allocation method that results in a transfer of wealth and is administratively complex and costly would badly skew the balance of power between suppliers and end users to a greater extent than already the case in the electricity market. This is a fundamental concern of policy that has been expressed by EUAA members.

The EUAA also notes that one of the most pernicious impacts of the EU scheme was, in fact, that generators received free allocations of permits far in excess of any legitimate claim they might have had for these and that this affected and continues to affect the credibility of the EU ETS. EUAA members with operations in the EU regularly express concern and cynicism about this matter. Australia should not repeat the mistake.

The issuing of permits either via free allocation or auctioning under an ETS raises many issues which are discussed in further detail in [Appendix 2](#).

The argument that auctioning is a preferred means to promoting price discovery in new markets is based on rational economic theory, however markets, particularly in the early stages of formation and establishment, may not always act in rational ways. If the auctioning process were to result in unanticipated turbulences and price uncertainties in the early stages, the credibility of the nascent ETS will be negatively affected. As such, it would be advisable to carry out detailed simulation modelling of the market behaviour under the

proposed auction system over a range of scenarios, in order to better determine that it will work in the way economic theory suggests it should.

3.3 Avoiding Distortions in Trade-exposed Emissions-intensive Industries (TEEIs) (Pages 38 – 40 and Appendix 3)

The Discussion Paper has outlined that Trade Exposed, Emission Intensive Industries (TEEIs) would need to be compensated potentially in the form of free permits or cash payments to the extent that the introduction of an ETS in Australia increases the cost burden of the TEEIs compared to their competitors overseas that do not face a carbon price.

The paper covers the principles that would be adopted in determining the amount and duration of such assistance – to be applied by the Independent Carbon Bank (ICB) – these include the materiality of Australian carbon prices in impacting on the TEEI's market share, prices that would have prevailed if all competitors faced similar levels of carbon prices, and progressive improvements to emissions-efficiency for well-managed firms in the relevant industry. It is proposed that the ICB have vested information discovery powers to assess claims for financial support, assessments be potentially undertaken at yearly intervals and payments would be made as closely as possible to the loss of revenue.

The EUAA welcomes that the Review has identified TEEIs as needing treatment under an ETS to avoid negative distortions to competitive position in international markets, and particularly that this approach isolates production that has trade exposure from that which does not. The lack of compensation to emission intensive businesses with trade exposure would result in competitive disadvantage to firms that compete in export markets with producers not similarly affected, or face competition in the domestic Australian market from imports from producers in unaffected countries, as these firms cannot pass through increased costs without a loss in competitive position. In such cases, there is a legitimate reason for compensation, as without it, Australia would be placing such firms at a competitive disadvantage by implementation of a carbon price. Additionally, many of Australia's trade competing industries are competing in countries where carbon pricing, emissions trading schemes and specific emission reduction goals do not apply, and are unlikely to in the foreseeable future. In addition failure to compensate may also give rise to an incentive for firms to relocate operations to countries where emission constraints do not apply, which does not auger well economically and in terms of emissions reduction as a global problem.

Any evaluation for compensation, however, will inevitably be subject to best assessments by the administrative authority. The EUAA considers it important that the process of assessment be conducted fairly and transparently, and without undue administrative complexity, with opportunity for those assessed to respond to the evaluating body's determinations. Compliance costs should also be taken into account in designing the frequency and processes for evaluation. In making these points, we recognise the importance of ensuring there is a robust and accountable process for receipt of compensation and are seeking a balanced outcome.

We look forward to the Review providing further details and engaging with energy end users in defining the eligibility criteria for an industry sector or a company to be treated as a TEEI, the type of international trade and market data that would be required to support the case for compensation, and how compensation would be calculated for on-site emissions and for increased input energy costs due to carbon prices.

While the focus of the PMTG and NETT have been on free allocation of permits to address competitiveness impacts, there are other approaches to addressing competitiveness loss. For instance, it has been suggested that border adjustments potentially provide an alternative approach to preserving international competitiveness of TEEIs, while maintaining the carbon price signal within the domestic economy. For industries that compete in export markets with producers not similarly affected by emissions costs, border adjustments would rebate firms on increases in production costs, as applied only to exported products. For industries that face competition in the domestic market from imports from producers unaffected by emission costs, a border adjustment would take the form of a levy on the imported good. Such an approach is to isolate compensation to the unequal production costs of goods with international competitive exposure, whereas the free permit allocation makes no such distinction.

Importantly, even though an approach to determine the most trade exposed, emissions intensive firms is proposed, recognizing the case for compensation is stronger in some cases, the demarcation would be arbitrary and will result in disadvantages to firms that fall outside the definition of TEEI, resulting in uncompensated costs to these energy users. Energy users at the margin will not be protected from the impacts of the ETS. The phasing out of assistance to TEEIs with the implementation of carbon schemes by competing countries would also raise issues about how to assess the ‘equivalency’ of such schemes with those for carbon in Australia and how to treat their trajectory.

3.4 Price Ceilings (Page 36)

The Discussion Paper argues against setting price ceilings or floors, stating that “in a credible and efficient scheme, the market is capable of assuming these risks into the price at any point in time and into the future price curve”. While these may be valid in an efficient and mature market, the EUAA believes that price ceilings inject a much-needed certainty for investment decisions, particularly in the nascent stages of the ETS.

No price ceiling or cap being applied would result in greater uncertainty about the emissions price established by the market, which can be volatile. A pure cap and trade approach without a price cap has the problem of setting the quantity of emissions reductions with the marginal costs to the economy unknown, which makes the economic costs more uncertain. The price certainty feature can be designed into an emissions trading market through the setting of a ceiling on the permit price or ‘safety valve’, as previous proposals have suggested.

Particularly as the introduction of an ETS creates significant opportunity for financial institutions and traders to become active and profit from the new market with strategies such as hoarding of permits, the EUAA is concerned about the risks of not having a safety net price for emissions in an untested and unproven market.

3.5 Penalties and Make-good Provisions (Pages 17, 44)

It is proposed that, as a means of enforcing compliance with the permit acquittal obligations, a penalty for non-compliance and also a provision to make good liabilities not met would apply. The latter would require parties with emissions in excess of its permit holdings to acquire and surrender an additional quantity of permits sufficient to cover excess emissions.

Alternatively, it is proposed that revenue from the financial penalty could be used by the government (or its agency) to purchase abatement equivalent to the non-compliant party's shortfall. In that case, the penalty level would need to be sufficient to cover the cost of purchasing equivalent abatement through permits or offset credits on the open market.

The EUAA considers that the concept of an additional 'make good' provisions applying to the non-compliant parties, requiring them to rectify any overrun of emissions is not clear given that a financial penalty is proposed. The additional requirement to make good appears excessive, in view of a financial penalty which presumably would be set at a level that takes into account the cost of acquiring permit shortfalls.

There is also a need to ensure that the market is working well before an onerous penalty regime is imposed. In the early stages of introduction, common in immature markets, factors such as an illiquid or a shallow market or an auction system that is prone to the exercise of market power by the bigger purchasers may introduce difficulties for efficient, timely and cost-effective acquisition of permits by liable parties. The EUAA recommends that, in the early years of an ETS being operative, a focus on compliance without financial penalties with no make good provisions, and for these to be phased in as parties grow to understand their liabilities.

3.6 Inter-temporal Use: Banking and Borrowing (Pages 16, 37)

The Discussion Paper proposal is for unlimited banking of permits, that is, for unused permits to be saved to meet emissions allowances in the future. The proposed approach is to allow limited quantity (and potentially time restricted) official borrowing by the ICB (allowing parties to use permits from the future to retire against current emission liabilities, on the condition that the loan for the permits be repaid).

Whilst being generally supportive of banking, particularly in the absence of a price ceiling on permits and the proposal to allow covered entities to borrow permits to meet their emission liabilities for current periods, the EUAA is concerned that unlimited hoarding is allowable. The EUAA expresses the concern that private sector traders, acting on self interest, may have incentive to hoard permits or limit permit trades to keep their prices higher than would otherwise be the case.

The EUAA is also supportive of borrowing in principle, but is concerned about the potential market consequences of lending by authorities, despite the Discussion Paper's assurance that the regulatory authorities would undertake prudential monitoring of the level of lending. While there may be a role for institutional lending as a last resort in a market not functioning as it should, any intervention in the market

place by the injection of lending by authorities only introduces more market uncertainty and appears to represent the assumption of some level of financial risk by the Government. Furthermore, prudential monitoring is no guarantee that ‘bad debts’ would never occur, with the US sub-prime lending being the most recent example.

3.7 Domestic Offsets (Pages 14, 29) and Early Action Credits

The Discussion Paper recommends unlimited use of domestic offsets, particularly for those sectors not covered by the ETS. This approach is similar to the ones in the NETT and the PMTG reports, except that as the ETS coverage becomes broader, the role of offsets would automatically diminish.

The EUAA supports the use of domestic offsets, and suggests that consideration should be given to check if, and how, energy efficiency and conservation can be incorporated into a domestic offsets regime. The experience of the NSW Greenhouse Gas Abatement program in relation to certified demand side abatement should be taken into account in such an analysis, including how the issues raised by the Discussion Paper such as ‘eligibility dates’ and ‘additionality’ were handled. There is a substantial body of experience in relation to design, measurement and verification of demand side and energy efficiency programs to facilitate the inclusion of these ‘low hanging fruits’ as part of the domestic offsets in the ETS.

The Discussion Paper does not address the issue of early action credits from the covered sectors in any detail, though the Climate Change Group, as part of the Department of Prime Minister and Cabinet issued a Discussion Paper on Early Abatement Incentives in December 2007. In its response to that paper,⁷ EUAA emphasised the need to recognise those who had taken proactive steps to reduce their emissions and the importance of the approval process for early action credits and offsets to be such that administrative and transaction costs are streamlined and kept to a minimum. EUAA hopes that the draft report on ETS in June 2008 will consider this issue in depth and provide clear policy directions.

3.8 Point of Obligation (Pages 15, 30, 31)

The Discussion Paper does not establish an emitting threshold for the obligation to acquire and acquit permits, but refers to a point where practical (previous proposals applied an obligation on direct emitters above 25 kt CO₂ equivalent). This implies a certain degree of flexibility in defining the point of obligation. In Page 31, it also refers to the possible need for netting out fuel sales to a manufacturing process (for example, plastics) which produces few or no emissions from an upstream party’s obligations.

This logic could be applied in another instance as well, namely that emissions by generators include those resulting from higher generation to make up for transmission and distribution losses. Given that the National Electricity Market has detailed historical and current data on transmission and distribution loss factors in all jurisdictions, the Discussion Paper should consider including electricity transmission and distribution businesses into the ETS, and netting out these losses from upstream (i.e. generator) obligations.

⁷ EUAA’s “Submission to the Climate Change Group, Department of Prime Minister and Cabinet” dated December 2007.

This idea is also consistent with the Discussion Paper’s own proposal “to include fugitive emission from the pipeline systems.” There does not appear to be any compelling reasons to include gas transmission in the covered sector, but not the electricity networks.

The Discussion Paper notes that the point of obligation should be determined by the ease, cost and accuracy of monitoring and estimating emissions, and it is noted that ‘where transaction costs are lower than the cost of distortions that may arise, upstream or downstream may be appropriate.’ To minimise compliance costs and individualised operational circumstances that may involve a significant number of sites, EUAA members have suggested an allowance to ‘opt-in’ facilities (as available under the New South Wales Greenhouse Gas Abatement scheme) to avoid charges from upstream suppliers for imputed emissions.

3.9 International Trade and Linkages (Pages 16, 35 and Appendix 2).

In an ideal world, linkages between different ETS schemes (either through acceptance of equivalent permits from other schemes or tradable certificates representing emission reductions under the Kyoto mechanism) would provide greater opportunity to access the lowest cost abatement. However, as the Discussion Paper highlights, issues with implementation, governance and the additionality of various mechanisms would need to be considered in any moves to seek linkages. As such, the EUAA would tend to agree that a judicious and calibrated approach to international linkage be sought as such a process will result in the importing of the attributes and behaviour of other schemes (including price volatility) to the domestic scheme.

At the same time, the EUAA considers that the linkages should be unambiguous to provide certainty to businesses who may seek to access linking mechanisms as a means of managing their emissions liability.

An additional issue we wish to raise about linking is that its unrestricted use, whilst having numerous advantages including access to more cost effective abatement, can also have some consequences that could have a dramatic impact on how an Australian ETS affects us. For example, linking to the EU scheme could result in that scheme setting our permit price because of the sheer size of the EU scheme. In that regard, we note that the current EU permit price is around €25/t CO₂e.⁸ Such a price would impose significant shocks on the Australian economy, especially in the early years of an ETS amounting to a doubling in the price of electricity.

The absence of any ETSs in countries such as the United States, China and India also makes linking more limited and raises uncertainties in terms of the design of any future schemes in such countries. This should be carefully considered by the Review.

3.10 Governance (Pages 17, 40)

The EUAA welcomes the proposal for the establishment of “an independent authority (for example, an Independent Carbon Bank, ICB)”, with a high degree of executive independence, analogous to the Reserve

⁸ Point Carbon website <<http://www.pointcarbon.com/>> at 21 April 2008.

Bank of Australia. The ICB would administer the ETS (release of permits, assess eligibility for payments/permits to TEEIs, manage the fiduciary requirements with permit lending) and enforce compliance. The clear delineation of the roles of the Government and that of the ICB, as an independent authority, as stated in the paper is strongly supported.

It is not clear whether the ICB will, in addition to the financial and commercial aspects, also regulate the process of GHG measurement, verification and acquittal. There is a need to keep the total cost of regulations as low as possible consistent reducing red tape and with the maintenance of an efficient and effective emissions market.

3.11 Emissions Reduction Trajectories and Modelling (Pages 18, 22 – 27)

The Discussion Paper outlines that economic modelling currently underway will inform the setting of the emission reduction trajectories (targets) for the ETS, and that quantified trajectories will be released with the draft report of the Review in June 2008. The proposed structure for reductions is:

- The overall emissions limit to be expressed as a trajectory of annual emissions targets over time
- Four trajectories to be specified upon establishment of the ETS. The first is to coincide with the end of 2012 - Australia's Kyoto commitments. The other three should reflect increasing levels of ambition in reducing emissions.
- Changes in trajectories to be made five years in advance, under defined conditions (eg – international policy developments, scientific advances). Any discrepancy between domestic and international commitments to be reconciled by Australia purchasing international permits.

The proposed framework differs to previous proposals, which favoured a range of possible future caps (gateways) set for the subsequent decade, with gateways set narrower for the first five years, and extended at five-yearly intervals. Although it is noted that conditions for movement in the trajectory, with five years notice, would be defined under the approach under the Discussion Paper, the EUAA considers that the gateway approach may provide a better balance between flexibility in the scheme operation, stability in permit prices and investment certainty that is important to capital investment in abatement. Potentially moving from one trajectory to another could give rise to a price shock, even five years in advance.

The Discussion Paper does not quantify the emission reduction trajectories, but outlines a basic framework for establishing the emission pathways. However, in the Review's *Interim Report to the Commonwealth, State and Territory Governments* in February 2008, it was stated that "Australian should make firm commitments in 2008, to 2020 and 2050 emission targets that embody similar adjustment cost to that accepted by other developed countries"⁹, with reference to commitments by the European Union of 60-80 per cent reductions in emissions by 2050.

⁹ The Garnaut Review, *Interim Report to the Commonwealth, State and Territory Governments*, February 2008.

An emissions reduction target of at the higher end of this scale is sizable and highly ambitious, will not be easy to realise and will have significant impacts on energy intensive industries that underpin the Australian economy. They are also higher than the 60% reduction already announced by the Rudd Government and would need to be based on robust analysis. To the extent that developing countries, which are now responsible for most of the growth in emissions, do not impose quantified targets, any commitment by Australia to targets of such magnitude will do little to address emissions as a global policy problem. Efforts to secure participation of major emitters, particularly developing countries with high emission growth trajectories, in effective bilateral efforts (such as development of low cost abatement technologies and other abatement opportunities) are central to the task of reducing emissions. In the absence of this, there is a risk that Australia adopts policies that contribute little to addressing a global problem whilst causing significant economic harm.

It is also likely that a more ambitious target for reduced emissions will require that Australia must adopt additional technologies that we feel less comfortable about, such as nuclear energy.

Climate change policy is often predicated on reducing emissions by spending resources on abatement, with an efficient path for mitigation determined by an efficient price on emissions. An efficient path to reducing emissions will also be influenced by expenditure that is to adapt to the impacts of climate change. More recent studies by of the impacts of climate change, eg by Mendelsohn (2006) and Tol (2002), suggest that with adaptation, the costs of climate change are smaller than previously thought, and suggest estimates at the lower end of the emission price range. Potentially, adaptation may prove cost-effective as a policy measure, as it is to address the consequences of warming that exacerbate existing problems (such as coastal flooding) and represents a normal Government response to an environmental changes regardless of whether it happens to be naturally occurring or human induced.¹⁰

The EUAA welcomes that further work, including economic modelling, is being done to inform the emissions reduction trajectories for the ETS, given the significant and widely dispersed economic impacts of the introduction of such a scheme. The need to prescribe circumstances for which the emission trajectories will be considered for change is also important to the credibility of the scheme and market certainty.

The EUAA considers that the criteria for changing trajectories should also be supplemented with stated, preferred sources providing the scientific basis for choice in trajectories, given that scientific opinion on climate change is wide ranging and to reduce the risk that changes will be made which ‘top up’ the latest information and targets.

Regarding the modelling to be undertaken, the EUAA strongly supports the need for this given the important economic impacts and structural/regional effects likely to result from an ETS. The community’s ‘need to know’ the costs and benefits of an ETS relative to business-as-usual should be given a high priority. The Treasury has written to the EUAA advising us of its modelling and seeking input from members to inform its inputs to the modelling. We have made our members aware of this.

¹⁰ Lawson, N *The Economics and Politics of Climate Change – An Appeal to Reason, A Lecture to the Centre for Policy Studies*, November 2006.

We support undertaking robust modelling that shows the impacts on the electricity and other covered sectors, the impact on energy prices and the broader economic impacts. Our understanding is that the Treasury modelling will do this. We also understand that the modelling will be shared by this Review and the Government's work on the ETS design.

We believe that the introduction of an ETS will be assisted if the modelling involves:

- Consultation with affected parties, including energy users, on the assumptions and parameters to be used and testing of their robustness; and
- An opportunity to comment on modelling results before they are finalised.

We urge this Review to adopt such an approach.

4. Interaction with Other Policy Measures

This section covers the interaction of the ETS with other policy measures that restrict emissions. Once again, the page references in brackets refer to the Discussion Paper.

4.1 Interaction with MRET (Pages 50, 51)

The Discussion Paper notes that with the announcement of the expanded MRET, more expensive renewable energy will be deployed, resulting in a higher cost to achieving a given level of emission constraint. It is noted that the interactions of the ETS with the MRET are being analysed for discussion in future reports. We are aware of recent reports that the proposed 20% MRET would impose a substantially higher cost path to reducing a given level of emissions (compared with an ETS alone) and would result in black coal displacing lower emission, natural gas as a source for new generation. Potentially under a scenario with emissions trading to achieve the emissions reduction required, gas power generation would play a greater role in the generation mix as a transition fuel.

The EUAA is concerned a policy with a focus on renewables is not consistent with a low cost approach to emissions mitigation, as it forces energy users to pay for higher cost renewable energy in electricity generation and forgo other lower cost, low emissions abatement alternatives. Potentially, as the Discussion Paper notes, the MRET would effectively cut across an ETS and impede its ability to deliver least cost abatement through carbon pricing. The EUAA notes that, in a recent paper, the Productivity Commission questioned whether the expanded target would in fact be complementary to an ETS, and ‘...the special status accorded the MRET needs to be rethought.’¹¹

The sizable increase in the target (from the existing renewable energy target of 2% by 2010 (9,500 GWhpa) also poses implications for the generation fuel mix that will emerge with any ETS operating in concert with a 20% MRET. It is quite conceivable, for example, that the 20% MRET by 2020 will override the ETS and distort the structure of generation towards high cost renewable technologies that will crowd out other lower cost and lower emissions technologies, eg gas fired generation and cogeneration. This would impose higher costs on the economy than would an ETS. The crowding out of gas generation may even prolong the life of some coal based generation – perhaps even the most emission intensive plant – and inadvertently make our emissions reduction target more difficult to achieve.

These impacts could be compounded if, as is possible, the 20% target can only be achieved by moving towards wind farms that are high cost (eg due to the need to use poorer wind resources or develop plants in areas that are more remote from the electricity network) or into higher cost non-wind renewable energy technologies.

¹¹ Banks, G. *Riding the Third Wave: Some Challenges in National Reform* [Paper presented to the Economic and Social Outlook Conference, Melbourne], 27 March 2008.

The other impact that concerns us is that a 20% renewable energy target may make the power system less reliable and more difficult to manage due to the intermittent nature of wind and some other renewable technologies. This is a well known problem with some renewable technologies, including wind, and the general view seems to be that a 20% target will create such problems.

The impact of the mandated renewable target should be re-assessed, rather than being assumed as complementary to an ETS approach. This is particularly in view of any ETS with an aggressive emissions reduction trajectory or one that does not seek to establish a low starting price for carbon to minimize the initial impact to the economy. It is imperative to keeping the total cost of any policy approach as low as possible; an explicitly stated aim of the Federal Government in terms of introducing an ETS.

The EUAA considers it important that there be rigorous examination of the policy thinking underpinning the target, its costs and impacts on the generation merit order in the NEM, as this has implications for not only price but also security of supply.

Ideally, if an efficient ETS were in operation there would be no need for separate regulatory measures such as MRET for promoting renewable energy. An ETS is technology-neutral and allows the price of carbon to determine technology choices. Having both ETS and MRET at the same time is a sub-optimal particularly from an economic viewpoint, as it adds to the regulatory impost faced by business customers. It may well also be a case of multiple and conflicting policies for single objectives. If the emissions trajectory established under emissions trading is sufficient to promote many currently uneconomic low-emission technologies, this would negate the need for Government to specify technology-specific emissions targets via MRET.

The EUAA welcomes that further work is being done by the Garnaut Review to assess how a proposed ETS would interact with the proposed expanded MRET.

4.2 Developing Low-Emissions Technologies

The Discussion Paper identifies that outside an ETS, a role for Government to address market failures associated with the research, development and commercialisation of low emission technology, and suggests that some of the permit revenue collected should be directed towards such purposes.

The EUAA agrees with this approach, as the emergence of technologies, some of which offer zero or close to zero emissions, will be a vital part of a low cost and environmentally effective path to managing carbon. These technologies can be fossil fuel based (carbon capture and storage, clean coal, coal drying, oxy-firing, nuclear), or renewables based (hydro, biomass, wind solar, thermal, wave). The portfolio mix of the above technologies, and the time taken to progress their development would be a crucial determinant of the extent of the increase in energy prices. There is still significant uncertainty around the question of how well an emissions trading scheme will stimulate the development of more nascent technologies.

Technological progress is a key to reducing emissions. New technology can have a profound impact in the development of cleaner energy. Therefore, we consider that support for research and development should

continue to be an important part of a policy approach to assist low emissions technologies reach a level of technological maturity that is required for them to be cost-effective. An important caveat to this, however, is that Governments should not pick specific technology winners, or seek to fund an industry focused on particular technologies.

The Discussion Paper suggest that some of the revenue generated by permit auctions should be used to fund technological developments. Whilst we agree with this, care will be needed to design an approach to funding that delivers good and timely outcomes, and avoids wasteful expenditure.

4.3 Demand Management

The EUAA has long argued the benefits of demand management to offset supply side dominance in electricity markets – and we believe that it has application in the emissions reduction policy framework as well. Activating demand side response through means such as facilitation efforts, capacity building, the introduction of smart meters (combined with price signals for peak use) would go some way to obviating the ever-increasing ‘need’ to build generation plant borne out of the unbridled growth in peak demand. In effect, demand management could reduce the size of the future investment needed for Australia’s stationary energy sector to keep pace and hence, contribute to reducing the stock of emissions.¹²

The need to manage the demand for carbon emitting technologies is particularly important given that low emissions technology will take time to arrive. The EUAA has consistently argued that Governments need to take more seriously policies to incentivise demand management. We were therefore pleased to see the Council of Australian Governments request the Ministerial Council on Energy (MCE) to address a range of important demand management issues.

Policies need to provide the price signals to indicate that increasing demand for power has a price, and the current MCE smart meter initiative (which also suffers from focusing only on demand side activity at the household level) falls short of achieving this. Demand response at the large user level has a number of impediments to activation, such as the need to educate businesses that demand side response actually ‘works’ and provide them with the means to make better use of it. This is likely to provide ‘low hanging fruit’, as it will be far more cost effective than the MCE focus on the higher transaction costs household sector.

Another considerable barrier is that the deployment of demand response during times of high demand is a decision made by market suppliers and not end users (due to curtailment clauses in agreements between retailers and large users), and in some cases the commercial incentive to facilitate a demand response is not aligned with individual user or broader market benefits. Moreover, the National Electricity Market (NEM) has no real means of activating demand response and energy network businesses have no incentive to utilize

¹² See for example, our report on a trial of a demand side response facility in the National Electricity Market (EUAA, *Trial of a Demand Side Response Facility for the National Electricity Market: Independent Consultant's Report*, April 2004) and the follow up case studies with a number of sectors offering the potential for high take up (EUAA, *Demand Side Response in the National Electricity Market Case Studies*, April 2005).

demand response, preferring to add capacity. These barriers need to be addressed. Whilst it is true that demand management is more concerned with the lopping of peaks in demand, and so will tend to displace peaking plant, which is mainly gas fired and lower emissions, there are ways in which it can make a useful contribution to the overall goal of lower emissions. This includes displacing some of the emissions from gas fired generation (N_{ox} and S_{ox}), reducing transmission losses and encouraging greater investment in technologies that also save energy.

The EUAA is currently finalising a Demand Management Action Plan that will set out many of the known barriers to demand response and develop actions to deal with each of them.¹³ However, the role of Governments and regulators is critical to removing various impediments and to supporting measures to stimulate demand management.

One can argue that had the NEM been designed to be inclusive of demand side responses, it might have contributed to Australia's emissions reductions in the last ten years. The Review should consider carrying out an analysis of the impact of the NEM design on emissions growth, and assess any lessons that could be learnt from the NEM experience, before finalising the ETS design features.

4.4 Energy Efficiency: (Pages 51, 52)

The introduction of an ETS should underpin the importance of energy efficiency measures and the need for energy efficiency and conservation. The Discussion Paper suggests the use of part of the auction revenue to address market failures that impede the take up rate of energy efficiency and energy conservation by consumers. This is welcome and should be given priority.

Greater involvement and investment in energy efficiency can save industry costs and at the same time contribute to the dual goal of using less energy and reducing emissions. At the large end user level, there are a number of schemes currently in place (or in development) that will mandate energy audits and (in some cases) also mandate implementation actions. Provided such schemes are well designed and attuned to commercial reality, they can make a positive and lasting contribution to Australia using less energy, using it more efficiently and reducing emissions.

One significant problem, however, is that these schemes overlap and impose multiple obligations on energy users. There is a need for rationalisation and focus at the national level, preferably around the Energy Efficiency Opportunities scheme. The Discussion Paper notes that the price effects of an ETS would render energy efficiency more attractive, and that these schemes would benefit from harmonisation. The interactions of the ETS with energy efficiency schemes are being analysed by the Review for discussion in future reports.

Since the time of our submission to the PMTG in March 2007, cost imposts from State-based mandated energy efficiency management have continued to grow adding indirect compliance costs to business. These developments are additional to existing federal energy efficiency requirements, voluntary programs such as

¹³ EUAA, *An End User Action Plan for Demand Management*, forthcoming.

Greenhouse Challenge Plus and new reporting under the National Greenhouse and Energy Reporting System (NGERS) which are to commence in July 2008. The EUAA considers that costs arising from such schemes should be taken into account with the introduction of measures to establish an ETS. Failure to do so would risk compliance burdens of regulations eclipsing the economic costs of increased energy prices.

There are also multiple programs at Commonwealth, State and industry level available that provide various forms of assistance with energy efficiency. According to the Productivity Commission's recent report on energy efficiency, there were over 100 such programs spanning a 5-year period.¹⁴ This multiplicity of programs must create scope for overlap, waste, confusion and low uptake. They should be reviewed and rationalised in order to produce more effective results, including both lower energy use and emissions.

One concern for the EUAA is that there is little in the way of incentives provided to large users to help them improve their energy use in areas that go beyond commercial hurdle rates. Governments increasingly want large users to do more. They are already doing a fair bit because it makes good commercial sense to do so. If Governments want them to go beyond this, it would be important to provide an incentive mechanism to encourage it.

As mentioned above, financial assistance provided thus far tends to be rather too narrow in its focus and broadening this to include energy efficiency, demand management, cogeneration and other lower emissions technology makes good sense. Options could include financial grants, energy efficiency research, development and deployment assistance or tax concessions. The revenue generated by auctioning of ETS permits provides an avenue to do this.

Finally, we also note that domestic users of energy can play an important role in saving energy and reducing emissions. The domestic sector is responsible for 9 per cent of emissions and 12 per cent of energy use and needs to be included in any strategy to lower energy use and emissions.

4.5 Impact on Electricity Prices (Page 51)

It is essential to ensure that the electricity price increases arising from the ETS is passed on to consumers equitably. If electricity retailers are unable to pass all these costs on to residential customers due to the existence of retail price caps, it is likely that disproportionate costs of carbon might be borne by other customer classes, principally the business customers. Pending the introduction of Full Retail Contestability (FRC) and the removal of retail price cap in all jurisdictions, some mechanism is needed so that energy retailers have the ability to pass through the full carbon prices to all customers equitably, and not be forced to exacerbate the existing cross-subsidy of residential users by business users.

Ultimately, the level of electricity price increases, changes to generation mix and loss in asset values experienced by incumbent emitters will be governed by many factors. Firstly, the emissions trajectory

¹⁴ Productivity Commission, *The Private Cost Effectiveness of Improving Energy Efficiency*, Report No.36, October 2005.

chosen by the Government for the period to 2020, and how steep the mandated emissions reductions will be is a critical factor. A slow ramp rate will mean lower price increases initially.

Secondly, the physical supply-demand balance in the electricity market is another key factor. In a supply constrained environment, all generators are likely to be operating despite an upward shift in their cost curve and any reduction in the market share of the coal fired generators may be more than compensated by the increase in prices they get for their sales.

The fact remains, however, that coal is the overwhelming source of Australian electricity, and the transition to a low-carbon based energy over some decades must be managed judiciously, and taking into account cost-effective developments in various low-emission technologies. The Discussion Paper draws on recent findings by the CSIRO, Bureau of Meteorology and the international Intergovernmental Panel of Climate Change showing that Australia would be worse affected by global warming than other developed countries and also points out that our contribution to global emissions is very small (around 1.5%). This underscores the importance of securing actions by major emitter countries as argued by the EUAA in its submission to the PMTG, but also the need for our mitigation actions to be designed and implemented well so as to avoid penalising the Australian economy with unnecessary and recurring costs.

5. Conclusions

The EUAA supports a low cost, balanced and measured approach to reducing emissions. We have outlined our preferences for a broadly-based policy framework that takes into account a range of policy measures in a submission to the PMTG in March 2007. In this submission, we have focussed on the role of an ETS in the transition to a carbon constrained economy and how it will interact with other key policy measures to address climate change.

The proposals in the Discussion Paper have added an independent perspective to policy ideas about the design of an ETS. The EUAA considers it positive that the proposed design places emphasis on auctioning as the method of releasing permits to the market, limits on the use of permit revenues and a judicious approach to compensating those worse affected. It is the fact that the Discussion Paper is wary that emissions trading, despite its market based virtues, can be corrupted in design and implementation is also seen as realistic. The non-traded sector can pass on increased costs in energy prices, whereas the competitive position of businesses in trade-exposed, emissions intensive industries would be undermined by the inability to pass on costs.

The EUAA considers that the principles of simplicity, transparency and credibility to guide the design of the proposed ETS are well-founded and agrees that a policy instrument that is administratively less complex to administer, has allocation permit rules that are less prone to market manipulation, market power abuse and gaming as preferable. Additionally, we see it as important that the design of any scheme minimize scope for parties like traders and the finance sector to act purely on self interest and express some concerns about elements of the design proposal in this area.

With respect to the key design aspects of an ETS, the elements that the EUAA view positively are:

- **Coverage:** The EUAA supports the Discussion Paper’s proposal that the “coverage should be as broad as possible, within practical constraints imposed by measurability and transaction costs.”
- **Auctioning:** The EUAA supports the auctioning of permits to covered sectors. This would be consistent with the principles of simplicity, transparency and credibility in scheme design that the EUAA sees as important. In particular, we recognize that providing free permits to non-trade exposed, power generators may not be justified and did not prevent the pass through of increased electricity costs to energy end users under the EU ETS.
- **TEEIs:** The EUAA welcomes that the Review has identified TEEIs as needing treatment under an ETS to avoid negative distortions to their competitive position in international markets. Any evaluation for compensation, however, will inevitably be subject to best assessments by the administrative authority. The EUAA considers it important that the process of assessment be conducted fairly and transparently, and with minimal administrative complexity, with opportunity for those assessed to respond to the evaluating body’s determinations. Compliance costs should also be taken into account in designing the frequency and processes for evaluation. Importantly, even though an approach to determine the most trade exposed, emissions intensive firms is proposed, recognizing the case for compensation as stronger in some cases, the demarcation would be arbitrary and could result in disadvantages to firms that fall outside the definition of TEEl, resulting in inevitable additional costs on these energy users.
- **Governance:** The EUAA positively views the proposal for an independent carbon bank authority to oversee the implementation of an ETS.
- **Emissions Trajectories:** The EUAA welcomes that further work, including economic modelling is being done to inform the emissions reduction trajectories for the ETS, given the significant and widely dispersed economic impacts of the introduction of such a scheme. The need to prescribe circumstances for which the emission trajectories will be considered for change is also important to the credibility of the scheme and market certainty.

The elements of key design aspects of an ETS that the EUAA views as requiring further assessment and consideration are:

- **Price ceilings:** No price ceiling or cap being applied would result in greater uncertainty about the emissions price established by the market, which can be volatile. A pure cap and trade approach without a price cap has the problem of setting the quantity of emissions reductions with the marginal costs to the economy unknown, which makes the economic costs more uncertain. The price certainty feature can be designed into an emissions trading market through the setting of a ceiling on the permit price or ‘safety valve’, as previous proposals have suggested. Particularly as the introduction of an ETS creates significant opportunity for financial institutions and traders to pursue their own self interest, the EUAA is concerned about the risks of not having a safety net price for emissions in an untested and unproven market.
- **Allowance for borrowing and unlimited hoarding:** Particularly in the absence of a price ceiling on permits and the proposal to allow covered entities to borrow permits to meet their emission

liabilities for current periods, the EUAA is concerned that unlimited hoarding is allowable. The EUAA expresses the concern that private sector traders, acting on self interest, may have incentive to hoard permits or withhold trade of permits held to keep their prices higher than would otherwise be the case.

The EUAA is also concerned about the potential market consequences of lending by authorities. While there may be a role for institutional lending as a last resort in a market not functioning as it should, any intervention in the market place by the injection of lending by authorities only introduces more market uncertainty and appears to involve the assumption of some level of financial risk by the Government.

- **Penalties and make-good provisions:** The EUAA considers that the concept of an additional ‘make good’ provisions applying to the non-compliant parties, requiring them to rectify any overrun of emissions is not clear given that a financial penalty is proposed. The additional requirement to make good appears excessive, in view of a financial penalty which presumably would be set at a level that takes into account the cost of acquiring permit shortfalls. There is also a need to ensure that the market is working well before an onerous penalty regime is imposed.
- **Recognition of early action abatement:** The Discussion Paper does not address the issue of early action credits from the covered sectors in any detail, though the Climate Change Group, as part of the Department of Prime Minister and Cabinet issued a Discussion Paper on Early Abatement Incentives in December 2007. In its response to that paper,¹⁵ EUAA emphasised the need to recognise those who had undertaken proactive steps to reduce their emissions, and the importance of the approval process for early action credits and offsets to be such that administrative and transaction costs are streamlined and kept to a minimum.
- **Interaction with an expanded MRET:** The MRET would effectively cut across an ETS and impede its ability to deliver least cost abatement through carbon pricing. The proposed 20% MRET would impose a substantially higher economic path to reducing a given level of emissions (compared with an ETS alone) and would have significant implications for the generation mix, including the possible crowding out of lower emissions gas generation plant. The EUAA considers it important that there be rigorous examination of the policy thinking underpinning the target, its costs and impacts, as this has implications for not only price but also security of supply, and welcomes the fact that the Review is further considering the policy interaction of MRET with an ETS.
- **Demand management:** The EUAA considers it important the Review examine the benefits of demand management to offset supply side dominance in electricity markets – as we believe that it has application to the emissions reduction policy framework. Activating demand side response through means such as facilitation efforts, capacity building, the introduction of smart meters (combined with price signals for peak use) would go some way to obviating the ever-increasing ‘need’ to build generation plant borne out of the growth in maximum demand. In effect, demand management could reduce the size of the future investment needed for Australia’s stationary energy sector to keep pace and hence, contribute to reducing the stock of emissions.

¹⁵ EUAA’s “Submission to the Climate Change Group, Department of Prime Minister and Cabinet” dated December 2007.

- **Energy efficiency:** The Discussion Paper suggests the use of part of the auction revenue to address market failures that impede the take up rate of energy efficiency and energy conservation by consumers. This is welcome and should be given priority. Existing schemes for mandated energy efficiency, however, overlap and impose multiple obligations on energy users. There is a need for rationalisation and focus at the national level, preferably around the Energy Efficiency Opportunities scheme. The EUAA supports the view that the price effects of an ETS would render energy efficiency more attractive, and that this will increase the uptake of energy efficiency in any case.

APPENDIX 1

Comparing Emissions Trading and Carbon Taxes

There is much literature which debates the relative merits of emission taxes compared to emissions trading as an effective instrument for the control of emission levels. Emissions trading and taxes are both incentive based policy approaches that establish an emissions price. However, they differ significantly in their operation.

In a cap-and-trade system, the total amount of admissible emissions is limited by the amount of permits issued. Those emitters that have lower abatement costs than the permit price will reduce their emissions while others will buy the necessary permits. The price of permits is determined by the costs of avoiding a further unit of emissions when the cap is reached. Emissions taxes, on the other hand, fix the price directly and emissions will be reduced up to the point where the costs of abating further emissions exceed the tax rate. With an emissions trading system, the amount of emissions is fixed, but the emissions price and thus the costs an emitter is willing to incur to mitigate emissions is uncertain. In contrast, with an emissions tax the tax rate and thus the (marginal) costs to the economy are fixed, but there is uncertainty about the level of emissions reduction that can be achieved.

If perfect information about the future costs and benefits of mitigation are known, either emissions trading or a tax can be used to induce the desired emissions reduction. If the abatement cost curve were known it would be possible to set a tax rate such that a given quantity is reached, or a cap such that the permit price will reach a given level. If the benefits of mitigation were also known, the optimal level of emissions could be determined and implemented by either a tax or a tradable quota. However, the benefits and abatement cost curves are presently not known, and are likely to change over time (e.g. with new abatement technology or changes in economic growth).

A positive aspect of a carbon tax is that it is price based, so it avoids the cap and trade problem of setting the quantity of emissions reductions with the marginal costs to the economy unknown, which makes the economic costs more uncertain.

A further advantage of the carbon tax approach is that it can produce a strong incentive to innovate and avoid the distortionary effects to innovation that can arise with poorly designed emissions trading schemes. A carbon tax is arguably administratively less complex to administer than an emissions trading market with detailed allocation permit rules, less prone to market manipulation and market power abuse, and could provide greater transparency to businesses. Additionally, it would be less influenced by traders and the finance sector.

However, like any tax, a carbon tax could end up growing in complexity over time thus increasing dead-weight costs to the economy and, in the absence of appropriate safeguards, the revenue gained could be retained for revenue purposes by Governments (although as previously indicated, so too could the proceeds

of auctions of tradable permits). Like emissions trading markets, a carbon tax requires close monitoring, in this case to establish the effect of tax rates on rates of emissions.

The eminent economist, William Nordhaus, who has been the leading advocate of the carbon tax approach, suggests that like emissions markets, but with greater precision, emission prices can be adjusted over time, with a carbon tax trajectory, to achieve whatever limits policymakers decide best balance the estimated costs of climate change with the estimated benefits of abatement.¹⁶ Nordhaus advocates the use of a price-based approach on the basis that they can more easily and flexibly integrate economic costs, whereas quantitative limits may produce high volatility in the market price for carbon and create an artificial scarcity in permit rights that encourages rent seeking behavior.

¹⁶ Nordhaus, William, 2007, 'To Tax or Not to Tax: Alternative Approaches to Slowing Global Warming', p.43.

APPENDIX 2

Permit Allocation – Free Issue vs. Auction

The Discussion Paper notes that the chosen emission permit issuing methodology would influence the efficiency of financial markets. The experiences of the European Union Emissions Trading Scheme (EU ETS) are highlighted in the Issues Paper, where the predominant use of free allocation of permits is argued to have had a dampening effect on abatement effort, working as a subsidy and preventing firms from facing upfront permit costs. The Issues Paper infers that the effect of free allocation is to impact negatively on the efficiency of financial markets limiting incentive to abate and sell excess permits, resulting in fewer permit trades and hindering early price discovery and the emergence of strong, transparent forward markets.

Policy makers have a number of choices in determining how many permits each emission source that is covered under the scheme should receive, and for how long. Permits should be allocated to parties on the basis that they are adversely affected by the scheme, should not create perverse incentives to continue to emit, should acknowledge early actions taken by parties to develop low-emissions strategies and should encourage the emissions market participants to reduce the carbon intensity of their operations. In addition to the impacts on financial markets, each method will have important equity and incentive impacts that will need to be carefully considered.

Free allocation

Allocating permits in accordance with existing emissions has built in incentive difficulties, in that it does not reward firms that have already undertaken action to reduce emissions, but penalizes them, through the issue of emission permits in proportion to reduced emission levels. Firms that have not undertaken emission reductions would be rewarded, and if permits continued to be issued on a historical emission basis, it would provide further perverse incentive to increase present emission levels to provide a larger base for future allocations.

The decision to issue permits freely also raises issues about the entities that should be the recipients of free allocation and the equity impacts of such a decision – as the approach in the EU ETS demonstrates. Under that scheme, permits were freely allocated to the generation sector and industry as they were assessed as the worst affected. The suggested basis for compensation proposed by the NETT and PMTG (for the loss of asset value, on a once off basis and only to sectors with sunk assets that are disproportionately affected) purports to address the shortcomings in the historical emissions approach of the EU ETS, and the associated problems with the periodic issue of permits, incentives to delay emission reductions and gaming for continued free allocation.

This approach is to provide compensation, and risk making ‘winners’ out of the largest polluters; exposing governments to a potentially significantly high liability over a long period of time. The compensation to generators would seem not to acknowledge the ability of these entities to pass-through increased costs and

benefit from wind-fall profits.¹⁷ Arguments that high emitting, coal fired generators, in particular would be worst affected and that lower emission generation would be promoted up the merit order, provides poor grounds for compensation as this is consistent with the intended outcome of emissions pricing – to reduce emissions when lower emission generators expand and higher emission generators contract. Arguably there is a greater case for the generation sector to not be insulated from the impact of carbon pricing, given that it contributes to half of total domestic emissions and is strongly correlated with Australia's emission intensity levels.¹⁸

The policy mechanism to achieve the 'de-carbonisation' of the economy, however, should not be applied with disregard to genuine losses in competitive outcomes. The lack of compensation to emission intensive businesses with trade exposure would result in competitive disadvantage to firms that compete in export markets with producers not similarly affected, or face competition in the domestic Australian market from imports from such unaffected producers, as these firms cannot pass through increased costs without a loss in competitive position. In such cases, there is a legitimate reason for compensation, as without it, Australia would be placing such firms at a competitive disadvantage by implementation of a carbon price. Many of Australia's trade competing industries are located in countries where carbon pricing, emissions trading schemes and specific emission reduction goals do not apply, and are unlikely to do so in the foreseeable future. In addition to the economic cost of disadvantaging domestic industry, it may also give rise to the incentive for firms to relocate operations to countries where emission constraints do not apply, which does not auger well in terms of emissions reduction as a global problem.

Previous work on a domestic emissions trading scheme by the NETT and PMTG have acknowledged the need for a mechanism to avoid damaging the competitiveness of trade exposed, emissions intensive industry (TEEI), until such a time as international competitors face similar emission constraints. Professor Garnaut also indicated in a public address last year that '...there are good reasons for special treatment of exceptionally emissions intensive, trade-exposed industries during the transition to widespread and broadly comparable international carbon pricing.'¹⁹ The proposal by the PMTG involved continuing free permits, allocated five yearly, for existing investments equivalent to carbon costs of industrial processes and indirect production costs. Over time, and also for new investments, permits would be issued on the basis of costs incurred using best practice technology.

However, we note that even if an approach to determine the most trade exposed, emissions intensive firms were devised, recognizing the case for compensation as stronger in some cases, the demarcation would be arbitrary and will result in disadvantages to firms that fall outside the definition of TEEI, resulting in inevitable additional costs on all other energy users. Some of these energy users will be in sectors that are still exposed to international markets, and being at the margin, will not be protected from the impacts of increased energy prices. The phasing out of assistance to TEEIs with the implementation of carbon

¹⁷ Phase II of the EU ETS is to tighten free allocation rules so that there is a reduced allocation, mainly to the power sector

¹⁸ Australian Greenhouse Office, *National Greenhouse Gas Inventory 2005*, 2005, p.1.

¹⁹ Garnaut, Ross, 'Will Climate Change Bring An End to the Platinum Age' (Paper presented at the inaugural S.T. Lee Lecture on Asia & the Pacific, Canberra, 29 November 2007), p.12.

schemes by competing countries would also raise issues about how to assess the ‘equivalency’ of such schemes with those for carbon in Australia.

While the focus of the PMTG and NETT have been on free allocation of permits to address competitiveness impacts, there are other approaches to addressing competitiveness loss. For instance, it has been suggested that border adjustments potentially provide an alternative approach to preserving international competitiveness of TEEIs, while maintaining the carbon price signal within the domestic economy. For industries that compete in export markets with producers not similarly affected by emissions costs, border adjustments would rebate firms on increases in production costs, as applied only to exported products. For industries that face competition in the domestic market from imports from producers unaffected by emission costs, a border adjustment would take the form of a levy on the imported good. Such an approach is to isolate compensation to the unequal production costs of goods with international competitive exposure, whereas the free permit allocation makes no such distinction.

Free allocation raises complex questions about defining the parameters to assess those that are the most adversely affected parties and may provide scope for rent seeking behavior. It requires careful design to take into account distributional impacts. Generators are not trade exposed, and whilst they could see some indirect negative impacts of load adjusting to higher energy prices, they would be in a position to pass through the increases in higher power costs. Therefore, a critical factor in any compensatory approach that will determine the ‘balance of power’ between electricity suppliers and end users is the rules governing the assessment of adverse impacts and how broadly this is applied. Given the revenue at stake, the interest of energy producers to game scheme design will be high, and asymmetries in information will compound issues in compensation. Any allocation method that results in a transfer of wealth and is administratively complex and costly would skew the balance of power between suppliers and end users. This is a fundamental concern of policy that has been expressed by EUAA members.

Auctioning

Under auctioning, liable entities in an emissions trading market would face upfront costs in buying permits to cover their emissions. An auction process would be consistent with the principle that the ‘polluter pays’, remove the perverse incentives to continue to emit and also reward those that have undertaken early actions to develop low-emissions strategies and reduce the carbon intensity of their operations. The EUAA agrees that, as earlier noted, auctioning would assist in the establishing of financial markets and facilitate early price discovery, which are both market factors that are fundamental to driving the long term investments required to move the economy to a lower carbon future. Auctioning may help to avoid many of the incentive problems of free allocation, but good design would be requisite to avoiding new inefficiencies such as market power by emitters with large permit liabilities and to ensure market transparency in the transactions. However, the EUAA would argue that low trading volumes (with negative impacts on price discovery) can be due to a number of factors, such as the ability of firms with permit liability to access within their company structures experience in trading in commodity markets. For instance, in the first year

of operation of the EU ETS, it was found that power companies and refineries were among the most actively traded participants, while many steel and aluminium companies had not traded at all by mid 2005.²⁰

As noted above, there are well founded reasons to provide compensation in cases where the competitiveness of TEEIs would be prejudiced by the introduction of an emissions constraint. Where there is no free allocation, a mechanism to address wealth distribution impacts (such as direct payments from Government to business) would be a necessary adjunct to an auctioning approach. This is particularly important in cases where there may be a significant cash flow impost arising from the purchase of permits.

While it appears that auctioning has some virtues for the efficiency of financial markets and the promotion of price discovery, the approach would generate a large transfer of revenue to Government and raises concerns about how the proceeds of the permit sale should be managed. The track record of Governments in utilizing windfall revenues in ways that are consistent with policy objectives, which in this case is effective emissions abatement, leaves a lot to be desired. There is a real risk that as revenues from emissions trading gives rise to another revenue stream, it could potentially be used as a 'cash cow' for Governments. In this sense, the EUAA is interested to ensure that revenues are separately identified and used for the purposes of reducing emissions, compensating those adversely affected or to stimulate research, development and deployment of a broad range of low emissions technology.

As discussed earlier, the initial distribution of permits to firms assessed as worst affected using free allocation has distributional impacts to all end users, as some energy producers are compensated for increased production costs, which can to varying extents be offset by increased revenues as a result of increased wholesale energy prices. The extent to which free allocation offers benefits for managing the short term transitional issues to emissions trading but risks creating substantial windfall profits, was observed by the Stern Review, in examining the policy responses for mitigation.²¹ Stern observed that a firm with free allocation competing with other firms that faces the cost of carbon but do not receive free allowances, would be at a competitively advantageous position, via the free allocation as a subsidy. The subsidy effect, as Stern argued, would mean that free allocation may offer an important role in managing the transition to carbon pricing, but he also cautioned against the risk of substantial windfall profits and the need for their temporary use.²²

On the whole, it may be that end users may be better off with the issue of permits through auctioning – provided safeguards are put in place to ensure specific appropriation of permit revenues by Government to assist abatement or to compensate those most adversely affected – as it reduces the scope for generators to benefit from wind fall profits as a result of being compensated for production costs, and higher revenues from being able to raise wholesale energy prices in a non-traded environment. We urge the Review to carefully consider this in view of the equity and market efficiency impacts that arise in any free allocation.

²⁰ The Commission of the European Communities, *Building A Global Trading Market – Report Pursuant to Article 30 of Directive 2003/87/EC* (2006), 4.

²¹ *Stern Review*, Part IV: Policy Responses for Mitigation, p355.

²² *Ibid*, p335.