



25 November 2005

Emissions Trading Working Group Secretariat  
The Cabinet Office  
GPO Box 5341  
Sydney NSW 2001

### **Submission - A national emissions trading scheme**

The Energy Supply Association of Australia (esaa) is pleased to have the opportunity to comment on the consultation paper regarding a proposed emissions trading scheme to be implemented by the States and the Territories. esaa represents forty five businesses in the electricity and downstream natural gas industries and has a strong interest in policies designed to address greenhouse gas emissions.

Australia's energy demand is growing steadily and substantial investment is required in energy infrastructure over the period to 2030. ABARE estimates that electricity generation to meet demand will grow by some 71% between now and 2030. Additional capacity to meet demand growth will cost in excess of \$30 billion. A key impediment to this investment coming online in a timely and least cost manner is carbon policy risk.

#### **esaa's greenhouse policy principles**

esaa's member Chief Executives have over a period of two years closely examined what they believe are the important greenhouse gas abatement policy settings necessary to ensure that the sector continues to be able to provide competitively priced, reliable and secure energy supplies. Recognising that Australia's achievement of its Kyoto target is virtually assured and that the energy supply industry invests vast capital sums in long-lived assets, the esaa members have concluded that greenhouse gas abatement policies should focus on the long term and specifically the period beyond 2008-12.

The have also determined that:

- The Commonwealth Government should establish a long term, single and national greenhouse gas (GHG) emission target for 2050 that applies to the whole Australian economy.
- This target should be established being cognisant that:
  - the economic impact is manageable;
  - the rate of change can be managed; and
  - a predictable investment climate will result
- Measures to achieve the target should minimise market distortions and provide appropriate mechanisms for technology selection

- R&D on new technologies should be effectively coordinated and explicitly funded by government.
- Australia must be an active participant in developing global approaches to GHG emission reductions.
- The Commonwealth, State and Territory governments should work together to achieve a single national approach to GHG abatement.
- The widest possible set of abatement options should be available to those with the obligation to achieve reductions
- The cost of abatement measures must be appropriately allocated in order to modify consumer behaviour.

These policy principles have guided the attached comments on the consultation paper.

esaa is concerned, however, that the pursuit of the proposed jurisdictional emissions trading scheme is occurring absent of a strategic, national policy approach to GHG abatement generally. In our view, selecting measures to abate GHG emissions in a least cost manner is done more effectively under a single national policy on GHG abatement that is led by the Commonwealth government in conjunction with the States and Territories, relates directly to Australia's long-term, international commitments and which is part of an economy-wide approach to the issue. Implementing an emissions trading regime solely for one element of the economy without a long term emission target does not improve investor confidence and may have significant adverse structural impacts. It may also lead to increased GHG emissions in non-covered sectors as a result of investment being directed away from the covered sector.

Nonetheless, esaa has analysed the design propositions and offers the attached comments on those questions to which we can respond.

I would be pleased to discuss any aspects of this submission with the Taskforce.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Brad Page', with a stylized flourish at the end.

**Brad Page**  
Chief Executive Officer

### **Proposition 1: That a cap and trade approach be used as the basis for scheme design.**

*Are there elements of other approaches which you would propose to include in a cap and trade scheme?*

While cap and trade schemes have in theory a number of advantages over baseline and credit schemes, one principal concern is that permit prices (and hence economic costs) may, at least in the short term, increase significantly and to levels not reflective of the marginal cost of abatement. EU experience to date has shown that permit prices reached levels well above those predicted for the first phase of the scheme and are stabilising at the upper end of this range. While recognising that the EU carbon market is probably still too immature to isolate the effect of the ETS, wholesale electricity markets have shown some links to the price of carbon. The UK Energy Information Centre for example estimated the ETS had added about £5/MWh (around \$12) to wholesale power prices by September 2005.

Determining the permit price effect on the retail price of electricity is harder still. The extent of electricity market regulation varies greatly in the EU – many countries have retail price caps that prevent the pass through of effective price signals. In the UK market, the most deregulated in the EU, electricity prices rose by 24 percent for medium sized industrial users with half of that being attributed to the EU ETS and the other half to higher fuel prices and increased demand.

While esaa has not concluded a preferred approach to addressing these issues, the Taskforce should consider all of the available options. These might include setting a relatively low penalty level, adopting a McKibbin-Wilcoxon style approach, and considering further the baseline and credit approach.

*To what extent does an Australian scheme need to be consistent and compatible with other schemes internationally (and therefore facilitate linking to those schemes)? What elements of a cap and trade scheme are required to ensure compatibility with other international schemes?*

Linking international trade in emissions rights should reduce the overall compliance costs for participants internationally. From this perspective, an Australian emissions trading scheme should be capable of linking with other schemes. However, whether Australian participants would benefit from linking with other schemes, and what the optimal arrangements for trade might be, would have to be assessed in greater detail taking into consideration a range of issues once the detailed design of the scheme has been progressed.

*What elements of the European emissions trading experience should be taken into consideration in establishing the broad framework of the scheme?*

Perhaps the main source of difficulties in the EU has been the fact that many important decisions were left up to individual member states instead of harmonising the rules across the entire scheme. Australia should not follow this model under any circumstances. The resulting distortions have attracted criticism from many companies, governments and the European Commission itself. Specifically, Member States were allowed to:

- develop their own inventories and path to achieve a cap that covers the sectors in line with their Kyoto target;
- decide on the interpretation of some facilities (where the EC guidance was inadequate);
- decide whether to use auctioning (allowed up to 5%), and the size and make-up of the new entrant reserve (within the cap); and
- determine the level of offsets (including type of gas abatement) (JI/CDM units or otherwise) allowed.

**Proposition 2: That the scheme be national and sector based.**

*Is national consistency an appropriate goal?*

Yes. Energy companies are increasingly operating across borders. Least cost regulatory compliance is only possible if a consistent policy approach is adopted in all jurisdictions. Inconsistent greenhouse policy only adds cost, discourages investment and introduces market distortions.

*Are there any jurisdictional variations that could be considered that do not undermine the desire for national consistency?*

No. esaa does not believe that jurisdictional variations should be considered – a single national approach is essential.

Consideration therefore also needs to be given on how to transition from existing schemes such as the NSW Greenhouse Gas Abatement Scheme, the Queensland Clean Energy Policy and the recently proposed Victorian renewable energy obligation. Investment and other financial commitments made on the basis of existing policy settings should not be devalued or stranded as a result of the shift to a new policy framework without appropriate compensation.

*Could a system operate effectively without all States and Territories involved?*

No. Without all jurisdictions involved, investment decisions and business activity decisions will be distorted. Even states that currently have relatively minor emissions from electricity generation should be covered. While they may not represent a large share of emissions at present, it is essential that all jurisdictions are covered from the start to avoid market distortions and allow for future changes in the energy mix. Exemption of some States would reduce the efficiency of the scheme, increase the compliance burden on participants in the covered states and could result in carbon leakage to other states.

*What institutions would be required for a nationally administered scheme?*

A nationally administered scheme would most likely require a central agency to handle key administrative functions such as permit allocation, reporting, monitoring and verification etc. The energy industry is already subjected to a range of agencies managing a diversity of market and financial transactions. Bodies such as NEMMCO, GM Co, REMCO and the Office of the Renewable Energy Regulator are but some. To the extent that a new set of functions need to be delivered as a result of any ETS, one of the existing organisations should be used for the purpose and no new agencies created in the interests of efficiency.

**Proposition 3: That in setting the cap, consideration be given to the overall national emissions abatement target, and how the abatement responsibility is allocated between sectors covered by the scheme and those outside the scheme.**

*How should a cap for the stationary energy sector be set? And how should it relate to an economy wide emissions target? How should the abatement potential of the non-covered sectors be taken into consideration in setting the cap for the stationary energy sector scheme?*

This issue presents the largest single challenge for the jurisdictions and is unlikely to be satisfactorily resolved in the absence of Australian Government involvement. A systematic approach is required in addressing the very complicated question of setting the cap. It is unlikely to be possible to determine an enduring cap for the stationary energy sector without first establishing the role Australia is to play in reducing global GHG emissions, and how the domestic economy overall is to contribute towards achieving this target. In a practical sense this can only be done in the context of international negotiations and agreements.

From the energy industry's perspective, equally important is the need for any policy measures to be long term in nature. As the background paper notes, looking beyond the first commitment period is very difficult at this stage, but that is exactly what is required at the outset if a meaningful cap that provides the necessary investment signals is to be set.

*Should scheme caps and/or economy wide targets be set beyond the first commitment period of the Kyoto Protocol? For example, are medium to long term scheme caps and/or economy wide targets an appropriate means for providing investment certainty? Are there other means of providing reasonable certainty for investors and what are their relative merits?*

Basing the cap on the first commitment period of the Kyoto Protocol is inadequate because it is far too short a timeframe to support investment in lower emissions technologies. Potential owners of new plant and investors in R&D projects will similarly require confidence that long term policy settings will support their investment before they are willing to commit substantial funds.

Because of its relatively short timeframe, analysts are doubtful whether the EU ETS will significantly influence investment decisions as far as new plant are concerned. Seven years (2005-2012) is only a small part of the lifetime of a major power station. Some companies are said to be putting off investment decisions until the future of the EU ETS and the post-2012 framework are more clearly articulated.

Conversely, the US Acid Rain program is an example of a trading scheme with a long term view. Phase II of the program (beginning in 2000) sets a permanent cap on SO<sub>2</sub> and NO<sub>x</sub> emissions for the affected utilities. Allowances are issued in the US Environment Protection Agency's allowance tracking system on a vintage year basis from 2000 to 2030. Reconciliation is carried out on a yearly basis. The program, which has been operational since 1990, is said to be the most liquid of all environmental markets.

*If medium to long term caps were considered, how should they be determined?*

As the background paper notes, this is a particularly difficult task given the current uncertainty around a comprehensive international agreement on greenhouse

reduction obligations. It is essential that Australia learn from the EU experience – much longer term settings are likely to be needed to reward low emission investments while enabling existing assets to transition in an efficient fashion. A cap should be based on a long term national target for 2050. Realistically, this doesn't mean a legislated obligation to 2050, but rather a clearly articulated policy objective for that time frame, with interim targets forming the basis for long term caps.

A logical starting point for a national target might be a scientifically-agreed scenario for stabilizing global concentrations of CO<sub>2</sub>-e molecules in the atmosphere. Determining how to translate this into an appropriate target for Australia is clearly difficult in the absence of international agreement. Once a long term policy objective has been established, interim targets should be established to guide the setting of the initial cap. But most importantly, the first target must be economy wide with the allocation for sectors decided as a second, considered step.

*Given uncertainty about the level of possible future international targets for emission reduction, how far should governments go to provide certainty for investors? To what extent might certainty for investors be at the expense of appropriate flexibility for governments? How can the scientific and political uncertainties best be incorporated into setting of the cap to ensure that future governments are not faced with unreasonable carbon liabilities?*

In esaa's view establishing national and sectoral emissions targets is a role that is best suited to the Australian Government given the international nature of the issue and the impacts of abatement action. However, if State and Territory governments want to implement emissions trading ahead of an international agreement beyond the 2008 – 2012 period and without the involvement of the Australian Government, they must be prepared to accept some financial responsibility for the risks this entails for energy companies. Investors cannot be expected to make investment decisions on the basis of uncertain policy settings that could change substantially in the future and affect the value of their assets. Investment confidence should be a priority since significant emission reductions will only occur if there is a clear and enduring reward for investing in new technologies and abatement projects. This suggests the longest possible period be used for establishing targets and/or caps.

**Proposition 4: That the scheme initially cover the stationary energy sector.**

*How should the stationary energy sector be defined? What threshold level of greenhouse gas emissions – installation capacity (eg MW), or annual output - should trigger entity under the scheme?*

In principle, the whole economy should be covered by the emissions trading regime unless there are clear and compelling reasons for it not applying to some sectors. In such a circumstance, alternative measures must be identified and adopted such that the abatement outcome and costs associated with this do not unduly change structural and economic relativities.

Under the National Greenhouse Gas Inventory, stationary energy comprises fossil fuel combustion in energy industries, manufacturing industries and construction. The energy industries sub-sector includes fuel combustion in electricity generation, petroleum refining, gas production and solid fuel manufacture.

Despite the wide definition suggested in the background paper, the Taskforce seems to have indicated that it believes that most of the sub-sectors aside from electricity generation are unlikely to be included in the trading scheme for various reasons. This would be an unacceptable outcome in that it discriminates against the electricity generation sector in favour of other sectors. For example, the combined transport and agriculture sectors emit approximately the same amount of GHG as the electricity sector each year, yet they do not receive the same amount of policy attention nor application of abatement measures. This unequal treatment of large emission sources risks distorting investment decisions which could, perversely, lead to an increase in emissions from other sectors, undermining the effectiveness of the scheme.

*Where would the most effective and efficient points to place emission liabilities for the different stationary energy sub-sectors (ie. gas, electricity etc) be – at point of emission, upstream or downstream?*

There are a range of options available for establishing the point of liability for emissions and there are arguments in favour of each of these. The EU ETS has settled on the point of liability in the stationary energy sector falling on generators on the basis that the emitting facilities are likely to have the greatest capacity to reduce emissions directly. Another approach that would more directly influence the demand for electricity, and hence emissions, could be to place the point of liability closer to end users.

However, in an efficient market economy the point of liability should have little impact on the final pattern of abatement because carbon costs will interact with other resource costs and will be passed on (or not) by market forces. The emissions cost (permit price) will be shifted downstream or upstream by the demand and supply mechanism, depending on an entity's ability to pass on its costs. However, in the Australian stationary energy sector, on-going government controls of retail prices for some consumers will preclude this. In esaa's view, the most significant action required is the removal of retail price controls by government to allow the market to resolve where the cost of carbon falls, irrespective of the point of liability for emissions.

*What level of reporting should be required in order to establish liability and monitor compliance?*

esaa supports the work currently being undertaken by the joint working group formed under MCE and EPHC on the streamlining of energy and greenhouse reporting. The Taskforce should firstly look to use the outcomes of the MCE / EPHC greenhouse reporting work before proceeding with a new or additional reporting requirement or facility specifically for the proposed ETS.

### **Proposition 5: That the scheme cover all six greenhouse gases under the Kyoto Protocol**

*Are there any practical impediments to the measurement and reporting of all six greenhouse gases?*

Given that the Taskforce has indicated that there are no plans to include any other sectors and that the scheme may end up covering electricity generators only, the value of measuring and estimating gases that are primarily emitted by other sectors

needs to be considered carefully. The measurement / estimation of immaterial quantities of other emissions should not be required of participants if there is no material net benefit in doing so.

From the point of view of offsets it is essential that abatement of all six gases be included. This does not necessarily mean that all six gases need to be monitored – abatement can be expressed on a carbon dioxide-equivalent basis (which is the approach being proposed for Canadian ETS).

The EU decided to exclude all gases except for carbon dioxide in phase one because of measurability concerns. While they may be included in phase two, this will be dependent on resolving monitoring, reporting and verification issues related to these emissions. The Taskforce should carefully consider the advice provided by businesses that already report these emissions in deciding whether to include the other gases and should monitor the EU and other nations' scheme developments carefully as there are potential linkage issues.

**Proposition 6: That permit allocation be made on the basis of a mix of administratively allocated and auctioned permits, with both long and short term (annual) permits**

*What criteria should be used to select the method of allocation (eg. equity, market efficiency, cost minimisation etc)?*

There are a number of principles that might govern an ideal method of allocation. It should be:

- effective (provide incentives to progressively shift towards less greenhouse-intensive technologies);
- efficient (minimise the cost of compliance for participants);
- equitable (in its impact on covered and non-covered sectors);
- simple and transparent (especially if there is to be a transition from one method to another); and
- long term (to provide adequate investor confidence).

Most importantly, however, allocations should be on a consistent national basis. EU experience has shown that leaving the determination of allocation rules to individual member states has resulted in complicated arrangements, delays in the finalisation of national allocation plans (NAPs), market distortions, legal action and other issues that should be avoided in any Australian scheme.

*How long should permits be allocated for? And why?*

As discussed previously, a long term focus is essential for driving investment in new plant. Short-term allocations, as seen in the EU ETS (3 years for phase one and 5 years for phase two), are not likely to provide sufficient confidence for investors looking to build plant that will run for at least 30 years or more. Ideally allocations would be for the life of the asset.

The background paper suggests that the allocation of both short term and long term permits would provide additional investor certainty and would facilitate the development of hedging markets. While there may be merits in this approach, care would be needed in the design of such a system to avoid the creation of two distinct permit markets that could lead to distortions and might actually hamper the natural development of derivative markets. There may also be issues in terms of linking with other schemes which may not recognise such permits.

Investor confidence could be more enhanced by establishing a longer term cap, setting clear, long term allocation rules and specifying any transitional provisions from the outset. At the very least, the method of allocation should be known for more than just the initial compliance period. Industry in the EU has criticised the short-term approach, because of the possibility for both the quantum and methodology of allocation for an individual installation to be substantially amended at the next round of NAPs. With a longer term cap and clear allocation rules, a futures market would be likely to develop on its own.

**Proposition 7: That a penalty should be set to encourage compliance and to establish a price ceiling for the permit market.**

*While it is recognised that scheme design (eg targets, coverage, offsets) will be key considerations, what penalty level is likely to be needed to achieve significant reductions from the stationary energy sector and ensure compliance of liable parties?*

As the background paper discusses, achieving the ideal balance between ensuring environmental outcomes and limiting economic costs is likely to be extremely difficult. A key consideration in establishing a penalty level should be the extent and cost of mitigation options outside of the ETS. If there are cheaper options available elsewhere in the economy, a lower level penalty will be effective at capping costs to ETS participants without necessarily jeopardising environmental outcomes. The Taskforce should therefore carefully examine the abatement opportunities elsewhere in the economy before determining how to use the penalty level in the ETS.

*What level of price certainty is desirable? Should a penalty be used to cap prices? If so, what level should it be capped at (eg. how high should a price cap be set in relation to the marginal cost of abatement?)*

While environmental outcomes must be achieved in order for the scheme to be worthwhile, these outcomes should not be enforced without considering the cost to the economy; economic costs cannot be allowed to escalate out of control when the environmental costs of not meeting the target are unknown.

**Proposition 8: That offsets be allowed**

*What sectors provide opportunity for inclusion through offsets – eg. industrial process emissions, sinks and energy efficiency?*

In principle, participants should be able to meet their emissions reduction obligations by using offset credits from as many sectors as possible. This would lower the costs of compliance for participants and improve the efficiency of the scheme.

Provided that adequate estimation techniques and measures to avoid double counting and ensure additionality can be designed, the inclusion of offsets from all of the suggested sectors should be permitted. .

**Proposition 9: That mechanisms be included to address adverse effects and structural adjustment**

*Are there any emissions intensive or energy intensive sectors that are not trade exposed which might be adversely impacted by emissions trading? What mechanisms could provide appropriate adjustment assistance to affected sectors? Should adjustment assistance be limited to those that can demonstrate impact?*

It is likely that any sector that is forced to change its behaviour could be adversely affected in some way when compared to a business as usual approach. Adverse effects could include the need to invest in emissions reduction technologies, switch fuel sources, purchase additional permits, suffer a loss of economic return or prematurely close facilities. This is especially likely to be the case for the energy supply industry. Indeed, it is conceivable that under some conditions, a poorly designed and executed ETS could needlessly “strand” existing assets, effectively expropriating owner value without providing adequate compensation.

In any case, businesses that have existing carbon emitting assets are exposed to some potential level of adjustment loss which in the interests of the economy and ensuring timely investment in new facilities must be recognised and properly addressed as part of the system’s design. These issues are likely to be best dealt with by providing long term targets and setting caps that enable a measured transition.

**Proposition 10: That mechanisms be included to allow a transition for participants who have taken early abatement action and new entrants.**

*Should early movers be protected from disadvantage and how could this practically be achieved? Which methods of permit allocation advantage or disadvantage early movers? Are additional measures required for early movers under different methods of permit allocation (eg. grandfathering, benchmarking or auctioning)?*

Clearly the scheme should not discourage participants from reducing their emissions ahead of its commencement. However, any recognition of early action (such as by providing extra allowances) must be on the basis that the abatement can be verified, has not already been credited under previous schemes (and especially those where trading or payment for credits has occurred) and has taken place in a clearly defined period prior to the commencement of the scheme.