

# Submission to the Emissions Trading System of the Garnaut Climate Change Review, March 2008

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## **General Comments**

Ahead of commenting on the specific details of the suggested Emissions Trading System (ETS) we would like to make some general remarks about the adoption of an ETS and its implementation. We recognise the urgency of mitigating climate change in view of the mounting scientific evidence that anthropogenic induced global warming is leading to ‘dangerous climate change.’ The factors contributing to global warming are complex, systemic and pervasive. Accordingly, the policy and regulatory responses to mitigation also need to be comprehensive and integrated, and to occur in concert with effective adaptation measures. While we recognise the necessity of implementing an ETS, especially with the future option of linking this to a global system of emissions trading, we suggest that a wide range of measures need to be considered and evaluated to effectively mitigate climate change.

National policy debates appear to be converging on an ETS as the singular option; with a rather uncritical reliance emerging that a trading system of this nature will be sufficient on its own to reduce emissions to levels that will stabilise concentrations of greenhouse gas emissions in the atmosphere. We suggest this reliance on an ETS as potentially ‘covering the field’ of mitigation responses may be misplaced. If not managed stringently, and in the absence of other measures, an ETS may well facilitate a ‘business as usual’ approach with only minor variations in current patterns of production and consumption, especially in resource dependent spheres and energy production areas. An ETS, without an independent means of setting the emissions limit and the trajectory targets is open to sectoral influences on the political process. A more thorough revision of systemic factors inducing global warming, together with a holistic approach across a variety of sectors and mitigation measures to provide a fine grained response is required if Australia, and indeed the international community, is to adequately respond to the challenge of climate change.

A quote (below) from the ETS Discussion paper at page 12 illustrates the convergence of policy objectives:

“Having established the policy objective of reducing emissions and **determined that this is most efficiently achieved by the implementation of an ETS...**”(emphasis added)

Any comprehensive policy framework should, in our opinion, endorse a number of coordinated and linked policy options. While the Discussion Paper discusses the need for other policy objectives to be considered by governments, the positing of the isolation of an ETS ‘transactional space’ that is not subject to political, social and other economic pressures seems unrealistic. Accordingly, we consider it inadvisable to lessen the attention directed to other policies for combating climate change, such as the promotion of renewable energy technologies and incentives for their development and adoption, for the sake of very explicit reliance on an ETS. While the Review

suggests that markets for renewable technologies may be cannibalised by an efficient and wide coverage ETS this assumes a) that efficiencies will be achieved and that the coverage of an ETS will be comprehensive. We suggest that only a policy mix and wide range of strategies can ensure that policy failure (as well as market failure) will be mitigated. This issue has been explored in more detail in our submission to the Interim Report, 11 April 2008.

### **Reliance on a ETS**

The Discussion Paper makes a broad claim as to the efficiency of an ETS. However, it is unclear in the ETS Review paper as to the evidence and analysis supporting the conclusion that the implementation of an ETS is the most effective way to reduce emissions. The Interim Report gives little guidance either. The Review follows earlier Taskforces in seeming to simply endorse an ETS, ‘as the most efficient means by which to achieve the mitigation required as compared to other market instruments’ (page 10). Two comments – first, mitigation appears restricted to market mechanisms. This view in itself is limited, and as noted, does not engage the complexities of the factors producing global warming. Rather it suggests a position that reflects the pervasive discourse of the market; notwithstanding that it might be argued that the market i.e. market failure of unpriced carbon is both the identified problem by the ETS Review and then the suggested solution! Is it realistic to suggest that the market in itself is characterised by such effective and efficient means of self correction? The assumption of the capacity of the market to correct for deficiencies such as inefficient pricing is not warranted by regard to the only large ETS scheme currently in operation – that of the EU. Promotion of an ETS as the ‘solution’ to climate change with the promise that ‘the market will take care of it’ is yet to be demonstrated comprehensively in practice. The only ETS for GHGs in place, the European ETS, so far has not delivered the promise of severe cuts with the European Co2 emissions rising by 1.1 % in 2007 thus lagging behind the Kyoto reduction goal of 8% by 2012 (see BBC news online, 2/4/ 2008 at <http://news.bbc.co.uk/1/hi/sci/tech/7326834.stm>). It remains to be seen whether the soon to start second phase of the European emissions trading system will be able to turn this trend around.

Further it is something of a misnomer to suggest that an ETS is solely a market mechanism. Any ETS will be set within a regulatory regime with the market parameters, such as sectors covered by the scheme etc being set by Government policy in key areas. The ETS will be subject to regulatory control in its initial design and structure and in terms of ongoing compliance and enforcement. Any cap and trade system by necessity of the character of the instrument must be instituted by explicit government policy to replicate in an artificial manner the ‘scarcity’ conditions that precipitate the ‘trade’ of the cap and trade process. Again, the explicit division of the ETS into intrinsic design factors and exogenous factors such as setting emissions limits seems artificial. It seems to suggest that the price set for carbon is internal to the transaction space and not related to factors such as any government set emissions limits/ budgets, whether or not these develop in concert with international agreements.

The second point to be drawn from the above quote is that an ETS is viewed as relatively more efficient than a carbon tax. It would be useful if the analysis that supports this assessment could be made more explicit and available for comment. While the concept of a carbon tax is not without its own drawbacks, it may have the

advantage of being more transparent in its operation and equitable in its impacts on redistribution of income. Presumably also a tax may be less open to potential political influence if administered by an independent agency.

### **Objectives of an ETS:**

The discussion paper starts with a suggestion for an objective of an Australian ETS at p 12:

Having established the policy objective of reducing emissions and determined that this is most efficiently achieved by the implementation of an ETS, the objective of the scheme should be kept as simple as possible in order to avoid compromising its efficiency. The singular objective of the scheme should be: *To provide a transactional space that enables the transmission of permits to economic agents for whom they represent the greatest economic value.*

...

Other policy objectives – be they economic, environmental or social – should be pursued through alternative policy instruments that operate alongside the ETS.

There are several comments we would like to make about the suggested objective. First, there is very little mention of explicit environmental objectives and policies within the ETS Review paper beyond the obviously important one of reducing global GHG emissions, and to a lesser extent some discussion of land clearance and vegetation management/ protection issues in the context of offset mechanisms. While the ETS is referred to as an environmental measure it seems ‘the environment’ is very much obscured in this discussion that prioritises economic value and the functioning of markets.

**Water Trading Analogy:** Indeed, perhaps an analogy can be drawn with another implementation of a cap and trade scheme that was designed to further specific policy objectives; that of water trading. In instituting water law and policy reform, via water trading regimes, the explicit policy goal of the National Competition Reforms and National Water Initiative was to achieve environmental objectives, e.g. salinity control and to prevent environmental degradation, in recognition of the imminent ecological collapse of many catchments in South- East Australia. The goals of environmental protection and efficiency were seen as being able to be achieved concurrently through the implementation of separated land and water rights and trading in the water rights. To date there is a growing and viable market in water, in the Murray-Darling, notwithstanding the particular distributive justice implications for the social fabric of those areas. However, environmental objectives, such as the return to ecological function of over-allocated rivers and water courses, have not been achieved in many instances, even despite CoAG agreements such as the Living Murray Initiative. The current plans under the *National Water Act 2007* to buy back water for the environment and the relatively high prices that water in a time of scarcity has attracted, are symptomatic of the difficulties of ensuring that environmental objectives are given ‘equal treatment’ to consumptive (property like) entitlements in any market based system. Indeed, analysis of the outcomes under the NWI with its emphasis on deepening of the market and the extension of trading regimes suggests that the market itself becomes the sum of the ‘end game’. The maintenance of the primary market and derivative markets in water now seems to be

the focus rather than viewing the market as the regulatory measure designed to achieve the policy goal of structural adjustment and environmental protection.

Further governments effectively have ‘priced themselves out of the market’ in terms of the large amount of tax payer funds that will be required under any buy back scheme to address ‘market failures’ such as the over allocation of water rights that has still not been ‘remedied’ by the market. A similar issue may arise with an ETS – will governments have to address perceived market failures of the scheme in relation to the environment as a public good, but yet be constrained by the competing demands on tax payer funds. Will design features such as unlimited hoarding of permits and lending of permits work against the capacity of governments to address market failures? In light of the poor record of effective government support for public goods like native vegetation/biodiversity protection in market based systems over the last decades in Australia the prognosis is not encouraging.

Thus we regard it as undesirable to detach emissions trading from its actual goal, in combating the impact of climate change on our environment, social system **and** economy. The largely economic point of view that is endorsed may make it easier, as the Discussion paper claims, to develop a simple and efficient ETS, but at the same time this may mean efficient and simple from a narrowly conceived point of view. The ETS may become a means in itself, with outcomes only being measured against its own smooth operation.

Further, as the ETS is considered the ‘centre-piece of a domestic mitigation strategy’ it appears questionable to isolate the pursuit of important policy objectives to alternative policy instruments and not have them explicitly embodied in the ETS . While the ETS Review contains a consideration of some other policy instruments, such as Mandatory Renewable Energy Targets (MRET) the possible efficacy of alternative instruments is not considered in depth. There is little detailed examination of the integration of ETS with other accompanying policy instruments, that could be closely linked and complement the ETS; possibly under some form of umbrella legislation. Not only should such integrated policies be developed but any policy response to climate change should have regard to the principles of ecologically sustainable development. (see submission to the Interim Report, 11 April 2008).

### **Establishing the Emissions Limit**

While some concerns exist about the identification of the target setting function as an ‘extrinsic’ aspect of the ETS, we strongly support the Review’s suggestion of setting stronger earlier targets for emissions reductions. While it is understood that the government will have the function of setting which targets/budgets/trajectory Australia will ultimately follow, setting an indicative defined target provides a symbolic goal that is open to community debate before political processes take effect.

In relation to the discussion of projected targets and trajectories for emissions budgets we have several comments. Trajectory A is supposed to follow the Kyoto commitments of Australia. We would suggest that Australia should start with a higher trajectory. Australia has one of the weakest Kyoto targets of all the developed countries. Indeed the existing mitigating measures that are already in place are supposed to deliver Kyoto results (see Australian Government, Department of

Climate Change, Tracking to the Kyoto Target (Feb 2008)). We think decisive action includes finally stepping out of the shadow of an embarrassingly low Kyoto commitment and starting on a more ambitious trajectory.

Further, although some uncertainties remain in respect of the available science and economic modelling, there is now a strong foundation on which 'long-term aspirational emissions abatement goals' might be set with a number of recommendations to draw on. CSIRO provided estimates regarding the emissions reductions considered necessary to avoid irreversible anthropogenic interference with the climate system. These estimates, supported by a credible scientific consensus, emphasise the urgency of stabilising GHG levels at or below 450 parts per million by volume (ppmv) of CO<sub>2</sub>e to ensure a reasonable likelihood of warming remaining at or below the 'dangerous' level of a greater than 2 degrees Centigrade rise. CSIRO advised that:

While the national implications of global reductions necessary to stabilise GHG emissions at 400-500 ppmv CO<sub>2</sub>e depend crucially on the distribution of the emissions task between nations or groups of nations, most of the literature suggests the need for reductions in annual GHG emissions of 60-90% from 1990 or 2000 levels by 2050 for [developed] countries.

Scientific opinion emphasised the necessity for immediate action to avoid more drastic emissions cuts in the future, with comprehensive global reductions ideally being implemented from 2015-2020. The Interim report discusses the necessity of an 450 ppmv CO<sub>2</sub>-e target under Stabilisation scenarios (19). It is thus disappointing to see this degree of commitment only envisioned for trajectory D, and then only in the context of comprehensive global action (see below). Considering CSIRO's advice above we would recommend the adoption a trajectory as tight as 450 ppmv CO<sub>2</sub>-e as the initial goal.

### **Linking of more ambitious targets to international development?**

The Discussion paper suggests moving on from one trajectory to a next, tighter one under certain conditions. The conditions under which a tightening is supposed to happen for trajectory C include:

"Australia would move onto this path when the average of the developed countries has accepted comparable commitments" (p.25).

A move to trajectory D is only envisioned under a comprehensive global agreement (p 25).

Technical development is not seen as a reason to tighten the emission budget. Instead the Discussion Paper supports international political development (with all its acknowledged vagaries) as the guiding principle under which Australia would move forward. The reason identified in the Discussion paper is "that Australian action alone will be of little consequence to climate change impacts". We think that this should not deter Australia from taking decisive action. Australia is one of the largest per capita emitters in the world. The "if you don't go- I don't go" attitude conveyed by the suggested conditions for movement from one trajectory to a more stringent one is

reminiscent of the earlier 'pre-Bali' Kyoto Protocol stance of the Australian government. The logic behind the reliance on international agreements to trigger trajectory changes is no doubt an economic one; Australia's competitiveness on the global market is seen as being endangered by unilateral action on climate change. But, as we argued in the submission to the Interim Report, climate change is not only an economic problem. It will necessitate deep structural and social changes in order to be combated efficiently, including a possible end to unbridled economic growth based on the unsustainable use of our natural resources. The development of the industrialised world, including Australia, is a major reason for today's level of global warming. Australia has a moral duty to mitigate climate change nationally in as rigorous a manner as possible. This includes taking note of technical advances that could help to lower emissions more quickly. Global political development should definitely factor into Australia's commitments and Australia should not commit to less than internationally agreed. Nevertheless national politics should not depend solely on international developments that may be difficult to broker. Thus we urge reconsideration of the criteria under which tighter trajectories should be adopted.

### ***The Design of the ETS***

**Coverage of the ETS:** We would support a comprehensive coverage for the ETS although recognising the difficulties involved in the immediate inclusion of industry groups such as agriculture and forestry.

**Offsets:** The adoption of offsets is a complex issue. As the Review notes, there is some support for the view that the effectiveness of offset measures has not been comprehensively demonstrated. In vegetation offset areas, such as wetland mitigation banking which have operated for several decades, the offset schemes have proven to be less than effective in maintaining biodiversity. We suggest that offsets are not a substitute for strong 'up front' conservation measures that will protect unique and high conservation value areas; whether or not such measures are tied to climate change outcomes. Further many 'offset' schemes, such as tree plantings are not subject to rigorous compliance and monitoring processes. In addition, the current trends to tree planting may be counterproductive where non indigenous species and/or non-tree species are displaced in a context of current enthusiasm for offsetting via tree plantings. These situations are often exacerbated where offsets occur at an international level in developing countries. Again we recognise the sensitivity of the issues of deforestation in many countries, especially in the South-east Asia and Oceania regions. While we support strong international efforts to address deforestation and the loss of customary land for many communities, offsets should not be the only manner in which the pressing issues of biodiversity and the sustainability of local communities should be addressed.

**Point of Obligation:** While recognising that the point of obligation may vary across industry and production spheres covered by the ETS we would favour those points that are most transparent. Experience in many other 'pollution' licensing and compliance areas indicates that there are many difficulties in establishing an effective compliance and monitoring regime. The financing of such a scheme will be very resource intensive. These costs largely will be borne by the public sector. These aspects interface with the compliance and penalties regime. Again there are many

‘hidden’ costs in ensuring effective compliance and sanctioning in the event of default. The legal and court system is likely to experience an added workload in this regard.

**Compliance:** Further, it is imperative that close attention is given to the effective implementation of compliance, and sanctions for non-compliance. Experience with other pollution/ environmental protection regimes indicates not only the substantial costs involved but also the difficulties in ensuring that a best practice regime of audit and monitoring and technological innovation is adopted.

**Permit Issuance:** We strongly support the auctioning of permits rather than the allocation of permits to identified groups through an evaluation process. The latter system is open to potential lobbying and sectoral influence that militates against a transparent and accountable process. Indeed, we have some reservations about the proposed permit lending scheme as we envisage that this scheme also may be open to sectoral influence upon the entities administering any such scheme. Nor do we support a free permit allocation situation. Costs that are incurred by industries and producers covered by the ETS will be passed on to the consumers or other ‘end users’. Free permits may well constitute a ‘gift’ that does not translate into effective emissions reductions while costs are still passed on to consumers.

**Distributive Justice and Equity:** We strongly support the adoption of a program to ameliorate the effects of the imposition of a carbon price on the most vulnerable in our society, such as low income households. We endorse the view that public funds derived from the auctioning of permits should be applied for such purposes.

#### **Announce changes to emissions limits five year in advance**

We support the critical need to make adjustments to the ETS. Moreover we understand the need to minimise uncertainty for industries and thus to give notice well in advance if policies/ targets are going to change. Nevertheless, given the rapid speed with which climate science and policy moved in the last ten years, a commitment to even a five year phase on each trajectory may prove unreasonably long. New scientific outlooks may necessitate prompt action. Although the Discussion Paper envisions that the government may be able to honour a stricter international agreement and targets by purchasing international permits, this should not preclude action at home.

#### **Compensating for Trade Distortion**

The Discussion Paper discusses the necessity to compensate certain industry sectors for losses of profit and other impacts of ETS introduction, especially where comparable trade partners do not make similar adjustments. We would suggest that careful consideration should be given to providing levels of support that allow for innovation and retraining, rather than excessive support that obviates the widespread structural changes that the ETS is designed to initiate as a means to address climate change in the long term.

A further reason given for the support for ETS impacted industries is the possibility that ‘emission intensive activity (will) relocate from Australia to countries with lesser constraints on emissions’; the so called carbon-leakage problem. We would like more detail on which emissions-intensive industries are in reality likely to relocate. Emission-intensive industries include stationary energy and mining of fossil fuels and

metals and associated refining processes. Stationary energy production is operating in the local market and many costs will be passed through to the customers. Investment in new technologies may be regarded as onerous but there are few alternative locations in the region offering a comparable stable political and social context to that in Australia that will deliver strong returns to industry for such investment. Moreover, resource based industries will remain anchored by geological considerations. Approximately one third of Australia's export is in minerals. Australia is the world's largest coal exporter. Given the actual location of fossil fuels in the world, it is questionable if the introduction of an ETS would lead to a large relocation of resource extraction industries and thus carbon leakage. Thus, we would like to question whether compensation under these circumstances is useful in achieving long term objectives. We agree with the principles suggested on p 39 that would include a rate of annual improvement in emissions efficiency to counteract the danger of drawing out unsustainable production with the help of public funding.

In this regard, we also question the ETS Review's heavy dependence upon carbon capture and storage as the technological innovation to be widely promoted. As noted in our submission to the Interim Review, CCS is in its infancy, it is unproven technology with considerable attendant risks that will remain over extended time frames. Emerging debates also question the economic viability of this technology as an effective mitigation measure. Finally, the technology may support an entrenchment of existing dependencies on fossil fuels and even be counter productive to the long term aims of an ETS that is designed to achieve a lessening of the actual production of GHG emissions. It needs to be remembered that CCS does not of itself lessen the amount of GHG emissions produced. It simply provides a method of storing what is already being produced.

**Conclusion:** In conclusion, the entrenchment of existing production and consumption patterns arguably might also occur with an ETS as it will create a market in 'valuable rights'. A market presumes an exchange relation. The valuable entity being traded is a right to emit carbon based waste. Thus it needs to be recognised that a carbon emissions trading scheme is predicated upon the *retention of carbon use* to produce waste, even if the effects of that use are ameliorated in various ways. It does not necessarily signal a move away from the reliance on fossil fuel use and other forms of resource and land use that produce GHG emissions. As with most property rights/ cap and trade schemes that utilise market based mechanisms, the trading or exchange relationship implicit to such schemes requires that there be a value, such as emissions, that can be traded or exchanged.<sup>1</sup> Therefore without the continuing fossil fuel use which produces carbon waste, the scheme collapses. Yet what is being created is a market designed supposedly to shut itself down over time as more stringent targets take effect. One may question whether a philosophy of the market, predicated upon the exchange of valuable rights, especially given the development of derivative markets, will want to forego the basis of exchange value that has provided value for what was once only waste. Accordingly, we return to the view that an ETS should be only one regulatory tool to ameliorate climate change and that it needs to operate in conjunction with a comprehensive range of measures.

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<sup>1</sup> An example is the Chicago Climate Exchange. This exchange is the largest voluntary carbon trading exchange in the world. Members come from a very broad range of industries and sectors and market participants include offset providers offering a range of mitigation options (e.g. reforestation and agricultural soil sequestration), available at <<http://www.chicagoclimatex.com>>.

