



Submission by
Alternative Technology Association

to the

Task Group on Emissions Trading Issues Paper

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ATA's submission to the *Task Group on Emissions Trading Issues Paper*

The Alternative Technology Association (ATA) welcomes the opportunity to provide comment on the ***Task Group on Emissions Trading Issues Paper*** (the Paper), as prepared by the Prime Ministers joint government-business Task Group.

ATA is a not-for-profit organisation established in 1980 to promote the uptake of sustainable technologies in order to protect our environment. The organisation provides service to over 3000 members, who are actively promoting sustainability in their own homes by using good building design and implementing water conservation and renewable energy technologies. ATA advocates in both the government and industry arena for ease of access and continual improvement of these technologies, as well as the production and promotion of information and products needed to change the way we live.

ATA welcomes the initiative of the Prime Minister in establishing a Task Group to address this vitally important issue of exploring a mechanism for reducing greenhouse gas emissions. However, we wish to express concern and disappointment at the make-up of the Task Group. The group contains representatives from the coal-fired electricity generation industry, large energy users and fossil fuel mining sector, all with direct vested interests in emissions-intensive industry; however there are no equivalent representatives from the renewable energy industry or environment sector.

ATA believes that such weighting has the potential to lead to perceptions of bias in the work completed by the group. As such, ATA urges the Prime Minister to ensure that any ongoing or future work into emissions trading be undertaken by a task group or panel with broader cross-sectorial representation from the industrial, commercial, environmental and community sector.

Terms of Reference

The Terms of Reference for the Issues Paper request the Task Group to explore "what form an emissions trading scheme, both here in Australia and globally, might take ...in a way that does not do disproportionate or unfair damage to the Australian economy..."¹ Recent work conducted by CSIRO and a number of other organisations have concluded that the introduction of a carbon price in Australia would not have negative implications on the economy². Indeed, the Australian Business Roundtable on Climate Change found that any delay in action "may lead to a major disruptive shock to the Australian economy" resulting from reduced GDP growth, loss of employment and increased energy prices when compared with an early-action scenario³.

This point is further reinforced in the wake of the Stern review of the economics of climate change, which highlights the global economic costs of delayed action in addressing this most serious of issues⁴. As such, the most prudent way to avoid damage to the Australian economy would be through the timely introduction of some form of cost for greenhouse gas emissions, as part of a host of measures designed to restructure the energy sector and reduce Australia's disproportionate contribution to global greenhouse gas emissions.

¹ Prime Ministerial Task Group on Emissions Trading (2006) *Issues Paper*, p.1

² CSIRO (2006) *The Heat is On – Report form the Energy Futures Forum*; Australian Business Roundtable on Climate Change (2006) *The Business Case for Early Action*;

³ Australian Business Roundtable on Climate Change (2006) *ibid*

⁴ Nicholas Stern (2006) *Stern Review: The Economics of Climate Change*

Emissions trading schemes are potentially open to gaming by participants, and as such, a direct tax on emissions has distinct advantages over a flexible scheme which may be subject to manipulation. However, coupled with strong and ambitious targets, a tough and transparent emissions trading scheme is preferable to no action at all. It is vitally important that any emissions trading scheme is robust, ambitious and effective to ensure the primary goal of emissions reductions is met, and the ATA urges the Task Group to carefully consider the views contained within this submission to ensure such a scheme eventuates.

Early Action an Imperative

There can no longer be any argument that a significant imperative exists to take action on climate change. Internationally, nationally and locally there is almost universal consensus on the urgency of addressing the largest environmental, social and economic challenge of our time.

The recent findings of Nicholas Stern's report into the economic costs of climate change put the ongoing cost of mitigation at around 1% of GDP annually, in contrast to between 5% and 20% of annual GDP for the full economic impacts of un-abated climate change – with most predictions pointing towards the upper end of this range.⁵

It is important to note that climate change results from increasing concentrations of greenhouse gasses (GHG) in the atmosphere, and thus is a response to *cumulative* emissions of GHG over time. Therefore, it is important to consider not only long-term emission reduction targets, but also the path taken to achieve these targets. Early action through stringent short to medium-term targets is essential in reducing overall cumulative emissions over the longer term. Additionally, early action will stimulate the development of innovative industries and technologies, better placing the economy for transition to a highly carbon-constrained future.

Emissions Reduction Target

The success or otherwise of any emissions trading scheme in achieving its goal of significant cuts to Australia's greenhouse gas emissions is dependent on the adoption of ambitious overall emissions targets. Without deep cuts to GHG emissions brought about by the setting of ambitious short, medium and long-term targets, the social, environmental and economic effects of climate change threaten to be disastrous. A cap-and-trade emissions trading scheme provides a mechanism to achieve pre-defined targets, and as such, the introduction of any scheme should take into account the following considerations when determining what level any such cap should take.

Both the latest science on climate change, and recent emissions levels reported by the IPCC, point to an increasing urgency to strive for dramatic and immediate reductions in GHG emissions. With emissions growing at unprecedented rates, and climate scientists outlining dramatic implications resulting from projected temperature increases, Australia, as one of the largest per capita emitters in the world, has a moral imperative to take significant steps to curb emissions.

It is essential that any emissions reduction targets, and hence emissions trading caps, use 1990 as the baseline year, in order to be consistent with the United Nations Framework Convention on Climate Change (UNFCCC) process. Further, the Stern Review outlines that, in order to achieve climate stability, the international community needs to stabilise emissions over the long term at 80% below current levels.⁶ Given this, and Australia's disproportionately high per capita emissions, Australia has a moral imperative to make deep cuts to current emission levels.

On this basis, ATA calls for caps limiting emissions to 80% below 1990 levels by 2050, with an interim target of 30% below 1990 levels by 2020. Whilst acknowledging these are ambitious targets, and will be difficult to achieve, ATA believes that there is little choice other than to reach these levels. It is

⁵ Nicholas Stern (2006) *Stern Review: The Economics of Climate Change* P.143

⁶ *ibid.* P. 193

imperative that any target be ambitious and difficult to achieve, given the gravity of the global climate change situation.

ATA strongly believes that ambitious short and medium-term targets be set in order to achieve an emission reduction of 80% from 1990 levels by the year 2050.

Host of Measures

Even with the broadest possible scope for a national emissions trading scheme, significant sectors of the economy will still sit outside its coverage. Further, for Australia to satisfactorily reduce greenhouse gas emissions, significant structural changes will have to be undertaken in the electricity generation, other stationary energy, transport and other sectors. Thus, it is essential that an emissions trading scheme is but one part of a host of measures designed to address the emission of GHG into the atmosphere, and that significant complementary measures exist along-side any scheme. Significant programs need to be adopted in the areas of transport, agriculture, land-use and waste to ensure that all sectors of the economy contribute to emissions reduction targets.

At present significant market failure exists within the National Electricity Market, failing to take in to account the range of benefits from demand-side measures. The adoption of an emissions trading scheme will not address these market failures, and a broad range of additional measures is required to capture the full benefits of this broad suite of possibilities.

Energy efficiency is a cost-neutral at worst – and, in most cases, cost-positive – means of reducing demand on energy supplies and hence reduce emissions of GHG into the atmosphere. Demand-side response, fuel switching energy conservation measures and small-scale embedded generation all have a range of environmental, social and economic benefits unrecognised by the current market structure.

By providing significant incentives for a range of demand-side initiatives and embedded generation, governments will enhance the stationary energy sector's ability to meet its targets, providing benefits for the sector, improving environmental performance, enhancing energy security and enabling greater community ownership of electricity generation capacity.

ATA strongly believes that a broad range of significant complementary measures should be adopted to ensure that overall emissions reduction targets are met

Offsets

The inclusion of offsets in an emissions trading scheme has the potential to provide cost-effective means of reducing emissions in place of abatement measures at the source of emission. However, significant concern exists over the uncertainty, potential for miscalculation and complexity of offset mechanisms. The potential also exists for offset mechanisms to delay restructuring of the electricity generation and other emission intensive sectors, thus limiting the ability of these sectors to achieve desired emissions reductions.

Bio-sequestration

Of particular concern to ATA is bio-sequestration, or the planting of trees to capture atmospheric CO₂. Firstly, there are obvious distortions resulting from the allocation of a quantity of carbon emitted in a particular year, to be captured by a tree over a lifetime of growth. Assuming that the tree captures the majority of its carbon whilst vigorously growing in its first 40 – 50 years, a significant gap exists between the year of CO₂ emission and the complete absorption of that CO₂, during which the excess CO₂ remains in the atmosphere contributing to climate change.

Secondly, it is almost impossible to ensure that trees planted today will still be here in the required lock-up time under the proposed scheme: 100 years. Climate change has and will continue to increase

the prevalence of bushfire in southeast Australia, and thus the risk of captured carbon being re-released into the atmosphere.

Thirdly, tree planting projects are intrinsically linked to other environmental issues and programs. Young trees in their early years of life consume considerable quantities of water, reducing run-off into catchments and water storages; tree planting has inherent benefits in other areas, such as reducing salinity and preventing soil degradation and erosion, thus linking tree planting carbon offset programmes could result in altered patterns of reforestation (i.e. delayed planting to take advantage of future offset opportunities); specific species of trees may be adopted for large-scale monocultures, due to quick growth rates or carbon storage capacity, rather than planting appropriate species in biologically-diverse patterns for the best ecological outcomes. This broad range of concerns needs to be taken into account when considering offset programs.

Finally, considerable scientific uncertainty exists surrounding the carbon abatement potential of trees. Offset programmes require the additional test of establishing a baseline and applying credits for additions above this level. This raises a plethora of questions around the potential for misrepresentation and gaming, and the difficulty in verification.

Geo-sequestration

It is essential that any form of carbon sequestration remain secure in the long term and captured emissions are not subject to release at a later date. However, significant uncertainty also exists around geo-sequestration. In the absence of stringent scientific analysis of the permanence and safety of the storage, the inclusion of geo-sequestration projects should not be permitted for carbon offset under any emissions trading scheme.

Energy Efficiency and Small Scale Renewable Energy

Energy efficiency is by-and-large a cost-neutral means of reducing energy demand, and small-scale embedded renewable energy generation technologies offer a range of benefits to the broader electricity industry and the stationary energy sector as a whole. However, ATA doesn't believe that the provision of offset credits for small-scale renewable energy and energy efficiency is the most effective means for achieving these benefits.

Whilst some opportunities will be achieved through price signals arising from an emissions trading scheme, ATA believes that existing energy market regulation and market structures impede the deployment of these technologies, and thus additional measures must be undertaken to ensure that these initiatives are adopted.

ATA strongly believes that offset programs should not be included in the emissions trading scheme, due to the difficulty in accounting and the potential for misrepresentation

Permit Allocation

The mechanism for the allocation of permits is an essential component for the success of any emissions trading scheme. There can be little argument that the most effective way to stimulate growth in low-emission technologies and promote the most efficient sectors of an industry is to auction all permits in the scheme. Thus, ATA calls for the allocation of permits to be entirely conducted through an auction process.

It has been argued that by auctioning permits, rather than free allocation, certain sectors of the industry would be disadvantaged – obviously those with higher emissions intensities. However, ATA would argue that this is the primary objective of the scheme; again, creating 'distortions', or, more accurately, 'market corrections', between fuel sources is precisely the objective of an emissions trading scheme.

By allocating even a portion of permits based on historical emissions or potential economic losses, any scheme will be favouring emission-intensive industries over low emission technologies, thus negatively distorting an essential component of the scheme. It must be remembered that, whilst there may be

economic losers from the introduction of an emissions trading scheme, there will also be economic winners.

Mechanisms for allocating free permits are inherently complex and arbitrary, and potentially open to significant levels of legal challenge by unsatisfied businesses who feel as though they have been unfairly treated by the process. A blanket allocation of permits via auction would remove the complexity and uncertainty of the process as well as promoting clean energy technologies – a fundamental goal of the scheme.

An essential additional benefit of the auctioning of permits is that revenue raised can be redistributed, via the states and territories, to support the most vulnerable consumers affected by any price increases resulting from the scheme. Funds can also be redistributed to regions and individuals affected by structural adjustments following on from the scheme, and to complementary programmes and projects which can assist in reducing emissions and enhance the application of the scheme.

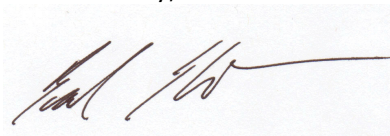
Further, ATA acknowledges that certain sectors of the economy, and potentially some states of the commonwealth, may be negatively impacted by the introduction of an emissions trading scheme, at the same time as other areas and sectors are stimulated. Revenue raised by the auctioning of permits can also be used to restructure industries and provide assistance to those areas affected by structural changes to the economy, assisting them to adapt to the opportunities created in a shift towards a lower emissions future.

ATA strongly believes that permit allocation be conducted wholly through an auction process in order to achieve the best outcomes for emissions reductions, and that revenue raised through the permit auction be redistributed to identified areas of need, such as low-income consumers and beneficial complementary programmes

Further Contact

ATA commends the Task Group for undertaking this process, and would welcome the opportunity to discuss any aspect of this submission. Please direct any questions or further correspondence to Brad Shone, Energy Policy Manager, on 9631 5406 or Brad.Shone@ata.org.au

Yours sincerely,



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