

18 April 2008

Professor Ross Garnaut
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1 Treasury Place
East Melbourne Vic 3002

By e-mail: contactus@garnautreview.org.au

Dear Professor Garnaut

Submission in response to Emissions Trading Scheme Discussion Paper

The Clean Energy Council thanks the Garnaut Climate Change Review for the opportunity to comment on the Emissions Trading Scheme Discussion Paper (the Paper).

The Clean Energy Council (the Council) is Australia's national clean energy industry peak body, formed in 2007 through the merger of the Australian Business Council for Sustainable Energy (BCSE) and the Australian Wind Energy Industry Association (Auswind). With a membership of over 450 businesses, the Council covers a quarter of Australia's total electricity production including gas, wind, hydro and bioenergy; and the spectrum of business in the low-emission energy and energy efficiency sectors including solar PV, solar hot water, biomass, geothermal and cogeneration. Our members are committed to tackling climate change, while developing financially viable businesses operating and a robust clean energy industry.

The Council, in preparing this response, has considered the issues addressed in the Garnaut Climate Change Review Interim Report released in February, and has concentrated predominantly on stationary energy industry considerations.

The Council fully supports the earliest feasible introduction of an Emissions Trading Scheme (ETS) as an essential policy element required for Australia to reduce its greenhouse gas emissions to the levels required to avoid dangerous climate change. In order to drive the required behavioural change, it is critical that the full cost of environmental externalities such as carbon emissions are internalised into the costs of commodities such as electricity and gas through mechanisms such as ETS.

As well as an ETS, there is need for a number of additional complementary policy elements to be in place to ensure that this abatement is achieved

quickly, safely, and at least cost with minimal disruption to the economy and quality of life of everyday Australians. In order to achieve the Government's goals it will be necessary to deploy the additional mechanisms promised by the Government including:

- significant additional Research and Development (R&D) funding of key areas including:
 - renewable energy technologies;
 - energy efficiency innovations; and
 - other low emission energy options (including clean coal and gas technologies).
- an expansion of the Renewable Energy Target to meet the Labor Government's objective of achieving 20% renewable energy production by 2020;
- nationally consistent feed-in tariffs for solar PV and other small scale renewable energy generators;
- a national energy efficiency target; and
- further regulations to overcome non-price based barriers to energy efficiency.

The Clean Energy Industry is excited about the developments that will lead to a low carbon future and is poised to contribute through the development of Australia's huge clean energy potential. The Council has already identified investments totalling over 14,000MW (around 40,000GWh pa) already under consideration.

Attached are detailed comments from the Council on the key elements of an Australian Emissions Trading Scheme.

If you are seeking clarification on any of the issues raised in this paper or answers to any questions that arise, please do not hesitate to contact me or the Council's General Manager Policy, Mr Rob Jackson.

Yours sincerely,



Rosemary Warnock
CEO

Principles to guide the design of ETS Design:

The Council supports five key principles to guide the ETS market design. These are:

- efficiency;
- effectiveness;
- equity;
- simplicity; and
- predictability.

In reaching conclusions on the ultimate design of the ETS the Government should look at the lessons learned in the development and operation of the Mandatory Renewable Energy Target (MRET). The MRET is a relatively simple market mechanism that has been effective in driving significant new investments in renewable energy technologies while minimising unnecessary bureaucratic burden.

ETS Design Framework:

- **Setting an emissions limit**

The Council believes that Australia needs to set strict targets for the reduction of greenhouse gases consistent with the scientific calls from the Intergovernmental Panel on Climate Change (IPCC) and our international commitments that should ultimately avoid dangerous climate change. As suggested in the Paper, it is the cumulative total of emissions over the period that has the real impact on climate change rather than a spot target at some time in the future. However, for the market to work efficiently annual limits need to be set consistent with the scientific evidence.

The Council supports the concept of a trajectory from 2010 to 2012 consistent with Australia's Kyoto commitments. However, beyond that date the trajectory should automatically move to a trajectory that is designed to allow Australia to meet the Federal Labor Party election commitment of achieving a reduction of emissions by 60% of 2000 levels by 2050.

The Council also supports the proposal to publish multiple trajectories at the establishment of the ETS along with rules for moving from one trajectory to a tighter trajectory consistent with international movements on climate change. There needs to be a transparent mechanism, however, to enable further, even deeper or faster, trajectories should the science and international agreement call for such action.

- **Changes to the emissions limit**

The Council supports the concept of the multiple trajectories as an appropriate alternative to the "gateways" suggested by the National Emissions Trading Taskforce.

Project developers require a degree of market predictability before investing and the proposal of predefined rules, a five year notice period and an ability to only move to a stricter trajectory will provide the confidence needed for zero and low emission investments to be made. Given the complexities of potential future international agreements and approaches the drafting of the rules for moving to a tighter trajectory will not be easy and may need to be refined over time as international positions evolve.

- **Coverage**

In order to be effective in reducing climate change the proposed ETS should cover all of the six greenhouse gases identified in the Kyoto Protocol.

It should also cover as wide a range of industry sectors as is practical. This would include stationary energy, industrial processes, fugitives, transport, waste, agriculture and forestry. However to avoid some of the problems observed in other markets, it is important that the emissions from these sectors can be efficiently and reliably measured. Veracity and credibility of the reductions are critical, particularly if the Australian ETS is to be linked to other international markets. It is important that uncertainty in the data does not undermine the integrity of the market.

The Council therefore believes that, if necessary, the scheme could commence in 2010 as proposed with a reduced coverage and other sectors added such as more reliable and internationally accepted data became available. The science suggests that the situation is getting worse and the international community cannot afford to procrastinate any longer. As a result, the Council would not support any delay to the commencement of the scheme on the grounds of lack of reliable data.

- **Domestic offsets**

Any verifiable emissions reductions in sectors not covered by the scheme should be eligible to create domestic offsets. As mentioned below under "Permit design" the credibility of offsets are critical to the continuing credibility of the scheme.

- **Point of obligation**

Where practical, the point of obligation should be as close as possible to those who can change their behaviour and reduce emissions. However, in keeping with the design principles outlined above, the point of obligation should be set for each industry sector at the appropriate place considering both the impact, the cost of administration and the ability to make changes. In the electricity industry the most appropriate point of obligation is the generator.

- **Permit design**

As stated above, the scheme needs to cover all six of the identified greenhouse gases and the permit design needs to recognise the different warming potentials of each of the greenhouse gases by converting their impacts into a carbon dioxide equivalent (CO₂-e). This is the approach used in other jurisdictions such as the EU. To ensure fungibility both locally

and internationally the permit design needs to be for a single permit worth one tonne of CO₂-e. Care needs to be taken to ensure that offset credit permits are sufficiently well defined and accepted to maintain the credibility of the scheme.

- **Permit issuance**

The Council supports the proposition that auctioning is the most appropriate mechanism for the issuing of the bulk of the permits. Some permits may be allocated as part of the transitional arrangements discussed below.

Auctioning should be made on a fixed schedule, and the Council suggests that quarterly auctions (the model used in the National Electricity Market Settlement Residue Auction) would be appropriate providing a suitable compromise between single large annual auctions and the complexity of multiple small weekly auctions.

All permits sold at the auction would trade at the common clearing price. Future on-trading of permits and the sale of offset permits would then be at prices set by the market at the time.

Cash flow issues are a major concern, particularly to large emitting businesses. To assist in managing these issues, it is possible to decouple the payment period from the auction time table and have successful participants pay more (or less) frequently from the auction.

To minimise the administrative burden on participants, consideration should be given to the use of existing mechanisms, such as Business Activity Statements (BAS) payments, for the payment of the monies required from successful auction bids.

As with all new markets, the ETS will take some time to mature and consideration may need to be given to the inclusion of rules to ensure that the credibility of the scheme is maintained and that no participants are able to distort the market by the exertion of undue market power.

- **International trade and linkages**

International linkages have the potential to impact strongly on the effectiveness and efficiency of the Australian ETS and must be considered carefully to avoid unexpected distortions.

It is well recognised that climate change is a global issue and can only be mitigated through international action. Nevertheless, the Council does not support waiting for international agreements before introducing an ETS and believes that a local scheme with simple linkages to other schemes as they develop will provide the incentives for true global action.

Careful linking to other schemes can limit the financial impact on the Australian economy while still achieving the aims of carbon abatement.

On the other hand it is important that there are sufficient incentives to ensure the required changes occur in Australia so that industry and the economy can be strategically positioned for a low carbon future.

- **Price control**

One of the prime reasons for implementing an ETS in preference to a carbon tax is the desire to set targets for carbon reduction and ensure that they occur, rather than just putting a price on carbon and hoping the appropriate reductions occur. Any price cap on the scheme would put a cap on the cost of the scheme, however, it would also put the credibility of the scheme at risk if people chose to pay the penalty rather than reduce emissions. Therefore the Council supports the proposal in the Paper not to have a price cap, but rather use a penalty price, set at a level above the marginal price of abatement, plus a make-good provision. This will ensure the ongoing credibility of the scheme.

- **Inter-temporality: banking and borrowing**

The Council supports unlimited banking and limited borrowing in a similar fashion to the MRET arrangements.

Enabling participants to bank permits will provide flexibility to the market and will assist in the development of a forward market for permits, while at the same time reducing the price volatility in that market. It will allow participants to efficiently manage their risk positions and make informed decisions on investments.

There are risks associated with unlimited borrowing from future obligations. The credibility of the market would be severely harmed should a business collapse owning a large number of borrowed certificates. To limit this risk borrowing should be limited to a very small percentage of the annual liability to cover administrative oversights in balancing annual liability, as is permitted under the MRET.

- **Transitional issues**

The ETS is designed to ensure a carbon price permeates throughout all economic activity and drive fundamental changes to the Australian economy. As identified in the Paper this could lead to significant negative impacts on some industries, regions of the country and social groups within the economy. It is appropriate to put in place transitional measures that have the effect of ameliorating these impacts while these sectors transition toward lower carbon intensity activities, without compromising the intent of the scheme. The Council supports the introduction of such targeted transitional measures provided that they are carefully considered and designed to avoid undesirable outcomes.

These transitional measures need to be designed to encourage people and businesses to improve their emission and efficiency performance over the long term.

The measures need to be designed to:

- provide transitional support for businesses, communities and individuals while they adapt to the impacts from the introduction of an ETS;
- develop a level playing field for all businesses to compete;

- encourage improved greenhouse performance in the production and use of energy; and
- ensure the long term competitiveness of Australian industry in the context of increasingly global carbon constraints.

Depending on circumstance and the exact outcomes being sought, this transitional support may take the form of a direct allocation of permits, some form of financial support or other options as appropriate. For the ongoing integrity of the ETS it is important that these arrangements are transitional and include mechanisms for their phase out as local or international circumstances change.

Transitional measures that provide some support to businesses facing negative impacts from ETS introduction may also avoid their investors and financiers seeking higher risk premiums for future investments in Australia, which in turn may have long term detrimental impacts on the Australian economy.

The Council supports the conclusion reached in the Paper that the extent or form of any transitional support is unlikely to impact on the price of carbon and therefore still result in costs of goods and services that reflect that cost/price. Similarly well designed transitional measures will not impact on the environmental outcomes of the scheme.

- **Scheme reviews**

The Council supports the proposal in the Paper that the Independent Carbon Bank (ICB) reviews the emissions trajectory every year, and if certain prescribed parameters are met, recommends the move to a tighter emissions trajectory to occur after a five year notification period.

To avoid unnecessary uncertainty the Council recommends that reviews of the ETS be infrequent and that any major changes should be subject to a reasonable lead time. The Council suggests that it would be appropriate to review the performance of the scheme in 2020, with any major amendments being delayed until 2025. This timing would create the market predictability required by developers.

- **Governance**

The credibility of the scheme will be enhanced by the use of an independent operator and therefore the Council supports the creation of the ICB to oversee the operation of the ETS.

- **Compliance and penalties**

In keeping with other schemes both nationally and globally, a participant's emissions should be measured over a calendar year period and an annual date set for the surrender of permits. To provide some flexibility there should be provisions for people to surrender permits more frequently if they desire.

As discussed above, the Council supports the premise that there should not be a price cap on the market, however there is a need for a penalty to be applied if a party fails to surrender permits equal to their emissions during a the annual compliance period.

To maintain the integrity of the scheme, this penalty must also be accompanied with a make-good provision.

The banking / borrowing provisions along with international linkages and offsets from non-covered sectors should allow full compliance without huge price volatility.

- **Secondary Trading**

A strong forward market will be essential for the efficient working of the ETS. It will provide the forward price curve needed to allow developers to plan and build future plant and to manage the risks of existing plant.

There is no need for this to be facilitated within the ICB as other mechanisms will develop as needed (including brokers, screen based trading and futures markets). However, to underpin this trading and provide the necessary market confidence, there is need for a central registry for permits to manage the rapid, cost effective and accurate registration, transfer and surrender of permits.

Barriers and supporting measures:

- **Market Barriers**

While ETS is a major driver in the move to lowering Australia's carbon footprint, there are a number of barriers that must be overcome to ensure this is achieved in an orderly manner and at the least cost.

Australia's economy has grown over the past 200 years on the back of plentiful cheap energy, huge quantities of easily accessible minerals and vast amounts of fertile land. This has led to a prosperous country, but unsustainable practices in energy production, energy use, mineral extraction and agriculture.

It will be a huge task to turn the economy around and overcome the inertia of the currently entrenched technologies and modes of production. An ETS alone will not do this quickly or easily. The Australian Government will need to overcome barriers and address market failures in:

- imperfect information flows;
- unconsidered externalities;
- inbuilt monopolies;
- infrastructure development; and
- immature industries.

- **Australia's renewable energy potential**

Australia has vast renewable energy resources that will contribute to significant lowering of Australia's greenhouse gas emissions; and many businesses with the capacity and capability to deploy them.

A number of reports have been published over the past few years that demonstrate the capability of the renewable energy industry to deliver large quantities of energy into the Australian systems, and show that, with suitable support mechanisms, they will do this at costs that will reduce quickly.

In the past two years the Renewable Energy Generators of Australia (REGA) have commissioned two reports from McLennan Magasanik Associates (MMA) on the potential of the Australian renewable energy industry¹ and on the impact of a clean energy target on an ETS². These reports show that Australia has enormous renewable energy potential and that, with the appropriate policies in place, its costs will drop significantly. The Council commends these reports to the Review and the Council's own database shows that the clean energy industry has the capability to deliver the projects required. The Council's database of projects has already identified projects totalling over 14,000MW (around 40,000GWh pa) that are under development or consideration.

- **R&D Investment**

Australia has a long history in high quality research and development (R&D), both within our universities and other government bodies and within our industry. Australia has also been a rapid follower taking up new and innovative goods and processes quickly and often improving on them.

It is well recognised that the initial R&D phase of a new technology can be very expensive and with a high risk of failure. These high costs and the risk premiums applied mean that ETS alone will not drive significant R&D and additional measures will be needed to ensure that the work continues to find new ways of reducing our greenhouse gas emissions. Historically the most effective measure for driving R&D work has been direct grants to businesses and institutions carrying out the work. This by definition requires those in charge of the grants process to try to pick potential winners.

In order to use the budget allocated to R&D effectively Australia needs to establish a national R&D strategy identifying those areas where Australia has an international advantage either through the particular resources or researchers.

For other technologies Australia may be better placed to learn from international R&D work and import the technologies when they are at a stage ready for deployment.

Australia has competitive advantages in areas such as:

- hot deep rock geothermal;

¹ Renewable Energy – A Contribution to Australia's Environmental and Economic Sustainability. (June 2006)
<http://www.rega.com.au/Documents/Publications/J1281%20Final%20Report%20V3.pdf>

² Increasing Australia's Low Emission Electricity Generation – An Analysis of Emissions Trading and A Complementary Measure. (October 2007)
<http://www.rega.com.au/Documents/Publications/MMAII-FINAL%20Report.PDF>

- large scale solar PV and solar thermal;
- pre-drying of lignite;
- some areas of bioenergy; and
- solar water heating.

The Council believes that a proportion of the revenue collected as a result of the auction of emissions trading permits should be recycled into Australian innovative R&D programs which have the potential to lead to large scale deployment of renewable energy and to drive large improvements in energy efficiency that will deliver significant reductions in emissions in the long term.

- **Mandatory Renewable Energy Target (MRET)**

The original MRET was introduced in 2001 and has been directly responsible for the construction of over 1,800MW of new renewable energy generation to date. It is Government policy to now increase the Renewable Energy Target to meet a 20% renewable energy target by 2020.

As was recognised in the MMA report mentioned above (Increasing Australia's Low Emission Electricity Generation – An Analysis of Emissions Trading and A Complementary Measure) the continued support of an MRET has the potential to overcome a number of the market failures faced by new clean energy generation in the Australian market and lead to lower costs to the economy in the long term. It is important to consider this time dimension in this debate.

MRET allows renewable energy to be deployed earlier than would occur under just emissions trading and at leveraged low cost to the economy. It allows technologies to transition quickly and smoothly from pilot plant through early deployment to full commercial deployment without the economy facing a high and sustained carbon price.

By combining emissions trading and other measures such as MRET, dual objectives can be achieved, including:

- least cost emissions abatement across the economy; and
- specific support for the fledgling Australian renewable energy and low emissions technology industries in order to establish substantial medium term growth and competitively export internationally in this strategically important rapidly expanding global sector.

The Council believes that the Federal Government needs to move quickly to provide investment certainty by finalising its work on the expanded Renewable Energy Target and implementing the amendments in 2008 for a 1 January 2009 start date for the revised scheme. The Council believes the current MRET design is working well but suggests the following major changes as a minimum requirement to meet the Governments policy position:

- the target rising from the 2008 target 6,800GWh in a linear trajectory to 45,000GWh in 2020, and then continuing at that level until 2035; and
- the penalty price increased and maintained at a level above the marginal cost of abatement and at a level that will support the industry meeting the measure.

The Council anticipates that additional changes may be identified through the amendment consultation process and would welcome the opportunity to provide detailed advice to both the Review and Government.

As the carbon cost rises over time and the cost of new renewable technologies fall, the cost of the MRET will naturally drop.

- **Feed-in Tariffs**

Small scale generation installations such as solar PV and individual wind turbines face particular market barriers that are not easily addressed through mechanism such as ETS and MRET. Further supporting measures that better recognise the impacts of local generation on both the power system and the behaviour of individuals are needed. Internationally in places such as Germany and Spain feed-in tariffs (FiTs) have been effective in driving investment in technologies such as solar PV. The Federal Government has announced that it will facilitate a consistent national approach to FiTs.

To be effective, this mechanism needs to be based on the gross generation at the site rather than just the generation exported to the local grid.

- **Market barriers to energy efficiency**

Numerous credible studies have identified large scale cost-effective energy efficiency improvement potential, often at cost effective prices even before a carbon price is added. This, however, begs the question of why energy users do not take advantage of these opportunities to save money now.

The key market barriers are often summarised in the following categories:

- imperfect Information;
- high transaction costs;
- split incentives;
- inefficient pricing;
- regulatory failure;
- cultural issues; and
- external costs.

An ETS addresses the last of these barriers but does little to address the other six. The cost impact of an ETS will only be minimised if all cost effective options to address these barriers are implemented.

The following section recommends how some key policy instruments to support energy efficiency should be applied in the Australian environment in the context of the establishment of an ETS. Six key policy priorities are highlighted:

1. A national energy efficiency target

This target needs to set an objective of total energy consumption peaking before 2012 and then falling by a minimum of 1% per annum to drive Australia to the forefront of OECD energy efficiency improvements. This target is achievable and needs to be supported with a clear and detailed action plan including allocation of responsibility and annual reporting.

2. A “white certificate” energy efficiency trading scheme

This scheme should form a key but not the only mechanism for meeting the energy efficiency target. It should be applied to the electricity and gas sectors, either at the retail or distribution level and should incorporate the NSW GGAS Demand Side Abatement, the VEET and the South Australian REES. The accounting and verification system should strike a balance to ensure that certificates are created but should not be so narrowly prescribed as to exclude real energy efficiency actions.

3. A national energy efficiency fund

This fund should be created with revenue from the auctioning of emissions permits and used to support energy efficiency measures that are not easily incorporated into a white certificate scheme including industry capacity building.

4. Minimum energy efficiency standards and information disclosure for new and existing buildings

Standards should be raised to ensure all cost effective energy efficiency measures are incorporated into new buildings and progressively into existing buildings at the time of sale and/or renovation.

5. Industry capacity building

Skills training needs to be rapidly expanded to meet the expected growth in the energy efficiency industry.

6. Electricity industry regulatory reform

Regulation of the electricity sector, particularly of monopoly network businesses needs to be reformed to remove disincentives to investment in customer energy efficiency and to reward utilities for helping their customers to save energy.