

21 April 2008

To Garnaut Climate Change Review Secretariat
Level 2, 1 Treasury Place
EAST MELBOURNE VIC 3002
email at contactus@garnautreview.org.au.

Dear Professor Garnaut

RE: EMISSIONS TRADING SCHEME DISCUSSION PAPER

Thank you for the opportunity to comment on the Emissions Trading Scheme Discussion Paper.

In this submission, SA Water discusses the issues associated with ensuring that the Australian Emissions Trading Scheme AETS is designed to co exist with voluntary renewable and low emissions energy actions.

As SA Water moves towards energy intensive desalination schemes, advanced wastewater recycling and higher standards for wastewater disposal, we propose to manage our greenhouse gas emissions associated with electricity use (defined as scope 2 emissions) by purchasing renewable energy and low emissions electricity products as well as accredited carbon offsets. We consider it reasonable to expect that if SA Water commits to such a market choice, it will own the associated emissions avoidance (in the scope 2 category).

The establishment of the capacity to reduce electricity related emissions, avoid carbon costs of emissions permits passed through the price of electricity, and the ability to drive additional emissions reductions to the mandated requirements of the AETS, are key requirements for Australian businesses such as ours. This is not possible under the current physical approach to emissions accounting re-affirmed in the National Greenhouse Accounts (NGA) Factors 2008 workbook, and poses a risk for the interaction of emissions trading with the greenhouse management of our business activities.

Other comments are made in relation to the topics of the discussion Paper in order of priority rather than in the order of the discussion document.

Yours sincerely

Anne Howe
CHIEF EXECUTIVE

About SA Water

SA Water Corporation (SA Water) is wholly owned by the State Government and provides water and wastewater services to approximately 1.4 million people state wide. Employing about 1300 staff, SA Water has an annual turnover of over \$700 million and more than \$7 billion in assets. Network infrastructure includes 25 000km of water mains and 8 100km of wastewater mains, allowing the Corporation to service an area of approximately 1 million km².

SA Water is strongly committed to reducing its greenhouse gas emissions and has been an active member of the Greenhouse Challenge Plus program since 2003.

Climate change impacts, higher standards for wastewater treatment and reuse, are likely to increase:

- the need for new infrastructure;
- electricity requirements (particularly for desalination);
- electricity costs (as carbon constraints are incorporated into standard energy pricing); and
- the cost of renewable energy and carbon offset products.

SA Water triggers the threshold for reporting under the Nations Greenhouse and Energy Reporting System (NGERS) and will be covered by the Australian Emissions Trading Scheme with requirements to acquire emission permits for fugitive emissions from wastewater processes and direct fuel usage.

5.2 The case of stationary energy

Role of Secondary Markets

On current advice from the Department of Climate Change (DoCC), consumers are not likely to be offered an electricity product of reduced or zero emissions. The DoCC, have nominated a physical approach to determination of the greenhouse intensity of 'grid electricity' in the National Greenhouse Accounts (NGA) Factors (2008) workbook. This means that no matter what type of electricity is bought, including renewables, lower emissions gas, brown coal or black coal, the attributed scope 2 greenhouse intensity is the same. The emissions benefits perceived by the market to be included in renewable energy purchasing do not therefore exist in a legal sense, as these benefits will have already been allocated to the grid community by proportion of use.

Secondary markets should enable customers that choose to buy renewables and low emissions energy to reduce their emissions and avoid some or all of the carbon costs associated with carbon permits. It would not be fair for a business to go to the expense of buying 100% accredited renewable energy, to then not receive reduced emissions and still pay for carbon costs embodied in the pricing structure of their electricity product.

Large users such as water utilities seeking to operate desalination plants in a carbon neutral way, can only justify the additional operating expenditure this approach entails, by receiving legal entitlement to reduced emissions (scope 2).

Secondary markets do have a valuable role to play in supporting the Emissions Trading Scheme (ETS) and empowering businesses and communities to play an additional voluntary role. It is essential that the single NGERS framework, and the ETS framework do not cause market failure in secondary markets.

Interaction with the mandatory renewable energy target (MRET)

In order for the Australian Emissions Trading system to co-exist with MRET in a fair and supportive manner, it is essential that Renewable Energy Certificates be quantified in terms of their emissions. For RECs from wind power, the scope 2 emissions would be zero. For some other renewables such as from biofuel crops, there will be a scope 2 value that can be quantified on the certificate.

In this way, there would be a common unit between the two systems.

It is the MRET Renewable Energy Certificate (REC) that is used in GreenPower and presented to customers as “*GreenPower – make the switch and cut your greenhouse gases today*”.

If RECs don't have a greenhouse benefit and the ETS Framework, the MRET framework and NGERs accounting frameworks follow a physical approach, then by definition, GreenPower contracts provide no greenhouse benefits for customers and this should be communicated.

In relation to the special case of stationary energy, appropriate protection of voluntary renewable energy and low emissions energy markets is essential for the Emissions Trading Scheme to align with Principles 2, 3, 4 and 5 described in the ETS discussion paper.

5.3 Adjustment in other sectors

Fugitive Emissions

The case of fugitive emissions from wastewater will require special consideration when it comes to measurement and permit requirements.

For nitrous oxide and methane emissions from wastewater collection, treatment and disposal processes, the measurement methodologies are immature and will require ongoing research and site ground truthing before wastewater management utilities can have confidence in the data they report.

Emerging scientific evidence suggests that in some situations, fugitive emissions from wastewater may be several times higher than currently reported. When multiplication factors are introduced (x 21 for methane and x 310 for nitrous oxide {NGA Factors 2008}) the impact on wastewater management authorities may be significant with few short term management options available.

With such potential emissions liabilities largely linked to population, it will be important for the ETS to make provision for a smooth adjustment and permit availability as methodologies are improved.

3.5 Releasing permits into the market

Method of permit release: Free or Allocation Auction of Permits

The discussion on the market impact of either auctioning or grandfathering emission permits in the first instance is interesting in that it suggests that grandfathering permits to existing emitters will not prevent or significantly delay costs from being passed on to customers. With this being the case, a “level playing field” would be better achieved through auction of permits. In addition, auctioning provides a fairer market option to support Principle 3 for credibility of the AETS design by creating conditions where market players enter the ETS with an equal standing.

3.3 Establishing the emissions limit

Emissions Baseline

Various design proposals and economic models over recent years have been based on different emissions baseline years to describe their pathways. The adoption of a later baseline, say year

2000, can be interpreted as re-starting the clock, particularly when an emissions pathway is then mapped out for a further increase in emissions before they are wound back. For transparency, and consistency with the internationally accepted approach, it is urged that 1990 is used as the starting year. This then recognises the growth in emissions between 1990 and 2000 and makes it easier for stakeholders to understand Australia's reduction targets in comparison with those of other nations.

Figure 3.1

Figure 3.1 provides a useful concept illustration of different approaches for early and delayed actions to reduce emissions. It will be important however to show quantified values for trajectory options that are used in economic modelling, and in doing so, the X axis should start at 1990 and continue to 2050, whilst the Y axis should start at zero and show the full range of emissions. This is important for the document to be seen as credible by not hiding part of the picture to make future achievements appear to be more significant than they might be.

What shape should the trajectories take?

Rather than 5 year stepped blocks, it would be better for annual small cuts in emissions to be required through reductions in permit allocations. This would provide fewer business and market shocks. There is a risk that if 5 yearly permit constraints were applied, then multiple businesses unable to adjust or acquire permits may fall from the market in one pulse causing un-necessary hardship. For this reason, it is suggested that a 5 year permit allocation term be defined yet with linear reductions across each year to maintain a smooth emissions reduction pathway.

Trajectories A, B,C and D

Trajectory A is established for the period 2008-2012

Trajectory B - does not address the climate change problem fast enough and fails to show any leadership in pegging Australia's greenhouse emissions performance to the average performance of other developed nations. Trajectory B borders on a 'Tragedy of the Commons' approach whereby emissions would not become sustainable due to fear of losing competitive advantage. Whilst becoming sustainable does come at a cost and creates risks until other players match our standards, the alternative approach leads to eventual collapse, and in the case of water supply, very difficult conditions to manage in the longer term. Leadership is important.

Trajectory C - provides a balance of leadership and aspiration to additional action as stronger global co-operation is established. This approach by concept appears to be favourable but cannot be fully supported until the details of the emissions reduction targets are known. It would be best if Trajectory C were designed to be as close as reasonably practicable to Trajectory D, with differences quantified in terms of particular trade issues.

The case to defer emissions reductions in parts of the Australian economy should be linked to industry specific trading constraints that may be cause by nations that have lower greenhouse standards. Such trade-exposed, emissions-intensive industries (TEEIs) are already identified as requiring assistance. Where no such competition exists, there is no need to allocate additional permits.

Trajectory D –should be considered as the aspiration goal to be achieved with international collaboration at the earliest opportunity. In working towards Trajectory D, international industry sector agreements and common global greenhouse performance standards adopted by multi national companies could assist in paving the way for Global agreements between nations.

3.6 International links

International linkages to the ETS provide both opportunities and risks to both the effectiveness of the ETS in achieving real reductions in net greenhouse gas emissions.

There are risks associated with carbon leakage. If the Australian ETS is linked to countries that do not have comparable levels of emission constraints then offsets might be sold to Australia at the same time as emissions increase in that trading country. This has been one of the problems associated with the Kyoto Protocol allowing nations such as China to trade in Certified Emission Reductions alongside rapidly increasing emissions from that nation.

Australia must be careful to assure that carbon offsets traded from other nations are surplus to that country's requirements to reduce their own current and future emissions. There is no long term solution in shifting funds from an overdrawn credit account to an overdrawn savings account, and the same applies to carbon.

A long term approach would identify and manage such risks at an early stage to prevent speculative or over-enthusiastic dependency on carbon credits from the international market that may become scarce when a holistic accounting approach is applied.

Adjustments to Australia's National greenhouse accounts will also need to be planned to cover imports and exports of carbon offsets.

3.7 Flexibility in meeting targets

Price Ceilings and Floors

A price ceiling on the value of emissions permits is not supported as this undermines the entire concept of the role of the market in a cap, permit and trade system.

There seems to have been an ideologically based preference against a tax based system towards permit and trade system with no formal comparative assessment. It would be useful to run economic modelling on a tax based system and formally assess and compare the ease of implementation and effectiveness compared with the permit and trade based system.

That said, there is no place for an artificial ceiling price in the design of a cap, permit and trade system.

Inter-temporality

A mechanism to enable the forward purchase of emissions permits allocated for a particular year will be useful for businesses to manage their forecast emission liabilities. Constraints may be required to prevent speculative hoarding that may cause perverse market distortions and difficulty particularly for smaller businesses with less purchasing capacity.

Whilst there may be some scope to transfer emission permits not used in one year for acquittal in a subsequent year, it is not desirable for future emission permits to be valid in an earlier year. This would create a perverse future shortage of permits.