

Mr Tim Kelly
Adelaide
South Australia

The Secretary
Senate Standing Committee on Economics
PO Box 6100
Parliament House
CANBERRA ACT 2600

economics.sen@aph.gov.au

RE: Inquiry into: Carbon Pollution Reduction Scheme Bill 2009

Please accept this submission to the Senate's inquiry into the Carbon Pollution Reduction Scheme package of bills. In particular, I provide comments in relation to b) the Carbon Pollution Reduction Scheme Bill 2009 which causes harm to voluntary actions, mechanisms and market responses by businesses, individuals and households to reduce their own emissions, reduce National emissions. The Bill fails to provide choice or incentive for alternative zero or low emission energy retail products that should not include a carbon cost or a reduced carbon cost.

I would also welcome the opportunity to appear in person at committee hearings into this matter. Whilst I make this submission as a private citizen, I work as a Principal Climate Change Advisor in the Water Industry and have significant knowledge and experience in climate change policy matters and particularly in addressing the challenges of managing greenhouse gas emissions using poorly designed voluntary market mechanisms.

Summary

The Federal Government has not fully understood the problems of voluntary actions under its CPRS. Its proposed mechanisms for voluntary action are unrealistic, contradictory (therefore self cancelling), unfair and ineffective. The situation is no better as a result of the Government's changes to recognise GreenPower, or its Carbon Trust. A more transparent approach would have been to be upfront and state that voluntary actions don't work effectively under emissions trading.

*The question must be asked as to why individuals and households would buy and surrender permits? This will cause greater AEU scarcity, increase the carbon price unnecessarily, increase the cost to the economy of achieving the same level of abatement and **make the situation less feasible to set more ambitious emissions reduction targets!** This is the Government's own logic applied the defence of traditional voluntary actions but acting in the opposite direction. Used at the same time within the economy, the government's support for traditional voluntary action (Energy efficiency, household renewable systems and buying GreenPower) having merit because the lower the economy wide cost, reduced demand for permits, reduced price of permits will improve the feasibility for the Government to lower future caps, is completely contradicted by the concept of voluntary removing of permits. Used within a single GreenPower transaction as proposed, the effectiveness of the voluntary action is cancelled.*

Voluntary Actions and the Rudd Government's changes to its proposed Carbon Pollution Reduction System

The Australian Government is belatedly acknowledging the harm that its proposed Carbon Pollution Reduction Scheme will have on the effectiveness of voluntary actions taken to reduce emissions. The media release from the Prime Minister, Treasurer and Minister For Climate Change and Water on May 4, 2009, stated that : “*The Rudd Government has listened to Australian households who have raised concerns that their individual efforts to reduce emissions will not be adequately taken into account under the CPRS*”, and a number of measures were proposed. So did the Government listen enough and has it has fixed the problems in regards to voluntary actions as claimed, or made them worse?

Where do the benefits of voluntary actions currently belong?

Under emissions trading, the benefits of voluntary actions are changed or cancelled, yet many believe that there are simple fixes that can be applied. It is important to understand how voluntary mechanisms work, whether actions are effective, and who owns the benefits. This understanding can serve as the foundation to determining whether the actions still have merit under emissions trading. So lets consider several examples:

- 1) **Energy Efficiency:** Without emissions trading, where individuals, households and businesses find ways to reduce their electricity use, fuel use or consumption of other products and services, their greenhouse gas emissions are reduced and National emissions are reduced.
- 2) **GreenPower:** Under Australian law, GreenPower works as a donation. Customer emissions are not reduced (despite marketing messages that [suggest otherwise](#) [2]) but new renewable energy is created which serves to avoid emissions from non renewable power stations so National emissions are reduced.
- 3) **Household solar and hot water systems when Renewable energy Certificates (RECs) are sold:** Where households establish these systems, their emissions are reduced, but their RECs are signed across to third parties, **either** other renewable energy that was already required by law is no longer needed so there is zero reduction in emissions Australia wide **or**, their RECs are used to create GreenPower that double counts the greenhouse reduction and use benefits as it is sold to other households and businesses negating the additionality of the efforts of the GreenPower Customer.
- 4) **Household solar and hot water systems when Renewable Energy Certificates (RECs) are kept by the householders:** Household emissions are reduced and National emissions are reduced.

So there are a number of good outcomes and wasted outcomes from current voluntary actions, and I maintain that there is an urgency to either reform GreenPower and electricity emissions accounting or clarify that it is really just a donation system for the benefits to be shared amongst all grid customers in proportion of their use so that the Trades Practices Act (1974) is complied with. (Also note that this matter is about the legal assignment of benefits and has nothing to do with how the grid is used or how inputs or outputs to the grid are measured).

The basic problem of voluntary actions under an emissions trading system.

As [pointed out](#) [3] by me since September 2008, by Richard Dennis in his [discussions](#) from the Australia Institute, and others where greenhouse gas emissions are voluntarily reduced by an

individual or business under an emissions cap and trade scheme, this frees up permits that can then be used elsewhere in the market resulting in zero reductions in Australia's National emissions.

Now let us run through the same four examples again, under an emissions trading scheme with no Government fixes of problems. (I will skip the some of the details that still apply).

1) **Energy Efficiency:** Individual, household or businesses reduce their emissions but National emissions are no longer reduced reduced as permits are redirected and used elsewhere.

2) **GreenPower:** Customer emissions are not reduced (as before), but now National emissions are not reduced either. The Nation's biggest electricity users receive the lion's share of the scope 2 greenhouse reductions where the State grid emissions intensity factors are reduced.

3) **Household solar and hot water systems when Renewable energy Certificates (RECs) are sold:** Household emissions are reduced but National emissions are not reduced because a) renewables that were already required by law are no longer needed and b) because permits are redirected and used elsewhere in the market.

4) **Household solar and hot water systems when Renewable energy Certificates (RECs) are kept by the householders:** Household emissions are reduced but National emissions are no longer reduced.

By using these examples we can see that individual actions to reduce emissions become less meaningful under emissions trading, compounding a number of pre-existing problems.

Government contradictory approaches on how voluntary actions have meaning under the proposed Carbon Pollution Reduction System:

In the Government's Discussion Paper on a National Carbon Offsets Standard, and in follow up claims by Minister Penny Wong there have been a number of explanations on how voluntary actions might work under the CPRS. The Government first claimed that traditional tangible voluntary action still has value in that it reduces:

“the demand for permits. This will in turn reduce the carbon price, reducing the cost to the economy of achieving the same level of abatement. As the cost to the economy decreases it becomes increasingly feasible to set more ambitious emissions reduction targets”.

With this approach, it is the “feasibility” aspect that determines whether the cap is reduced in following 5 year target and gateway periods that determine how quickly Australia will move towards and beyond its mid term target in five yearly blocks. My own view is that this approach was probably close to how the scheme would work but it has virtually been abandoned by the changes announced on May 4, 2008.

Voluntary retirement of Australian Emissions Units (also referred to as permits)

The contradictory approach comes from the concept of voluntary retirement of Australian Emissions Units AEU's. The basic idea is that if there is a fixed amount of permits released, and persons or entities acquire these permits but retire some of them voluntarily without causing emissions then this will cause a reduction in total permits available for pollution so National emissions will be reduced.

There are two fatal flaws with this approach as follows:

a) Where AEU's are released in surplus, this approach has no impact. This can where the the cap is breached and unlimited permits begin to be released as can occur under the CPRS proposal for \$10/tonne unlimited permits in the first year followed by \$40/tonne unlimited permits commencing in the subsequent year. As soon as the cap is breached, there would be proof that voluntary retirement of permits has failed.

Alternatively, recession can cause permit surplus (as currently being experienced in the European emissions trading system) meaning that individuals may be retiring permits that may not have been used anyway.

b) Secondly, the logic is a complete contradiction of the Government's case for traditional tangible voluntary actions to have meaning. This is what will happen:

Voluntary retirement of Australian Emissions Units causes greater AEU scarcity. This will in turn increase the carbon price, increaseing the cost to the economy of achieving the same level of abatement. As the cost to the economy increases it becomes less feasible to set more ambitious emissions reduction targets.

In addition, unlike traditional actions like permanent improvements in efficiency or additional renewable energy generation, throwing AEU's in the bin, does not create infrastructure that would improve Australia's capacity to reduce emissions further.

Changes made to the CPRS on May 4, 2009

Australian Carbon Trust

Sounding like something dreamed up in an episode of "The Hollow Men", the Government has proposed the Australian Carbon Trust where Australians can donate money that will be used to "fund efficiency improvements in commercial buildings and businesses". Well at first glance this sounds good but this does not reduce emissions under the Government's scheme so it is really just more charity for businesses. Which ones, we don't know!

Voluntary Retirement of Permits

The Federal Government has proposed that "a new website will provide a one-stop shop for individuals and households to simply calculate their energy use and buy and retire carbon pollution permits under the Carbon Pollution Reduction Scheme".

The question must be asked as to why individuals and households would buy and surrender permits? This will cause greater AEU scarcity, increase the carbon price unnecessarily, increase the cost to the economy of achieving the same level of abatement and **make the situation less feasible to set more ambitious emissions reduction targets!** This is the Government's own logic applied the defence of traditional voluntary actions but acting in the opposite direction.

One further complication is that as the price of pollution increases in time (and it must to achieve deep cuts in emissions) the cost of this approach increases in a perverse manner. In a proper functioning market, the cost of voluntary action to reduce emissions should decrease in comparison to greenhouse intensive options, not be tied with the cost of pollution.

Changes to GreenPower

The Government will now retire an Australian Emissions Permit associated with GreenPower sales above a threshold. This means that the indirect benefit of GreenPower that as previously described by the Department of Climate Change will reduce the demand for permits. This will in turn reduce the carbon price, reducing the cost to the economy of achieving the same level of abatement. As the cost to the economy decreases it becomes increasingly feasible to set more ambitious emissions reduction targets is now cancelled because a permit is now going to be removed to increase the demand for permits. This will in turn increase the carbon price, increase the cost to the economy of achieving the same level of abatement. As the cost to the economy increases it becomes less feasible to set more ambitious emissions reduction targets.

So with the Government's proposed change, we end up back where we started from. Decreased scarcity to ultimately reduce emissions is undone with re-introduced scarcity. I am astounded that the Australian Government has used the same logic at once in two different directions claiming that either way emissions will be reduced.

GreenPower Threshold

GreenPower threshold that causes AUE retirement only for purchases above 2009 levels has focused attention on the fairness of the threshold rather than the mechanism itself. Whilst the use of thresholds to count or discount voluntary efforts of individuals in any given year is blatantly unfair, it is irrelevant and diversionary in this instance as the whole concept of throwing permits in the bin is flawed anyway and the general problems of whether voluntary action is meaningful under an emissions cap and trade scheme are not resolved.

Furthermore, none of the underlying problems of GreenPower, its greenhouse accounting and its marketing messages have been resolved. The Government is proposing to recognise greenhouse reductions of a product that has no greenhouse reductions to offer, as these benefits have already been assigned to all grid customers under Australian Law. The Government might as well retire an AEU with old shoes because in terms of greenhouse reductions they have the same merit.

Efficiency

So where does efficiency end up under the Government's proposed Carbon Pollution Reduction System? Whilst not making a clear unambiguous statement, the Australian Government has now progressed on a pathway that suggests that energy efficiency which reduces the emissions of households and businesses is futile in terms of emissions reduction unless further payments are made to the Australian Carbon Trust to throw permits in the bin.

The Government's [Fact Sheet on Individual Action](#) reads as follows:

“Web based tools will enable households and small businesses to calculate their energy use and the dollar savings that can be made through actions to reduce energy use such as installing energy efficient appliances. Individuals can then pledge the resulting savings, or any other amount, to the Energy Efficiency Savings Pledge Fund. The fund will buy and cancel carbon pollution permits to create additional emission reductions. Individuals could also choose to purchase and cancel offset credits complying with the Government's forthcoming National Carbon Offset Standard”

If my family and I go a bit hungry and shiver in the dark and manage to halve our personal emissions this doesn't count under the Government's new implied perspective on voluntary action. Instead of being able to use our savings to pay off our mortgage, to reduce emissions we then need to donate our savings to the Energy Efficiency Savings Pledge Fund presumably managed by the Australian Carbon Trust where it will be used to buy a permit which forces up electricity prices,

does nothing tangible to reduce emissions and makes the situation less feasible to reduce the cap in the future.

In my view, if my family reduces its emissions by halving resource use then this should be recognised in regards to our personal footprint, and if the Federal Government is now suggesting that under the CPRS our actions are not genuine and that we should also buy and throw permits in the bin, through a mechanism that cannot work in the real world then the system is wrong and it is offensive.

Why Voluntary action is the major Economy wide Issue, not something at the margins

Some claim that voluntary actions are and will always be minor in terms of reducing Australia's emissions. yet it is not appropriate to compare a voluntary response in the absence of a carbon cost, with a market that would apply a meaningful carbon cost.

I sought to address this in the carbon tax versus cap and trade debate within our Submission to the Senate Economics Committee (section 4.2. Can voluntary action make the difference?, but there is more to it.

All actions taken to increase emissions or decrease emissions are voluntary in the absence of a scheme, under a cap and trade scheme or under a carbon tax scheme. (percentages applied to the efforts of individuals, households and businesses in terms of where emissions might have been if people took no action **cannot be realistic** as there is no reliable way to make such an assessment).

Under an emissions trading scheme any business can choose to increase emissions and it is only customer 'willingness to pay' for the necessary Australian Emissions Units (AEUs) or approved international emissions units (IEUs) that control the success or otherwise of the business. New greenhouse intensive businesses can start up providing they are given and buy AEUs or buy IEUs. Any decision a business makes to reduce emissions and avoid the need to pay the cost of such units, or to sell excess units to others is also voluntary.

It is therefore only the voluntary cost that matters even beyond 2015.

The key difference is that under emissions trading, voluntary mechanisms and the effectiveness of voluntary actions to reduce emissions by any more than the legislation requires, are significantly harmed. So it is only under the cap and trade approach that voluntary action by more than the cap will always be minor.

Under an emissions tax, all actions are voluntary! All actions for reduction are voluntary whether acting on direct or indirect emissions, and all actions contribute to the end result in a straight forward way. Where voluntary actions are damaged under one option and supported as mainstream by another there is a key difference that the Federal Government should acknowledge.

Conclusion

Given the choice between throwing permits in the bin or enhancing traditional voluntary actions in support of the concept that this will provide greater capacity to reduce emissions and ultimately make a difference, the latter option is better.

Both options are less than satisfactory. Both options cannot be used at the same time and still be regarded as credible.

It is my view that the Federal Government has not fully understood the problems of voluntary actions under its CPRS. Its proposed mechanisms for voluntary action are unrealistic, contradictory (therefore self cancelling), unfair and ineffective. The situation is no better as a result of the Government's changes to recognise GreenPower, or its Carbon Trust. A more transparent approach would have been to be upfront and state that voluntary actions don't work effectively under emissions trading.

The tragedy in all of this is that the Federal Government is proposing a scheme that is more like a taxation mechanism anyway because of its significant interventions to manipulate the price, the setting of upper limits starting at \$10 per tonne CO₂-e and increasing to \$40 per tonne CO₂-e in the second year, and unlimited permits in any given year until 2016. This approach relies on managing the price beneath the cap using national supply of permits and international supply options in a way that is more akin to a carbon tax scheme. The only difference is that all actions are voluntary and enhanced under a carbon tax approach whereas voluntary actions are harmed under the proposed emissions cap trade scheme.

Other relevant documents:

1. **Joint [submission](#) [1] with Professor Barry Brook to the Senate Economics Committee Inquiry into the Exposure Draft of the Carbon Pollution Reduction Scheme.**

http://www.aph.gov.au/senate/committee/economics_ctte/cprs_09/submissions/sub33.pdf

2. **[Submission](#) to the Department of Climate Change on the Discussion Paper for a Proposed Carbon Offset Standard**

<http://www.climatechange.gov.au/carbonoffsetting/pubs/4TimKelly.pdf>