Notes for introductory statement to the Senate Select Committee on Climate Policy

Centre for Energy and Environmental Markets (CEEM), University of NSW. 1 May 2009, Canberra

Dr Regina Betz and Dr Iain MacGill

CEEM

• CEEM is an interdisciplinary research centre working in the area of energy and environmental market analysis and design. CEEM researchers have been investigating emissions trading and energy and climate policies more generally for the last decade in Australia and internationally.

1. (a) the choice of emissions trading as the central policy to reduce Australia's carbon pollution,

- A coherent and comprehensive policy framework will be required to achieve effective, efficient and equitable transition.
- Carbon pricing is a challenging, but indispensable, component of an effective climate policy frameworks
- A comparison of *implemented* carbon tax schemes (e.g. Norway) with *implemented* emissions trading schemes (eg. EU ETS) suggests that the main policy challenge to date has been one of governance rather than choice of instrument. Inadequate ETS targets or carbon tax levels, and inappropriate free permit allocation or tax exemptions to favored emitters can all result in ineffective and inefficient carbon pricing.
- Multi-national emissions trading schemes are possible as illustrated by the EU experience, whereas harmonised taxes have proven to be very difficult to achieve as seen in EU efforts prior to the introduction of their ETS.
- Other policies will be required to provide assurance against the possible failure of 'CPRS' governance, correct the many potential market failures even with an effective carbon pricing policy, facilitate social consensus towards behavioural change, deal with equity impacts and drive innovation.

taking into account the need to:

- *(i) reduce carbon pollution at the lowest economic cost,*
- Societal economic costs associated with climate change are now unavoidable: the real issue is to try and reduce the risks of unacceptably high costs, and determine where, when and on whom these costs are most effectively, efficiently and equitably imposed.
- The critical issue for the economic cost of climate change is that of the risk of inaction versus that of action. The evolving climate science suggests potentially catastrophic impacts with unchecked climate change whereas the costs of mitigation appear to be manageable.
- In this context, the key challenge is to provide a robust policy framework that drives assured effective mitigation and adaptation regardless of the possible failure of one or more particular policy efforts, rather than attempting to develop a policy framework that potentially reduces emissions at the lowest cost.

- With respect to the proposed CPRS, there are numerous design choices that are likely to reduce its efficiency and hence increase the economic costs.
 - 1. Broad **coverage** emissions trading is only appropriate for meaningful targets; otherwise the transaction costs of coverage may well exceed benefits of inclusion.
 - 2. arrangements to shield some emitters from the carbon price (eg. as seen for liquid fuels) involve significant transaction costs with little immediate benefit, and can establish inappropriate expectations amongst CPRS participants.
 - 3. The proposed legislation has areas of enormous complexity that add to transaction costs including possible legal processes(eg, the definition of "liable entity").
 - 4. All free allocation rules will introduce distortions. Allocation based on average industry emissions intensity and output as proposed for CPRS removes incentives to reduce output (an important abatement option for transitioning to a low-carbon economy). These free allocations increase the costs imposed on the rest of the society and can also damage price discovery and carbon market liquidity.
- *(ii) put in place long-term incentives for investment in clean energy and low-emission technology, and*

The purpose of the scheme is to drive change.

- Significant change requires investment. Such investment requires an expectation that future carbon prices will be significant and assured.
- Even more importantly, investment requires 'space' to bring new plant and processes into. Probably the most important role the CPRS should play is driving the exit of high emitting plants and industries. However, this requires that the scheme be permitted to destroy their financial viability. Some proposed rules of the CPRS are specifically designed to avoid exit:
 - free allocation to coal generators depends on future ongoing market participation.
 - free allocation based on output for EITE including new entrants subsidises the output of those high emitting firms and works against the restructuring process needed for a low emissions economy.
- Additional policies are necessary to address the other market failures which occur in the innovation chain

(iii) contribute to a global solution to climate change;

- A global solution requires global action. Australia's proposed national targets and CPRS are very significant with respect to their impact on the international negotiations.
- Removing the option of a more significant target than 15% emission reductions for 2020 may be seen by other countries as Australia attempting to avoid its international obligations, given widespread acceptance that developed countries need to adopt far stronger targets in order to protect the climate.
- In particular, it appears inconsistent for the draft legislation to state that a global 450ppm stabilisation would be in Australia's interests yet not have the option of an Australian 2020 target consistent with achieving this on the table for Copenhagen.
- The proposed EITE arrangements effectively represent a subsidy for large emitters to stay or even establish themselves in Australia, even if global emissions would be

significantly reduced should such industries be located in other countries which may not have a carbon price, but do have lower-emission energy supplies.

• The CPRS offers an opportunity to provide global leadership in the implementation of effective, efficient and equitable carbon pricing, however, the proposed scheme appears to fall well short of world best practice. The rules for the third phase of the EU ETS are clearly superior to the CPRS in almost every regard.

(b) the relative contributions to overall emission reduction targets from complementary measures such as renewable energy feed-in laws, energy efficiency and the protection or development of terrestrial carbon stores such as native forests and soils;

- It is inherently difficult to precisely distinguish between the impacts of broad based emissions trading and some forms of complementary measures because the impact of the carbon price is to support activities that reduce emissions.
- Some possible measures such as soil carbon management may not currently be included in the Kyoto accounting.
- There are specific issues associated with voluntary action that will certainly require attention. One possible solution to achieve more stringent targets and support voluntary action could be an additional Action Reserve for which units (AAUs linked with AEUs) can be cancelled based on specific approved actions

(c) whether the Government's Carbon Pollution Reduction Scheme is environmentally effective, in particular with regard to the adequacy or otherwise of the Government's 2020 and 2050 greenhouse gas emission reduction targets in avoiding dangerous climate change;

- The proposed 2020 target appears inadequate given the likely global emissions stabilisation required to avoid dangerous warming, Australia's wealth and extremely high per-capita emissions.
- The proposed price cap risks the environmental integrity and the physical cap on emissions for covered sectors within the CPRS, and therefore increases the risk that government and hence tax payers will have to pay for reductions required to meet national targets.
- Risks are even greater given the potential indirect banking of excess emissions at the price cap.
- Proposed \$40 in draft legislation may be too low to prevent triggering this cap (international prices have been as high as \$60 EUAs)

(*d*) an appropriate mechanism for determining what a fair and equitable contribution to the global emission reduction effort would be;

- Clearly per capita emissions is the most appropriate general principle for allocating
 emissions rights to different countries as it is based on the aspect that each individual
 has the same right to the atmosphere as any other. The contraction and convergence
 approach proposed to achieve this hinges critically on the rate at which convergence
 occurs. Since trading of those emissions rights will be a necessary element, an earlier
 convergence will mean that there will be more transfers to poor countries.
- Other studies such as the European Commission's discussion document *Towards a Comprehensive Climate Change Agreement in Copenhagen*, published in January this year, considers 4 metrics: GDP per capita; emissions per GDP; early action, and; population growth. For an overall 30% emissions reduction in 2020 for developed

nations, Australia's (combined with NZ) reductions using these indicators would be -34%, -37%, -48% and -6%; the last being the population growth adjusted reduction. On an evenly weighted average of these four indicators, Australia and NZ comes out as -38%.

• Another report by EcoFys (2007) *Factors Underpinning Future Action, 2007 Update*, examines a number of other different approaches and also shows Australia's reduction targets are weaker than is suggested by the population-adjusted figure.

(e) whether the design of the proposed scheme will send appropriate investment signals for green collar jobs, research and development, and the manufacturing and service industries, taking into account permit allocation, leakage, compensation mechanisms and additionality issues; and

- As noted earlier, a key investment signal is exit by large emitters and the proposed CPRS actively works against such outcomes.
- Unlimited use of CDM and JI credits appears inconsistent with principles of Supplementarity within the Kyoto Protocol. This may be interpreted by other countries as a lack of willingness to ensure Australia contributes its fair share of emissions reductions domestically.
- CDM will not be appropriate in the longer term as key developing countries will have to move beyond project based 'emissions reductions from BAU' towards some form of emissions caps.
- Unlimited use of international credits puts CPRS outcomes entirely at the mercy of highly uncertain future developments in the international negotiations on such flexibility mechanisms as the CDM.

Other issues:

- The proposed governance arrangements do not reflect the lessons of good governance for 'designer' markets. Such markets are established almost entirely through government mandate and must balance market participant certainty against the necessity of rule changes as circumstances require. Hence the process and quality of rule making is vital to their effectiveness.
- For example, the Australian National Electricity Market (NEM) is Australia's most significant 'designer' market and has very formal governance arrangements built around separation of powers, transparency and consultation. Policy directions are established by the MCE while the AEMC is responsible for rule making, the AER for regulation and NEMMCO for market operation. Rule change requests can be made by any stakeholder at any time, and the process involves several consultation rounds and reasonably high transparency.
- The proposed CPRS governance appears to have insufficient separation of roles, low transparency and considerable inflexibility in changing the rules should circumstances demand it.