Productivity Commission report too narrowly focused
Climate Institute Background Note, May 2007

Overview

Productivity Commissions (PC) report on complementary measures to emissions trading is an important contribution to the climate debate but fails to recognise the significant role complementary measures such as clean energy targets and energy efficiency policy play unlocking Australia’s clean energy future.

The Institute’s initial response is that while there are many conclusions in the PC report that should be supported such as a review of tax incentive and tariffs, the Institute is concerned that this textbook economic analysis is too blinkered.

For example, the PC appears to assume that Australian businesses and innovators will sit on their hands while the global clean energy industry powers forward. This is contrary to real world experience. For example, Australia’s geothermal and solar industries are world leaders, pioneering new technology. Existing Australian clean energy innovation should be fully encouraged, not frustrated, and with the right policy settings can deliver benefits to many Australians.

The PC has also taken a very narrow view of Australia’s national interest. They assume that pricing carbon through emissions trading will largely overcome nearly all the barriers and market failures to clean energy and energy efficiency. This is akin to saying that if roosters could make money out of laying eggs they would do so regardless of their physical limitations.

The PC also focuses almost exclusively on short-term economic efficiency as the primary judge, jury and executioner of good policy. This is counter to the climate policy consensus, which supports the view that environmental effectiveness, flexibility, social equity and political sustainability are also key criteria for good policy. Critically, we need to examine policy through its cost effectiveness in achieving the long term pollution reduction outcomes.

The Climate Institute’s view is that complementary measures are warranted where real market failures and barriers exist to actions and technologies that will enhance the social cost effectiveness of the emissions trading scheme in the short and long-term. Recognition must also be given to non climate benefits that would come from introducing some complementary measures.

Effective climate policy will require a broad range of measures to unlock innovation, reduce the cost of the emissions trading system on the economy and ensure Australia has the maximum flexibility it will need in meeting strong emission reduction targets.

The Climate Institute will examine the Productivity Commission’s (PC) contribution to the climate change debate in detail and give a full response to the report in its upcoming modelling assessments of energy efficiency and clean energy policies and measures.
Some initial points in the PC analysis are provided below.

**Positive:**

- Recognises that it is in Australia’s interest to ensure other countries reduce emissions.
- Australia should pursue an emission trading system that is credible and effective in reducing emissions at least cost.
- Complementary measure could be justified if it leads to the uptake of cost effective energy efficiency measures, stimulates innovation that reduces the long term cost of reduce emissions or is targeted at a non-emission trading covered sector.
- Recognises the role of Government in research development and demonstration of low emission technologies.
- Raises concerns that Renewable Energy Target (RET) may favour wind over other technologies and create technology lock in. Note that this is not a problem with the RET per se but in considering the design of the expanded target the Government should explore design features that ensure a broad range of renewable technologies are pulled to market. Also care needs to be taken in assuming that Australia wind companies will not find ways to innovate and reduce costs in the Australian market over and above what would have happened at a global level. Recent industry experience as shown that they can and will reduce the costs in the Australian specific elements of wind developments (e.g. discovery of optimal wind resources, reductions in manufacturing costs for wind towers and managing integration in Australia electricity grip). (See also below on Australian innovation). Note that emission trading systems may also generate similar results as it may encourage gas technology lock in at the expense of technologies that will be the primary deliver mechanisms to a low emission future (e.g. renewable energy, fossil fuels with CCS).
- Need to review and overcome barriers to emission reductions in other markets (e.g. transmission infrastructure in the National Electricity Market) and government programs (e.g. tax and tariff system that encourage greenhouse emissions).
- The emissions trading system should have the broadest possible coverage.

**Negative:**

- **Broadly the PC take a very blinkered view in assessing the merit of complementary measures:** The primary policy rational to introducing complimentary measures is not to reduce emissions. As the PC point out this is the role of the emission trading scheme. However, the PC assumes that businesses and consumers will make informed decisions based largely on price alone. This is a kin to saying that if roosters could make money out of laying eggs they would do so regardless of their physical limitations. The Climate Institute’s view is that complementary measures are warranted where real market failures and barriers exist to actions and technologies that will enhance the social cost effectiveness of the emissions trading scheme in the short and long-term.
• **Barriers to greenhouse mitigations are broad**: It is also important to note that as the Intergovernmental Panel on Climate Change conclude barriers to greenhouse reductions are manifold and cost effectiveness is only one relevant criterion to judge effective policy. Others include environmental effectiveness, equity, flexibility and whether the policy is politically sustainable.

• **Examines the costs but ignores many benefits**: As the Intergovernmental Panel on Climate Change point out governments rarely consider climate change policy interventions through the single lens of achieving emission reduction. For example, fuel efficiency standards for vehicles not only reduce emissions they also enhance energy security and would make Australia less vulnerable to world oil price volatility. Improved energy efficiency can also have additional positive effects by reducing pollutants from energy production and/or use; increasing national competitiveness and productivity; delivering infrastructure savings; allowing more time for the deployment of more advanced and less carbon intensive technologies, and; ameliorating the impact that higher energy prices.

• **Understates the market failures and barriers associated with energy efficiency**: The PC assume that low energy prices and inadequate information are the primary barriers to energy efficiency. Other market failures and barriers not explored by the PC include the fact that consumers and firms may be capital constrained and not able to afford the up front cost of efficiency technologies (particularly in low income households) and behavioural and organisational barriers (e.g. when purchasing a TV consumers may be more interested in the quality and size of the picture and the look and features of the appliance than in the standby power consumption).

• **Assumes Australian’s are not innovative**: A central tenet of the PC criticism of the Renewable Energy Target is that Australia will largely adopt technology from other countries. They conclude that global cost reductions will occur and that this will have economic benefits. However, they assume that if the right market and policy setting exist that Australia will undertake little innovation and not find ways to reduce the cost of low emission technologies. Australia is already world leader in a number of renewable energy technologies and has the potential to be so in fossil fuels with carbon capture and storage. Real world experience has shown us that Australian clean energy industries are innovators.

Note that the key difference between the different modelling studies examined in the PC report is that some assume learning will occur in Australia as technologies are adopted to Australian conditions and new technologies are developed here (so called learning by doing). Others do not. Modelling learning by doing is a relatively new field of research. The Intergovernmental Panel on Climate Change point out that more advanced modelling assessments that explicitly include learning by doing do show long term cost reduction benefits. In affect the early adaptation of technologies leads to greater market experience and economies of scale that reduce the cost of the technology at faster rates. A number of studies have pointed out that failing to consider learning by doing will over state the costs of reducing emissions.
• **Simplistic representation of climate science:** The PC notes that climate change is a pollution "stock" problem, i.e. it is the total emissions over time that matter and not necessarily emissions in any given year. This is true to an extent but this proposition ignores the consensus among the scientific community that policy actions over the next 10-15 years will determine whether highly dangerous climate change can be avoided or not.

• **Electricity prices are unlikely to be higher with complementary measures:** As the PC note complimentary measures are likely to reduce carbon prices. This would therefore reduce electricity prices below what they would have been otherwise. Also, the PC fails to consider the electricity and gas market impacts of complementary measures. Electricity sector modelling has shown that pulling forward renewable energy that have lower operating costs that traditional fossil fuel plants depresses prices in the wholesale electricity market.