

14 April 2009

The Secretary
Senate Select Committee on Climate Policy
PO Box 6100
Parliament House
CANBERRA ACT 2600

Dear Secretary

The Investor Group on Climate Change Australia/New Zealand ('IGCC') would like to thank you for the opportunity to provide a submission to the Senate Select Committee on Climate Policy.

Introduction

IGCC represents mainstream Australian investors, with total funds under management of over \$500 billion, and other key participants in the investment community. IGCC believes that climate change is one of the most significant issues facing industry, the economy and society.

Our views as they relate to your terms of reference are outlined below and supported by the *Investor Statement on a Global Agreement on Climate Change* (attached) which has been produced by the European Institutional Investors Group on Climate Change (IIGCC), the US Investor Network on Climate Risk (INCR) and the IGCC who collectively represent 135 investment institutions with assets exceeding \$6 trillion.

Choice of emissions trading as the central policy to reduce Australia's carbon pollution, taking into account the need to:

- (i) reduce carbon pollution at the lowest economic cost,**
- (ii) put in place long-term incentives for investment in clean energy and low-emission technology, and**
- (iii) contribute to a global solution to climate change**

IGCC strongly supports the choice of emissions trading as a key policy instrument to reduce Australia's carbon pollution. Moreover IGCC is of the view that the introduction of emissions trading no later than 2010 is vital for the Australian economy.

IGCC fully supports the principles of emissions trading. While there has been recent speculation regarding a carbon tax, IGCC is firmly of the view that an emissions trading scheme is the most efficient and effective mechanism to:

- (i) reduce carbon pollution at the lowest economic cost,
- (ii) put in place long-term incentives for investment in clean energy and low-emission technology, and
- (iii) contribute to a global solution to climate change.

IGCC also supports many of the design features of the proposed Carbon Pollution Reduction Scheme (CPRS) as outlined recently in the draft Bill. While there are some design features of the CPRS that IGCC does not support, IGCC is of the view that the passing of the legislation should not be blocked or the introduction of the Scheme delayed due to disagreement in relation to various aspects of the Scheme. Rather the legislation should be introduced and should contain sufficient provision for the review and amendment of the Scheme once it is in operation to ensure the most effective operations.

For further information regarding this point please see the IGCC submission to the Standing Committee on Economics Inquiry into the exposure drafts of the legislation to implement the CPRS (http://www.aph.gov.au/senate/committee/economics_ctte/inquiries.htm Submission 96).

However, in the short to medium term it is considered unlikely that the CPRS alone will provide the appropriate investment or research and development incentives for many existing and developing renewable technologies and carbon capture and storage.

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

IGCC view the CPRS as a key policy instrument for reducing carbon pollution. However, it is only one of a number of appropriate government policy instruments needed to address the economic, environmental and social challenges associated with carbon pollution.

Various complementary measures are essential to assist in the reduction of carbon pollution and further encourage improvements in energy efficiency as well as innovation and investment in energy and carbon reduction initiatives and technologies. Complementary measures are also needed to ensure that a focus on minimising short-medium term economic cost does not lead to the Australian economy being highly exposed to potential changes/increases permit prices in the longer term. This may occur under a scenario where an over reliance on low cost emission reduction units to meet emissions reductions means that there is not the necessary longer term structural change to the Australian economy.. In this scenario, the complementary measures act as a risk reduction measure as well as emission reduction measure. This is particularly important where market failure impedes the market signals generated by an emissions trading scheme.

Valuable complementary measures include but are not limited to:

- mandatory renewable energy target
- building energy efficiency programs
- renewable/low emission energy net feed-in tariffs
- investment funds for renewable energy
- research and development funding for low emissions technologies.

It is recognised that the role these different measures have will vary. Building energy efficiency programs or a white certificate trading scheme may overcome well recognised market failures and, through decreasing the demand for electricity by up to 20-30%, make a meaningful contribution to meeting emission reduction targets at lower costs. The development of a renewable energy industry through a 20% renewable target will make Australia comparable to other trading partners, such as China, US and EU. It will also help de-risk, to some extent, the Australian exposure to international permit price.

The Garnaut Report highlights how other measures provide other important longer term incentives to the development of renewable and low emission technology.

In the short to medium term (i.e. up to 2020) terrestrial carbon stores, in particular soil carbon, are not considered likely to make a large contribution to overall emission reductions. This is primarily due to the scientific and practical measurement uncertainty with level amount of carbon sequestered, acceptance under international law, land/water availability and competing land use associated with the potential for soil carbon.

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

IGCC supports strong and binding carbon emissions reduction targets for Australia and the global community. IGCC is of the view that the targets need to be both ambitious and achievable to drive the carbon emissions reductions necessary to maximise the probability of avoiding dangerous climate change.

The IGCC understand that the current 2020 and 2050 targets are consistent, if applied worldwide, with achieving an atmospheric concentration of greenhouse gases of approximately 550ppm. Based on IPCC reports, this will still lead to significant negative environmental, social and economic impacts and that atmospheric concentrations of 450ppm or less are required to minimise the worst of these negative environmental, social and economic impacts.

From an investor's perspective, the potential decrease in value from significant economic costs from climate change is a significant concern, though at this stage difficult to quantify. However, prudent long-term investment risk management would suggest that lower atmospheric concentrations, ie higher global emission reduction targets, are preferable.

The IGCC believe the current emission reduction targets if considered as a reduction per capita or relative to business as usual are comparable to proposed EU reductions and will be difficult to meet through domestic abatement action alone.

Higher emission reduction targets will have important implications for Australian economy and investors. Analysis by IPCC members suggests that, given current/acceptable capital investment cycles and current technology, particularly in the electricity generation sector, higher targets will be impossible to achieve through domestic abatement action alone in the short term (ie. 2020) and the commercialisation of low emission technology and behavioural changes will be required to meet medium term (ie 2050) targets by domestic abatement action. The IGCC believe that higher emission reduction targets will necessarily make Australia dependent on emission reductions overseas (and the subsequent import of permits) if it is to meet higher emission reduction targets. At this stage and given the complexity of the assessment, the IGCC has not assessed the exact magnitude and the broader investment implications of such dependence.

Irrespective of the target chosen, the CPRS is vital if Australia is to achieve the necessary emissions reductions at least economic cost and that a range of complementary measures, as described above, are also required.

An appropriate mechanism for determining a fair and equitable contribution to the global emission reduction effort

IGCC generally support the contraction and convergence approach to determining a fair and equitable contribution to the global emission reduction effort, as described in the Garnaut Climate Change Review Draft Report June 2008.

The contraction and convergence approach seems to have the most potential to combine the desired levels of acceptability, perceived fairness and practicality as it is based on population or per capita emissions. The approach which gives increasing weight over time to population in determining national allocations acknowledges both high emitters' positions in starting from the status quo and developing countries' claims to equitable allocation of rights to the atmosphere.

'Under contraction and convergence, each country would start out with emissions entitlements equal to its current emissions levels, and then over time converge to equal per capita entitlements, while the overall global budget contracts to accommodate the stabilisation objective. This means that emissions entitlements per capita decrease for countries above the global average, and increase (albeit typically at a slower rate than unconstrained emissions growth) in countries below the global average per capita level. Importantly, emissions entitlements would be tradable between countries, allowing actual emissions to differ from the contraction and convergence trajectory.' Garnaut Climate Change Review Draft Report June 2008 pp 301 – 303.

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

IGCC is of the view that enshrining the CPRS in legislation this year with a commencement date in 2010 will decrease the level of uncertainty for private sector investment, particular investment in technologies and industries that facilitate the transition to the low carbon economy. Decreasing the level of investment uncertainty will support employment. Based on analysis of the financial impacts on EITI, the provision within the CPRS to assist EITI is not expected to lead to "lost jobs" as a result of carbon leakage.

The IGCC recognise that, if the permit price is sufficient to encourage structural change within the Australian economy, employment patterns within some domestic orientated industries, in particular electricity generation, will change, with a growth in employment opportunities in low emission fuel sources and a decrease in higher emission fuel sources and associated infrastructure. With a sufficiently high permit price and the complimentary measures, such as the renewable energy target, significant investment and employment opportunities are expected.

Notwithstanding some of the issues with the current design of the CPRS as mentioned in the inquiry terms of reference and outlined in the IGCC submission to the Standing Committee on Economics Inquiry into the exposure drafts of the legislation to implement the CPRS referenced above, the operation of the CPRS will then generate appropriate investment signals which result in:

- a new investment asset class – carbon
- investment in low emissions technologies, processes and programs
- the creation of 'green collar jobs'

These opportunities will be enhanced through the combined influence of the CPRS and the complementary measures mentioned above.

Carbon markets

The market for carbon is currently worth billions of dollars and is expected to grow significantly in the coming decades. According to World Bank figures, the global carbon market doubled in value to \$64 billion between 2006 and 2007 and grew around 80% in value terms between 2007 and 2008.

This may provide jobs in the finance sector in Australia if there is a CPRS.

Non-government investment in low emissions

New investment in clean energy globally increased 5 fold between 2004 and 2008 from US\$35b to US\$155bn. Consistent with this global trend Australia venture capital and private equity for clean energy companies by sector grew from \$17m in 2004 to \$210m in 2008. Similarly ASX public market transactions in clean energy companies by sector increased from \$20m in 2004 to \$170m in 2008¹.

Investment in clean energy in Australia will lead to job growth in that sector. Pacific Hydro, one of Australia's leading renewable energy companies support this view claiming that tens of thousands of new jobs that will be created in building Australia's clean energy future. This was the case in Germany where the renewable energy workforce grew from 160,000 to 236,000 in just two years between 2004 and 2006.

Green collar jobs

Various studies in Australia and internationally support the view that policies to reduce carbon pollution, including emissions trading and complementary measures will not reduce employment in the medium to long term and may in fact result in the creation of green collar jobs.

The CSIRO report, *Growing the Green Collar Economy: Skills and labour challenges in reducing our greenhouse emissions and national environmental footprint (2008)* shows that despite the introduction of an emissions trading scheme in 2010, employment will grow by between 2.6 and 3.3 million jobs by 2025. While employment is likely to decline in some sectors after the introduction of the CPRS, it is forecast to recover from 2017, and to increase in the long-term to higher levels than the present.

¹ Source: New Energy Finance

Table 1: Growth in green jobs – international and overseas studies

Source	No. of jobs actually/ potentially created	Region examined	Timeframe
UNEP, 2008. Green Jobs: Towards Decent Work in a Sustainable, Low-Carbon World.	470,000	Worldwide	2006
	624,000+	Worldwide	2006
	1,174,000	Worldwide	2006
	64,000+	Worldwide	2006
	145,000	Germany	2006
	18,000	India	2009
University of California, 2008. "Energy Efficiency, Innovation, and Job Creation in California."	1,500,000	California	1977-2007
	403,000	California	2008-2020
US Metro Economics, 2008. "Current and Potential Green Jobs in the US Economy."	750,000	US	2006
	2,500,000	US	2008-2018
	4,200,000	US	2008-2038
Political Economy Research, 2008. "A Program to Create Good Jobs & Start Building a Low-Carbon Economy."	2,000,000	US	
Present potential Barack Obama, 2008. Energy and Economic Policies	5,000,000	US	2008-2018
Gordon Brown, 2008. UK Renewable Program	160,000	UK	2008-2020
	25,000,000	Worldwide	2050

Source: Deutsche Asset Management April 2009

IGCC would appreciate the opportunity to discuss these matters with you at any hearings to be held by the Senate Select Committee on Climate Policy. In the meantime, please do not hesitate to contact IGCC on 1300 794 047 or by email secretariat@igcc.org.au if you would like any more information on any of the issues raised.

Yours sincerely



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