



Investor Group on
Climate Change

9 March 2007

Dr Peter Shergold
Task Group on Emissions Trading Secretariat
c/- Department of the Prime Minister and Cabinet
PO Box 6500
Canberra ACT 2600

Dear Dr Shergold

RE: SUBMISSION ON THE TASK GROUP ON EMISSIONS TRADING ISSUES PAPER

The Investor Group on Climate Change (IGCC) (Australia/NZ) would like to thank the Task Group on Emissions Trading (TGET) for the opportunity to provide comment on the TGET Issues Paper.

The IGCC represents Australian investors, with total funds under management of over \$225 billion, and others in the investment community interested in the impact of climate change on investments. The IGCC aims to ensure that the risks and opportunities associated with climate change are incorporated into investment decisions for the ultimate benefit of individual investors through:

- Raising awareness of the potential impacts, both positive and negative, resulting from climate change to the investment industry, corporate, government and community sectors;
- Encouraging best practice approaches to facilitate the inclusion of the impacts of climate change into investment analysis by the investment industry; and
- Providing information to assist the investment industry to understand and incorporate climate change into the investment decision.

More information on the IGCC including a listing of current members and an outline of our activities and events can be found at www.igcc.org.au.

What is IGCC's Interest in the TGET Issues Paper?

The IGCC represents a range of interests in the investment community, including superannuation funds, large multi-asset managers and single asset managers. As such, members of the IGCC are investors in both publicly listed and private companies, across all sectors of the Australian economy and internationally. The objective of the members of the IGCC is to obtain, or provide advice to others on gaining, acceptable risk adjusted returns for their investments. The size and mandate of the IGCC membership means our members focus is on both short-term and long-term returns.

The IGCC believes climate change is likely to bring considerable global economic, social and environmental risks. As a result significant and immediate action is required to reduce current and future emissions so as to minimise adverse impacts. For investors that invest across all sectors of the economy, climate change risks cannot be easily mitigated through diversification, as all sectors and economies will be impacted. Therefore, if not adequately managed and reduced, climate change risks have the potential to significantly impact the mid to long term returns of investors.



The IGCC supports the introduction of a National Emissions Trading Scheme (NETS) administered and regulated by the Federal Government. The IGCC believes that the introduction of a NETS is one of a number of appropriate government policy measures needed to address the economic, environmental and social risks associated with climate change. As IGCC members invest across all sectors of the economy, the IGCC is concerned with the impact on both specific sectors and the broader Australian economy in the short-term and how the Australian economy adjusts to the new reality of a greenhouse gas emissions constraint across all sectors in the mid to long term.

The IGCC believe that the adjustments to the Australian, and other economies, may be significant and while there may be political uncertainty at the international level it is in the long term interest of the broader Australian economy and investors that action is taken sooner rather than later so certainty can be increased and a smoother transition can be made to the economy.

The cost of addressing climate change will be felt economy wide and paid by companies in which we currently invest or may invest in future. A well designed NETS has the potential to reduce greenhouse gas emissions at least cost to the economy and facilitate significant opportunities as new sectors develop and companies display innovation and ability to adapt to changed market conditions. However, a poorly designed NETS has the potential to bring about significant distortions within the economy, resulting in considerable unnecessary transfers of wealth, potentially increasing abatement costs and investment risk.

From an economic perspective, the underlying principle should be that liability for greenhouse gas emissions lies with the emitter and that through a NETS the market addresses the distribution of the costs through the economy. One of the key objectives for government in developing a NETS is to reduce the risk of investing in emission abatement, which will have the added benefit of reducing the cost of abatement and the cost of the NETS across all sectors of the economy.

Attached is more detailed outline of the IGCC's views on the specific issues raised in the TGET issues paper.

The IGCC would be happy to discuss further the issues raised in this submission. Please do not hesitate to contact me on 1300 794 047, or 0422 101 715 or email secretariat@igcc.org.au.

Yours sincerely

Joanne Saleeba
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A. CONTEXT SETTING

1. What are the implications for Australia of a carbon constrained future?

Climate change will result in considerable economic, social and environmental costs globally if not addressed¹. To minimise these costs, immediate and significant action is required to reduce current and future greenhouse gas emissions. As such, the IGCC is of the view that a carbon constrained future for Australia is not only inevitable but vital for our continued prosperity.

A carbon constrained future will have costs to the Australian economy but these costs are potentially lower than the ultimate costs to the economy, society and the environment of failing to respond appropriately. It is the approach and the design of the carbon constraint that will determine the extent of the costs to the Australian economy.

On the positive side, a carbon constraint will lead to greater innovation and investment in emissions reductions and low emissions technologies. This innovation and investment is vital for developing a competitive advantage for Australia in a carbon constrained world and will be enhanced if Australia acts sooner in its response.

It is important to note that the Australian economy cannot be effectively isolated from a carbon constrained world. At present, IGCC members are investing in companies that have direct and indirect exposure to the European Union Emissions Trading Scheme (EU ETS). In addition, Australian companies operating internationally are already being impacted by international efforts to reduce greenhouse gas emissions and establish a cost of carbon. The impact on Australian companies in this regard is not necessarily negative, and there are numerous examples of Australian companies creating significant opportunities in a carbon constrained world.

2. What are the elements likely to affect the cost of reducing emissions over time and how might these develop?

The timing of action to reduce emissions will affect the cost. In particular, the cost of the negative physical impacts and the cost of reducing emissions will increase the longer the delay in taking action. Delay in taking action will require greater action to be taken over a shorter period of time in future. This will result in greater adaptation costs and will increase the potential for disruptive shocks to the Australian economy. In addition, the current policy/regulatory uncertainty is unnecessarily increasing investment risk. As such the IGCC supports taking action sooner rather than later so investment certainty can be increased and a smoother transition can be made to a carbon constrained economy.

The approach to reducing emissions will also affect the cost. For example, depending on its design, an ETS has the potential to reduce greenhouse gas emissions at least cost to the economy by allowing the market to address the distribution of costs. Furthermore, the establishment of a cost on carbon will also encourage innovation and investment in emissions reductions and low emissions technologies which will ultimately lead to lower costs associated with reducing emissions over time.

It should be noted that historically, predicted future costs associated with similar type of action have been overestimated. This is evidenced by the predicted costs of the US sulphur dioxide emissions trading scheme and the cost to address ozone depleting substances. Amongst other things, the estimated costs failed to adequately consider the impact on innovation and competition that regulatory certainty fosters.

¹ Reference Fourth IPCC Report February, 2007

3. To what extent is Australian industry currently factoring a carbon price into investment decisions? How can longer term investment certainty be improved?

Climate change is an established investment risk that companies should have considered in investment decisions for many years. Evidence to suggest that companies should have considered climate change risk includes a number of international and domestic actions such as:

- the first International Convention on Climate Change was signed in 1992;
- the use of emissions trading was specifically identified by the Kyoto Protocol in 1997;
- emissions trading was discussed extensively in 1999-2000 by the Australian Greenhouse Office as a policy approach; and
- climate change risk has been specifically raised by institutional investors in various forms since 2001.

One study undertaken back in 2002 found that a significant majority of Australian companies in “high risk” sectors or likely to be liable parties under an ETS had considered climate change risk at a board level.²

Therefore, while IGCC is of the view that Australian companies should already factoring climate change risk into investment decisions, investment certainty could be considerably improved by the introduction, as soon as possible, of a regulated mechanism to establish a cost of carbon e.g. a NETS.

For a NETS to be a meaningful policy instrument, to improve investment certainty and minimise distortions to the economy it should have long-term emissions reduction targets. In addition, it is critical that the emissions cap reflects the overall national emissions cap. One way of achieving this is to ensure that it covers the broadest possible range of emission types, emission sources (e.g. combustion, industrial process and fugitive emissions) and sectors (e.g. road and air transport). This would ensure a NETS increased certainty across the broadest range of existing and future investments.

B. A WORKABLE GLOBAL EMISSIONS TRADING SCHEME

1. What would constitute a workable global emissions trading scheme from Australia's perspective? It would be useful if respondents could reflect on the key principles, design elements and objectives underlying such a scheme:

- a. **how to best protect Australia's economic competitiveness?**
- b. **how encompassing? What constitutes an effective definition of "global" (ie does this include all countries, major emitters only, Australia's major trading partners or competitors in key sectors)?**
- c. **what scope? which greenhouse gases should be included and which sectors (or industries) covered?**
- d. **how should permits be issued or allocated and offset creation be administered?**
- e. **how to ensure market transparency through registry and information systems, monitoring and compliance?**
- f. **what financial market support structures need to be established? and**
- g. **what other key design elements are required?**

From an investor's perspective, a key requirement of a global emissions trading scheme is the fungability of “permits” or “credits” between countries so a truly international market can be developed.

While recognising that any international scheme is unlikely to result in the same constraints on all countries, in particular developing countries, it would be in Australia's interest that emission abatement in developing countries produces a “credit” which can be used within a national and broader international trading scheme. This will enable the NETS to have access to potentially lower cost abatement and provide an opportunity to transfer low emissions technologies to developing countries.

² “Impact of Climate on the Financial Sector”, AMP Henderson (now AMP Capital), December 2002.
Investor Group on Climate Change Australia/New Zealand
Level 6, 90 Collins Street Melbourne Victoria 3000 Australia, www.igcc.org.au

2. How have existing emissions trading schemes delivered against key desirable design elements? What problems have emerged?

There are a number of valuable lessons from existing ETSs and in particular the European ETS.

Ten notable lessons are:

1. Long-term emission reduction targets and transition targets are required to reduce the level of risk for investments in energy and greenhouse gas intensive industries;
2. Lump sum allocation of permits, e.g. via grandfathering, can lead to opportunity cost pricing by sectors such as the electricity generating sector;
3. The scheme needs to ensure that there is a proper market, i.e. the supply of permits is scarce relative to demand;
4. There needs to be transparency within the market with respect to how permits are allocated;
5. An effective registry of permits is required to minimise transaction costs;
6. There is need to minimise the administrative costs associated with emission abatement actions in developing countries, while still ensuring the emissions abatement integrity;
7. Step change in energy costs as a result of either auctioning or opportunity cost pricing can have a significant unnecessary impact on the economy;
8. Design should consider the means to transition the economy into the new reality of costing greenhouse gas emissions, as well as the environmental objective of reducing emissions;
9. All industrial sectors should be covered by the trading scheme; and
10. Potential inclusion of transport and aviation into the scheme.

3. Does the inclusion and design of a global emissions trading scheme have implications for the broader international climate change framework?

The trading of permits or credits will need to be recognised by any international climate change framework as a means to meet an individual country's climate change and emissions reduction commitments.

4. What would be the best way to design a workable global scheme to encourage maximum participation at the outset? In particular, would an accession mechanism, an incentive, or flexibility in the form of commitments, be needed to allow additional countries to be brought into the system more fully over time? If yes, what are the key design elements?

5. What are the possible advantages and disadvantages to Australia of being positioned within the first-wave of countries to adopt emissions trading as a step towards a workable global scheme?

When considering Australia's position relative to others on emissions trading, it should be noted that approximately 25% of the world's GDP has been covered by the EU ETS since 2005. In addition a number of developing countries are developing significant competency on emissions trading through the Clean Development Mechanism. While this may mean Australia is not one of the first to undertake a nation wide ETS, it does provide Australia with an opportunity to learn from the EU ETS experiences. Within Australia, the NSW GGAS greenhouse gas emissions trading scheme has been operating for more than four years, has also developed some Australian capability and provides some lessons for the development of a NETS.



As stated above IGCC is of the view that it will be in Australia's advantage to adopt a NETS in the near term. The advantages will be that:

- Australian companies and investors obtain greater certainty around a cost of carbon and potential greenhouse gas liabilities which they can factor into investment decisions;
- Australian companies acquire experience with an ETS that will place them in a better position when a global ETS gets underway;
- Australian companies will be able to take greater advantage of low cost emission abatement options by being able to move the abatement action to when it is most cost effective;
- Australian companies may be better able to take advantage of revenue generating opportunities;
- Australian NETS administrative arrangements can become established and gain operational experience.

It also means that we will be in a position to immediately adopt a global ETS by adapting our arrangements as new countries come on board. We will also be better positioned to shape the development of future international arrangements. This is in contrast to our position should we be a late adopter or laggard in the development of an ETS.

It is also worth noting that, like the development of many other markets, it is unlikely that a single global market will appear in an instant. A global market will develop as a result of linking of national markets and the inclusion of new countries.

C. DOMESTIC ACTION TO PREPARE FOR A WORKABLE GLOBAL SCHEME

1. How is Australia positioned to respond to or influence any emerging workable global scheme? Respondents could reflect on whether:

- a. the appropriate systems are available for greenhouse reporting and measurement?**
- b. financial markets are able to provide relevant instruments for trading? and**
- c. other relevant issues?**

As Australia does not currently have a NETS, we are not well positioned to respond to any emerging workable global scheme. Unlike countries or regions with operational ETSs, Australia has not developed the necessary experience, support structures and credibility to be able to effectively respond to or influence a global ETS. However, if Australia did have a national ETS, Australia would be in a better position to influence the further development of the international trading scheme.

However, Australia does have some of the supporting elements of an ETS, such as systems for greenhouse reporting and measurement, and financial instruments and institutions for trading have been developed in Australia to some extent, particularly in NSW under the GGAS and the Federal MRET scheme, which will help facilitate the introduction of a NETS.

While it is likely there will need to be some improvement to existing reporting and measurement systems so as they provide the level of accuracy of emissions and other data required for a NETS, especially given the potential financial implications to a company, the introduction of a NETS will drive the market to quickly become more sophisticated at accurately measuring emissions.

In addition, as mentioned above, a number of Australian companies and organisations are already indirectly participating or have exposure to the EU ETS. There are also other possible learnings available from existing schemes that Australian companies could tap into.

2. What are the pros and cons of Australia adopting a domestic emissions trading scheme in the absence of a universal, fully-developed international scheme? It would be useful if respondents could reflect on:

- a. the impact on global abatement efforts;**
- b. the implications for Australia's international competitiveness;**
- c. the implications for industry performance;**
- d. the extent to which a domestic scheme would promote investment generally and in low emissions technologies in particular;**
- e. whether transitional measures would be necessary to protect Australia's existing competitive advantages;**
- f. whether the early introduction of a domestic trading scheme might promote the emergence of future competitive advantages for Australia;**
- g. the efficacy of a domestic emissions trading scheme in achieving policy objectives relative to alternative or complementary measures; and**
- h. the opportunity for Australia to design a flexible scheme which would allow the country to calibrate its commitments in response to international developments.**

The IGCC is of the view that best way to enhance Australia's economic competitiveness is to foster continued growth across a range of sectors including developing expertise and technology in low emissions technologies and practices.

To facilitate this growth, Australia should introduce a NETS as soon as possible, as one of a suite of government policy measures to reduce greenhouse gas emissions, regardless of the existence of a global emissions trading scheme.

Members of the IGCC already invest in companies that have direct and indirect exposure to the EU ETS. The IGCC believes it would be in the interest of these companies and for the Australian economy, in general, to design and implement a NETS compatible with the EU ETS – in as much as the commodity or commodities created by the market, i.e. permits (or allowances) and credits, are fungible between the two schemes.

This does not mean that an Australian ETS needs to be the same as the EU scheme, as the EU ETS has demonstrated some valuable lessons that can be used in the development of a NETS in Australia (see question B. 2. above). As already mentioned, any Australian ETS also needs to be flexible enough to accommodate or adjust to any international ETS that comes on line.

The IGCC has made considerable comment on the design of a possible NETS to the National Emissions Trading Taskforce (NETT). Key points on the design of a NETS are outlined in question C.3. below, as well as in the IGCC submissions to the NETT which are attached (Attachments 1, 2 & 3) or available from www.igcc.org.au.

While an ETS may impact the relative international competitiveness of some facilities in some sectors (generally older facilities), analysis of the impact of an broad ETS on Australian companies indicates that the overall impact on the Australian economy in the short to mid term (5-10 years) is relatively minor if the Australian ETS is designed appropriately. A design requirement is that the market works effectively in the electricity generation sector.

An ETS does provide an incentive for the development of low emission technologies, though a range of other complimentary measures will be required to facilitate energy efficiency initiatives in the properties sector and the further development of emerging technologies such as Carbon Capture & Sequestration and renewable technologies.

3. What are the key design features (such as permit allocation, offsets and coverage) of a workable domestic scheme?

For a NETS to be a meaningful policy instrument, it is critical that the following elements be achieved.

Targets (caps) need to be long term

To improve investor certainty it is important that medium to long term emissions reduction targets are set. Given the lead time for developments and the economic life of major generation and energy intensive investments, an emissions target for 2030 is required, with an indicative target for 2050. The target for 2050 can be made firmer in the next 10-15 years as a firmer international agreement emerges. Along with these targets, how the emissions cap changes with time needs to be addressed and then communicated.

Emissions cap needs to reflect the overall national emissions cap

To ensure that a NETS is effective as an equitable national greenhouse gas policy tool and encourages efficient reductions in greenhouse gas emissions the emissions cap under the NETS needs to reflect the overall national emissions cap.

The coverage of emissions and sectors needs to be as board as possible

A NETS with broad the coverage will achieve:

- significantly increased effectiveness as a government policy approach to climate change;
- greater abatement opportunities and hence greater potential for least cost abatement;
- an appropriate cost of carbon signal to drive innovation and emissions reduction; and
- less regulatory uncertainty for a significantly broader range of existing and future investments.

In addition, as investors across all sectors of the economy, the IGCC is of the view that it is important that a NETS does not lead to distortions in the economy by including some sectors and excluding others. Exclusions in the coverage of a NETS will result in an uneven playing field within the Australian economy and will distort investment in a way that increases the overall costs of emissions abatement.



Therefore, in principal, it is desirable that all sectors of the economy are included in any NETS. In particular, the NETS should not exclude emissions from transport and aviation sectors if it is to be an effective mechanism to reduce greenhouse gas emissions across the economy (emissions from transport currently constitute 14% of Australia's total emissions).

Although the IGCC acknowledge that due to the difficulties and cost of assessing emissions from the agricultural, waste, land use change and forestry sectors, other government policy measures are likely to be more appropriate for these sectors. However, where emission reductions in these sectors can be clearly and quantifiably established, abatement actions may be incorporated as offsets under the NETS.

The IGCC is of the view that a NETS should cover emissions from stationary energy (combustion), industrial process and liquid fuels as well as fugitive emissions. For instance, industrial processes and fugitive emissions will have a growing contribution to Australia's total greenhouse gas emissions and their exclusion from a NETS creates potential investment distortions in a number of sectors, such as steel and power generation. An outline of the distortions created by excluding industrial process emission sources is given in the attached submission to the NETT (Attachment 3).

The IGCC also believes that if all or most sectors are included in a NETS, then it is appropriate to include all six types of greenhouse gases.

Based on 2003 emissions data the inclusion of all sectors and emission sources and types would cover approximately 60% of Australia's emissions.

Furthermore, it is preferable that any NETS begin with all sectors, emission sources and types included at the outset, rather than any phased inclusion. Changes to the sectors, emission sources or types covered by a NETS may significantly impact the permit supply and demand dynamic, particularly supply side, and hamper the development of an efficient forward permit market. This would lead to inefficiencies and almost inevitably higher permit prices than would occur with a broader market.

Permit allocation method needs to produce economic efficiency and equity

The method of allocating permits and any uncertainty around this process has the potential to significantly impact shareholder value. The impact on a particular company will depend not only the number and price of permits required by a company, but also the ability of the company to pass on additional cost to customers and the ability of customers to either further pass on costs or absorb costs.

It is critical that the permit allocation method produces economic efficiency i.e. results in minimum costs to the economy and reflects the cost of abatement required to achieve the emissions cap. A cost to the economy greater than the total cost of the abatement implies that some party covered by the NETS is making a windfall profit (or government raises revenue from auctioning), which implies some other party either directly or indirectly incurs additional costs.

The IGCC contends that the permit allocation method should:

- focus on the objective of meeting emissions cap at the lowest price over the long term, i.e. not be seen as a means of raising revenue for government;
- be economically efficient, i.e. minimising the cost of a NETS to the economy;
- recognise that step changes in costs may have a significant impact the economy and energy intensive sectors;
- be equitable, i.e. not discriminate against sectors or new entrants;
- be effective, i.e. avoid the potential for windfall profits;
- be efficient, i.e. have minimal administration costs;
- facilitate an appropriate secondary market for permits;
- be transparent;
- be flexible to adapt to international developments; and
- enable participation of Australian companies in overseas ETS.

Using these criteria, the IGCC would have concerns with any ETS that involved the auctioning of all permits. Such a proposal may have a significant step change impact on costs for industry as the cost to participants in the NETS would be significantly higher than the cost of abatement to meet any emissions cap. Auctioning will raise significant revenue for the government and while some of this revenue may be “recycled” back into the economy through subsidies or a decrease in tax levels, the IGCC has concerns that this is likely to:

- be inefficient due to the level of administration required;
- lead to potential inequities as some sectors are likely to be favoured over others; and
- have the potential to lack transparency.

Neither does the IGCC believe that the lump sum allocation, e.g. grandfathering based on previous emission levels or asset value, will lead to a desired outcome. The experience of the EU ETS suggest that lump sum allocation will lead to opportunity cost pricing by the electricity generators, resulting in windfall profits to the sector. While this may be to the advantage of certain investors in electricity generation, it has the potential to significantly disadvantage investors in electricity users, in particular energy intensive industries. As investors across all sectors of the economy, the members of the IGCC do not believe this is a desirable outcome for the economy or investors.

The IGCC believes that linking the allocation of permits with the actual level of economic activity of the liable party responsible for the emission, e.g. basing allocation on megawatt-hours electricity produced for electricity generators, should overcome the potential for opportunity cost pricing and not disadvantage those who have undertaken early action in abating emissions or, necessarily, existing operations.

The percentage of the total permits allocated in this way should be such that the cost to the economy is minimised. Obviously a small percentage of permits may still need to be auctioned to facilitate the establishment of a permit price and provide a certain amount of selling to provide the liquidity required to achieve an efficient permit market.

To the extent that the permit allocation method can achieve economic efficiency, the equity issues will be addressed and the need for assistance to any sector in the economy minimised.

The NETS framework is consistent over time

A significant issue for investors is that there is constancy in the ETS over time. Changes in government policy can generally be accommodated by the market if sufficient notice is given of the changes, with the amount of notice required depending on the magnitude of the change in government policy.

Once a NETS is established, the primary risk to companies involves the permit price. The majority of companies and investors can manage the permit price risk and the financial market will soon develop ways to manage this risk. However, changes to the NETS as a result of changes in government policy, regardless of whether it is a result of international negotiations, is a risk for which government needs to accept responsibility.

It should be noted that the current uncertainty with regard to the ETS and longer-term emission targets is already putting a disproportionate amount of the risk associated with addressing climate change on investors and thus the Australian economy in the longer term.

The liability should lie with the emitter

For the system to be workable, the liability should lie with the emitter, with the market addressing the distribution of costs through the economy. However, for small direct emitters, e.g. residential or small commercial users of gas, the liability should be placed upstream, i.e. on the fuel supplier, e.g. the gas retailer. A similar approach could be used for the transport sector. The exact definition for “small direct emitters” requires further consideration, covering issues such as administrative costs. The introduction of contestability into the gas markets may provide some assistance in defining a “small direct emitter” and the number of potential parties liable under the scheme.

The IGCC also believes that:

- to maintain the integrity of the NETS, it is recommended that large downstream users cannot opt out of the system;
- whether renewable energy is covered by the ETS will require further consideration, e.g. depending on permit allocation processes, the desirability of encouraging renewable energy sources to get diverse energy sources and the effectiveness of using other policy approaches to achieve this result, such as an extension of MRET; and
- Given the nature of ownership of “emission” facilities and how they can change over time, liability, monitoring and compliance should be at a facility level. Normal accounting processes can be used to address reporting of company liabilities and transparent company structures used to provide natural hedges against the potential financial impacts of the ETS.

4. What other steps could Australia take:

- a. to prepare for any workable global scheme?**
- b. to improve energy efficiency in end uses, including through better demand management and the facilitation of future technological improvements?**
- c. to encourage the commercial deployment, in Australia and overseas, of low emissions technology?**

To prepare for any workable global ETS, to improve energy efficiency in end uses, including through better demand management and the facilitation of future technological improvements, and to encourage innovation and investment in low emissions practices and technologies, a NETS should be adopted as soon as possible.

Design and implementation of a NETS would allow for a learning phase to get underway across all sectors of the economy, with the ETS market, price discovery, financial intermediaries and financial risk instruments all being developed. A cost of carbon generated through a NETS would also encourage greater energy efficiency in end uses and innovation and investment in low emissions practices and technologies.

5. Are the proposals put forward in 4(a)-(c) best considered as complements to a domestic trading scheme or as an alternative?

The IGCC is of the view that a NETS is one of a number of appropriate government policy measures needed to address the economic, environmental and social risks associated with climate change. Various policies or programs to improve energy efficiency and encourage innovation and investment in energy reducing initiatives and technologies will appropriately complement and support a NETS.

D. OTHER MEASURES

1. Were Australia to adopt an emissions trading scheme what would be the implications for the current suite of measures to address climate change?

- a. *would emissions trading further encourage the research and development of low emission technologies?*
- b. *would emissions trading have an impact on the commercial deployment of other low emissions technologies?*
- c. *would emissions trading have an impact on the take-up of low cost abatement options such as energy efficiency measures?*
- d. *would there be scope to abolish other, more costly, interventions without affecting the overall abatement effort? and*
- e. *what other policies would most effectively complement a possible future emissions trading system?*

As mentioned above a NETS would significantly add to the current suite of Australian policy measures to address the risks associated with climate change.

The IGCC are of the view that there is value in maintaining and expanding the MRET scheme as a means of developing the sector and facilitating a diversified portfolio of electricity generation in Australia.

There are some current measures to reduce greenhouse gas emissions and address climate change that should be replaced over time by a NETS, including the NSW GGAS and the Queensland 13% Gas Scheme.

2. What low cost abatement options are available now? How technically feasible is it that existing infrastructure, plant and equipment can be modified to reduce emissions?

There are numerous low cost abatement options available across the economy. However, perhaps more importantly, a properly designed ETS will encourage low cost abatement options to be undertaken, as well as the development of new and innovative low cost abatement options. By placing a cost on carbon and allowing the market to operate through the trading of emissions permits, the low cost abatement options will be undertaken and the emissions reductions targets will be achieved at least cost to the economy.

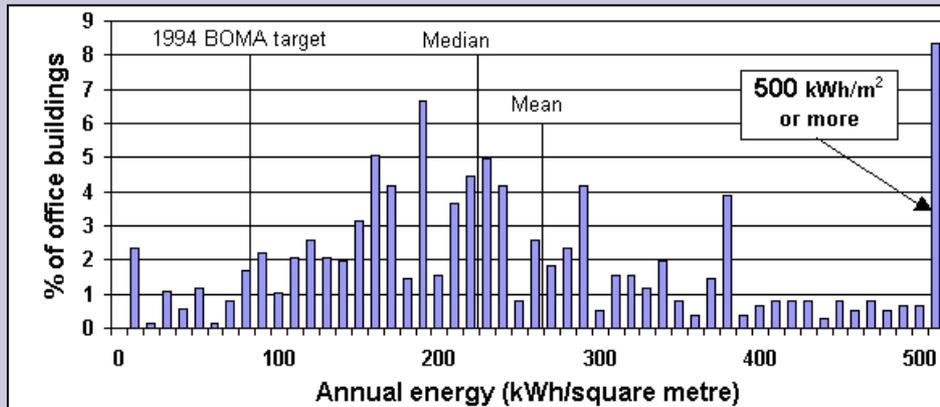
There is considerable opportunity for existing infrastructure, plant and equipment to be modified to reduce emissions. This is evidenced by an almost endless number of examples across a range of sectors in Australia and globally.

Example: Commercial Property Sector

Taking into account a building's life span, it's generally accepted that buildings are responsible for 25-40% of the world's energy use and 30-40% of the world's global greenhouse gas emissions. In the commercial property sector, research has shown that the great majority of commercial high rise buildings in Australia are grossly inefficient (see figure below).

For many buildings energy consumption could be halved economically. The slow up-take of energy efficient technologies in the sector results in missed opportunities to:-

- Reduce energy consumption – by half
- Reduce greenhouse gas emissions
- Reduce water consumption resulting from improved energy efficiency
- Reduce peak electricity demand
- Create significant financial savings
- Improve working conditions and productivity of occupants
- Enhance the value of buildings and their rental returns



The commercial property sector has the advantage compared to the residential property sector of relatively concentrated ownership. This means that operational emissions efficiency improvements and practices can and generally are rapidly implemented across a large number of assets in a short period of time relative to the life cycle of the asset (e.g. over an asset planning cycle of 3-5 years). There is ample literature to demonstrate cost effective operational efficiency improvements in the order of 20-30% compared with current industry average emissions performance in absence of a ETS (refer to DEUS Energy Smart Business case studies; Investa Sustainability Report, 2006; The GPT Group Annual Report, 2006). For instance, Investa achieved a 9.9% reduction in electricity consumption and a 13% reduction in gas consumption in 2005 through its energy management program which applies to 36 buildings across their office portfolio. Total financial savings from Investa's energy management program in 2005 were \$600,000.

Capital investment to achieve the next 20% would benefit from certainty around the question of ETS and its implications for both emissions income and future energy costs. The GPT Group have been investigating the potential for emissions improvement through new capital investment. The GPT Group believe that 45-50% (relative to current average performance across all asset classes) is commercially supported if an ETS existed for which participation by the sector was possible at a low cost. Capital investment in high performance outcomes is constrained by a) lack of certainty about forward energy prices (e.g. 10-15 years) and b) a clear value for emissions abatement.

Whilst the potential to secure 20-30% operational emissions improvement at low cost through the existing stock in the commercial property sector is encouraging this should be considered against a background of 50-60% targets being suggested as prudent. As the property sector is a significant driver of global emissions (estimated at 55-60% when embodied emissions in capital formation are also contemplated) it is essential that pathways to improving life cycle emissions footprint by 50% are identified. The discussion above attempts to highlight that to achieve this level of improvement an ETS is desirable to support the higher levels of capital investment required to achieve the efficiency operational and embodied improvements.

There are numerous similar examples that could be provided.

3. To what extent would emissions trading facilitate such abatement or modification activities?

As mentioned in response to various questions above, an ETS would not only facilitate but also encourage emissions abatement activities in existing infrastructure, plant and equipment.



Attachments

Attachment 1

IGCC Submission to the National Emissions Trading Taskforce on A National Emissions Trading Scheme: Background Paper For Stakeholder Consultation, 12 September 2005
3 March 2006

Attachment 2

IGCC Submission to the National Emissions Trading Taskforce on A National Emissions Trading Scheme: Working Papers, 10 April 2006
1 June 2006

Attachment 3

IGCC Submission to the National Emissions Trading Taskforce on Possible Design for a National Greenhouse Gas Emissions Trading Scheme” Discussion Paper, August 2006
7 February 2007

Attachment 4

Lessons from the EU Emissions Trading Scheme and Emission Intensity Permit Allocation
3 March 2006

Copies of these attachments are available from the publications page of the IGCC website www.igcc.org.au