Energetics Pty Ltd

Level 7 132 Arthur Street North Sydney NSW 2060 PO Box 294 North Sydney NSW 2059 Australia

Phone: 61 2 9929 3911 Fax: 61 2 9929 3922 Web: www.energetics.com.au ABN 67 001 204 039 ACN 001 204 039

22 April 2009

Mr. John Hawkins
Committee Secretary
Senate Select Committee on Climate Policy
PO Box 6100
Parliament House
Canberra ACT 2600

Dear Mr. Hawkins

Ref: Senate Select Committee on Climate Policy

Energetics is Australia's most experienced provider of energy and carbon management services, with a wealth of experience in providing policy and climate change program advice to state and federal governments. We have 25 years of providing energy efficiency advice to Australia's ASX 200 companies.

Energetics would like to make two major points to this important Inquiry:

- Firstly we believe that the Carbon Pollution Reduction Scheme (CPRS) is one important tool in helping to address climate change. We do however also recognise that a range of complimentary measures will be required if emission levels and energy consumption are to be managed and reduced.
- Secondly we believe that the use of the CPRS permit auction revenue will be an extremely
 important tool to help Australia in its transition to becoming a low emission, energy efficient
 economy. If used wisely the Climate Change Action Fund (CCAF) may be as important for
 reducing energy consumption and emissions as the carbon price itself.

1. Filling the gaps – complimentary measures

Around the world today there are multiple emission trading markets with varied drivers, targets and prices. The experience that has been learned from the operation of these markets is that an emissions trading scheme can not alone deliver the emission reductions that are required in the next decade. A price signal alone does not necessarily overcome the full range of barriers to the implementation of energy efficiency, nor will a weak price signal drive innovation in energy efficiency to the extent that could be achieved.

Even with the best design elements, Energetics believes it is likely that an emissions trading scheme will only play one part in achieving an emission peak by 2015 – 2020, as recommended by the Inter-Governmental Panel on Climate Change. The key to meeting this emission peak recommendation is to rapidly drive energy savings and demand management at the same time as the introduction of the CPRS.

A range of studies have shown that energy efficiency is the only approach that can substantially reduce emissions without an economic cost. For example:

- The International Energy Agency's, *Energy Technology Perspective Scenario* (2006) found that energy efficiency measures could account for 31 53% of the total carbon dioxide emission reduction effort required to stabilise emissions at 2005 levels by 2050.
- A study for Vatenfall found that 35-45% of a 60% global emissions reduction target can be met by cost effective energy efficiency measures with a low carbon price (Vatenfall, 2006).

Given the importance of efficiency in meeting the emission reduction challenge it is concerning that energy consumption rates have been heading in the wrong direction in recent decades. Australia's annual growth in energy use is currently 2%. The International Energy Agency (IEA) has found that between 1990 and 2004 the rate of energy efficiency improvement in IEA nations was less than 1% a year – compared to a much better rate of efficiency improvement of 2% a year in the period 1974 - 1990.

It is the view of Energetics that this mis-match between potential and reality is largely a failure of policy-makers to invest seriously in regulations and initiatives to drive efficiency. There is no coherent national dialogue on energy efficiency and because there is only a small energy efficiency industry, the obvious, and most cost effective solutions for climate change have had the lowest level of focus of all solutions.

Stronger measures to drive efficiency will both reduce emissions, and also have a positive impact on the operation of the CPRS. Energy efficiency incentives are anti-inflationary as they reduce the operating costs for companies which implement them.

Efficiency measures funded before the introduction of the CPRS will also ensure the overall impact of the scheme is lower on both households and business. Industrial efficiency programs will also lower the need for allowances to be purchased by generators and large point sources of emissions, and therefore could lower the permit price.

For all of the above reasons Energetics is of the view that the Government must introduce significant new energy efficiency measures with the same level of priority as the CPRS.

2. Strategic use of the CPRS auction revenue

Energetics view is that a larger proportion of the permit auction revenue needs to be retained for the Climate Change Action Fund (CCAF) than is currently planned. A well funded and designed CCAF can have multiple benefits for the Australian business community:

- It can fund major programs to drive changes until the carbon price rise leads to long term structural change;
- It can assist the business sector get ready for a carbon constrained economy, to develop
 the business culture and management practices to plan for future carbon prices and
 constraints;
- It can fund business energy efficiency improvement so that as the price of carbon does rise it will pose less of a financial risk to large electricity consumers.

A 20% reduction in Australia's energy consumption by 2020 would save Australian business more than \$8 billion a year.[1] To seize this opportunity it is important that the CPRS revenue is targeted at both business as well as households.

While Energetics supports household assistance from an equity perspective, we urge the Senate Committee to recognise that the residential sector is a relatively small part of Australia's energy

and emissions profile. Far more energy is used in the Australian business sector than is consumed in homes.

At least 20% of auction revenue should be retained for the Climate Change Action Fund and this fund should target the business sector as this is where the bulk of energy use and emissions are generated. To achieve a substantial reduction in growth, and ultimately substantial absolute reductions of energy use and greenhouse emissions, it is necessary to apply a range of measures. It is necessary to match regulation with incentives to facilitate implementation.

In designing the programs it is important to understand what is currently not happening inside business to combat rising energy use. Energetics has assessed over 2,000 companies and we have found that over 85% on those surveyed have no or very limited energy management systems in place – this means there are no formal processes, little or no accountability and few people at decision making and influencing levels tasked with trying to reduce energy consumption and costs.

A Vision of the Climate Change Action Fund

There is a very large pool of un-tapped energy and emission savings available in the business sector. Some of these will be captured by entities with permit liabilities under the CPRS but many of these will be in enterprises that are not captured by the CPRS or in businesses that simply pass on their carbon costs without implementing changes. Some of these opportunities will be in enterprises that receive free permits or for other reasons outlined above, do not respond to a carbon price signal in ways that reduce energy use and emissions.

These opportunities could be tapped with new and additional programs and incentives funded through the CPRS permit revenue. The CPRS provides the Australian Government with the opportunity to streamline and improve the mishmash of under-funded business climate change programs currently operating in Australia.

Energetics believes the following program ideas are worthy of further exploration by Government in the design of the CCAF:

1. New carbon economy - a transition program for business

A major share of the Climate Change Action Fund needs to be reserved to support transition for businesses that do not have to buy permits, but are currently large electricity users and therefore exposed to increasing carbon prices.

The major targets for this should be all businesses that will be captured under the National Greenhouse and Energy Reporting Scheme (NGERS). Targeting companies that produce more than 50,000 tonnes of CO_2 (Scope 1 and 2 emissions) will ensure that the funds are being targeted at:

- The nation's largest energy users, which will ensure the funds have an impact on our national emissions profile; and
- The businesses with large energy footprints, who will therefore be the largest recipients of pass through carbon costs from electricity generators.

The goal of the program should be to ensure Australia's largest energy users assess, plan for and reduce carbon price risks to their business. Large energy users should also evaluate energy conservation and efficiency projects as risk mitigation options and prioritise the implementation of these options.

It is important that the development of business programs draws on evidence from past programs run both in Australia and internationally. We believe that the existing State-based programs should be rolled into one model. State agencies and other independent bodies may be best placed to

deliver the programs, but if the CCAF becomes the major source of funds then the design guidelines and mandatory components should be established by the Australian Government. Streamlining all the current business climate change programs under a new national model would help to reduce the confusion about climate change response programs that exists at the moment. Reducing confusion will make it easier to increase the involvement of the business sector in these programs. Greater buy-in is essential if we are to ensure long lasting changes are made to business models and operations.

The business program should draw on the key program elements that are essential to success. From our experience we believe three elements are necessary:

- A clear target group with a reason to be engaged
- > Requirement for a carbon management plan
- Substantial incentives to take action.

A. Identify a clear target group with a reason to be engaged

In this case we believe that all the companies captured by the NGERS are an excellent target because they are the biggest energy users and are becoming aware of their carbon footprint. Over time we recommend that the threshold for both the NGERS and this business transition program drop to 10,000 tonnes CO₂ produced by a corporation.

B. A requirement for participating businesses to have board approval of a carbon management plan

Companies wishing to access assistance under the scheme need to first develop a 3 year carbon management plan. Given this is a new area of management and enterprise planning we recommend that, like the Carbon Trust model in the UK, businesses are given support to develop this plan with the assistance of a register of approved carbon advisory services. To maintain quality and the cost of this part of the program there would be a fixed price for this carbon planning process and a recommended set of outputs. If the company wanted to explore additional elements of a carbon management plan or a longer period, they would need to fund this themselves.

To ensure commitment, the carbon management plan needs to be approved by the board before the company can qualify for further assistance.

The key components of a carbon management planning process should include:

- A projection of carbon price scenarios and flow through costs to electricity, natural gas most likely to affect the company over the planning period;
- Evaluation of emission reduction policies and measures including energy efficiency options and their cost-effectiveness and market potential across the full range of carbon price scenarios; and
- Process for implementation of emission reduction measures.

C. Substantial incentives to take action

The first two steps will ensure that the targeted companies will have measured and reported their emissions, and developed a carbon management plan. To guarantee a transition process occurs with these large energy users the CCAF should provide substantial financial incentives to help implement the identified emission reduction and efficiency improvements.

The incentives can either be in the form of part-payment grants for part of the cost or in the form of tax incentives. Grants could be made available for retrofit projects and new capital projects leading to energy savings, or assistance for implementing management, operational and staff training improvements that lead to energy savings.

The funding selection criteria will include the level of certainty of the project continuing to deliver outcomes, total savings by a project across a facility, and the relative cost effectiveness of the project in terms of \$ / GJ or tonnes CO₂-e saved).

2. New technology deployment with tax concessions

The National Renewable Energy Target addresses a policy gap in assisting the deployment of new renewable technologies. There are however a range of other efficiency and emission mitigation products that are important in the transition to a low carbon economy.

We propose a tax concession program to encourage the rapid deployment of a range of specially identified and approved products. These would include:

- Energy-saving plant and machinery;
- > Low carbon dioxide emission cars; and
- Water conservation plant and machinery.

We recommend that this scheme be funded by the CCAF and build on the lessons learned from the Enhanced Capital Allowance Scheme operating in the United Kingdom. Under this scheme Enhanced Capital Allowances (ECAs) enable a business to claim 100% first-year capital allowances on their spending on qualifying plant and machinery. Businesses can write off the entire capital cost of their investment in these technologies against their taxable profits in the period during which the investment is made. This can deliver a helpful cash flow boost and a shortened payback period.

3. Efficiency program for free permit recipients

The top 250 energy using companies account for over 70% of business energy use, and approximately 45% of total energy use. Many of these companies will be recipients of free permits because they are also Emissions Intensive Trade Exposed (EITE).

These companies will receive an asset from the free permits, which is needed to ensure that they remain competitive in international markets. There is however also a need to ensure that these large facilities are continuously improving their efficiency and emissions performance. The easiest way to do this will be to have a process to show there is work occurring to improve energy efficiency and emissions performance.

Given many of these companies are part of the Commonwealth Energy Efficiency Opportunities (EEO) program, the EITEs process could be linked to this program. For those free permit recipients not currently captured by EEO, joining the scheme could be made part of the free permit conditions.

Options for the program could include requiring participants to allocate a percentage of the value of the free permits to implementation of energy efficiency opportunities identified on that site or other sites that the company has operational control over. Free permit recipients could also identify other non-energy emission reduction opportunities in their annual EEO Reports. Some EEO program participants already include non-energy savings CO_2 reductions in their EEO reports. The work required to be implemented by the free permit recipients would be reported and be subject to verification under normal EEO processes.

There is administrative ease in the use an existing program like EEO to ensure emissions performance improvements for free permit recipients. Many of the companies have established management systems to work with this program, so it would be an easy vehicle to implement a policy goal for free permit recipients. There would however need to be some additional funding

provided for linking the program to the CPRS regulator and the free permit process as well as more detailed auditing processes. These elements could be funded from the CCAF.

4. Funds to expand mandatory performance standards

Setting minimum energy performance standards are the most efficient and cost effective way to ensure that inefficient products are eliminated from the marketplace. They allow manufacturers to focus production on their more efficient ranges, and consumers to choose from relatively efficient products. This process also drives out the most inefficient products from the market.

There has been on-going development of minimum energy performance standards (MEPS) through cooperation with the States. However the CCAF can fund a process to accelerate the establishment of additional MEPS for business equipment and technologies, as well as the introduction of more stringent national minimum mandatory energy and water efficiency standards in the building code for new commercial buildings. Additional funding should also be allocated from the CCAF to ensure the vigorous enforcement of the MEPS.

Yours sincerely,

Anna Reynolds

Principal Consultant - Government Policy

^[1] Based on data from ABARE 2008 with \$/GJ today and escalated at 3% pa to 2020 forecast GJ by fuel for business