



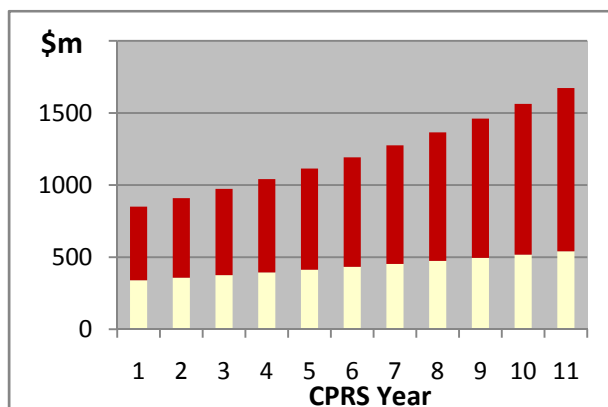
Australian
Coal Association

SUBMISSION

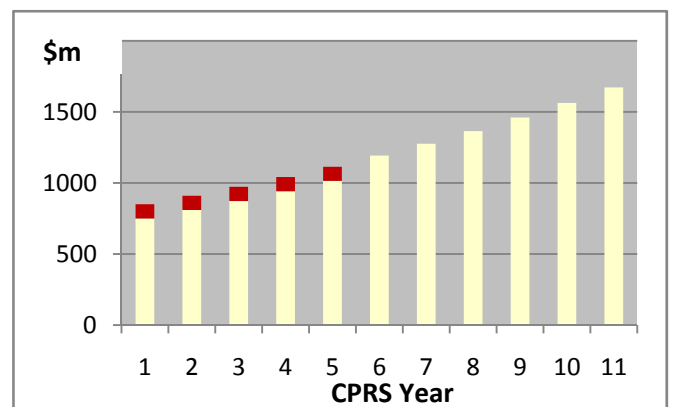
Senate Select Committee on Climate Policy

APRIL 2009

(a) Illustration of the treatment of the coal industry were it included in the EITE arrangements (red bars) & the net impact of the CPRS (yellow bars)



(b) Illustration of the transitional assistance to coal (the red bars) under the White Paper proposals and the net cost of the CPRS (the yellow bars)



Australian
Coal Association

PO Box 9115
Deakin ACT 2600
Tel +61 2 6273 6044
Fax +61 2 6273 6060

info@australiancoal.com.au
www.australiancoal.com.au
ACN 11 095 274 472

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Executive summary

The Australian Coal Association (ACA) represents Australia's black coal industry with ACA members responsible for 99 per cent of Australia's black coal production and all of its exports.

The ACA has long accepted the science of climate change. To keep the costs of necessary allocation action low there must be a strong emphasis on the use of market-based instruments. However, such instruments need to be environmentally effective, economically efficient and involve equitable burden sharing. They should also be calibrated with progress toward a global agreement including avoiding carbon leakage. In addition market based instruments can only represent part of the solution and a broader, national climate change policy framework is required comprising complementary measures including, most importantly, technology development, demonstration and deployment – particularly of low emissions technologies.

In responding to the request for submissions to the Select Committee's inquiry this submission focuses on the following issues:

1. The emissions trading scheme design is flawed in that the Emissions Intensive Trade Exposed (EITE) arrangements do not adequately address the competitiveness impacts on trade exposed industries and particularly Australia's largest export industry, coal.
2. There are alternative approaches to the Carbon Pollution Reduction Scheme (CPRS) that should be considered to ensure that competitiveness is preserved and the economy is insulated from unnecessary economic and employment losses.
3. If Parliament determines that the CPRS should go ahead in its present form then amendments to its framework are required, particularly to address the exclusion of the coal industry from the EITE arrangements:
 - Coal has been unfairly treated. The industry is not asking for special treatment, just fair treatment. This is because coal is quite clearly eligible for a 60% allocation of permits under the White Paper methodology with an emissions intensity over 1330 t CO_{2-e} per million dollars of revenue – well above the threshold of 1000. Furthermore the assertion in the White Paper that nearly 90% of coal production has an emissions intensity less than 500 is wildly inaccurate. Mines representing over 50% of production are in fact over the 1000 EITE eligibility threshold. Yet the White Paper goes out of its way to exclude coal on the basis of:
 - the wide diversity of emissions profiles across mines and therefore potential for windfall gains. However, this issue can be addressed simply through a specific coal industry allocation rule that ensures permits are directed to mines in accordance with their emissions rather than production. This will avoid the potential for windfall gains to mines with low fugitive emissions. This rule would also maintain the incentive for mines to reduce their emissions in the future and could incorporate mine emission abatement planning; and
 - the potential for substantial step changes in emissions due to the availability of relatively low cost abatement technologies. This assertion is fundamentally incorrect. The Australian coal industry is a world leader in tackling emissions from the mining and use of coal and is implementing viable solutions. However the abatement technologies referenced in the White Paper have location-specific deployment limitations and require further technical development and demonstration.
4. Failure to include coal in EITE arrangements will result in reduced investment, mine closures and job losses in export mines. Coal mines that are suppliers to domestic power stations under long-term contracts face closure because they are unable to pass on emissions trading costs.
5. Public/private sector collaboration in demonstrating and developing viable Low Emissions Technology solutions to reduce emissions will be essential.

1. Overview of submission

The Australian Coal Association (ACA) represents Australia's black coal industry with ACA members responsible for 99 per cent of Australia's black coal production and all of its exports. Coal is Australia's largest export industry employing many Australian's directly and indirectly particularly in regional centres. The importance of the industry to the national economy is summarised in **Box 1**.

Box 1: The importance of black coal to the Australian economy

Black coal:

- is Australia's largest commodity export valued at \$24.4 Billion in 2007-08 and \$54.7 Billion (forecast) in 2008-09. In addition, some 76 million tonnes of black coal and 72 million tonnes of brown coal are used annually in Australia;
- directly employs over 32,000 Australians and a further 100,000 indirectly;
- provides 57 per cent of our electricity generation and is vital for iron and steel making and in other industrial processes;
- together with brown coal, underpins the security, reliability and comparatively low-cost of Australia's coal-based electricity supply (over 80 per cent derived from both black and brown coal) which;
 - supports the competitiveness of a significant proportion of Australian industry; and
 - provides affordable power for Australian households;
- is a large regional employer contributing to the social fabric of the nation including through the underwriting of significant rail and port infrastructure as well as social infrastructure in regional and more remote communities; and
- will provide over \$4 Billion in royalties to State Governments in 2008-09.

About 5% of Australia's greenhouse gas emissions are associated with coal mining with about four fifths due to fugitive emissions (that is methane emissions released to the atmosphere as a result of the mining process). Both open cut and underground mines have significant emissions with approximately a 40/60 split of emissions. A further 35% of emissions result from coal-fired electricity generation.

In considering the issues confronting the Committee the ACA accepts:

- the science of climate change and acknowledges the role that reducing emissions from coal-fired power can play in addressing climate change globally;
- the precautionary principle underpinning the need for action now while at the same time ensuring this action does not impose unnecessary costs;
- that to keep the costs of necessary action low there must be an emphasis on the use of market-based instruments;
- that market based instruments can only be part of the solution and a broader, national climate change policy framework is required comprising complementary measures including, most importantly, technology development, demonstration and deployment – particularly of low emissions technologies; and
- managing climate change requires a global solution and Australia's actions need to be carefully calibrated with progress towards a global agreement.

2. The Carbon Pollution Reduction Scheme design is flawed

The Garnaut Climate Change Review and the Productivity Commission are among those to point out that independent action by Australia to substantially reduce greenhouse gas emissions, in itself would deliver barely discernible climate benefits but could be nationally very costly.

It is clearly in Australia's interest to participate in the design of a multilateral framework. To be effective an international agreement must include all the major economies if there is to be a chance of containing emissions. Achieving this will take time. In the meantime facilitating transition to an impending lower emissions economy is the strongest rationale for independent action by Australia. But that is contingent on the imminent emergence of an extensive international response and requires careful calibration of Australia's actions with that emerging response.

An efficient response to the challenge of reducing human induced emissions of greenhouse gases to the atmosphere and sequestering carbon from the atmosphere must involve pricing emissions and offsets in a coherent way. A carefully designed emissions trading scheme (ETS) over the long-term has the potential to achieve this by ensuring that costs are minimised and predictable, and investments are rationally allocated.

One of the challenges to reducing greenhouse emissions is that while the physical impacts of climate change are likely to be experienced locally the greenhouse gas emissions that contribute to these impacts are a result of a multitude of global actions. A key Treasury modelling finding is that developing countries that delay taking on emission reduction commitments experience a surge of investment in energy and minerals processing industry.¹ This surge in investment is 'carbon leakage' from countries like Australia that take on early 'targets' undermining the environmental benefits of that action.

A fatal flaw in the CPRS approach is the way it assesses and therefore addresses trade exposure. It does this by using emissions per unit of revenue to assess whether an activity is Emissions Intensive Trade Exposed. This is the wrong test as it is unrelated to trade exposed cost competitiveness and, in the case of resource industries such as coal, is distorted by commodity cycles.

In addition, the CPRS does not fully offset the competitive disadvantage of trade-exposed businesses. Within the coverage of the proposed emissions trading scheme, and leaving aside agriculture, it is estimated that 45% of Australia's emissions are associated with potentially trade-exposed businesses. However, the CPRS allocates just 25% of permits to address loss of competitiveness, investment and jobs from these businesses.

Recommendations

- **The design of the CPRS is fundamentally flawed particularly because it does not adequately address competitiveness concerns. Specifically, emissions per unit of revenue is the wrong test as it is unrelated to trade exposed cost competitiveness and is distorted by commodity cycles.**
- **The Australian emissions trading scheme's transitional arrangements should address competitiveness issues in a much more effective way to preserve jobs in Australian industries and regions. This should be achieved by basing the transitional arrangements on trade exposure and cost pass through (ie the extent to which an activity/facility can pass on the costs of emissions trading in international markets).**

3. Alternative approaches to the Carbon Pollution Reduction Scheme

"Arguably the biggest-ever case of policy-making under uncertainty is the contemporary challenge posed by global warming. With huge residual uncertainties in the science, economics and (international) politics, there can be little confidence that anyone would identify a uniquely correct policy prescription for Australia at this point. The only sensible way forward, therefore, is to start gradually, to monitor, to learn by doing as we develop institutions and see the effects of carbon pricing on our economy and community, and as we wait for others to come to the party – in other words, an adaptive response."²

Australian domestic policy developments cannot be considered in isolation from the international negotiations that are progressing under the United Nations Framework Convention on Climate Change (UNFCCC). The position that the Australian Government takes in negotiating its future international commitments has important implications for the design of a domestic emissions trading scheme and the determination of the emissions 'cap' in that scheme.

Adoption of an international framework to progress national commitments under the UNFCCC will be essential in moving towards implementation of an international emissions trading scheme. The EU plans to continue its emissions trading scheme beyond 2012 and some individual developed countries (Australia and New Zealand) are proposing to introduce emissions trading schemes. It is possible some other developed countries or groups of like-minded countries could implement emissions trading. However, it seems extremely unlikely that a scheme will emerge in the near term that encompasses the majority of emissions in countries representing a significant proportion of world greenhouse gas emissions. It is also extremely unlikely that the coal industry's principal (developing country) competitors will introduce a price on carbon over the next decade.

¹ Australian Treasury (2008), *Australia's Low Pollution Future: the economics of climate change mitigation*, Box 5.2, page 104.

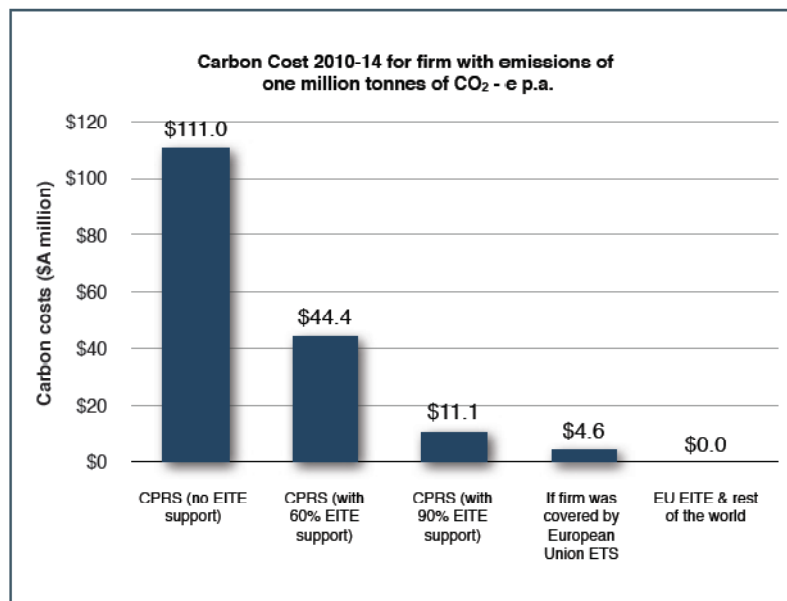
² Gary Banks, *Evidence-based policy-making: What is it? How do we get it?* ANZSOG/ANU Public Lecture Series, 4 February 2009, page 7.

The ACA therefore suggests the chance of a single, global emission price emerging or of Australia’s major competitors in seaborne coal export markets adopting emissions trading over the next investment cycle is remote.

With this in mind, the ACA considers that the CPRS must deal comprehensively with competitiveness concerns. If it cannot be designed to offset competitiveness loss by import and export industries then consideration will need to be given to other scheme designs, notably:

- the proposal by the Minerals Council of Australia (MCA) to phase in auctioning;
- the proposal by the Australian Industry Greenhouse Network (AIGN) to expand EITE transitional arrangements and address other concerns with the CPRS;
- the consumption-based approach proposed by Geoff Carmody;
- a carbon tax; and
- a hybrid carbon tax and emissions trading scheme.

The ACA supports the MCA’s submission to the Committee outlining its alternative emissions trading concept proposal to phase in the ETS by providing 90% allocated permits at the outset to industry (other than electricity generation) and dealing with aluminium, cement and other high energy users with additional assistance where merited. This approach would more effectively tackle the trade competitiveness impacts that the White Paper model does not adequately address as illustrated in the following chart from page 7 of the MCA submission.



Under the MCA approach there would be no arbitrary emissions intensity thresholds or complicated formulae for determining eligibility. The approach also eliminates inter-sectoral distortions as all trade-exposed sectors would pay the same price for a tonne of CO_{2-e} emitted. Such an approach contrasts with the approach set out in the White Paper and associated exposure draft legislation, which will impose three different carbon costs.

Offsetting competitiveness loss in the CPRS could also be improved by adopting the AIGN approach to addressing trade exposure that, like the MCA approach, is calibrated with international action to abate emissions to address human induced climate change.

These two approaches are similar and would address a lot of the ACA’s concerns: coal would receive a permit allocation, there would be more time to ensure the framework is right and the price cap in the first years is realistic.

Geoff Carmody’s consumption based proposal would also comprehensively address exporter concerns about loss of international competitiveness, associated ‘carbon leakage’ and job losses. It does not seek to exempt

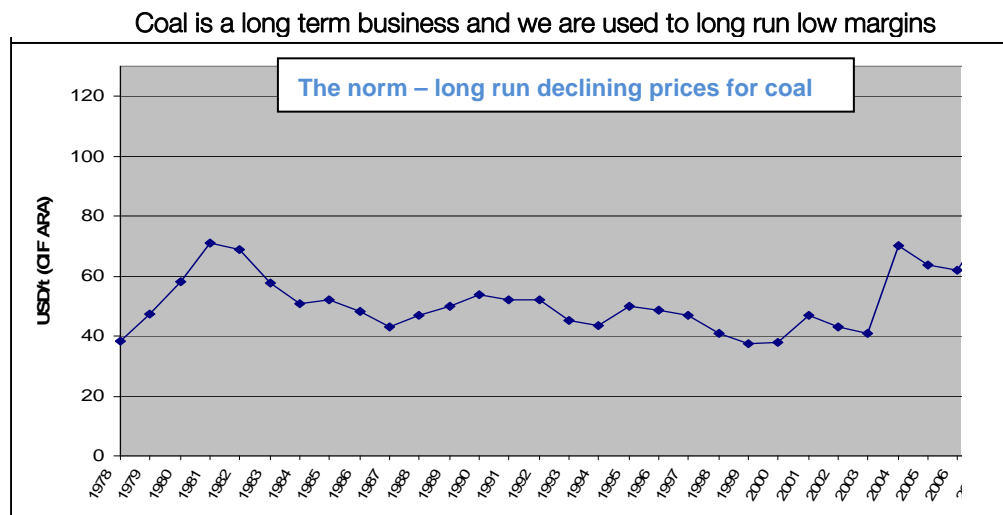
Australian exports from carbon costs. Instead, it (properly) allocates the task of imposing those costs on the importers of Australian exports. For this reason it deserves further assessment and debate. But it is more difficult to see how it can be applied equitably and transparently to imported goods.

Recommendation

To enhance the efficiency and productivity of our economy, government accountability and public debate on the relative merits of policy alternatives there must be a higher degree of transparency in the formulation and evaluation of the CPRS. This should cover the rationale, nature, and economic effects of the CPRS, a carbon tax and alternative approaches such as the MCA, AIGN and Carmody proposals, which would deal with competitiveness issue in a much more effective way to the CPRS thereby preserving jobs in Australian industries and regions.

4. Exclusion of coal from EITE transitional arrangements

The coal industry is a cyclical industry. Traditionally coal and other bulk commodity markets have been in a state of either over-supply or near over-supply. Whenever the coal or iron ore price rose, producers were motivated to increase production to maximise profitability, which started the cycle again.



Source: World Coal Institute

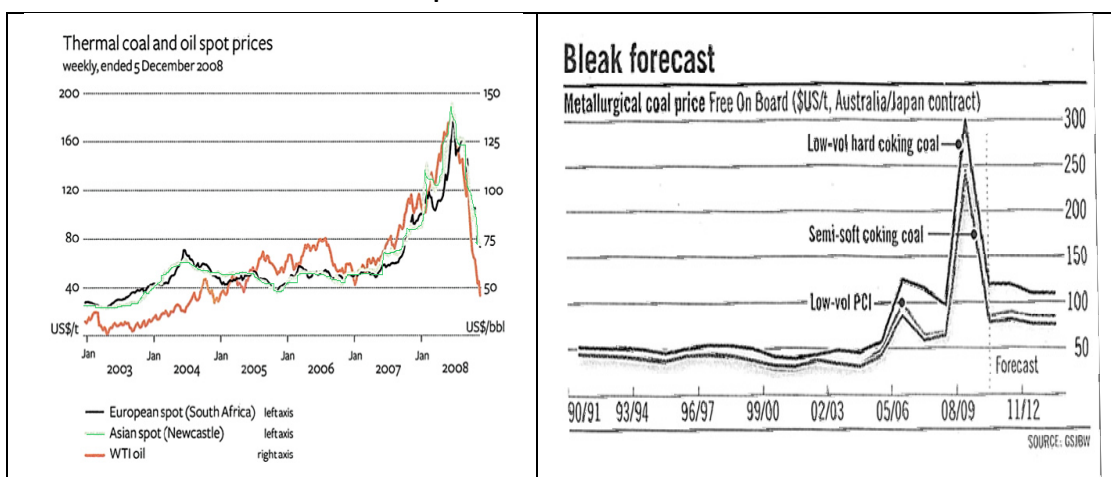
Unfortunately the initial development of the emissions trading scheme took place during one of the greatest commodity booms in history as illustrated in the charts below. For example, the Green Paper stated that:

The Australian economy is well placed to face the challenge of responding to climate change. Wide-ranging reforms over the past quarter century have resulted in the flexible, prosperous economy Australia enjoys today. (Page 10)

The Government basically assessed that the coal industry could afford to meet the costs of emissions trading. This combined with a reluctance to be seen to be allocating permits to coal due to perceived concerns in the electorate led to the decision to exclude coal from the EITE arrangements. This decision was taken notwithstanding coal's importance in the national economy, its ranking as Australia's main export industry, the nature of commodity cycles and the efforts the coal industry is taking to address emissions from coal-fired power generation.

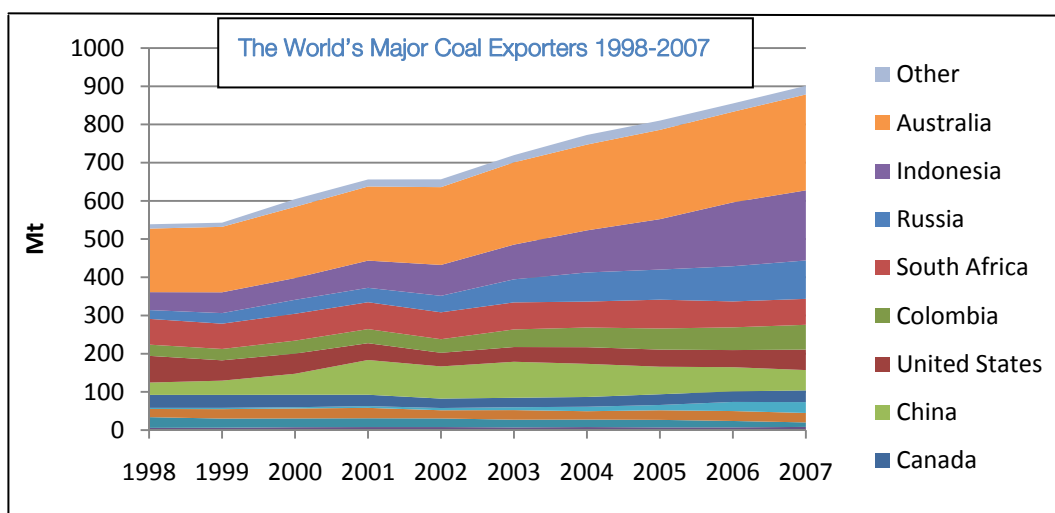
At over 1330 coal is well above the 1000 tonnes of CO_{2-e} per million dollars of revenue eligibility threshold. The coal industry is, therefore, seeking fair treatment not special treatment. The same rules that apply to other emissions intensive trade exposed industries should apply to coal: the inclusion of coal in the EITE arrangements will provide that.

Coal prices – a short tem view



By the time the White Paper came out it recognised that “The world is currently experiencing a financial and economic crisis that has created a climate of uncertainty.” (Page XVI)

Indeed the commodity boom has now come to an abrupt end as illustrated in the above two charts. We need an emissions trading scheme that takes proper account of the nature of commodity cycles. This is particularly important for coal, which is one of the most trade exposed industries in the economy. This is illustrated in the following chart.



Source: Australian Mineral Economics

In the transition to a global price on carbon the above chart also illustrates that the majority of Australia’s competitors are developing countries that will not be subject to a carbon price in the next decade. There is no guarantee that developed county competitors will impose an emissions cost on coal in the near future. Australia is also the only country proposing to include fugitive emissions in its emissions trading scheme.

Our trade exposure is further illustrated in the above chart by the fact that Indonesia, the greatest volume beneficiary from the strong growth in demand for thermal coal in recent years, outstripped Australia to become the largest thermal coal exporter in 2005. In fact Australia has lost over 15% of its market share of seaborne thermal coal since 2002. In addition, falling global coal prices and rising permit prices would have a material impact on the competitiveness of the Australian coal industry.

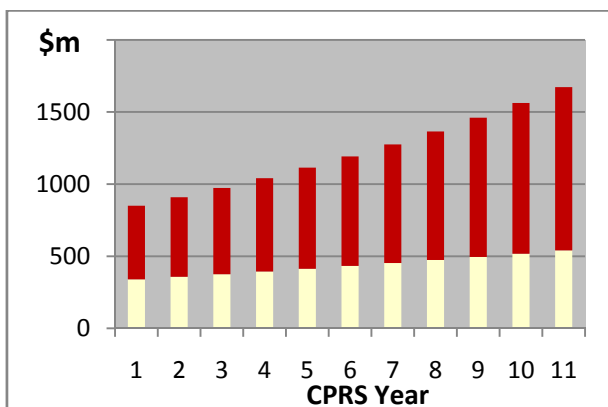
As a further illustration of Australia’s competitiveness exposures, were China, which produces around 46% of world production, to switch even a portion of its coal to export markets again, which seems highly likely, this will further substantially impact world prices. In 2007 China exported some 53 million tons of coal, less than a government-approved quota of 70 million tons, because of increased domestic demand at the time.

The EITE arrangements have been developed to address such competitiveness issues so that EITE firms do not choose to leave Australia or reduce their investments here with no global environmental benefit. They also guarantee permit allocation for at least 10 years to ensure incentives remain for EITE firms to invest and adjust their emissions profiles consistent with an emerging global carbon constraint. This is illustrated in chart (a) below where the red bars represent the EITE rebate and the yellow bars the net cost of the CPRS to the coal industry.

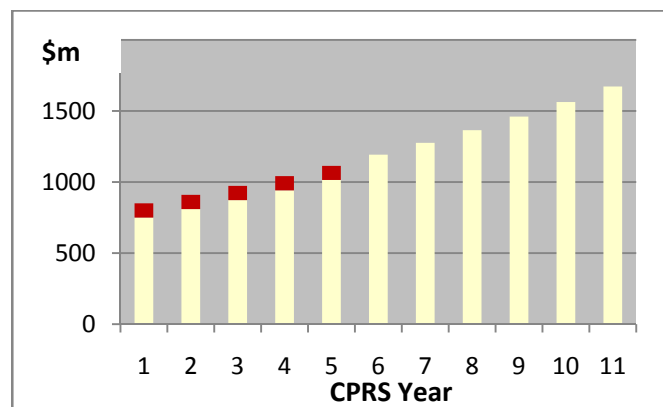
The coal industry is eligible for a 60% allocation of permits under the White Paper methodology yet the White Paper goes out of its way to exclude coal even though it easily meets the threshold test.

Instead the proposal in the White Paper is to establish a technology fund for coal industry emissions abatement (\$250 million matched by industry) and a transitional assistance scheme (\$500 million over five years). As illustrated by the red bars in chart (b) below that does not address the industry's international competitiveness exposure. The coal industry operates in a highly competitive global market and will be unable to pass on the bulk of CPRS costs. However, the proposal does not adequately recognise this nor address the longer-term impact on future investment and jobs in Australian coal mines that will have to compete with overseas mines not facing similar costs.

(a) Illustration of the treatment of the coal industry were it included in the EITE arrangements (red bars) & the net impact of the CPRS (yellow bars)



(b) Illustration of the transitional assistance to coal (the red bars) under the White Paper proposals and the net cost of the CPRS (the yellow bars)



The risks associated with the introduction of emissions trading have been greatly increased by the current global economic downturn and rapidly falling commodity prices. As illustrated in **Box 2**, substantial investment has been put on hold or cancelled, exploration activity significantly reduced, mines placed on care and maintenance and over 3 000 direct jobs lost with flow on effects to regional economies and the broader community, including 9 000 indirect jobs being impacted due to the economic multiplier effect coal production has.

Box 2: Impact of the Global Financial Crisis on the Australian coal industry since December

- Over three thousand redundancies in coal mining have been announced publicly with more to come
- For every job lost in coal at least 3 more jobs are lost elsewhere in the economy:
 - so the flow on effects of the 3000 redundancies so far is the loss of a further 9000 jobs elsewhere
- Mine lives are being re-evaluated and three have moved onto care and maintenance
- Investment is being reconsidered:
 - significant investment in coal mining is now under review or deferred and equipment orders associated with mine expansions cancelled
 - Wiggins Island Coal Terminal and the Northern Missing Link rail project are both on hold for at least 18 months
 - other major projects placed on hold for 12 months

The cumulative impacts on cost competitiveness due to the CPRS and the global financial crisis are also on top of other regulatory impositions, including:

- increases in coal royalties in Queensland and NSW;
- the recent NSW mini budget decision to remove the allowable transport deductions for the purposes of royalty calculations;
- the imposition of a levy of \$15/tonne on coal washery rejects; and
- the increased regulatory burden particularly due to substantial duplication in regulation.

As a result of the introduction of the CPRS the Australian coal industry will lose market share, investment will decline and significant numbers of jobs will be lost.

Although coal is eligible for an allocation of permits the White Paper specifically excludes it on the basis of:

- a) the potential for substantial step changes in emissions due to the availability of relatively low cost abatement technologies; and
- b) the wide diversity of emissions profiles across mines and therefore potential for windfall gains.

Both propositions are incorrect as explained as follows.

a) Availability of technology

The Australian coal industry is directly responsible for about 5% of Australia's greenhouse gas emissions. The major source of direct emissions – about 4% - is methane (fugitive) emissions from coal mining. Given this fact the advent of a price on carbon will provide a further financial incentive to abate fugitive emissions.

However for surface mining there are very limited options to abate emissions simply because of their nature. In the case of underground mining there are also limited options. To explain this it is useful to distinguish two types of fugitive emissions:

- a) pre-mine drainage of methane – abatement through flaring and electricity generation; and
- b) ventilation air methane – there are limited options for flaring and the application of emerging technologies, currently limited to Vocsidizers:
 - Vocsidizer technology is proven in various industrial applications but only demonstrated so far in an Australian and North American coal mine;
 - there are locational and technical difficulties restricting Vocsidizer deployment in coal mining (eg they do not work if methane concentrations are too low or too high – in fact they are really only viable with methane concentrations consistently between about 0.3% and 1% in the ventilation air);
 - Australia leads the world in research in this area;
 - other available abatement opportunities for underground mines are very limited although the ACA Research Program continues to examine a range of technologies with a view to undertaking further research, development and possibly demonstration.

b) Ensuring there are no windfall gains

The White Paper asserts that:

“the high variation in emissions means that some mines have very low emission intensities. Fugitive emissions from coal mines range from close to zero to 0.71 tonnes of CO_{2-e} per tonne of coal extracted. No other industry has the emission-intensity of different production facilities that varies by a factor of 1000. While there are some very gassy mines, the vast majority of production (nearly 90%) originates from mines which have an emissions intensity of less than 0.05 tonnes of CO_{2-e} per tonne of coal extracted.” (page 18.8)

While it is correct to assert that there is wide variation in the emission intensity of different mines it is wildly inaccurate to say that the vast majority of production – “nearly 90%” – originates from mines with emissions intensity of less than 0.05 tonnes of CO_{2-e} per tonne of coal extracted. The ACIL Tasman study of mines accounting for 84% of production finds that mines representing 53% of production are over the 1000 threshold for EITE eligibility.

Furthermore, the concern with windfall gains if the White Paper’s production allocation rule as employed for coal mining can simply be addressed through a specific coal industry allocation methodology. Such an approach ensures permits are directed to mines in accordance with their emissions rather than production thus avoiding the potential for windfall gains to mines with low fugitive emissions. This allocation rule would also continue to provide the incentive for mines to reduce their emissions in the future and could incorporate mine emission abatement planning.

Figures 1 and 2 below illustrate the approach. **Figure 1** shows the level of fugitive emissions for 69 underground and open cut coal mines in Australia in 2007 and the blue bars illustrate the wide dispersion of fugitive emissions in coal mining. This wide dispersion by mine is unique to the coal and gold industries. Other activities only have a very limited dispersion of emissions by facility and so the allocation rule in the White Paper is appropriate for them.

If we employ the White Paper’s allocation methodology, which is based on the average emissions per tonne of coal production, then some mines would receive more permits (shown here by the red bars) than they would have to purchase (the bars shown in blue). On the other hand the really gassy mines receive relatively fewer permits relative to the number they would have to buy.

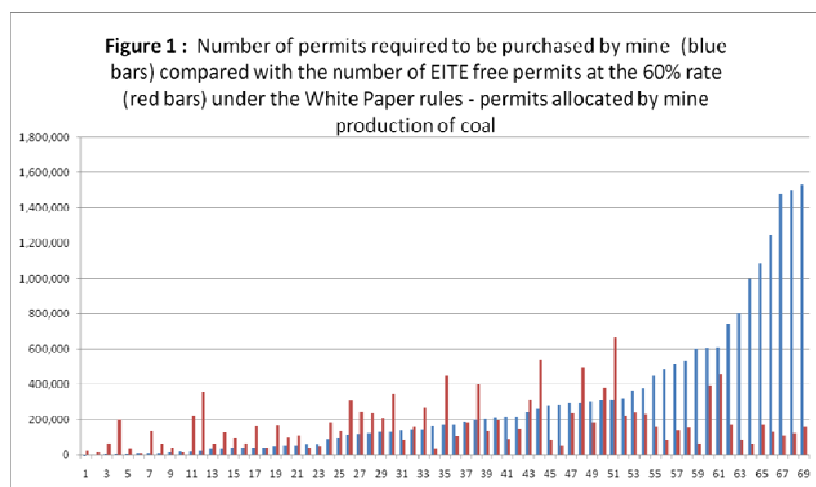
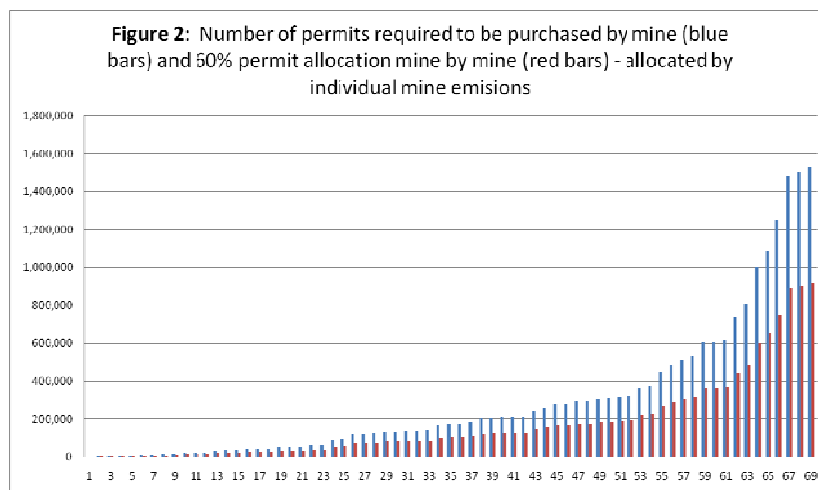


Figure 2 illustrates there is a simple solution to deal with the windfall gain issue. This involves allocation of permits mine-by-mine based on 60% of mine site direct emissions (the red bars). In this way all mines receive an allocation of permits in recognition of their trade exposure. Moreover, all mines, including non-gassy mines, still pay for 40% or any direct emission permits they require and are fully impacted by any cost escalation due to the implications of the emissions trading scheme for purchased inputs (ie the impact on the cost of transport, consumables, contractors, contract miners, etc).



Officials have said the above approach is not feasible as you cannot have one allocation rule for all activities except coal. But public policy needs to be specifically tailored, as recognised in the special arrangements for coal-fired generators and agriculture under the CPRS. **EITE is simply not a credible response to preserving Australia’s competitiveness if Australia’s largest export industry is excluded because a largely manufacturing industry approach is adopted without taking account of the distinguishing characteristics of coal mining.** In fact the approach shown in Figure 2 is akin to the approach adopted in the White Paper in allocating assistance to coal mines under the Coal Sector Adjustment Package.

Recommendation

If the Government does implement the CPRS model despite its obvious shortcomings, it must deal more effectively with competitiveness issues that will inevitably arise in the transition period in which there will be no comprehensive global agreement on emissions reduction or comparable emission trading arrangements elsewhere. To ensure the ongoing competitiveness of the Australian coal mining industry and other trade exposed sectors:

- **the coal industry should be included in the trade exposed and emissions intensive arrangements as the best way to address the risks to its international competitiveness, coal jobs and regional prosperity. This would provide certainty and transparency for future investment in the industry and be equitable with the treatment of other activities;**
- **the CPRS should involve a gradual adjustment of the economy to reduce economic, transaction and compliance costs until a multilateral regime that comprises major emitting countries is in place.**

5. The overreliance on subordinate legislation

In the past various Parliamentary Committees have held that regulations are appropriately used to include matters of detail and matters liable to frequent change. For the CPRS, a policy that will impact diverse organizations and consumers across the economy, it is sensible to consider utilizing subordinate legislation.

The essential theory of subordinate legislation is that:

- a) the Parliament deals directly with general principles;
- b) the executive or other body empowered to make subordinate legislation attends to matters of administration and detail.³

In this way the Parliament can debate the broad principles contained in bills and still retain control over the detailed implementation of that policy by judicious use of its powers of disallowance.

But, as explained in the ACA’s submission to the Senate Economics Committee inquiry into the CPRS Bills (refer to **Attachment 3**), the main CPRS Bill as it currently stands gives little indication about the requirements for satisfying the EITE transitional arrangements provided in the CPRS to address competitiveness concerns. The

³ Harry Evans (Ed), *Odgers’ Australian Senate Practice*, 12th edition 2008, p. 325.

details are left to be dealt with in regulation. In fact, of the 17 policy positions set out in the White Paper for EITE implementation 13 are to be covered in regulation and two do not appear to be covered by the Bill.

Given the import of the legislation this minimalist approach to setting out the details of how EITE will work is concerning. The minimalist approach also appears in many respects to be unnecessary as much of the material which is proposed to appear in the Regulations is described in the explanatory material (EM). There seems to be no reason why, if policy decisions on the issues outlined in the EM have already been reached, they cannot be set out in the CPRS Bill and subjected to debate in Parliament. It seems reasonable to suggest that if policy decisions are significant enough to appear in the EM then they are not mere matters of detail. In addition, the proposed “objects” for the EITE arrangement section need to be defined more fully in black letter law.

Recommendation

To ensure Parliament can debate the broad principles contained in the CPRS bills and still retain control over the detailed implementation of that policy by judicious use of its powers of disallowance:

- **the objects in Part 1 of the CPRS Bill should be expanded as proposed in the ACA’s submission to the Senate Economics Committee inquiry into the CPRS exposure draft legislation (set out in Attachment 3);**
- **the objects in Part 8 concerning the EITE arrangements should also be amended as proposed in that submission to address concerns with objects (a), (e) and (f);**
- **the main Bill should be amended through incorporation of policy positions set out in the explanatory material to ensure an equitable and transparent approach to determining the allocation of permits to EITE activities. This approach also needs to be capable of being applied consistently over time as new activities begin operation in Australia and as other activities are covered by the Scheme; and**
- **the subordinate legislation should be broken down into a series of small packages for Parliament’s consideration each dealing with discrete topics.**

6. Other technical issues

6.1 The implications for property rights of the removal of the NSW Greenhouse Gas Abatement Scheme

The CPRS Bill does not provide for transitional arrangements for Greenhouse Gas Abatement Scheme (GGAS) participants. Instead the Federal Government in Policy position 15.2 in the White Paper continues to seek an agreement with the NSW and ACT governments on GGAS termination. The White Paper states that although the NSW Government is responsible for transitional arrangements, if an agreement on assistance cannot be made, the Federal Government will consider providing some limited assistance for the benefit of GGAS participants.

Methane power station owner/operators rely on GGAS revenue and without this operating cash flow would be significantly reduced. No or inadequate transitional assistance is likely to lead to closure of methane power stations using methane supplied by coal companies. This would clearly impact both the power station operator and the coal company. If the power stations were forced to close because they were no longer viable without receiving revenue from GGAS, coal companies would be worse off as a result of lost gas sales revenue and additional permit costs.

To ensure there is no impairment to existing property rights there is a need to address this transitional issue.

Recommendation

The CPRS Bill should outline transitional arrangements in the form of assistance to GGAS participants from CPRS commencement until 2020. One method of doing this would be to grandfather the obligations under GGAS into the CPRS which would maintain support for utilising gas that would otherwise be wasted and give commercial effect to long term investments in power stations.

6.2 Enabling an exporter of coal to relieve its overseas customer of the need for the latter to obtain an Obligation Transfer Number

The policy position stated in the White Paper is that a coal producer/supplier will not be liable for the emissions associated with combustion of coal that is exported from Australia (although it may be liable for the fugitive emissions released during the mining/processing of that coal). This position is restated at paragraph 1.150 of the explanatory material accompanying the draft CPRS Bill.

However, the policy position does not appear to be reflected in the actual provisions of the Exposure Draft of the CPRS Bill. That is, there is no clear mechanism under the draft Bill for an exporter of coal to be exempted from liability for the emissions associated with that coal.

The Exposure Draft legislation thus seems to require exporters to ask their foreign customers to apply for an Obligation Transfer Number (OTN) if the transfer of title of exported products takes place in Australia before physical export. This is an unnecessary administrative cost for customers of Australian bulk commodity exports and should be addressed in a like manner to the way that export coal is treated under the GST with export status accepted where title to coal changes on an fob or free alongside basis, for example.

The Bill also seems to assume that a foreign purchaser of coal will apply for an OTN and will quote that OTN to the Australian supplier of the coal, thus relieving the supplier of emissions liability in relation to that coal. However, the mechanism for exempting the foreign purchaser from liability under the CPRS (having quoted an OTN) does not appear to be present in the Bill.

Recommendation

To address concerns with the foreign customers needing to apply for an Obligation Transfer Number the CPRS legislation should clearly exempt export coal from liability under the CPRS. Further consultation with industry is likely to be necessary to ensure there are practical mechanisms in place to deal with export supply arrangements for coal.

7. Energy security and the treatment of captured coal mines

The White Paper proposal does not provide a legislative solution to ensure CPRS cost pass through (under long-term contracts) or an allocation of permits, preferring to leave this to the market. In the case of captured coal mines supplying thermal coal for the domestic market, the prospect of mines being able to renegotiate long-term (eg 20 year) commercial contracts with power generators to pass on CPRS costs is considered unlikely.

While some contracts currently include “cost pass-through” clauses these were not designed with a potential emissions trading system in mind. Such contracts would only permit pass through of “taxes” or “charges”. As compliance with the CPRS is achieved by the purchase of permits, which can be purchased either from the Commonwealth at auction or in the marketplace, it will be difficult in the case of many contracts to show that the cost of acquiring permits is a “tax” or “charge”. By contrast most contracts would allow for the pass-through of a “carbon tax” as it is a tax. While the ACA supports the choice of an emissions trading scheme the use of an ETS does create a practical implication for miners which would not arise in the context of a carbon tax. In other words it is the structure of the system which causes the problem. In addition, the inability to pass through is at odds with the intent of the CPRS.

The current design of the CPRS will place significant financial stress on these mines, with consequent implications for asset owners and for Australia’s energy security.

Recommendation

The CPRS impact on captured coal mines to be addressed through incorporation of coal in the EITE arrangements.

8. The Development of Low Emissions Technologies

The Committee's terms of reference ask it to take into account long-term incentives for investment in low-emission technology. The ACA welcomes this as an ETS really cannot be considered independently of the need to support ongoing RD&D in low emissions technologies. This is because in the absence of substantial new low emissions technology development and demonstration it will be difficult to significantly reduce Australia's emissions without impacting economic activity.

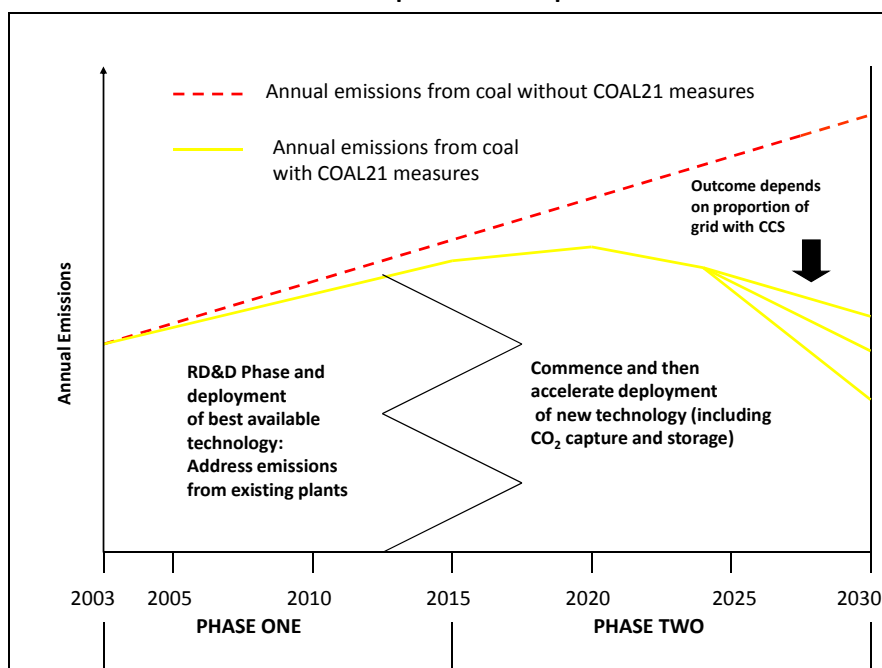
While an ETS deals with market failure arising from an absence of a price on carbon, substantial government funding is required to address the separate market failure resulting from the public good nature of RD&D in low emissions technologies. In particular, investment in fundamental technological innovations – including carbon capture and storage technologies – will be necessary to achieve deep emission cuts without putting economic development at risk.

As low emission technologies relate to areas in which Australia has substantial resource endowments, RD&D also represents an important investment in sustaining the value of national assets. The advance of knowledge from research to eventual commercialisation of low emissions technologies will also boost confidence in the achievability of mitigation objectives within the global community.

The Australian coal industry has made the development and demonstration of low emissions coal technologies the central focus of its approach to dealing with climate change. For many years the industry has been proactive in addressing environmental issues including greenhouse gas emissions in the extraction and use of coal. These are summarised in **Attachment 1**.

In 2003 the ACA took this further with the COAL21 initiative to demonstrate the technical and economic viability of the major low emissions coal technologies (see **Figure 3**). This has subsequently evolved into a target to deploy them at large-scale from 2017.

Figure 3: COAL21 National Action Plan phases and impact of COAL21 measures on emissions



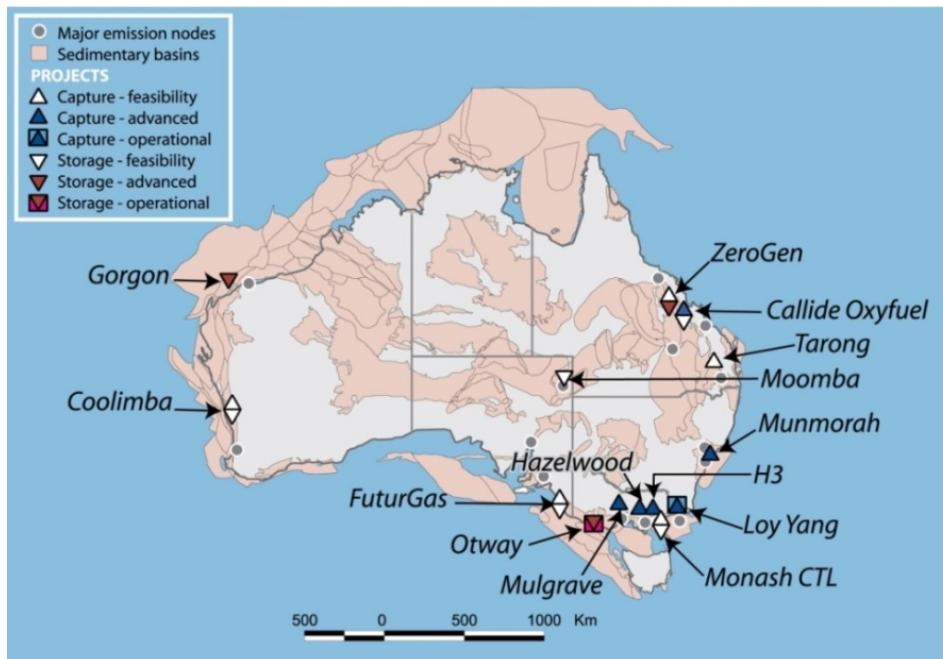
In order to drive this demonstration program the black coal industry in 2006 established the COAL21 Fund. The Fund is a voluntary levy on coal production and is raising more than \$1 billion over the next decade. The Commonwealth and State governments are also providing substantial funding to the demonstration program and the ACA has welcomed initial commitments by:

- the Australian Government's \$500 million National Low Emissions Coal Initiative and funding of up to \$100 million each year for a global carbon capture and storage institute that would help guide the development of CCS technologies worldwide;
- Queensland Clean Coal Council – \$300 million;

- NSW Clean Coal Council – \$100 million;
- Clean Coal Victoria – \$110 million; and
- Western Australia Low Emission Energy Development Fund – \$36.5 million.

These contributions represent a cooperative approach with industry to develop and demonstrate low emissions coal technologies. Industry is actively engaged on the projects listed in **Table 1** below. These projects are among a number of major carbon capture and storage technology ventures currently at various stages of development in Australia and indicated on the following map of Australia.

Major carbon capture and storage technology ventures in Australia at February 2009



Source: Cooperative Research Centre for Greenhouse Gas Technologies, www.co2crc.com.au

A description of the various low emission coal capture technologies is included at **Attachment 2** and covers post combustion capture; oxyfuel; Integrated Gasification Combined Cycle (IGCC); and Carbon Capture and Storage.

Recommendation

The price of carbon and resulting adjustment burden on both industry and households under an Emissions Trading Scheme is extremely technology dependent. Significant government funding will be required to demonstrate and deploy low emission, electricity generation technologies in order to decrease substantially Australia's emissions.

TABLE 1: COAL21 FUND COMMITMENTS OVER THE PAST 20 MONTHS

PROJECT	Committed Funding				Estimated Total Project Costs	Target completion date
	Coal Industry \$	Government \$	Other (including in-kind)	Total Committed Funding		
Callide Oxyfuel Project, Queensland <ul style="list-style-type: none"> under way 	\$68 m COAL21 Fund \$1 m Xstrata	\$50 m (C'th) \$10 m (QLD)	\$35 m Japanese Partners \$25 m CS Energy \$2 m Schlumberger \$15 m Project electricity sales	\$206 m	\$206 m	2015
Support for a Queensland Integrated Gasification Combined Cycle (IGCC) project	up to \$300 m (includes \$26m for a feasibility study for stage 1 of the revised ZeroGen)	\$300 m (QLD)	\$122.5 m	\$600 m	TBD	Stage 1: 2012 Stage 2: 2017
Queensland Geosequestration Initiatives	\$20 m	\$30 m		\$50 m	\$60 m	2014
Post Combustion Capture in NSW – a number of pilot and demonstration projects including storage. [Note: an initial project at the coal-fired Munmorah Power Station on the state's Central Coast is under way. The pilot plant will capture about 3 000 tonnes of CO ₂ a year from the power station. A larger scale carbon capture project is also planned to be operating in NSW to capture up to 100 000 tonnes of greenhouse gases each year.]	\$50 m	\$50 m (NSW) \$50 m (C'th)	\$5 m	\$150 m	\$150 m	2015
National Low Emission Coal Council R&D program	\$75 m	\$75 m (C'th)			\$150 m	Being established
TOTAL THUS FAR	\$512.9 million	\$565 million	\$204.5 m	\$1006 m		

Note: In addition to the above commitments the black coal industry is providing initial funding for the CO2CRC Otway CO₂ storage demonstration project in Western Victoria through the ACA Research Program (ACARP).

The Australian Coal industry is contributing to Greenhouse Gas Mitigation

COAL21 and COAL21 Fund

In 2003, the Australian Coal Association (ACA) brought together representatives from the coal and electricity industries, unions, federal and state governments and the research community to form the **COAL21 partnership**. The COAL21 Action Plan, launched in 2004, aims to accelerate the demonstration and deployment of clean coal technologies that will reduce greenhouse gas emissions from coal-based electricity generation.

In 2006 the ACA announced the establishment of the **COAL21 Fund** as part of a world-first whole-of-industry funding approach to support greenhouse gas abatement. The COAL21 Fund is raising over \$1 Billion over 10 years from a voluntary levy on coal production to support the pre-commercial demonstration of low emissions technologies in the power generation sector (where over 95 per cent of emissions from coal occur) and supporting R&D. This initiative complements the Australian Government's \$500 million Low Emissions Coal Fund and \$500 million Low Emission Technology Demonstration Fund.

Australian Coal Association Research Program (ACARP) see <http://www.acarp.com.au/>

Since 1992 ACARP has been funding R&D into coal production and use. ACARP currently invests over \$14 million per annum on industry-related research via an industry-wide levy on coal production.

Through ACARP the industry also supports key research via its membership of the:

- Cooperative Research Centre (CRC) for Greenhouse Gas Technologies (CO2CRC); and the
- Queensland Centre for Low Emissions Technology (cLET).

A number of coal producers have also elected to become individual participants in these Centres.

In addition to ACARP and the COAL21 Fund individual Australian black coal producers are providing significant direct funding for demonstration projects – in Australian and international projects.

The coal industry continues to support R&D projects into the mitigation of methane in mine ventilation air (MVA) in the following areas:

- using MVA as the combustion air with another primary fuel, eg gas turbines or nearby power stations;
- using MVA supplemented with secondary fuels, with energy recovery;
- developing catalytic systems for converting ultra-lean air-methane mixtures; and
- developing a system for concentrating methane in MVA, eg by methane adsorbents or membranes.

Australian and International Initiatives

The coal industry, the ACA and its members are active participants in a number of national and international programs and fora related to greenhouse issues and technology development including the:

- National Low Emissions Coal Council;
- National Carbon Storage Taskforce;
- Global Carbon Capture and Storage Institute;
- Greenhouse Challenge Plus Program;
- Asia Pacific Partnership on Clean Development and Climate;
- International Energy Agency (IEA) Clean Coal Centre;
- Carbon Sequestration Leadership Forum (CSLF);
- Methane-to-Markets Partnership; and
- Australia-China Joint Co-ordination Group on Clean Coal Technologies.

Low Emissions Coal Technologies

What are low emissions coal technologies?

Low emissions coal technologies (or new generation coal technologies – see <http://www.newgencoal.com.au/>) refer to technologies designed to enhance the environmental performance of coal used in power generation. These technologies aim to deliver significant reductions in greenhouse gas emissions and reduce waste.

Low emissions coal technologies to reduce greenhouse gas emissions cover two broad categories:

- CO₂ capture technologies (pre-combustion and post combustion) and
- CO₂ storage technologies.

Post Combustion Capture (PCC) Technology can be applied to new plant or as retrofit technology for coal fired or natural gas power plants that can dramatically reduce CO₂ emissions by as much as 90% through the process of removing CO₂ from flue gases:

- flue gases leaving a power plant are first cooled and then, using amine separation, the CO₂ is captured;
- the CO₂ is then removed from the absorbing solution allowing the absorber to be recycled and reused;
- alternatively capture can be achieved using cryogenic or membrane separation;
- the captured CO₂ is compressed and cooled to form a liquid which can be permanently stored using geosequestration.

This technology is at a pilot and demonstration stage of development. Current projects in Australia include the Munmorah Project (NSW), Hazelwood Project (VIC) and the Loy Yang Project (VIC).

Oxyfuel Combustion Technology can be applied to new plant or as retrofit technology to existing plant. While conventional power plant boilers burn pulverised coal in air (comprising oxygen, nitrogen and other gases) the oxyfuel process replaces air with a mix of oxygen and recirculated gases from the boiler, creating a highly concentrated stream of CO₂. The CO₂ can then be liquefied and permanently stored using geosequestration.

This technology is at the demonstration stage of development. The key project in Australia demonstrating this technology is the Callide Oxyfuel Project (QLD).

Integrated Gasification Combined Cycle (IGCC) Technology is applied to a new plant. In the IGCC process, coal is converted into a synthetic gas (syngas), which is cooled and cleaned to remove particulates and sulphur compounds, passed through a shift reactor (to convert more of the syngas to hydrogen and to separate CO₂) and then burned in a combined cycle gas turbine unit. Coal gasification technology can also be adapted for coal to liquids production.

The main components are a coal gasification facility, an air separation unit (oxygen instead of air is typically used in the gasification process), a gas cleaning facility, CO₂ shift reactor and a combined-cycle gas turbines (CCGT) power plant. As concentrated CO₂ is one of the by-products of the gasification process this technology is highly suited to carbon capture and storage.

This technology integrated with carbon capture and storage is currently at a pilot and demonstration stage of development. Current projects being proposed in Australia include ZeroGen Project (QLD) and Monash Energy Project (electricity and coal to liquids) (VIC).

Carbon Capture and Storage (CCS)

CCS technologies could be combined with any of the generation options outlined above and can in principle be retrofitted to existing plants. While many components of the techniques and technologies are well-established in other industrial applications, their adaptation to power generation systems is currently at the pilot or demonstration stage. The type of fuel and generation technology that is used will determine the type of capture technology that is most suitable.

Carbon dioxide can then be transported using high pressure pipelines – a technique that has already been proven for use in enhanced oil recovery (EOR) projects since the 1980s (although on a smaller scale than would be required for transporting power generation emissions). It could also be transported in tankers similar to those used to transport LPG. Transportation costs will vary greatly depending on volume, distance, geography and method. Captured carbon dioxide has the potential to be stored in a variety of onshore and offshore geological sites including active and depleted oil and gas reserves and saline aquifers.

Extract from the ACA submission to the Senate Economics Committee review of the Carbon Pollution Reduction Scheme (CPRS) Exposure Draft Legislation

1. Purpose of the legislation

The CPRS Bill includes three objects at clause 3. These objects are general in nature and while informative of Parliament's objective in enacting the legislation do not adequately explain the purpose of the highly detailed and complex legislative package. The objects should be made more complete and informative through specific reference to:

- an efficiently designed cap and trade emissions trading scheme (ETS) capable of being linked to both individual country and regional initiatives as these evolve to a more broad-based ETS;
- the ETS to be complemented by other efficient market-based mechanisms to encourage: technology development and deployment including Carbon Capture and Storage research, development and demonstration; energy efficiency; and adaptation;
- the imposition of a price on greenhouse gas emissions in Australia to promote structural reform in Australia while ensuring "Australia's international competitiveness is not compromised", "industry ... operations ... are not disadvantaged" and specific mechanisms are established "to ensure that Australian operations of emissions intensive trade exposed firms are not disadvantaged by emissions trading";⁴
- the objective of offsetting the competitive disadvantage of the CPRS for trade exposed industry and to provide transitional arrangements until such time as Australia's major trade competitor countries impose similar requirements (to link in with improved objects for Part 8).

These amendments would clarify the intention of the Government that the six bills making up the CPRS exposure draft legislation together with associated complementary measures "will provide the robust framework that is required to set up Australia's economy for a low pollution future."

The Government has also stated it "is very mindful of the need to deliver business certainty and a clear position in the lead up to the Copenhagen climate change conference. Passing the legislation during the 2009 winter sittings will deliver this certainty". The ACA does not share this view. We have consistently maintained that the most important objective in implementing the CPRS is to ensure the framework is right and will stand the test of time. This will mean providing adequate time to the legislative process.

It needs to be recalled that the legislation and yet to be developed regulations seek to establish an emissions trading scheme for Australia that will impact all Australians over a period of many decades. What is required is:

- a) legislation that will stand the test of time; and
- b) a sound and enduring emissions trading scheme framework founded in sound public policy principles that have been clearly endorsed by Parliament and are capable of interpretation without ambiguity by Tribunals and Courts.

The ACA is concerned that insufficient time is being provided for comment on these highly complex Exposure Draft Bills and that the proposed implementation timetable will allow the Senate only two weeks of sittings to consider the Bills as presented from the House of Representatives. The Parliament will also only see a portion of the lengthy Regulations that are yet to be developed for implementation of the CPRS.

⁴ ALP, Election Policy Document, *Labor's Plan for a Stronger Resources Sector*, November 2007, p 9.

Use of subordinate legislation

In the past various Parliamentary Committees have held that regulations are appropriately used to include matters of detail and matters liable to frequent change. For the CPRS, a policy that will impact diverse organizations and consumers across the economy, it is sensible to consider utilizing subordinate legislation.

The essential theory of subordinate legislation is that:

- c) the Parliament deals directly with general principles;
- d) the executive or other body empowered to make subordinate legislation attends to matters of administration and detail.⁵

In this way, the Parliament can debate the broad principles contained in bills and still retain control over the detailed implementation of that policy by judicious use of its powers of disallowance.

But the main CPRS Bill, as it currently stands, gives little indication about the requirements for satisfying the EITE transitional arrangements provided in the CPRS to address competitiveness concerns. The details are left to be dealt with in regulation.

In fact, of the 17 policy positions set out in the White Paper for EITE implementation 13 are to be covered in regulation and two do not appear to be covered by the Bill.

Given the import of the legislation this minimalist approach to setting out the details of how EITE will work is concerning. The minimalist approach also appears in many respects to be unnecessary as much of the material which is proposed to appear in the Regulations is described in the explanatory material (EM). There seems to be no reason why, if policy decisions on the issues outlined in the EM have already been reached, they cannot be set out in the CPRS Bill and subjected to debate in Parliament. It seems reasonable to suggest that if policy decisions are significant enough to appear in the EM then they are not mere matters of detail.

In addition, the proposed "objects" for the EITE arrangement section need to be defined more fully in black letter law:

- Object (a) is to enable identification of EITE activities. But the object should be to offset competitive disadvantage and provide adjustment assistance to Australian industry in the wake of the introduction of a price on carbon;
- Object (e) goes to the issue of whether foreign countries that are responsible for the substantial majority of the world's emissions of carbon dioxide and other greenhouse gases have implemented sufficient measures to reduce those emissions. However, it is not necessarily these countries that are important to the competitiveness of Australian industry under the CPRS. Rather it is competition from overseas producers of Australia's trade exposed products. In the case of coal major competitors that are not in the top ten emitters' group include Colombia, Indonesia and South Africa. This point was made clear by the Garnaut Review and the Bill should establish it as one of its most important objects: and
- Object (f) covers "any other relevant matters" but is surprisingly vague and all encompassing as an object established at law by Parliament:
 - to give effect to government policy;
 - to ensure Parliament's intent is clear; and
 - to inform the community and the judiciary of the objectives of the EITE scheme.

This object should be removed.

Regulations are tabled in the Senate and the House of Representatives with the capacity to move/provide notice of motion within 15 sitting days of tabling that the regulations be disallowed. It is not possible for the

⁵ Harry Evans (Ed), *Odgers' Australian Senate Practice*, 12th edition 2008, p. 325.

Parliament to make any amendments. The importance of this issue would be diminished if the subordinate legislation, elements of which are going to be tabled in Parliament in stages, were broken down into a series of small packages which each dealt with discrete topics. Then the Senate could disallow a particular legislative instrument without having to disallow the entire package or part thereof (eg the EITE assistance program, for example).⁶ Given that the Regulations will include matters of the most fundamental significance – such as how many permits are to be allocated and at what level (60% and 90% are provided for in the explanatory material but are not open for review by the Parliament as part of the black letter law); the five year scheme caps and gateway; and emissions measurement, reporting and auditing – the Regulation could only be disallowed at the potential cost of disrupting the entire CPRS.

These initial comments on the main CPRS Bill, including the extensiveness of the detail of the legislation that will be established at law under yet to be developed disallowable instruments, go to the heart of the ACA's concern with the legislation. As noted in a different context:

We are constantly told that Parliament should be concerned only with "broad principles" and should leave "details" to the journeymen. But what is principle and what is detail? "Broad principles" may be very attractive in theory, but may lose their charm if unworkable in practice, just as a grand strategic plan is valueless unless practicable in tactics. It is not good government to pass an Act first and think about it afterwards.

There are a good many examples of leaving to delegated legislation "sticky details" which are not really details at all but turn out to be matters of essential principle.⁷

Recommendation 1

To ensure Parliament can debate the broad principles contained in the CPRS bills and still retain control over the detailed implementation of that policy by judicious use of its powers of disallowance:

- The objects in Part 1 of the CPRS Bill should be expanded as proposed above to address the ACA's concerns;
- The objects in Part 8 concerning the EITE arrangements should also be amended as proposed above particularly to address concerns with objects (a), (e) and (f).
- The main Bill should be amended through incorporation of policy positions set out in the explanatory material to ensure an equitable and transparent approach to determining the allocation of permits to EITE activities. This approach also needs to be capable of being applied consistently over time as new activities begin operation in Australia and as other activities are covered by the Scheme.
- The subordinate legislation should be broken down into a series of small packages which each deal with discrete topics.

⁶ It is noted that the Senate Standing Committee on Regulations and Ordinances would look to the government to clarify why multiple instruments are made at the same time on the same or similar matter.

⁷ Sir Carleton Kemp Allen, *Law and Orders An Inquiry into the Nature and Scope of Delegated Legislation and Executive Powers in English Law*, Third edition, 1965, p. 154.