	Entity	Submission to
1	NSW Government	Commonwealth Government: Carbon Pollution Reduction Scheme: Exposure Draft Legislation
2	ACT Government	Carbon Pollution Reduction Scheme Green Paper
3	Northern Territory Government	Carbon Pollution Reduction Scheme Green Paper
4	Western Australian Government	Carbon Pollution Reduction Scheme Green Paper
5	Tasmanian Government	Carbon Pollution Reduction Scheme Green Paper
6	NSW Government	Carbon Pollution Reduction Scheme Green Paper
7	Victorian Government	Carbon Pollution Reduction Scheme Green Paper
8	Queensland Government	Carbon Pollution Reduction Scheme Green Paper
9	State Electricity Commission of Victoria	Carbon Pollution Reduction Scheme Green Paper

Carmel Tebbutt MP

Deputy Premier

Minister for Climate Change and the Environment | Minister for Commerce

Our reference: DOC09/15875

Senator the Hon Penny Wong
Minister for Climate Change and Water
Parliament House
CANBERRA ACT 2601

cc. The CPRS Exposure Draft Team
Emissions Trading Division Department of Climate Change
GPO Box 854
CANBERRA ACT 2601

Dear Minister Penny

I am writing in relation to the Commonwealth Government's exposure draft legislation on the Carbon Pollution Reduction Scheme (CPRS).

Please find enclosed a submission from the NSW Government which provides comment on a number of specific issues, including the assistance arrangements for electricity generators, coverage for the waste sector and the arrangements relating to the transition of the NSW Greenhouse Gas Reduction Scheme.

The NSW Government strongly supports an effective CPRS and welcomes the opportunity to continue to work with the Commonwealth to ensure that Australia implements a successful emissions trading scheme.

Should your officers require further information on this submission, please ask them to contact Ms Zoe de Saram, Director Climate Change, Air and Noise, Department of Environment and Climate Change on ph. 02 9995 6202 or zoe.desaram@environment.nsw.gov.au.

Yours sincerely

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NSW GOVERNMENT SUBMISSION

TO THE

COMMONWEALTH GOVERNMENT

Carbon Pollution Reduction Scheme: Exposure Draft Legislation

April 2009

EXECUTIVE SUMMARY

The NSW Government has and continues to support the introduction of the Carbon Pollution Reduction Scheme (CPRS) as the main vehicle for achieving Australia's reduction in greenhouse gas emissions. We also acknowledge that a successful response to climate change requires cooperation across all levels of government.

The NSW Government notes that the CPRS draft legislation substantially reflects the decisions contained in the December 2008 White Paper. However, there are still some priority issues relating to both technical and policy positions in the draft legislation that need to be resolved. We would welcome the opportunity to work further with the Commonwealth in order to do so.

The comments and proposals put forward in this submission are aimed at:

- Establishing efficient, liquid and stable carbon markets;
- Achieving a fair and efficient transition for participants in the NSW Greenhouse Gas Reduction Scheme (GGAS) to the CPRS;
- Achieving adequate compensation for coal-fired electricity generators commensurate with expected value losses and to maintain energy security;
- Providing flexibility for the CPRS to interact with cost-effective abatement and incentives in non-covered sectors including voluntary markets and agriculture; and
- Ensuring effective scheme administration and implementation.

Overall, New South Wales is seeking reassurance from the Commonwealth Government that the impacts of the CPRS on stakeholders, particularly those located in rural and regional areas, will be closely monitored and that timely and equitable assistance will be provided to those most affected by the introduction of the Scheme. Distribution of assistance to households and businesses should be targeted to support areas that require the most significant structural adjustment.

The proposed statutory provisions for independent review appear to provide a reasonable framework for evaluation of the efficiency and effectiveness of the CPRS and its legislation. However, as part of these review processes, we encourage the Commonwealth Government to specifically consider the impacts of the CPRS on all stakeholders and the appropriateness of assistance arrangements (not just for the emissions-intensive trade-exposed industries).

Future reviews should take into account feedback from jurisdictions on the impacts of the Scheme and progress on climate change mitigation measures that complement the operation of the CPRS. There should be ongoing review of assistance packages, including assessment of whether further stimulus is needed to accelerate the shift towards a low-carbon economy.

1. Establishing efficient, liquid and stable carbon markets

The Carbon Pollution Reduction Scheme will be the first comprehensive emissions trading scheme in the Asia-Pacific region. This confers a major economic advantage on Australia to become the premier carbon market hub in the region. One of the key issues highlighted by the Sydney Carbon Market Taskforce is the importance of optimising the CPRS design to maximise this advantage for Australia.

In this context, some of the critical factors are:

- Compatibility of the Australian and international carbon markets;
- Regulation of the Australian carbon market;
- Taxation issues; and
- Linkages with international trading schemes.

There appears to be sufficient flexibility in the draft legislation to link to international schemes, for example as the United States' approach develops. The CPRS would also allow international permits to be imported to Australia from 1 July 2010 and count towards Australia's international emission reduction targets.

Having said this, the timing of the Commonwealth Government's review of the CPRS policy position that restricts transfer of Australian Emissions Units should be clarified and completed within 18 months of the commencement of the CPRS. This would help reduce the uncertainty that is currently impeding new investment (such as foreign investment in the forestry sector). Australian Emissions Units should be eligible to be exported from Australia as soon as is practicable.

In addition, more effort is needed to ensure there is sufficient liquidity in carbon markets. To facilitate dialogue on the design of the CPRS, the Sydney Carbon Market Taskforce recently convened a Technical Workshop with around 20 representatives from leading finance sector institutions, energy market companies and representatives from the Commonwealth Department of Climate Change.

The issues highlighted at the Technical Workshop have been summarised by the Taskforce in the attached document, *Taking Advantage of the Carbon Market Hub Opportunity: CPRS Design Issues* (Attachment A). If not properly addressed in the final CPRS legislative package, there is a risk that these technical issues could impact on the establishment of efficient, liquid and stable carbon markets.

As previously advised, the NSW Government would welcome the opportunity to have the new regulator, the Australian Climate Change Regulatory Authority, established in Sydney. Sydney has several strategic advantages which make it unique and the logical centre for carbon trading in Australia and the Asia-Pacific region.

2. Achieving fair and efficient transition for participants in the NSW GGAS to the CPRS

NSW led the way in 2003 in adopting emissions trading as a cost-effective means to reduce greenhouse gas emissions through the implementation of the NSW Greenhouse Gas Reduction Scheme. GGAS was one of the first mandatory greenhouse emissions trading schemes in the world.

GGAS has so far led to abatement of over 80 million tonnes of CO2 associated with the production and use of electricity, through activities nationally, not just within New South Wales. The abatement has been achieved at low cost that has largely been met by NSW electricity consumers.

GGAS has relatively low public visibility because it creates a liability for only a small number of parties operating in the wholesale electricity market. Nevertheless, the Scheme has been highly successful in achieving its objectives, and has made a very significant contribution towards Australia meeting its Kyoto targets.

It would be inequitable if those who have participated in GGAS in good faith are penalised rather than rewarded for undertaking early action in developing and then putting in place projects that abate greenhouse gas emissions. In doing so, these companies (and New South Wales electricity consumers who have had to contribute towards meeting the cost) have made the task of the CPRS easier in the early years than it would otherwise have been.

As GGAS has contributed towards Australia's Kyoto targets, it is appropriate that the Commonwealth Government take satisfactory steps to ensure that GGAS participants (which are not just located in New South Wales) are not significantly disadvantaged from the NSW Government agreeing to the Commonwealth's request for the Scheme to be terminated on the commencement of the CPRS.

We acknowledge that there has been ongoing constructive dialogue between the Commonwealth and NSW Government officials on the details of the transition aimed at providing an equitable resolution of compensation for adversely affected GGAS participants.

However, we note that the draft legislation does not contain an explicit provision to deal with the GGAS to CPRS transition. This is inconsistent with the treatment of assistance for coal-fired generators and the emissions-intensive trade-exposed (EITE) assistance program. It is appropriate that the cost of the GGAS transition is passed on 'in common' with all of the other costs associated with the introduction of the CPRS and in a legislative framework similar to that for the EITE industries.

A smooth transition is critical to protect the value of legitimate investments undertaken by GGAS participants as a consequence of the Scheme, and to minimise avoidable adverse impacts on the NSW Greenhouse Abatement Certificate market in the lead up to the CPRS. Compensation from the Commonwealth should be of a sufficient magnitude to: reflect the value of abatement contributed by the GGAS; help retain abatement activities that are undertaken under GGAS but for which the incentive to continue under CPRS may be weak; and maintain incentives for continuing early abatement in the transition to the CPRS consistent with Commonwealth policy.

3. Achieving adequate compensation for coal-fired electricity generators commensurate with expected value losses and to maintain energy security

Whilst Part 9 of the draft legislation reflects the positions in the White Paper in relation to the allocation of free Australian Emissions Units to coal-fired electricity generators, the proposed method of providing assistance to the electricity sector may not ameliorate the risk for the New South Wales coal-fired generators of introducing the CPRS.

The maintenance of energy security is an important issue for Governments and should be afforded the highest priority because:

- The direct impacts of the CPRS will strongly impact on the electricity production sector;
- The electricity industry's unique production characteristics require supply capacity to be planned and committed to well in advance of its need; and
- The maintenance of a reliable electricity supply is critical for both economic and social well being.

Assistance calculations

The draft legislation provides a precise formula for the assistance calculations for coal-fired electricity generation. This approach may not provide the flexibility to respond in a timely way to unanticipated issues that may emerge for base load coal generators as the CPRS commences. Such inflexible legislative treatment of the coal generation sector is in contrast to the emissions intensive trade exposed assistance program. This program, according to s167, is to be entirely formulated in regulations, which provides more flexibility to change the approach in a timely manner as circumstances change or as assumptions on which assistance was based are found to have been inaccurate.

The White Paper noted that asset value impacts will depend upon the extent of permit cost pass through and impacts on sales volumes. The allocation formula, now in the draft legislation, would allocate around 85 per cent of the coal generators assistance pool to the brown coal generators.

Under the proposal, brown coal generators will receive $2.8 billion of assistance, whereas black coal generators will receive $500 million of assistance. This reflects modelling for the Commonwealth which suggested the fall in asset values of brown coal generators would be substantially greater than for black coal generators. Of the assistance to black coal generators, NSW generators will receive around $200 million, which is a disproportionately low level of assistance.

To derive this allocation approach the Commonwealth is assuming a modelled outcome for more than 100% of permit costs to be passed through in higher wholesale electricity prices, for sustained periods. This is not achievable and is unlikely to occur because the high rate of pass through assumed would require "strategic bidding" and collusion to manipulate prices over a number of years. Further, the MMA modelling undertaken for the National Emissions Trading Taskforce projects significant value losses for both black and brown coal generators, and of a similar magnitude for the two sectors.

The proposed formula for the allocation of assistance through the ESAS leaves high output stations in New South Wales ineligible for assistance, and assistance to other stations would be minimal.

Allocating 85% of assistance to the brown coal sector is not consistent with the expected "broad pattern of asset value impacts".

Given the similar magnitude of value losses between brown and black coal, a 50:50 split of the assistance pool would be more appropriate. This requires the allocation formula threshold to be reduced from 0.86 to 0.65. The proposed pool of assistance for coal generators, worth around $3.5 billion, should be increased. The expected loss for NSW black coal generators alone could be in the order of $2.6 billion.

Windfall Gains and Other Adjustments

The draft legislation provisions for assessing possible windfall gains by coal generators who have received assistance in section 187.8 states that each of the following:

(a) net present value;
(b) market value;
(c) projected market value;
(d) net revenue;
(e) projected net revenue;

is to be calculated in a manner ascertained in accordance with a legislative instrument made by the Authority.

While that manner has not yet been ascertained, modelling will be required for each generation entity who receives assistance, to derive projections to 2025 for the five items specified with and without the CPRS. However, the initial allocation of assistance is to be based on the allocation formula in s182 that takes no account of financial projections for individual generators. If projections for individual generators are deemed appropriate for the purpose of assessing windfall gains, they are also appropriate for determining the initial allocation of free permits.

Furthermore, it would be completely inconsistent to rely on individual generator projections to determine windfall gains, without provision for additional compensation for generators who have received inadequate assistance and endured disproportionate losses.

Part 25 of the draft legislation contains provisions for the conduct of periodic reviews of the Scheme. The matters to be covered in the draft legislation do not include the provision of assistance to coal fired generators. It is therefore essential that there is scope for this issue to be the subject of a Special Review under s355 to be undertaken by an expert advisory committee at the request of the Minister.

4. Providing flexibility for the CPRS to interact with cost-effective abatement and incentives in non-covered sectors including voluntary markets and agriculture

The CPRS legislation framework should be flexible enough to enable emission reductions in agriculture and other sectors to be validated and integrated with the primary CPRS carbon market to meet the Scheme targets. The legislation should address this up-front to provide certainty and clarity about how the scheme will work.

GreenPower

The draft legislation is silent on the treatment of voluntary programs such as GreenPower. There is no arrangement provided to ensure that action by individuals opting to purchase GreenPower will have any impact on CPRS targets to 2020 – when the targets are already determined by the legislation and the regulations.

The National GreenPower Steering Group has commissioned the Centre for Energy and Environmental Markets at the University of New South Wales to conduct research on the implications of several potential models for GreenPower and how each would interact with the currently proposed CPRS structure.

There are 911,000 customers currently signed up to purchase GreenPower products. It is important to find a workable solution for customers, retailers and government in a manner

that allows GreenPower to effectively reduce greenhouse gas emissions in a robust and transparent manner.

Agriculture

The draft legislation does not provide any incentives to encourage abatement of agricultural emissions in the lead up to possible coverage in 2015. The strategy for coverage of agriculture through the CPRS or via complementary measures should seek to increase adoption of best management practices.

Specific research and development is needed to develop the capacity of this sector (to refine emission estimation techniques and verification methods), improve access to available technologies and to develop on-farm abatement techniques (such as biochar and carbon sequestration in soils).

Coal mining

The Commonwealth Government is currently collecting data from industry to determine which activities are both sufficiently emissions-intensive and trade-exposed to qualify for assistance in the form of free Australian Emission Units.

The only emissions-intensive industry precluded from this assessment is the coal mining sector. The sector has argued that this decision ignores the special circumstances that apply to coal mining in Australia.

The emissions intensity of the coal mining process is a function of location-specific geological factors. Coal mines vary significantly in terms of the depth of the coal seams, coal type and methane gas concentrations. In general, deep underground deposits of bituminous coal are more likely to have high methane concentrations than shallower deposits of lesser quality coal. New South Wales coal mines in the Hunter and Illawarra regions tend to be more methane prone than most mines in Queensland.

The exclusion of the coal mining sector from EITE status consideration will impact on NSW mines, their employees and the local communities.

The Commonwealth Government should further consider the merits of:

- The coal mining industry being treated in the same manner as other industries that are going to be affected by the CPRS;
- The underground and open cut sectors of the coal mining industry being considered separately for the purpose of determining compensation under the CPRS;
- Either or both sectors to be eligible for EITE assistance if emissions intensity exceeds the appropriate thresholds; and
- An alternative approach may be the inclusion of underground coal mining in the Strongly Affected Industries classification, especially in case of coal mines tied to coal-fired generators.

6. Ensuring effective scheme administration and implementation

Strong governance arrangements provided by the draft legislation provisions for monitoring, enforcement and compliance provisions are supported. The following advice is provided to enable prevention of unintended consequences of the Scheme.

Transport

The draft legislation confirms that the CPRS is to include transport among the covered sectors. Further details should be provided on the specific treatment of transport fuels.

The draft legislation does not address the proportional fuel excise reductions foreshadowed in the White Paper and details on the transport fuel excise should be dealt with in the CPRS Regulations.

Landfill facilities and legacy waste

Coverage

The draft legislation does not make it clear whether a closed cell within an operating site could be regarded as a closed facility and could therefore claim an exemption. To avoid liability avoidance, the closed landfill definition in the legislation should be amended to make it clear that closed cells within an operating site are not regarded as closed facilities.

Whilst the draft legislation reflects the position in the White Paper, the provision for legacy waste disposed of prior to 1 July 2008 to not incur a liability until 2018 will mean that a significant proportion of emissions will never be covered by the scheme. It also provides no incentive to reduce the majority of landfill emissions for another 9 years.

New South Wales does not support including legacy waste in the scheme, and proposes as an alternative to regulate landfills at the State level by requiring mandatory gas capture. This can be done at lower cost than the expected cost of permits in the scheme, will be equitable for all operators and will be easier to administer as it will not require the calculation of a legacy emissions profile for each landfill.

Calculation of liability

The liability threshold (Section 20(13)) is set at two different levels to prevent avoidance of liability by transporting to a nearby landfill. This is a complicated means of regulating the sector that is dependent on the relationship between the cost of transport and the carbon price. A 10,000 tonne threshold for all facilities would avoid this problem, is more equitable and would not capture significantly more facilities. This would also avoid the need for a proximity rule to be included in the regulations, which is problematic because:

- The distance proposed will be determined by economic factors that determine when it is no longer profitable to transport waste to a below threshold facility. This means the threshold will need to be changed as economic conditions change.
- Landfills that are below the 25,000 tonne threshold will become covered if a new landfill is built within the nominated distance. These landfills will not be able to plan for this outcome and are unlikely to be able to pass on the unanticipated costs that will accrue.
- It is inequitable to base liability on geography. It should be based on emissions and administrative simplicity.

The liability should reflect the full lifetime emissions from waste and be payable in the year the waste is received rather than spread across the decay period. This would remove the compliance risk that landfill operators will defer the emissions cost and abandon the landfill, and also landfills would not need to be in the scheme after they are closed.

The most popular NGERS method (the first order decay model) uses a model that spreads the emissions profile over a decay curve. This spreads the liability over several decades and will mean that initial liability will be very low and unlikely to drive any emissions reduction – unless landfill operators reflect the lifetime emissions cost in current prices. Strong industry

competition may entice operators to postpone their liability. This is a compliance risk for the scheme.

It is suggested instead that deemed emissions factors (e.g. per tonne of waste) for each waste classification would minimise the variability and be considerably easier to administer.

Reforestation

New South Wales undertakes a number of land management activities that could contribute to eligible reforestation projects, including:

- Managing NSW Forests;
- Ecological restoration projects in National Parks and Crown Lands;
- Approval of private native forestry projects; and
- Biodiversity conservation and land rehabilitation projects.

There is substantial potential for eligible reforestation projects in NSW. In 2005, Forests NSW became the world's first organization to trade carbon sequestered by forests in a regulated trading scheme. Since then it has created nearly 2 million carbon abatement certificates under GGAS.

In addition, New South Wales has a large National Parks and Crown land estate on which ecological restoration projects are carried out. These projects have the potential to store a significant amount of carbon. The issue of free Australian emissions units would encourage investment in ecological restoration projects, resulting in increased greenhouse and biodiversity benefits.

Criteria for eligible reforestation projects

It is important that the Regulations do not create a perverse incentive that favours production forest projects over ecological restoration projects. If the trees used in a forest stand, regardless of the mix of species, have the potential to reach 2m and collectively occupy 20% of the area covered by the stand, then these stands should be eligible for the scheme.

It is acknowledged that there may be issues around calculating the carbon sequestered when there is a mix of tree species, but this could be over come through several means, for example taking an average of the carbon sequestered by species used, or by specifying in a project plan the species that will form the reforestation project. The ease of calculations must not be used as a reason to exclude ecological restoration projects from the Scheme.

Ecological restoration projects have biodiversity benefits additional to the carbon sequestration benefit. The regulations should allow and encourage reforestation practices that lead to the best outcomes for biodiversity.

The definition of an eligible 'forest stand' requires the stand to be established by direct, human-induced methods. This definition should be flexible enough to allow a variety of ecological restoration projects; for example the fencing of an area for removal of cattle to allow regeneration of native species.

It is proposed that the Regulations will set out requirements for project attributes such as boundary descriptions. Experience in existing conservation covenant approaches should be considered in determining these rules, as a strict requirement for formal survey is unnecessary and would make participation in the scheme unviable for many projects.

The NSW Government considers that the requirement (cl.209(4)(b)) to require that a project area or multiple areas which are proposed to be part of the reforestation project be held under a single title should be removed from the legislation.

Under GGAS, Forests NSW has an eligible reforestation project that is spread over several hundred land titles. Similar legislation for native vegetation and biodiversity conservation also provides for adjoining or multiple land parcels to be linked under a common agreement. There are efficiencies in administration, management, and monitoring and reporting if multiple projects sites are included in a single reforestation project.

Attracting new investment in reforestation

In 1998, the NSW Government introduced the world's first world's first carbon rights legislation, the *Carbon Rights Legislation Amendment Act*. This legislation provided for the creation of forestry right that allow a person with an interest in the land to establish forests independently of the landowner.

The existence of carbon rights legislation in NSW has already facilitated the establishment of over 10,000 hectares of 'Kyoto compliant' forest since 2000, and an investment of over $45 million in regional NSW by international companies. This represents an excellent base on which to build investment in the future.

Sydney is the logical entrance for international businesses seeking to invest in Australian reforestation projects.

As previously stated, Australian Emissions Units should be eligible to be exported from Australia as soon as is practicable. The timing of the Commonwealth's review of the CPRS policy position that restricts transfer of Australian Emissions Units should be clarified and ideally be completed within 18 months of the start of the CPRS. Such a commitment would help reduce the uncertainty that is currently impeding new investment.

Administration of the scheme

Sections 201(6), 202 and 212(8) deal with Authority decisions to revoke, refuse or vary the recognition of an applicant as a reforestation entity. Where the Authority makes such a decision, the applicant should be advised in writing of the decision and the reasons for it. The basis on which decisions are made should be transparent in the Bill or regulations.

Forest maintenance obligation

Section 226(7)(b) provides that where a reforestation entity fails to relinquish Australian emissions units when required, they will be subject to a forest maintenance obligation until any penalty is paid in full, or 130 years has passed. 70 years is considered a more workable length of time and would be consistent with 'Greenhouse Friendly'.

TAKING ADVANTAGE OF THE CARBON MARKET HUB OPPORTUNITY: CPRS DESIGN ISSUES

Global carbon markets, estimated by the World Bank to be worth around $US64 billion in 2007, are growing rapidly. There is every likelihood that the epicentre of global carbon trading markets will in future be in the Asia-Pacific due to the large volume of greenhouse gas emissions (especially in China, India, and Indonesia). There are few – if any – bigger economic opportunities in the transition to a low-carbon economy than the opportunity to establish an Australian city as a carbon market hub within the Asia-Pacific region.

At the moment, no city is yet a clear leader in the Asia Pacific region - but the race is on with a host of cities competing to be the regional hub as London is for the European scheme. One of Australia's major advantages is that from 2010 it will have the region's first emissions trading scheme with an expected direct market value of around $A8-11 billion a year. Developing stable, efficient and liquid carbon markets from the onset of the Carbon Pollution Reduction Scheme (CPRS) will be crucial if Australia is to leverage advantage from the early establishment of a trading scheme.

The purpose of this paper is to highlight any technical issues with the proposed design of the CPRS which could impact on the establishment of efficient, liquid and stable carbon markets. This paper summarises the key issues highlighted by the financial sector and energy market companies at a Technical Workshop convened by the Sydney Carbon Market Taskforce. **Therefore, this is not an official NSW Government position paper.**

Consultations with the financial sector have highlighted technical design issues in the following areas:

- the compatibility of Australian and international carbon markets;
- the regulation of the Australian carbon market;
- taxation issues;
- linkages with international trading schemes.

Issue 1: There is a Mis-alignment between the Timing of CPRS Compliance Requirements and the Liquidity Dates of International Units

The White Paper proposes that the CPRS compliance period be the Australian taxation year. National Greenhouse and Energy Reporting requirements have already been established on this basis. Liable parties will be required to report emissions by October 31 annually following the end of the compliance period, and surrender permits by December 15.

However, all international schemes (including the Kyoto Protocol) operate on a calendar year. EU futures contracts almost invariably expire at the end of the calendar year, with a scheme requirement to surrender permits by February 15. Around 80 per cent of primary Carbon Development Mechanism project credits (Certified Emission Reductions – CERs) are generated in February and January.

The Australian market is the 'odd one out'. This mis-alignment will have two major consequences.

Firstly, it creates additional costs for compliance buyers in the CPRS. Although the carrying costs for holding secondary CERs are not a major issue, any buyer wishing to purchase

primary CERs will have to fund and hold them from the beginning of the calendar year. The White Paper allows for the unlimited import of CERs, but if local compliance buyers are to access CER's in significant quantities this will be a significant additional compliance cost.

Secondly, the long-term effect is likely to be less liquidity in Australian carbon markets. There are already disagreements between local buyers and international sellers as to which compliance period they should use. By increasing the cost of hedging and creating logistical hurdles to the creation of fungible units, there is a risk that liquidity will go offshore to other markets which are aligned – jeopardising Australia's prospects of developing a carbon market hub.

Recommendation: the best option would be to align the compliance period of the CPRS with the liquidity dates of international units.

If this is not possible, the Commonwealth should consider strategies for mitigating the impact of the mis-alignment.

One option is to consider setting the delivery date for the surrender of AEUs later – either to the end of the calendar year, or at least up until March 1 to enable liable parties to source primary CER credits.

We note the Renewable Energy Target will operate on a calendar basis with a February compliance date.

Issue 2: An Interface between the National Registry and a Settlement Service and Settlement Design

An interface to the national registry is important in order to efficiently facilitate clearing and settlement for secondary and forward markets.

The late development of stand-alone registries in the EU ETS, without an interface to a settlement service for over-the-counter trading, has given rise to inefficiencies in the related spot and forward markets. The lack of settlement infrastructure has also been detrimental to the existing environmental schemes in Australia such as the Mandatory Renewable Energy Target scheme and the NSW Greenhouse Gas Reduction Scheme.

The Australian equity and debt and energy (electricity and gas) markets would not operate efficiently in the absence of settlement services. Similarly, a market with an annual value of approximately $8-11bn will not work efficiently in the absence of a market based settlement service.

The design of the registry should also allow for an open interface (API) to allow other systems to electronically connect. This would permit transactional straight through processing and 'competitively neutral' market infrastructure.

Experience in the Irish auction has also shown that there is a link between the settlement period and the deposit, as there is a risk that price volatility in the spot market could lead to bidders withdrawing their bids when the settlement period are long and deposits are low. Two day settlement period and a higher deposit helped reduce the risk for the Irish government of defaulting auction participants in the second auction.

There are significant lead times likely to be associated with interfacing settlement and trading systems to the national registry.

Recommendation: Establish interfacing settlement and trading systems as soon as possible.

It is noted that the Commonwealth intends to shortly release a discussion paper on settlement design issues. Future consultation should occur with the industry stakeholders and the Taskforce following the release of the discussion paper.

Issue 3: Regulatory Requirements for Participating in Auctions

Regulatory requirements for participating in auctions need to reconcile different objectives: the aim of opening participation in auctions beyond major financial institutions, while also ensuring adequate safeguards to protect market integrity. For example, there are risks that small, inexperienced participants could make excessive bids in the early auctions from which they subsequently try to walk away. Any such episodes in the early stages of the CPRS would damage the legitimacy and trust which is essential to a smoothly functioning trading market. Conversely, regulations which limit participation will require smaller liable parties or individuals to engage financial intermediaries which will make managing their liability more expensive.

The accreditation system for the Commonwealth bond market could provide one model for managing participation – although the $25,000 annual fee effectively excludes smaller operators.

Industry stakeholders also suggested capping bids at the level of liability for smaller operators in the early operation of the CPRS, in addition to requirements such as letters of credit to prove capacity to pay. Some type of two-track system is needed to ensure small market participants can act on their own behalf at the scale they need to acquit obligations, and another to regulate large participants who could individually affect the overall stability of the market.

Once the market is established, requirements can be eased if they prove excessively onerous or un-necessary.

Recommendation: The Commonwealth Government should implement adequate safeguards for market integrity in the early operation of the CPRS (an accreditation system, caps on bids), with a commitment to review their operation by a specified date to broaden participation in the auction process where this can be done prudently.

Issue 4: Auction Reporting Requirements

Under the rules proposed by the White Paper, holders of AEU's will be required to report when they and their "associates" (yet to be defined) hold more than 5% of a particular vintage. This creates an un-necessary additional compliance cost on businesses as once an entity had identified its "associates" the Registry could track its holdings.

Clarification is also required as to whether long derivative positions will be considered to constitute a "hold" over those permits for the purposes of the CPRS's statutory framework.

Recommendation: Parties purchasing AEU's should be required to supply information on associates up-front (i.e. instead of in relation to particular transactions). This would enable the registry to monitor holdings. This reporting requirement could be supported by penalties for false reporting.

Issue 5: Applying GST to CPRS Transactions: the Competitiveness of Australia's Taxation Regime

There are two consequences from applying GST to CPRS transactions.

1. A cost differential between International Units and AEU's

GST will be applied to AEU's, but not to imported international units. Whilst the White Paper notes exempting CPRS transactions would create a distortion relative to other financial products, the application of GST creates a significant distortion between Australian and international units which is not consistent with market efficiency and least-cost abatement.

The cost differential will also have implications for future linkages to other schemes and the potential for exporting AEU's which will hinder the development of an Australian city as a regional trading hub.

2. Australia's tax regime for carbon markets will be less attractive than other cities competing to be the Asia-Pacific hub

By applying GST to CPRS transactions, Australia's taxation regime will become less attractive than Australia's competitors to become the Asia-Pacific carbon market hub.

First-mover advantage is likely to be crucial. Once a critical mass of institutions, businesses and market liquidity is established in one city, it is likely to attract future investment and activity.

London now captures 70% of global carbon market trade. The early establishment of an early voluntary emissions trading scheme and tax incentives were crucial in developing an early mover advantage.

Australia's competitors to be the Asia-Pacific carbon market hub are likely to use tax incentives to attract the early location of carbon traders. New Zealand will not levy its value-added tax on the trading of scheme permits. Singapore, in particular, is considering an extensive array of incentives to attract the location of carbon traders which link major tax concessions to the location of significant trading personnel and activity within Singapore.

Some stakeholders have also questioned whether it would raise significant revenue for the Commonwealth Government once deductions are accounted for, and the administrative costs of compliance.

Recommendation: At least initially, the Australian Government should not apply GST to the trading of AEU's, and examine tax incentives to attract the early location of carbon trading desks as a matter of urgency.

Issue 6: The Timing of Income Tax Deductions for Purchasing AEUs

The proposed income tax treatment of AEUs as being trading stock will generate additional funding costs for scheme participants. Broadly speaking, the trading stock rules will defer the tax deductibility of AEUs until after they are surrendered. For participants with a standard 30 June year end, the surrender in August will defer the deduction until the subsequent tax year. This will increase the income tax payable for the participants who will need to fund the additional income tax payments.

Recommendation: AEU's should not be treated as trading stock but rather as a normal business expense for income tax purposes. As such, emission permits should be eligible for tax-deductibility in the year the expense is incurred, rather than at point of surrender.

Issue 7: The Price Cap

Under the White Paper, scheme participants will be able to access an unlimited quantity of AEU's at $40 per tonne (increasing 5% per annum) until 2014-15.

The price cap effectively prevents any bilateral linkages with other schemes, or the transfer of AEU's into international units for export.

Recommendation: The price cap should be removed at the earliest opportunity as part of a wider strategy by the Commonwealth Government to facilitate international linkages and the export of AEU's into other schemes.

Issue 8: Fragmentation of Australian Environmental Markets

Complementary measures to address market failures in relation to renewable energy and energy efficiency which will not be addressed by the CPRS are an important component of the policy mix.

However, there will be five environmental markets from 2010: the CPRS, the national renewable energy credit market, and three energy efficiency permit markets at state-level (NSW, Victoria, South Australia). Market fragmentation disperses market liquidity and increases compliance costs.

Recommendation: the Commonwealth Government should consider measures to consolidate trading markets whilst delivering complementary measures – in particular, the establishment of a national energy efficiency market based instrument.

Issue 9: the Regulation of AEU's as Financial Products

AEU's will be treated as a financial product for the purposes of the Corporations Act 2001. All entities that 'trade' permits will consequently be required to acquire a financial services licence.

It is acknowledged that regulation is important in the early stages of the CPRS to create safeguards against unqualified or unscrupulous operators, and protect market integrity. If it proves to be un-necessary or excessively burdensome, it can be subsequently wound back.

However, some stakeholders are concerned about the compliance costs. For example, as soon as an entity buys and sells permits beyond what is required to acquit their own liability – no matter how small scale - they are considered to be engaging in trading and they will be required to acquire a financial services licence. It could effectively lead to all liable parties acquiring financial service licences (although the smallest quartile of liable parties is unlikely to trade in any significant volume) just-in-case as a matter of prudence – un-necessarily increasing compliance costs.

Recommendation: the Commonwealth Government consider measures to minimise the compliance costs on small liable parties.

Appendix A

Technical Workshop on CPRS Design Issues
Sydney Carbon Market Taskforce

Monday 2 March 2009
9am – 11am
Lv.27 Baker & McKenzie
AMP Centre
50 Bridge St, Sydney

Attendee

Regina Betz	University of New South Wales
Allen Young	Australian Financial Markets Association
Diane Tate	Australian Bankers Association Inc.
Dimitri Burshtein	Financial & Energy Exchange (FEX) Limited
Vincent Cornes	EnVex
Will Evans	Barclays Capital
Bianca Sylvester	JPMorgan
Charles Dowsett	ABN AMRO Group
Geoff Rousel	Westpac Banking Corporation
Greg Foy	EnergyAustralia
Leila Ngadi	TRUenergy
Neil Hereford	Commonwealth Bank of Australia
Adrian Uberti	AGL Energy Ltd

Taskforce member attendees

Martijn Wilder (Chair)	Baker & McKenzie
Anthony Collins	Australian Securities Exchange
Geoff Carroll	Macquarie Bank Ltd
Emma Herd	Westpac Banking Corporation
Jillian Broadbent	Reserve Bank of Australia

Commonwealth Government Representatives

Anupam Sharma	Cth Department of Climate Change
Stuart Kinsella	Cth Department of Climate Change
Nicholas Linacre	Cth Department of Climate Change
Gerard Ruddy	Cth Department of Climate Change

NSW Government Representatives

Simon Smith	NSW Department of Environment and Climate Change
Zoe De Saram	NSW Department of Environment and Climate Change
Chris Briggs	NSW Department of Environment and Climate Change
Richard Cox	NSW Treasury
Rhett Gibson	NSW Department State and Regional Development

ACT Government Submission to the Australian Government on the Carbon Pollution Reduction Scheme July 2008 Green Paper

September 2008

INTRODUCTION

The ACT welcomes the opportunity to make a submission to the Australian Government on its green paper on a Carbon Pollution Reduction Scheme (CPRS), released in July 2008.

The Chief Minister issued a media release at the time supporting the proposal outlined in the Green Paper. After years of lack of Commonwealth leadership, the jurisdictions are now all working towards an agreed national approach to this important issue. The approach outlined is consistent with ACT Government policy as outlined in its Climate Change Strategy (Weathering the Change) released in 2007.

It is important to note that there will potentially be significant social and economic impacts of the introduction of the CPRS, including increases in the price of fuel and electricity. The ACT welcomes the various initiatives outlined in the Green Paper that aim to minimise the impact of these on the most vulnerable individuals and sectors in the community.

The ACT Government also notes the requirement for a review of all existing emissions reductions programs. This will assess the degree of complementarity with the CPRS with the aim of reducing duplication or conflicting market signals. The ACT is in discussions with other jurisdictions on how to conduct the review.

The ACT is also in discussions with NSW on transitionary arrangements for the Greenhouse Gas Abatement Scheme. The ACT is involved with NSW in GGAS, the world's first emissions trading scheme.

IMPLICATIONS FOR THE ACT

Permits and Price

The ACT Government notes that CPRS is based on a cap and trade system, with a firm cap on carbon emissions to be set for a period of five years, to be extended for one year each year. This helps to ensure that businesses continue to have certainty for the proceeding five year period. We will be in a better position to assess the impact of

the CPRS as more detailed Treasury modelling becomes available and a cap recommended. Likewise a likely price is still unknown.

Although permits are likely to be auctioned, it appears that the Government intends to keep some sort of control on the price – although the mechanism for that is not clear at this point in time, we would welcome further details on this.

It is important to note the need for good monitoring and data to underpin a trading scheme. Considerable work is still needed in this area before an effective emissions trading scheme can be implemented.

Coverage

The ACT Government's position on coverage is to maximise the extent of coverage and to minimise the exemptions as far as possible. This view is consistent with that of the Garnaut review.

According to the Green Paper, sectors to be covered include industrial processes, electricity, transport and waste. At this point Agriculture and Land Use Change will not be covered due to difficulties in accounting and reporting.

Key sectors in the ACT will be electricity, transport and waste (outlined further below). The ACT differs from many other jurisdictions in that we do not have significant Energy Intensive Trade Exposed Industries which maybe seeking exemptions.

Households

It is anticipated that there will be an increase in energy prices as result of the CPRS, particularly from high emissions sources. The ACT Government is concerned that low income households are assisted particularly to reduce energy use.

The ACT welcomes proposals in the Green Paper that support will be provided for pensioners and low income households through the tax and payment system. Support is particularly required in the introduction of energy efficiency measures and consumer information to help households reduce energy use and save on energy bills, so that all can make a contribution. This type of approach is consistent with

initiatives already underway in the ACT such as the energy audits provided by the Home Energy Advisory Team (HEAT) and associated rebates.

Business

Only a limited number of firms will be subject to direct compliance obligations. Unlike the GST, this will have limited direct impacts on ACT businesses in terms of reporting and compliance. It will however impact on all businesses and individuals as a result of increased energy costs.

We note that the Green Paper proposes a Climate Change Action Fund (CCAF) be established to assist business transition to a cleaner economy through partnership funding for capital investment in low emissions processes, energy efficiency and innovative practice. Of less relevance to the ACT is the proposal for specific support to be provided to Energy Intensive Trade Exposed Industries.

Electricity

There is a need to facilitate electricity generators transition to reduce their carbon emissions and move to alternative forms of generation. We note there is widespread concern about the impacts of the CPRS on electricity generators, particularly in the Victorian brown coal belt. A financial collapse of any generating company would have a detrimental effect on the national energy market. Care must be taken to phase any withdrawal of a generator from the national market and to phase in generating capacity with low or zero greenhouse gas emissions.

We would not however support compensation to generators or other parties simply because of a change in Government Policy. This would open up the risk of Governments being asked to provide compensation for any policy changes.

The ACT notes in the Green Paper that an Electricity Sector Adjustment Scheme (ESAS) will be established to provide limited direct assistance to coal-fired electricity generators to facilitate structural adjustment. We understand that this is designed to underpin investor confidence, secure energy supply and facilitate structural adjustment. We would welcome further details on the ESAS as they become available.

In relation to electricity the ACT has for a number of years been involved with NSW in the Greenhouse Gas Abatement Scheme (GGAS). GGAS includes four types of certificates. These are for:

- Generation
- Larger users (industry),
- Carbon sequestration
- Demand side abatement (for example the programs that change lights and install low flow showerheads at no cost to householders)

The first three categories will transition quickly into the new national CPRS when it becomes operational. However this might not be the case for the last category, demand side abatement. Discussions are being held between ACT and NSW Governments on how to harmonise transition arrangements.

Transport

Any impact of the CPRS on fuel prices will be compensated by a reduction in national fuel excise. This will cut taxes on a cent for cent basis initially for a period of three years, when it will be reviewed. For heavy vehicle road users this will be reviewed after one year. This will therefore minimise the short term impacts in relation to fuel.

In the longer term, establishing a price for carbon through a CPRS, and factors of global supply and demand will increase costs for the transport of people and goods. This will also be a driver for innovation in transport. The ACT has presented proposals to Infrastructure Australia for a light rail system to be developed in Canberra. There is also potential for a Sydney to Melbourne fast rail, stopping in Canberra. Given the rising costs of fuel, and limited alternatives currently in aviation, such a proposal will become more economic feasible. In this context the ACT Government has recently announced that it will fund a business case for Light Rail in the ACT.

Waste

Decisions on how waste is included need to be carefully considered. The ACT currently generates electricity from methane at its major landfill site, and will continue to do so in future operations. We support the inclusion of waste within the CPRS into the future. However, we do not believe that inclusion should be

retrospective and include closed land fill sites or material buried before the scheme comes into place. This would potentially impose significant costs on landfill operators and would be difficult to monitor. Further in the ACT's case, the polluter was the Commonwealth prior to May 1988 which would raise questions of responsibility.

Innovation

The ACT would support funding to assist innovation for a low carbon future. Such an approach could help reduce the level of house hold support required at the outset and to contain the potential price shocks as tighter levels of cap are applied.

FINANCIAL IMPLICATIONS

The increase in energy costs will impact on all areas of the community and on direct ACT Government expenditure. It is not possible to quantify this impact until further details of the CPRS are available. We would support setting a low target at the outset with a clear intention to increase it over time to identify risks and financial shocks on corporations.

We note that the CPRS will remove and shift the environmental benefits of complimentary abatement initiatives. It is intended that the introduction of CPRS will drive a reduction in emissions in the most cost effective way and that this will remove the need for other government programs. A review of all jurisdictions emissions reduction programs will be undertaken to assess their complimentarity with the CPRS, with the aim of rationalising the number of programs.

SOCIAL AND ECONOMIC IMPLICATIONS

The ACT Chief Ministers Department commissioned a report into the Social Impacts of Climate Change in the ACT (May 2008).

The report refers to the impacts of climate change such as the increasing severity of drought, higher bushfire risks, damage from destructive storms, and potential increase in weed and insect pests. These will have direct social and economic impacts.

In addition there will be costs as society responds to climate change with measures such as emissions trading (CPRS). The cost of essential goods and services will rise including food, housing, transport and domestic fuel and power. This will impact particularly on vulnerable households and sectors of the community

Areas for action identified in the report include:

- Household audits
- Solar hot water systems
- Space heating efficiency
- Household education behaviour change linked to audits
- Identifying vulnerable households and priorities
- Improving access to sustainable transport
- Access to locally grown fresh food.

The ACT Government is already implementing programs covering many of these areas. These could provide a strong basis for expansion to meet emerging needs. In this regard the ACT Government welcomes, and will support, the Australia Government in its Green Paper commitment to:

- Increase pensions and benefits to meet increased cost of living
- Provide taxation relief and payments assistance for low income households
- Assist middle income earners to meet increased cost of living
- Measures to increase energy efficiency improvements to help households take practical action to reduce energy use and save on bills.

WHAT IS THE ACT DOING?

The ACT Government is actively addressing climate change. It is involved in national discussions the Council of Australian Governments (COAG) Working Group on Water and Climate Change. It is also implementing the ACT Climate Change Strategy. The Government released *Weathering The Change: ACT Climate Change Strategy 2007-2025* and *Action Plan* on 27 July 2007.

The Climate Change Strategy has taken into account community views and national and international best practise. The ratification of the Kyoto Protocol by the

Australian Government is an endorsement of those same principles that underpin the ACT Strategy. The Strategy focuses on stabilising and ultimately reducing our greenhouse emissions, and developing a capacity to respond to and adapt to the changes in climate that are now occurring.

The Government has adopted a long term target of achieving a reduction of 60% of 2000 emissions levels by 2050 with an interim goal of stabilising the Territory's emissions at 2000 levels by 2025. 43 actions to both reduce greenhouse gas emissions and to help the ACT community adapt to climate changes that are already occurring are included in the first Action Plan 2007-11.

The Strategy and Action Plans will remain responsive to climate change knowledge and technology development in Australia and internationally, and we can adjust our approach as our knowledge increases. As all government departments have a role to play in the strategy, an IDC has been formed to act as an ongoing forum for sharing of information across agencies.

All 43 Actions are currently being progressed. These include:

Action 1 Development of an Energy Policy;

Action 5 Legislation is now in place that ensures all new electricity customers are offered GreenPower;

Action 10 The ACT is working with other jurisdictions (through COAG) to develop a national emissions trading and reporting scheme;

Action 14 In December 2007 ACTION buses introduced free bus travel for bicycle riders;

Action 18 Introduce a feed-in tariff for renewable energy generation;

Action 31 ACT is working through COAG to develop a National Climate Change Adaptation Framework;

Action 37 The Government has an ongoing climate change community education strategy. This has included TV ads, printed material, information stalls at public events

Action 42 Legislation is now in place that will allow the ACT to collect fuel sale data to be used for emissions monitoring and reporting.

More recently the ACT has determined that a solar farm is likely to be feasible in the ACT. The ACT would welcome discussions with the Commonwealth about opportunities to participate in this project as it develops.

CONCLUSION

The ACT supports the position outlined in the Green Paper, noting that the social and economic impacts, particularly to those most vulnerable in our community, must be addressed. The ACT Government looks forward to more details on the range of initiatives outlined in the Green Paper and to more detailed modelling in relation to setting a cap on emissions.

The ACT Government looks forward to working in partnership with the Commonwealth in addressing this most important issue.

Northern Territory Government

Submission to the Carbon Pollution Reduction Scheme Green Paper

Executive summary

The Australian Government has invited comment on its July 2008 Carbon Pollution Reduction Scheme (CPRS) Green Paper. The Northern Territory Government supports the Australian Government's proposal to implement the CPRS and is in broad agreement with the Scheme design. This submission sets out the issues of particular concern to the Northern Territory Government and Territorians, and makes specific recommendations. In making this submission, the Northern Territory Government emphasises its commitment to move beyond a 'business as usual' approach to emissions mitigation, and seeks assistance and support from the Australian Government to transition Territorians into the new carbon constrained economy.

The Northern Territory's distance from major markets, the high number of low-income remote communities in the Territory and the distributed nature of Northern Territory power generation mean that a clear and sizable burden is likely to be imposed on identifiable segments of the community. Additionally, appropriate assistance for trade-exposed industries will be important for the Northern Territory economy given the extent to which the Northern Territory relies on its export trade.

Stationary energy

The comparative carbon footprint from primarily open-cycle gas and diesel electricity generation in the Northern Territory is not substantially smaller than that of the black coal-fired generating capacity of southern States. The Green Paper proposal on strongly affected industries may disproportionately disadvantage the Northern Territory in comparison to States where the primary generating capacity is coal-fired.

The Northern Territory Government encourages the Australian Government to consider providing assistance to energy generation in the Northern Territory as a strongly affected industry.

Recommendation:

1. The Northern Territory Government recommends that:
   a) assistance to low-income households in the Territory be provided from the Climate Change Action Fund (CCAF), and
   b) a separate program be established for remote communities that assists these communities to reduce their overall energy use and transition to renewable technologies.

Liquefied Natural Gas

The Northern Territory Government strongly believes that the international competitiveness of the Liquefied Natural Gas (LNG) sector will be adversely impacted by the CPRS. Australian LNG is particularly trade-exposed as Australia already has the highest costs for LNG projects in the Asia-Pacific region and none of our direct competitors yet face a carbon impost.

The Northern Territory Government supports the Australian Government's commitment to discussing the options for assistance required for the LNG sector.

Recommendations:

2. To note that the Northern Territory Government supports Australian Government commitments to developing CPRS assistance options for the LNG sector.
3. The Northern Territory Government seeks clarification from the Australian Government as to how:
   a) emissions intensive, trade exposed (EITE) status thresholds can be improved on those outlined in the Green Paper to better account for the clear risks the CPRS imposes on the international competitiveness of Australian LNG, and
   b) an industry's potential contribution to global greenhouse gas emissions mitigation will be factored into any assistance offered by Government to smooth the transition to a carbon-constrained economy.

Savanna burning

The Green Paper commits the Australian Government to facilitating the participation of Indigenous land managers in carbon markets and consulting with Indigenous Australians on the potential for including offsets from reductions in emissions from savanna burning and forestry opportunities in the CPRS.

There are potentially a range of benefits from an offset scheme for savanna burning including reducing the major source of Northern Territory emissions and providing social and economic benefits to remote communities, particularly Indigenous communities. However, there are also considerable challenges to establishing an offset scheme that must be resolved, including issues around measurement, monitoring, additionality, accounting, verification, and establishing baselines.

The Northern Territory Government recommends that the Australian Government establish a working group comprised of major stakeholders, sub-national jurisdictions and Indigenous representatives to investigate policy options to reduce savanna burning emissions.

Recommendations:

4. That the Australian Government establish a specific working group which brings together all major stakeholders to investigate policy options to reduce savanna burning emissions.

5. That the proposed working group address savanna burning offset emissions reduction options and establish a pathway for policy development in achieving emission reduction outcomes. In doing so, the working group should consider the opportunities, challenges, costs and benefits of a full range of policy options, including:
   a) additional pilot schemes for emissions reductions similar to the existing West Arnhem Land Fire Abatement (WALFA) project,
   b) ensuring the proposed Australian Government standard for offsets for the voluntary market, where firms and individuals voluntarily buy abatement recognises the opportunities for offsets from reductions in savanna burning emissions, and
   c) an offset scheme for savanna burning emission reductions which could be incorporated into the CPRS.
6. That the Northern Territory Government and Australian Government examine relevant legal foundations to identify potential barriers to implementing effective multi-tenure governance arrangements to savanna burning, including:
   a) application of the *Native Title Act 1993* (Cth) and *Aboriginal Land Rights (Northern Territory) Act 1976* (Cth) and *Pastoral Lands Act,* and
   b) ability of project partners to share benefits and risks of fire management across land tenures.

Transport

The transport sector is a significant source of emissions in the Northern Territory, largely due to the region's low population density and the wide geographical dispersion of communities and industry.

Future issues for Territorians exist as a result of the CPRS in the freight sector, public transport and efficient fuel use in the Northern Territory. The costs of freight add to the general cost of goods in the Northern Territory, with Territorians having a higher expenditure on food than the national average as a result. There are also social issues that should be considered, particularly in providing effective, affordable transport services for rural and Indigenous communities.

The Northern Territory Government recommends that the Australian Government extend the cent for cent reduction in the fuel excise for the Northern Territory freight sector until viable and commercial low-emissions freight technologies are feasible in the Territory.

Recommendation:

7. The Northern Territory Government recommends that the cent-for-cent support on fuel be extended beyond one year for the freight sector in the Northern Territory, prior to viable and commercial low-emissions technologies becoming feasible for freight transport.

Land Use, Land Use Change and Forestry (LULUCF)

The Northern Territory Government supports the Australian Government's approach to including the forestry sector in the CPRS on an "opt-in" basis and

believes that Kyoto Article 3.4 non-forest additional activities should also be considered for future inclusion.

The Northern Territory Government would like to work with the Australian Government on developing a deeper understanding of the interrelationship between carbon property rights, from forestry or other potential sources, and Indigenous land rights issues.

The Northern Territory Government supports the Australian Government's proposal not to include deforestation as a covered sector in the CPRS. The Northern Territory agrees with the Green Paper's identification of deforestation as a continuing significant emission source needing improved management.

Present land clearing guidelines in the Northern Territory were developed primarily to protect biodiversity and river and catchment health. The Northern Territory Government is committed to stronger regulation of land clearing through the development of new native vegetation management legislation linked to limits on the amount and type of land subject to clearing that also deals effectively with control of emissions issues to make a real contribution to national emissions mitigation goals.

The Northern Territory Government is particularly interested in exploring with the Australian Government options for related financial or other incentives to encourage retention of native vegetation on private and leasehold lands.

Recommendations:

8. The Northern Territory Government supports the Australian Government's CPRS approach to:
   a) include forestry activities as a covered sector on an "opt-in" basis, and
   b) not include deforestation activities as a covered sector.
9. The Northern Territory Government encourages the Australian Government to:
   a) work with the Northern Territory and other jurisdictions on the interrelationship between carbon property rights and Indigenous property rights and interests under the *Native Title Act 1993* (Cth) and *Aboriginal Land Rights (Northern Territory) Act 1976* (Cth),
   b) consider including Kyoto Article 3.4 non-forest additional 'sink' activities in the CPRS in future,
   c) work with the Northern Territory to develop initiatives that will support improved regulation of deforestation (land clearing) activities, including caps on amounts of land clearing and development of financial and other incentives to avoid deforestation, and
   d) engage with the Northern Territory on international negotiations (as they progress) on LULUCF activities that may impact the Northern Territory, particularly on land clearing and Kyoto Article 3.4 non-forest sinks.

Household assistance measures

Households in the Northern Territory already pay significantly more for goods and services than in many other areas of Australia, primarily due to freight costs and weaker competitive pressures associated with the smaller size of the local market. It is also likely that Territory households, particularly in remote communities, will have fewer options available to them to transition to purchasing trends the CPRS is designed to encourage.

Recommendations:

10. The Northern Territory Government encourages the Australian Government to:

    a) explicitly consider the factors in the Northern Territory which influence relative costs of living for households, such as small scale, geographical dispersion of the population, isolation and market fragmentation, and the associated impact of carbon prices, in determining the allocation of revenue recycled from the CPRS, and

    b) assess structural changes to the Northern Territory economy that are likely to result from the CPRS and where required provide funding to facilitate effective change.

Small and medium enterprises

Small and medium business enterprises (SMEs) are likely to be impacted by the CPRS through increased energy prices, fuel and travel costs and increased input prices due to the impost of a carbon price and associated administrative costs passed on from suppliers directly liable under the CPRS. In particular, the Northern Territory Government believes that the CPRS will disproportionately affect regional SMEs due to the costs involved in transporting products to distant markets, and SMEs in the tourism sector due to their reliance on travel and exposure to international and inter-state competition.

The Northern Territory Government looks forward to analysing the Australian Government's modelling on the sectoral and distributional impacts of the CPRS. Once impacts are more clearly enunciated, an analysis of the suitability of existing assistance packages for SMEs can be undertaken.

Recommendation:

11. The Northern Territory Government supports the Australian Government's approach to providing assistance to businesses via the Climate Change Action Fund and encourages the Australian Government to work with the Northern Territory and other jurisdictions to provide:

    a) modelling of the cost impacts of the CPRS on SMEs, and

    b) information and assistance around obtaining support from the CCAF to ensure SMEs in the Northern Territory have the appropriate tools to transition to a carbon constrained economy.

Transitional issues – energy efficiency

Improving energy efficiency and reducing energy consumption provides significant opportunities in the Northern Territory. The Northern Territory Government will continue to work cooperatively with the Australian Building Codes Board to improve energy efficiency in commercial and residential buildings. Any developments to ensure greater national consistency in building standards will need to ensure that not only are the standards climatically relevant, but that the verification tools are also appropriate.

Recommendation:

12. The Northern Territory Government requests that national energy efficiency standards and verification tools are developed to be climatically relevant.

Waste

The Northern Territory faces a number of unique waste management challenges in comparison to other jurisdictions, such as the viability of capital-intensive recycling processes, which is severely constrained by the population and distance to markets.

The Northern Territory Government supports the Australian Government's position to include the waste sector in the CPRS, in particular the 25 kt CO_2-e per year threshold for inclusion.

The Northern Territory Government encourages the Australian Government to provide support for increased research and development in waste measurement techniques, drive the development of national standards for the use of renewable waste derived fuels, and consider transaction and transportation costs as part of any emissions reduction strategy for waste.

Recommendation:

13. The Northern Territory Government agrees with the Australian Government's proposal to include the waste sector in the CPRS, noting that the precise scope of coverage, thresholds and other detailed design issues are yet to be determined.
14. The Northern Territory Government encourages the Australian Government to:
    a) ensure support for increased research and development in waste measurement techniques (e.g. into variability of emissions and the timing of their release) and more efficient waste recovery and less capital-intensive recycling technologies,
    b) drive the development of national standards for the use of renewable waste derived fuels to overcome discrepancies across jurisdictions which may be preventing greater take-up in some areas, and
    c) retain the proposed 25 kt CO_2-e/year threshold for the waste sector's inclusion in the CPRS, and consider transaction and transportation costs as part of any emissions reduction strategy for waste.

Adaptation

Given the Green Paper is about the CPRS which is a mitigation policy lever, the Northern Territory will reserve its comments on adaptation policy for the release of the final Garnaut Review Report and other developments in Australian Government and national policy on this issue.

Introduction

The Australian Government has invited stakeholders to comment on its July 2008 Carbon Pollution Reduction Scheme (CPRS) Green Paper. Comments are sought on the design options canvassed in the Green Paper and on the preferred design positions of the Australian Government.

The Northern Territory Government shares the deep concerns of the Australian Government on climate change and is committed to playing its part in reducing greenhouse gas emissions. The Northern Territory Government agrees that a comprehensive national measure is required to mitigate greenhouse gas emissions.

The Northern Territory Government affirms that it will continue to work in close collaboration with the Australian Government and other jurisdictions where appropriate, to transition the Territory economy, effectively and at lowest cost, into a carbon-constrained future. In particular, the Territory is committed to joint exploration of options for making meaningful contributions to national goals in greenhouse gas (GHG) mitigation.

The Green Paper and the draft Garnaut Reports emphasise the risks climate change presents to Australia. Many of the most significant of these risks will be borne by northern Australia. The Northern Territory Government also recognises the risks that greenhouse gas mitigation policy, particularly emissions trading, present to the Australian and Territory economies. The mitigation measures proposed in the Green Paper would induce significant economic and structural change. This change is likely to be substantial and would be the most significant intervention in the Australian economy since the financial market reforms and trade liberalisation of the 1980s.

The transition to a carbon-constrained Australian economy will come at a price. There will be winners and losers. Meeting the Australian Government's emissions reduction commitment – 60 per cent of 2000 levels by 2050 – will require major changes in the way our economy is structured; changes that will affect every aspect of our economic life. Australian governments must ensure that these changes come at least cost and that comprehensive mechanisms are in place to minimise any disproportionate disadvantage being imposed on any single community or region.

This submission is focused on issues of particular concern to the Northern Territory Government and Territorians, and makes a number of specific recommendations. It draws on comments received in response to the recent *Discussion Paper on Northern Territory Climate Change Issues*. In raising these issues, the Northern Territory Government emphasises that the Territory Government does not seek Australian Government assistance to continue with a 'business as usual' approach to emissions mitigation, but rather seeks assistance from the Australian Government to transition Territorians to a new carbon constrained economy.

In this submission, the Northern Territory Government seeks explicit recognition of the specific challenges of its isolated and developing economy which is subject to recognised socio-economic disadvantage, especially in regional areas. The Territory is particularly concerned that the national policy

framework be structured to avoid unreasonable constraint on, and explore opportunities for Indigenous aspirations for economic development based on extensive land ownership.

The Northern Territory Government wishes to ensure that it is able to maximise any opportunities that there may be under the new carbon constrained economy for the Northern Territory. This includes opportunities such as improving natural resource management in savanna burning or forestry, and new employment opportunities, particular for tourism, and small to medium sized enterprises.

Agreement with the national policy approach

The Northern Territory Government supports the Australian Government's proposal to implement a national, market-based response to climate change. Broadly, the Northern Territory Government believes that any such measure should be:

- an efficient means of meeting the policy objective, with compliance and administrative costs kept as low as possible,
- effective in delivering the policy objective of significant emissions reduction,
- mindful of the need for a global response and capable of being linked to schemes in other countries,
- designed in a way that minimises carbon leakage and inordinate damage to Australia's export industries and balance of trade, and
- structured so as not to impose an inequitable burden on households (particularly low income households), rural and remote communities, Indigenous people or individual States or Territories.

The Northern Territory Government considers that the proposed CPRS can satisfy many of these criteria and is in general agreement with the scheme design.

Carbon market, governance and implementation arrangements, and emissions caps

The Northern Territory Government broadly supports the proposed carbon market structure, governance arrangements and implementation plan. While there are some concerns regarding administrative and compliance costs, any comprehensive measure is likely to involve such costs. The Northern Territory Government believes that the final design of the CPRS should be able to accommodate concerns about burden sharing between community groups and States and Territories.

With regard to the overall emissions target and scheme caps, the Northern Territory Government agrees in principle with the Green Paper position and is awaiting specific details on Scheme caps and interim targets from the Australian Government. The Northern Territory Government supports setting caps for five years in advance and identifying 'gateways' that limit the range in

which future caps will be set as an appropriate compromise between providing certainty to business for long-term decision-making, while allowing the Australian Government flexibility to alter policy in response to new scientific information or global agreements.

The Northern Territory Government believes that, while the commitments made by other countries will clearly have an important influence on setting emissions targets for Australia, 'hard' emissions caps should be established at the outset of the Scheme. Penalties for non-compliance should be used in conjunction with make-good provisions and not perform a price cap function to ensure the integrity of the emissions target.

Coverage, assistance measures and transitional arrangements

The Northern Territory Government broadly supports the sectoral scope and timeline for coverage from 2010. In particular, it supports the initial exclusion of agriculture from the Scheme, as measurement, liability and accounting issues in this sector require significant further work. The Northern Territory Government believes that additional policy options could be explored to reduce emissions from savanna burning. Specifically, the Northern Territory Government believes there is merit in assessing the potential for a savanna burning offset market.

The Northern Territory Government supports the Australian Government's commitment to providing assistance to business and households, particularly low-income households, and the establishment of the Climate Change Action Fund. However, the Northern Territory Government has significant concerns that the scheme as currently proposed may cause undue carbon leakage and economic damage by providing insufficient assistance to some emissions-intensive, trade-exposed (EITE) industries. The current proposal for threshold tests for emissions intensity is unnecessarily simplistic and the effects of this proposal on an export industry key to the Territory's economic development, LNG, are examined in more detail below.

Auctioning of permits

The Northern Territory Government agrees with the Australian Government's preferred position that the Scheme move towards auctioning as close to 100 per cent of permits as possible, with allowance made for assistance to EITE industries.

Quarterly auctions provide the best balance between administrative cost, maximising the bidding field, and frequency for price discovery. The Northern Territory Government believes that annual auctions would be too infrequent to allow the necessary price discovery and might introduce unacceptable levels of volatility into the market.

Linking the scheme to international markets

The Northern Territory Government agrees with the proposed approach to linking the scheme to international greenhouse gas reduction schemes. Strong linkages to international abatement opportunities provide additional market depth and liquidity, which will assist in achieving emissions reductions at least cost. Maximising the potential for strong links with international markets will require a robust and credible national scheme and one that is compatible with approaches proposed by other countries. This is an issue that must remain front of mind for Australian Government policy makers when they consider both accounting and auditing standards and the inclusion of sectors like agriculture.

Once strong links have developed with international markets it is almost certain that Australia will be a price-taker given the comparative size of our national market. This raises important considerations for any decision about a 'soft start' to the Scheme if it is combined with the proposal for unlimited banking. Speculation about future windfall gains from international linkages may well complicate attempts to cap prices if there are opportunities for arbitrage between various national schemes.

Tax and accounting issues

The Northern Territory Government agrees with the preferred position on tax and accounting issues and awaits the outcome of the Australian Government's liaison with the International Accounting Standards Board (IASB). A credible national market, and any future links with international schemes, will require the maintenance of international standards and a strong national regulator to ensure credible reporting.

Northern Territory Government concerns

Broad impact of Scheme on the Northern Territory

The Northern Territory Government is concerned about the impact of the Scheme on communities in the Territory. The Northern Territory's distance from major markets, the high number of low-income remote communities and the distributed nature of Northern Territory power generation are factors that all contribute to the likelihood that, in the absence of remedial action, a clear, sizable and disproportionate burden will be borne by identifiable segments of the Northern Territory community.

The Northern Territory Government believes that it can present a strong case for assistance for these groups to transition to lower carbon use under the proposed Climate Change Action Fund (CCAF). The Northern Territory Government looks forward to receiving the details of the CCAF from the Australian Government and believes that it is important that the threshold test for assistance take account of the geographical and existing equity issues

(e.g. remoteness, transportation costs, electricity generation, existing low incomes and Indigenous disadvantage) that are likely to lead to a disproportionately regressive impact in the Northern Territory.

Similarly, a significant proportion of the Northern Territory economy is export-based and there is a close link to highly-competitive Asian markets. Ensuring the appropriateness of assistance and threshold tests for EITE industries is of critical importance for the Northern Territory economy given the extent to which the Northern Territory relies on its export trade (35 per cent of GSP in 2006-07).

Tourism also provides a significant contribution to the Northern Territory economy compared to the national average, contributing 6.7 per cent of Gross Value Added, compared to 3.8 per cent nationally. The CPRS will have strong, cross-cutting impacts on tourism in the Northern Territory. These impacts are likely to be higher than those borne by other States as tourism in the Northern Territory is highly dependent on transport industries (both road and air) and already faces high prices for goods and services as a result of its remoteness from major centres. The Northern Territory Government will brief the Australian Government on the impacts on Tourism once further details of the Scheme are released in the proposed White Paper.

Stationary energy

Stationary energy generation in the Northern Territory will be uniquely affected by the CPRS. While electricity in the Northern Territory is primarily generated using natural gas, it has only one combined cycle gas turbine (CCGT) plant, with most electricity being generated by more emissions-intensive open cycle gas turbines (OCGT) with back-up from diesel generation in remote communities. The overall carbon footprint from electricity generation in the Northern Territory is not substantially smaller than it would be if black coal technologies were used, resulting in a significant exposure to a carbon price.

The Northern Territory Government notes that the Green Paper proposes strongly affected industry assistance be provided to coal based generators, including government-owned plants. The Northern Territory Government believes that similar assistance should be provided to Power and Water Corporation (the owner of the electricity network in the Northern Territory) in order to allow investment in reduced emissions technologies and research and development including:

- a new CCGT plant in the Darwin-Katherine network,
- gradual switching from diesel to solar generation in remote communities, and
- a detailed examination of renewable energy generation options in the Northern Territory, including solar thermal, geothermal, and tidal.

Without assistance, the Northern Territory may be disproportionately disadvantaged in comparison to States where the primary coal-fired generating capacity is likely to qualify for strongly affected industry assistance.

Following the introduction of a CPRS, there is an argument for retail price regulation to be eliminated nationally in order to ensure an effective price signal in relation to energy use and carbon emissions and, therefore, complementarity with the CPRS. Any removal or reduction in the level at which retail prices are regulated would require an expansion in assistance to low-income and remote households to minimise the regressive impacts of the CPRS.

The Northern Territory Government currently provides financial assistance to Territory households for meeting the cost of electricity. This occurs primarily through two mechanisms – the community service obligation payment and direct grant funding for guaranteeing continued electricity supply to remote communities, even where there is negligible cost recovery. Electricity in remote communities is provided largely by diesel generators and supply costs are strongly affected by fuel and transport prices. Given the extent of socio-economic disadvantage in the Northern Territory, particularly in remote and Indigenous communities, assistance to these communities to adjust to the impacts of the CPRS will need to increase following the introduction of the CPRS.

Recommendation:

1. The Northern Territory Government recommends that:
   a) assistance to low-income households in the Territory be provided from the Climate Change Action Fund (CCAF), and
   b) a separate program be established for remote communities that assists these communities to reduce their overall energy use and transition to renewable technologies.

Liquefied Natural Gas (LNG)

The Northern Territory Government strongly believes that the international competitiveness of the Australian LNG industry will be adversely impacted by the CPRS. Although LNG demand is growing globally, many of our direct LNG competitors are actively targeting Australia's key LNG markets and none of them is likely to face a carbon price in the foreseeable future.

Initially, Australian LNG projects have difficulty in meeting commercial rate of return benchmarks due to relatively high project costs. The competitiveness of these projects, therefore, is highly sensitive to any increase in relative costs. Australia already has the highest costs for LNG projects in the Asia-Pacific region. Unmitigated exposure of the Australian LNG industry to the CPRS is likely to damage the potential for future investment in expanding capacity and increase the trade-exposure of the local industry. LNG investments in the Northern Territory will have the potential for a significant positive impact across all sectors of the Territory's economy.

The Australian Government must find a way to ensure that this impact on Australia's LNG international competitiveness is removed or reduced to the

maximum extent possible, including through international discussions on sectoral agreements.

The criteria for inclusion as an EITE should not be based on abstract benchmarks but should take account of the competitive position of individual businesses. Ideally, the CPRS should not affect the viability of trade-exposed projects that presently satisfy commercial rate of return criteria. The Australian Government could classify LNG as an EITE industry on the basis that:

- none of the Australian industry's main competitors, particularly in the Asia-Pacific region, face a carbon price, and
- LNG production is emissions-intensive compared to other oil and gas production methods.

Electricity produced from LNG also produces considerably fewer greenhouse gas emissions than electricity produced from coal, even when entire life-cycle emissions are taken into account. Consequently, the Australian LNG industry will make an important contribution to global greenhouse gas emissions mitigation. Over the next decade, Australian LNG could result in 120 million tonnes less CO_2-e being released in the Asia Pacific region per annum.

Current and future Territory LNG exports can make a significant contribution to this abatement only if investment decisions in the LNG industry are not stymied by the impact of the CPRS. While natural gas is an important 'transition fuel' on the path to zero emissions energy supplies, as new generation technologies become commercially viable the overall emissions benefits derived from LNG-fired electricity are likely to be reduced. From a market perspective, Australia – and the Northern Territory in particular – should aim to exploit LNG opportunities to the maximum extent in the medium term.

Recommendations:

2. Note that the Northern Territory Government supports Australian Government commitments to developing CPRS assistance options for the LNG sector.
3. The Northern Territory Government seeks clarification from the Australian Government as to how:
   a) EITE-status thresholds can be improved on those outlined in the Green Paper to better account for the clear risks the CPRS imposes on the international competitiveness of Australian LNG, and
   b) an industry's potential contribution to global greenhouse gas emissions mitigation will be factored into any assistance offered by Government, and how this assistance can be designed to ensure a smooth transition to a carbon-constrained economy.

Savanna burning

The Green Paper commits the Australian Government to facilitating the participation of Indigenous land managers in carbon markets. It is clear that the Australian Government plans to consult with Indigenous Australians on

the potential for offsets from reductions in emissions from savanna burning and forestry opportunities under the scheme. The Northern Territory Government welcomes this opportunity to work with the Australian Government, particularly in addressing savanna burning emissions.

The Northern Territory Government believes it is an essential partner in this consultation process and that the Australian Government should establish a specific working group which brings together all major stakeholders including the Australian, Northern Territory, Queensland and Western Australian Governments as well as the North Australian Indigenous Land and Sea Management Alliance (NAILSMA) and Aboriginal Land Councils to investigate policy options to reduce savanna burning emissions in the context of the Australian Government's emissions mitigation goals.

As the Green Paper notes, savanna burning emissions are unlikely ever to be included in the CPRS. However, among the range of policy options for reducing savanna burning emissions, a savanna burning offset scheme is one with development potential. Such an offset scheme offers multiple potential advantages, including reducing the major source of Northern Territory emissions and providing a variety of social and economic benefits to remote Indigenous communities and other landholders.

The Northern Territory Government recognises that there are considerable challenges to establishing an effective and practical savanna burning offset scheme that must be resolved in order to provide low cost emissions abatement and credible emissions reductions. The Northern Territory Government is committed to working with the Australian Government to address these challenges.

The Northern Territory Government understands that as with any offset scheme, some basic requirements need to be met to ensure integrity and credibility. For a savanna burning offsets scheme to provide credible offsets, significant work on a number of issues remains, including: measurement, monitoring, additionality, accounting, verification, and baseline establishment. Research on these issues is in progress and the Northern Territory Government acknowledges the funding provided by the Australian Government to NAILSMA for this purpose.

In addition, there may be potential legal obstacles to implementing effective multi-tenure governance arrangements to savanna burning, including the application of native title considerations and the *Pastoral Lands Act*; and the ability of project partners to share benefits and risks of fire management across land tenure. The Northern Territory Government wishes to work with the Australian Government to develop a firmer understanding of these interrelationships.

The Northern Territory Government believes that preparation for inclusion of savanna burning offsets in the CPRS could be enhanced by the participation of Indigenous communities in voluntary carbon markets as the above issues are resolved. One advantage of initial participation in voluntary carbon markets is that a strong offset scheme could be developed over time without risking the overall credibility of the CPRS and future international links.

It is likely that Northern Territory households, particularly in remote communities, will have fewer options available to them to transition to purchasing trends the CPRS is designed to encourage. Consequently, the effects of the CPRS will be a direct cost rather than providing an incentive to actively reduce their emissions profile. The Northern Territory Government believes Australian Government assistance is required to assess structural changes to the Northern Territory economy that are likely to result from the CPRS and where required provide funding to facilitate effective change.

The Northern Territory Government is particularly concerned about the impacts of these and other development related issues on Indigenous communities.

Further ongoing research will be required to establish the extent to which the CPRS affects Northern Territory communities. The Northern Territory Government believes this research should be based in the Northern Territory given the local knowledge required. The Northern Territory Government will seek further funding to work with the Australian Government on establishing an appropriate research program.

Recommendation:

10. The Northern Territory Government encourages the Australian Government to:

    a) explicitly consider the factors in the Northern Territory which influence relative costs of living for households, such as small scale, geographical dispersion of the population, isolation and market fragmentation, and the associated impact of carbon prices, in determining the allocation of revenue recycled from the CPRS,.and

    b) assess structural changes to the Northern Territory economy that are likely to result from the CPRS and where required provide funding to facilitate effective change for households.

Small and Medium Enterprises

The proposed CPRS will have a number of impacts on small and medium business enterprises (SMEs). These include increased energy prices, fuel and travel costs, together with increased input prices due to the pass through of a carbon price and associated administrative costs from suppliers directly liable under the CPRS.

SMEs contribute significantly to the Northern Territory economy and any adverse effects arising from the CPRS may be felt throughout the Northern Territory in terms of job losses and business failure. In particular, the Northern Territory Government believes that the impact of the CPRS will disproportionately affect regional SMEs due to the costs involved in transporting products to distant markets.

SMEs in the tourism sector are also particularly likely to be affected by increases in fuel prices due to their reliance on travel and exposure to

international and interstate competition. This will be especially relevant for the Northern Territory tourism industry, as it is largely 'self-drive' and highly dependent on air travel.

A key issue will be whether these costs can be passed on to customers or whether they will erode the competitiveness and viability of SMEs in the Northern Territory. The Northern Territory Government looks forward to analysing the Australian Government's modelling on the sectoral and distributional impacts of the CPRS. Once the impacts are more clearly understood, an analysis of the suitability of existing assistance packages for SMEs can be undertaken.

Recommendation:

11. The Northern Territory Government supports the Australian Government's approach to providing assistance to businesses via the Climate Change Action Fund and encourages the Australian Government to work with the Northern Territory and other jurisdictions to provide:
    a) modelling of the cost impacts of the CPRS on SMEs, and
    b) information and assistance around obtaining support from the CCAF to ensure SMEs in the Northern Territory have the appropriate tools to transition to a carbon constrained economy.

Transitional issues – energy efficiency

Improving energy efficiency and reducing energy consumption provides significant opportunities in the Northern Territory. The Northern Territory Government will continue to work cooperatively with the Australian Building Codes Board to improve energy efficiency in commercial and residential buildings. Any developments to ensure greater national consistency in building standards will need to ensure that not only are the standards climatically relevant, but that the verification tools are also appropriate.

In the residential sector, market failures and structural limitations may limit the take-up of energy efficiency measures in the Territory. These include the high rental market, transient population, significant existing stock in inefficient buildings and cost barriers (particularly for low-income remote and Indigenous communities). These factors also mean that it is likely that there will be a number of difficulties in achieving any nationally implemented energy efficiency targets.

Recommendation:

12. The Northern Territory Government requests that national energy efficiency standards and verification tools are developed to be climatically relevant.

Waste

The Northern Territory faces a number of unique waste management challenges in comparison to other jurisdictions. For example, the Northern Territory's small population and low population density challenge the viability of capital-intensive recycling processes, which is severely constrained by the population and distance to markets. Dealing with GHG emissions from waste also poses similar challenges, particularly outside major population centres.

Approaches adopted in other jurisdictions with higher population densities will not always be appropriate to the Northern Territory. The Northern Territory's challenges are compounded by the relative underdevelopment of waste collection and processing infrastructure. Territorians are however recycling where possible and reducing the amount of waste transferred to landfill.

Recommendations:

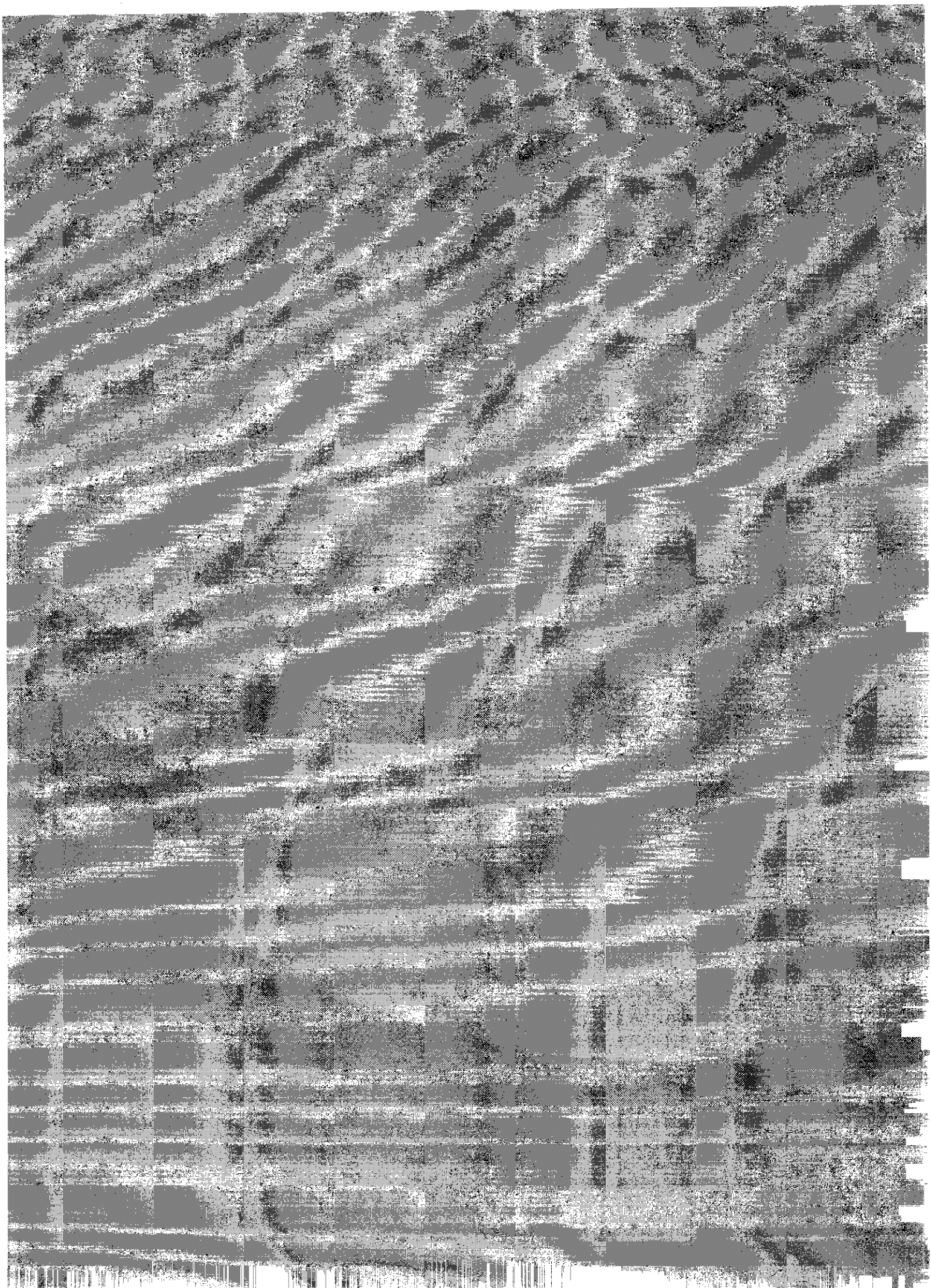
13. The Northern Territory Government agrees with the Australian Government's proposal to include the waste sector in the CPRS. However, the precise scope of coverage, thresholds and other detailed design issues are yet to be determined.
14. The Northern Territory Government encourages the Australian Government to:
    a) ensure support for increased research and development in waste measurement techniques (e.g. into variability of emissions and the timing of their release) and more efficient waste recovery and less capital-intensive recycling technologies,
    b) drive the development of national standards for the use of renewable waste derived fuels to overcome discrepancies across jurisdictions which may be preventing greater take-up in some areas, and
    c) retain the proposed 25 kt CO_2-e/year threshold for the waste sector's inclusion in the CPRS, and consider transaction and transportation costs as part of any emissions reduction strategy for waste.

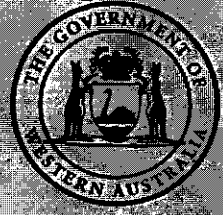
Adaptation

Given the Green Paper is about the CPRS which is a mitigation policy lever, the Northern Territory Government will reserve its comments on adaptation policy following the release of the final Garnaut review report and other developments in Australian Government and national policy on this issue.

Western Australian Government Submission to the Commonwealth Government on the

October 2008





Western Australian Government Submission
to the Commonwealth Government on the

Carbon Pollution Reduction Scheme Green Paper

October 2008

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Introduction

The Western Australian Government welcomes the opportunity to provide comments to the Commonwealth Government on its Carbon Pollution Reduction Scheme (CPRS) Green Paper (the Green Paper).

This submission is constructed to provide:

1. Alternative design options on the aspects of the scheme design that have the potential to significantly affect the State's economy (and the national economy); and
2. Information on circumstances in Western Australia that should be taken into account by the Commonwealth Government when considering the scheme's design and undertaking economic modelling.

The views conveyed were formulated in the absence of the Commonwealth Government's economic modelling of the CPRS. The Western Australian Government urges the Commonwealth Government to publicly release its modelling results as a matter of priority. This will enable the effects on the Western Australia economy to be assessed more fully.

The Western Australian Government may provide additional submissions to the Commonwealth Government on the CPRS following the release of additional information such as the economic modelling results, the CPRS White Paper and the emissions trajectory.

This submission focuses on three key emissions trading priorities:

- maintaining Western Australia's international competitiveness;
- ensuring the design takes into account the characteristics of the Western Australian energy sector; and
- ensuring the design is equitable.

The submission also provides the State Government's position on other important aspects of the design, such as the timeline for introduction and the coverage of agriculture and forestry.

Summary of Recommendations and Key Points

International competitiveness and emissions-intensive, trade-exposed industries

- The Western Australian Government strongly supports compensation for emissions-intensive, trade-exposed industries (EITEs) to minimise carbon leakage. The mechanism proposed in the Green Paper requires further work to ensure that this objective is achieved.
- The denominator in the emissions intensity formula should be changed to a measure that better reflects the effect of the carbon price on a company's operating margin. If gross value added is the most viable replacement measure, then some provision needs to be made for addressing its volatility.
- Eligibility for compensation should include an assessment of trade exposure.
- Compensation should be based on an approximation of the disadvantage that firms will actually face.
- The Commonwealth should consider introducing a sliding scale for compensation. A sliding scale would allow compensation to be targeted to those activities where the likelihood of carbon leakage is greatest and overcome the arbitrariness of hard thresholds (if the activity approach unveils a continuum of emissions intensities).
- In the absence of refinements to the compensation arrangements to EITEs, eligible activities should be periodically reviewed to ensure that the compensation is appropriately targeted.

The Western Australian energy sector

- Assistance to communities, workers and regions negatively affected by structural adjustment in the electricity sector should take a higher priority than the provision of assistance to existing coal-fired electricity generators.
- The Commonwealth Government needs to take into account the economic ramifications of the CPRS on the liquefied natural gas (LNG) industry, if this results in new LNG projects being delayed. Much of Western Australia's new domestic gas supply depends on applying the State's domestic reservation gas policy to new LNG developments.
- The State Government seeks the cooperation of the Commonwealth Government to develop a consistent and complementary approach to assist households to manage the electricity price rises in Western Australia arising from the CPRS.

- Western Australia's energy infrastructure will need to be upgraded to enable large-scale deployment of low-emissions renewable energy.

Equity considerations

- The Western Australian Government supports assistance to households to meet the additional costs arising from the CPRS.
- The Commonwealth Government should ensure that remote operations and communities with no short-term access to lower emissions energy substitutes do not face disproportionate disadvantage.
- The CPRS would worsen the living standards of Western Australians living in regional and remote communities, especially those living in very remote indigenous communities (with extremely low income levels), unless the assistance provided recognises the limited viable substitutes for emissions-intensive electricity generation and limited opportunities for behavioural change in these communities.
- Although Western Australia is experiencing strong economic growth driven by high commodity prices, the associated increases in the cost of essential goods and services (including housing) has put strain on low-income households. These circumstances should not be overlooked when considering levels of assistance.
- The cost of providing essential services such as power and water will rise in response to the CPRS. This is likely to increase the value of existing concessions and assistance provided by the State Government to households by at least $6 million a year if the State was to fully mitigate the impact of the CPRS.
- It is recommended that the Commonwealth Government work with the States and Territories to identify the additional support or needs that will arise from the CPRS and find the best mechanisms to deliver this support.

International Competitiveness and Emissions-Intensive, Trade-Exposed Industries

Compensation for emitting industries

The Green Paper proposes a mechanism that seeks to minimise the risk of carbon leakage and provide transitional assistance to firms. However, the Western Australian Government is concerned that the proposed mechanism will not adequately address the problem. This is primarily because:

1. The mechanism does not differentiate between firms and activities that are already located in Australia, to which the sensitivity of moving offshore varies with the share of costs that are fixed, and future investments, which have no fixed (sunk) costs and will be extremely sensitive to any movements in costs;
2. Emissions intensity is defined relative to revenue rather than fixed costs and will not identify those EITEs for which the carbon price represents a significant proportion of fixed costs, and will therefore be more at risk of closing down;
3. Eligibility for compensation does not include an assessment of trade exposure, meaning that some firms may be over-compensated or under-compensated relative to their risk of carbon leakage;
4. The compensation is based on arbitrary values (90% and 60% of costs), rather than an approximation of the disadvantage that firms will actually face;
5. The mechanism does not recognise that there may be offsetting macroeconomic effects, such as the depreciation of the Australian dollar, given that Australia will increase its costs structure relative to competitors who do not adequately price carbon; and
6. The proportion of permit revenue available for compensation is capped at 30%. The consequences of this decision are that the compensation parameters are set with no reference to the potential for carbon leakage and that the value of compensation to EITEs will decline over time.

These issues are explored further in the remainder of this section along with a number of other relevant concerns.

The risk of carbon leakage in Western Australia

It is difficult to quantify the risk of carbon leakage to the Western Australian economy from the CPRS. There are currently no data available to assess the emissions intensity of activities, which is the basis for the proposed compensation mechanism. Consequently, there are no economic models available to perform activity analysis. Industry emissions intensities, as provided in Appendix D of the Green Paper, are indicative and may not appropriately reflect the direction of compensation. It is also difficult to develop an appropriate counterfactual argument to determine which projects would have occurred in the absence of an emissions trading scheme.

Nevertheless, **the risk of carbon leakage has a stronger relationship to international exposure than to emissions intensity.** The Western Australian economy is the most trade-exposed State economy, with 46.7% of the State's income derived from exports, compared to 20.5% of the national income (in 2006-07). Accordingly, Western Australia is likely to suffer the negative economic impacts of carbon leakage more acutely than other jurisdictions.

Based on the preliminary analysis of EITE activities in the Green Paper, alumina is the only commodity in the State's top ten exports by value (Appendix 1) that would be eligible for compensation, exposing the remaining $51.6 billion of export value (or 84.4[1]%) to the full effect of the carbon price. A considerable portion of this value is derived from products for which the price is set internationally and for which it will be difficult to pass on the carbon price. These commodities include gold, petroleum and oil, nickel ores, copper ores, other base metal ores and concentrates, and nickel. These exports were worth approximately $25.2 billion in 2007-08.

[1] ABS cat. no. 5368.0. This proportion is exaggerated because it assumes that alumina is the only product in Western Australia's confidential commodities trade (valued at $9.6 billion in 2007-08). The confidential commodities trade is broader than alumina and includes various nickel products and mineral sands (among other commodities). According to the Western Australian Department of Industry and Resources, alumina exports were valued at $4.2 billion in 2007.

Modelling undertaken for the National Emissions Trading Taskforce (NETT) estimated that the Western Australian economy would experience a relatively small decline in Gross State Product (GSP) of 0.5% in 2030 compared to business as usual under an emissions reduction scenario of 30% by 2030 (relative to 2000 levels). These results were predicated on 100% compensation for increased energy costs for EITEs[2] and a wider eligibility for compensation than shown in the current Green Paper's industry analysis[3]. Consequently, the effect of an emissions trading scheme on the Western Australian economy is expected to be higher than estimated for the NETT, as most of the State's exports would not be eligible for compensation.

The sector of the Western Australian economy with the greatest exposure to carbon leakage is probably the manufacturing industry, which is already more emissions-intensive than the national average. The State's manufacturing industry is based on processing minerals to more intermediate products. These processes tend to be more energy intensive than mining and exporting unprocessed ores, but are not as energy intensive as transforming intermediate goods into final products. The Green Paper's proposed compensation arrangements for EITEs may distort economic activity away from intermediate processing (as extractive industries may not experience large cost increases and final processing could be eligible for compensation); meaning that future investment in existing and new projects may be reduced.

The demand for Western Australian commodities has lifted the national terms of trade, benefiting all Australians. Western Australia's top ten exports accounted for 33.9% of total national exports by value in 2007-08. Current prosperity may be undermined if these commodities are highly susceptible to carbon leakage. Consequently, a careful assessment of carbon leakage should be the overriding consideration when developing the compensation mechanism.

Definition of emissions intensity

The Green Paper proposes to calculate emissions intensity on the basis of emissions of tonnes of carbon dioxide equivalents (CO_2-e) per million dollars of revenue attributable to an activity.

Emissions intensity can be measured in many ways, such as dividing emissions by operating expenditure; capital expenditure; value added; profit; earnings before interest, tax, depreciation or amortisation; or revenue. The Climate Strategies report

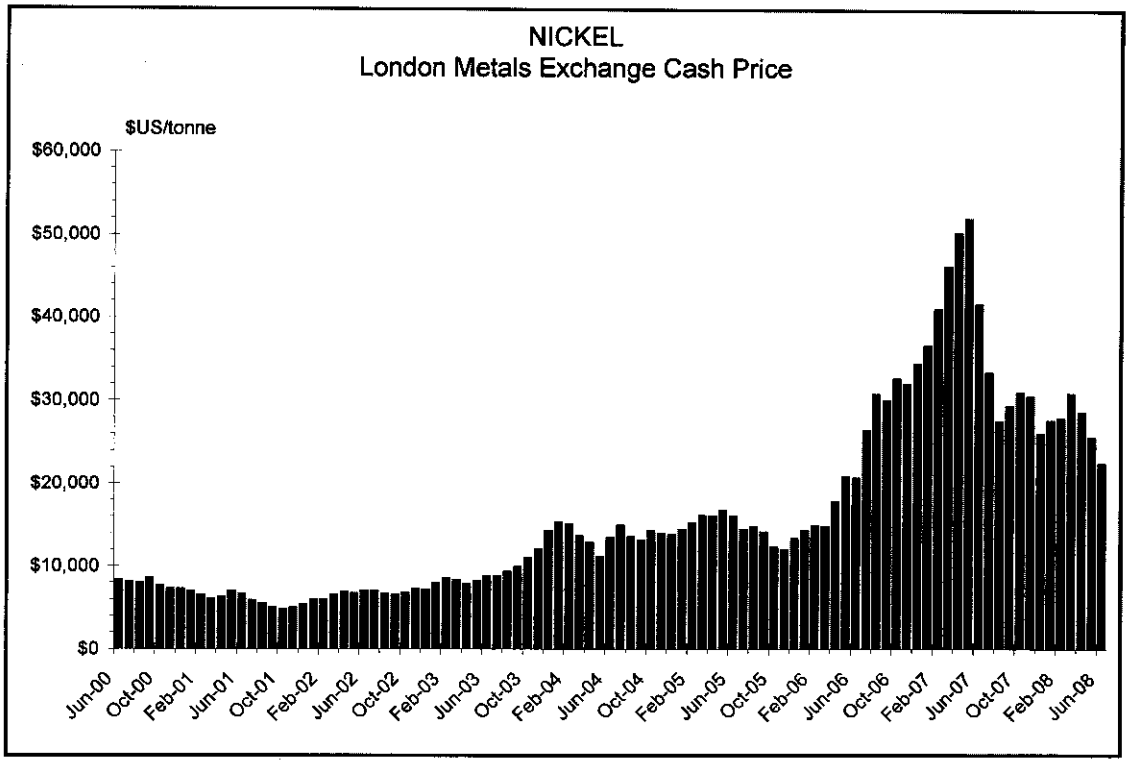
[2] EITEs were classified as those industries that were trade exposed and had energy costs greater than 3.5% of total operating costs in the 2004 MMRF database. Under this definition, other mineral ore, iron and steel, alumina and aluminum and other metal products received compensation.

[3] In addition to the sectors in the footnote above, compensation was provided to underground coal miners in New South Wales and Queensland, LNG producers in Western Australia and oil producers in Victoria, South Australia and Western Australia to offset the direct cost effects of the permit price from fugitive emissions.

favoured value added[4] as the most appropriate measure because it is the 'most stable metric over time... reflects the fraction of costs that are under the direct control of the firm and is less subject to strategic optimization'[5]. The disadvantages of using value added are that it is harder to obtain value added data than revenue data and value added can be more volatile than revenue.

Revenue may also be volatile when prices are variable or cyclical, as is common for commodities. The chart below shows changes in nickel prices since June 2000.

Figure 1



Source: Datastream

The average nickel price over 2006-07/2007-08 ($US33,215 per tonne) more than doubled the average price in 2004-05/2005-06. Assuming no change in emissions from nickel production, the more than doubling of the nickel price would lead to a more than halving of its emissions intensity. Recent high commodity prices (and consequently high revenue) could result in some activities being ineligible for compensation that would have been

[4] Value added was defined as "the income generated by the business, industry or sector less their intermediate consumption of goods and services used up in order to produce their output... [it] consists of labour costs (e.g. wages and salaries) and an operating surplus (or loss)" (Demailly, D., Grubb, M., Hourcade J., Sato, M. 2007, 'Climate Strategies Report: Differentiation and Dynamics of ETU ETS competitiveness impacts', Interim Report, p. 4-5).

[5] Hourcade, J., Demailley, D., Neuhoff, K., Sato, M. 2007, *'Climate Strategies Report: Differentiation and Dynamics of EU ETS Industrial Competitiveness'*, p. 58.

eligible under more normal prices. The reverse situation would also apply. High commodity prices are not necessarily a problem for assessing eligibility for compensation if prices remain at those levels for the length of the compensation period or if activity eligibility is reassessed at regular intervals.

Volatility can be addressed by using an average for a period longer than a few years, however the Green Paper proposes to use only two years of data (2006-07, 2007-08).

More importantly, entities investing in new projects make their decisions based on profits, while existing firms will make the decision to stay open based on whether they cover variable costs and some proportion of fixed costs, not revenues. If the purpose of compensating EITEs is to stop carbon leakage, then some form of value added or profit is the appropriate measure for new investments, while some measure of fixed costs is appropriate for currently existing forms. If a firm thinking of making a new investment has thin margins, as many capital-intensive resource projects do, then an increase in costs (even a minor one compared with total revenue) could cut profitability significantly, perhaps resulting in a loss of production to overseas. This will occur even for firms with some pricing power on world markets.

Definition of trade exposure

The Green Paper's model for compensating EITEs does not include an assessment of trade exposure. The Green Paper proposes to define trade exposure as 'all industries without a physical barrier to trade'.

The absence of a more rigorous and effective trade exposure criterion could result in some businesses with a low risk of carbon leakage receiving compensation, while others with a higher risk of carbon leakage may not receive compensation.

It is important to assess trade exposure, as it will determine the extent to which businesses can pass on carbon costs. Products could be assessed as trade-exposed if the product is a price-taker (possibly set by the international market) or if the demand for an entity's product depends to a significant degree on the price charged for similar products made in countries with no carbon constraint. In the case of Western Australia's top ten exports, producers of some commodities may have some capacity to influence prices (for example, iron ore), while for others prices are linked to, or set by, world markets (crude oil and condensate, gold, nickel, and wheat). In these cases, Western Australian commodity producers would have limited scope to influence prices and pass carbon costs to customers. This applies equally to exporting and import-competing businesses.

The Green Paper cites two measures of trade exposure already used in Australia (the Australian Competition and Consumer Commission Merger Guidelines and the Australian Bureau of Statistics' tradeable/non tradeable price series). Both measures adopted a

trade share of 10%. The Climate Strategies Report also developed a measure of trade exposure (or 'trade intensity'), which it defined as:

- Non EU trade intensity = (value of exports to non EU + value of imports from non EU)/(annual turnover + value of imports from EU + value of imports from non EU).

The Climate Strategies Report noted that although it was "an imperfect indicator, and in response to large price differentials could change substantially over time... it remains... the most plausible aggregate indicator of the barriers to large scale imports and exports"[6]. This measure could be considered alongside further analysis of the previously cited trade measures when considering eligibility criteria.

Another important aspect is whether, if an industry is trade-exposed, are its major production and/or investment competitors subject to a carbon permit price similar to that in Australia. If a firm competes with companies from the European Union (EU), which is covered by an emissions trading scheme, and has a comparable carbon price, then there is no case for EITE compensation.

Assessing this criterion requires an examination of the relevant market, which is not necessarily the world market. For example, Russia produces most of the world's natural gas, and is covered by the EU scheme, but this is exported almost entirely to Eastern and Western Europe. Australia's LNG production competes against Malaysia, Brunei, Indonesia, Qatar, Oman and the United Arab Emirates, none of which price carbon adequately, if at all.

Levels of assistance to EITEs

The Green Paper does not propose to provide full compensation to EITEs. Activities that emit above 2,000 tonnes of CO_2-e per million dollars of revenue will have initial assistance set at 90% of the industry average for that activity. Activities that emit between 1,500 and 2,000 tonnes per million dollars of revenue will have assistance set at 60% of the industry average.

These arbitrary compensation levels are unlikely to bear any resemblance to the actual level of disadvantage faced by various firms, nor the factors that will cause existing firms to relocate offshore, or for new investments to look elsewhere.

New investments at the margin will not be made if there is an alternative location where the firm could produce in a free-carbon environment or where competitors who are able to increase supply face no price for carbon emissions. Hence, less than full compensation will deter future investment, even if full compensation over-compensates the firm compared with the worldwide carbon price alternative.

[6] ibid, p. 17

Existing firms will close down if the cost of the CPRS forces variable costs to rise above price. Hence, a potential measure might be to compensate firms if the cost of the CPRS rises above Gross Operating Surplus (or a threshold of less, for example 75%) for the relevant industry in the Australian Bureau of Statistics (ABS) Input-Output tables[7].

Alternatively, given the EITE problem is about the slope of the demand curve facing exporters, or the import supply curve competing against local producers, directly compensating firms by calculating a rough measure of the difference in prices between the EITE situation and the case where the whole world prices carbon at a rate similar to Australia. This is essentially the solution proposed in the Garnaut Climate Change Review Draft Report[8] but this report does not specify how the difference in price should be calculated.

A hard threshold for compensation, such as the Green Paper's proposed thresholds of 1,500 and 2,000 tonnes of CO_2-e per million dollars of revenue, makes intuitive sense when there are quite defined gaps in emissions intensities. Appendix D of the Green Paper provides an industry level breakdown of emissions intensity. It shows an obvious increase in emissions intensity above 2,000 tonnes and at 1,500 tonnes. The use of revenue in this analysis may have also contributed to the definitiveness of the gaps.

However, it is not clear that the activity approach will show such definitive gaps in emissions intensity. The initial assessment of activities may produce many more data points than the industry approach (which examined only 109 industries), as there are multiple activities in each industry. The list of activities could produce more of a continuum of intensities. In the absence of definitive gaps for activities, the Commonwealth should adopt a sliding scale to determine the level of compensation to be paid to EITEs, which would minimise the potential for inequity should particular activities be just short of the hard thresholds.

The Green Paper proposes to limit the proportion of permits available for EITE compensation to 20% of the total pool (expanded to 30% if agriculture is covered by the Scheme from 2015). The cap underpins the thresholds and ratios proposed in the compensation mechanism. These parameters may change, pending further information from the consultation process. However, a compensation cap means that the parameters are unduly restrictive and may not adequately prevent carbon leakage. Furthermore, the cap also means that the number of permits available for compensation will decline over time, irrespective of the risk of leakage.

The purpose of the cap on compensation is to ensure that the proportion of compensation does not rise over time and erode assistance to other groups such as households. However, the Green Paper does not provide a reason for setting the cap at 30% or explain

[7] Production of the Input-Output tables at a greater level of industry detail may be required for this to function as desired.

[8] Garnaut Climate Change Review Draft Report June 2008

how this relates to the risk of carbon leakage. This is particularly concerning when the cap underpinned the compensation parameters. The central focus of the Green Paper's treatment of the EITEs appears to be containing the level of compensation provided rather than preventing carbon leakage. Carbon leakage is a lose-lose outcome, potentially imposing significant costs for no environmental benefit.

Additionally, if the aim of EITE assistance is to ameliorate the effects of other countries not pricing carbon correctly, then the total level of assistance should rise over time, as more cost-sensitive industries make investment decisions.

The need to refine the eligibility criteria is reinforced by the application of the 30% cap. This is because the proposed arrangements may lead to the limited amount of compensation being poorly targeted. Three key refinements to the eligibility criteria are necessary:

1. Add a specific measure of trade exposure to reduce the likelihood of compensating companies with a low risk of carbon leakage;
2. Adopt a measure of profitability for new investments and fixed costs or level of disadvantage for existing industries; and
3. Use a sliding scale to determine the value of compensation for activities to better reflect exposure to the carbon price.

Furthermore, if the 30% cap for EITEs is to be retained, further detail is needed on timeframes proposed and the allocation of the total pool of compensation. In particular:

1. Is there a point when the economy will have adjusted sufficiently and that changes in consumer behaviour will mean households no longer need assistance? and
2. If agriculture is allocated 10% of the EITE cap, how will the 10% be used in the years prior to inclusion or afterwards in the absence of inclusion?

Other issues

Defining activities

The activities approach to assess eligibility for compensation is more suited to the manufacturing industry than extractive or agricultural industries. It may be more difficult to develop a comparable activity in extractive industries because each project, and potentially each process, may be individually tailored to the characteristics of the ore body or the specifications of the inputs (e.g. the chemical make up of the gas to be recovered – whether it is 'sweet' or 'sour', 'wet' or 'dry' – dictates the number and complexity of the intermediate processing steps required to produce a marketable product).

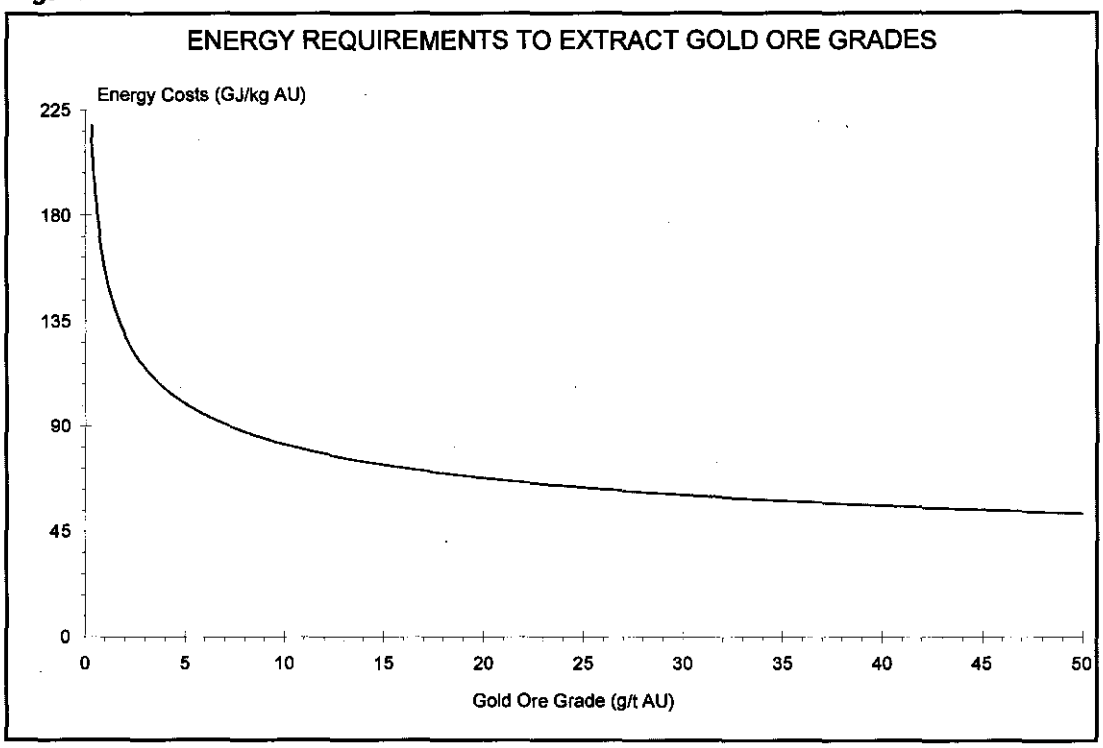
The activities approach appears to have little or no benefit over an industry approach when applied to the agriculture sector. Using industry averages, with a high level of granularity to capture the different types of agricultural production, should be sufficient.

Where processes exist, the activities approach provides mixed incentives to define an activity. There is an incentive to define activities broadly to capture as much of the emissions as possible (as the numerator) and to define activities tightly to minimise the measure used as the denominator. As a result, companies that engage in similar activities may define their activities differently. Bounding an activity by tradeable products may aid comparability.

Appropriate definitions of activities for extractive industries will need to be devised. For example, iron ore tends to be considered a single commodity, but there are two types of iron ore – haematite and magnetite – that have different chemical compositions. These different types of iron ore need different industrial processes to bring those goods to market. Haematite iron ore tends to be 'mined and shipped', while magnetite iron ore is crushed and magnetically separated to produce a tradeable commodity. It is estimated that magnetite production may be eight times more energy-intensive than haematite production. Similarly, the bulk of nickel is in two types - laterites and sulfides - that use different productive processes to separate out the nickel metal. Extractive activities should be defined to enable different ore types to be separately identified for the initial assessment of emissions-intensive activities.

Different producers within extractive industries can have very different emissions profiles. This may occur for two reasons. Firstly, the geographic location of the ore bodies will influence fuel mix used in extraction and processing. Western Australia has many mines located off the main electricity grids (South West Integrated System (SWIS) and the North West Interconnected System (NWIS)) or gas pipelines, and these tend to be fuelled by diesel generators of various levels of efficiency, with few or no fuel substitutes available. Second, different ore bodies may have different grades or types of ore that require different energy levels to extract and process. For example, the following chart illustrates the level of energy required to extract gold from various gold ore grades.

Figure 2



Source: Mudd, G., 2007, *'Gold mining and sustainability: A critical reflection'*.

In the same way as emissions from extractive industries are closely linked to the quality of the natural resource (for example the quality of the ore body), agricultural emissions are linked to variables such as climate and land quality (i.e. the local climate may not support production alternatives that have lower emissions). In this respect, the extent to which agricultural emissions can be reduced is determined by the constraints of the environment in which the production is based. This means that some producers may have few viable substitutes and a limited capacity to reduce emissions in response to the carbon price. This issue also has implications for the development of averages for EITEs in the agricultural sector (for the purpose of calculating compensation). Averages that fail to take into account the emissions variation arising from the crop type, type of animal and weather events could lead to perverse outcomes.

Despite these issues, the activity approach overcomes some of the difficulties of the industry approach. The industry approach relies on the alignment of Commonwealth Government emissions data with ABS industry data. The ABS Input-Output tables segment industries at a very high level (109 industries), which obscures important intra-industry and inter-industry differences. The NETT final report notes that within the cement, lime and concrete slurry industry, cement manufacture is considerably more emissions intensive than slurry manufacture. An industry approach for compensation could lead to some entities being eligible for compensation despite not being emissions intensive, while compensation may not be sufficient (or non-existent) for those that may require it

more. The activity approach also overcomes some of the difficulties of the firm approach, which were highlighted in the Green Paper.

Developing activity benchmarks

There are three issues that the Commonwealth should consider when developing activity benchmarks. The first is how to calculate an appropriate benchmark where there is a sole producer or very few producers of a particular commodity in Australia. For example, Australia has one producer of silicon (Simcoa) and one London Bullion Market Association accredited gold refiner (AGR Matthey). Australia also has sole producers of chromite, tantalum and lithium.

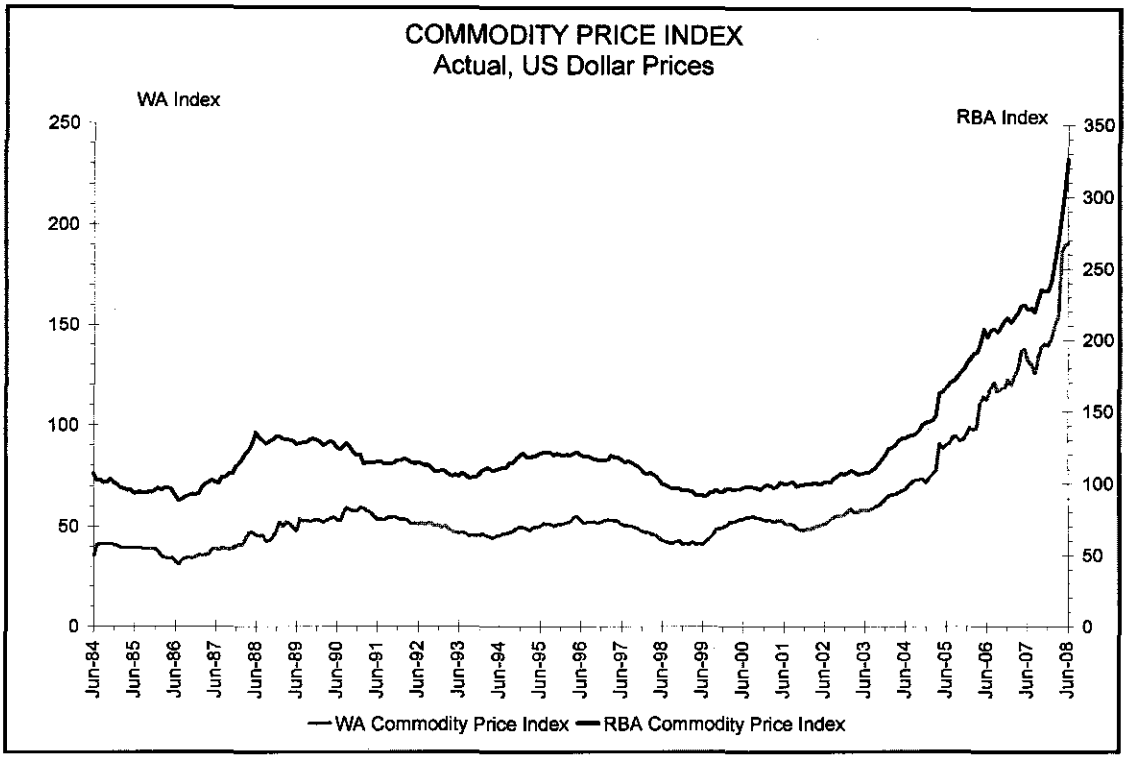
The second issue is how to benchmark new industries or activities in Australia. The Commonwealth will need to assess activities sufficiently early in the project development stage, as eligibility for compensation may influence the viability of the project.

The third issue relates to the poor suitability of some industries to averaging. As discussed earlier, there can be significant variability in emissions intensity between projects within the same industry. This is particularly the case in extractive industries such as gold, where the emissions intensity depends on the quality of the ore deposit and access to energy.

The appropriate data period for assessing eligibility for compensation

The Green Paper seeks stakeholders' views on the use of data from 2006-07 and 2007-08 to assess activities for compensation. As noted previously, using a revenue denominator may skew emissions-intensity calculations in periods where prices are volatile or cyclical and may result in some activities being made ineligible for compensation (and vice versa). This is particularly the case in commodity prices, which grew strongly in those two years, as demonstrated by the Western Australian Commodity Price Index and the Reserve Bank of Australia Commodity Price Index (Figure 3). If a revenue-based measure is to be used, an average for a period longer than two years should be used to address the volatile nature of commodity prices.

Figure 3



Source: RBA and Western Australian Department of Treasury and Finance

Review mechanism for activities eligible for compensation

The Green Paper proposes to include all activities eligible for compensation into the Scheme regulations. This would be a 'once and for all' assessment of activities and eligible activities would continue to receive compensation until phased out over time or competitor nations apply similar constraints on their own carbon emissions. Eligible activities would not be reviewed at a later date. Activities would be added to the regulations if the Scheme coverage extends to agriculture or new activities occur in Australia.

A once-off assessment of activities would provide compensation security to entities that engage in eligible activities. However, it is possible that eligible activities would be different if assessed at a different time period. **In the absence of refinements to the compensation arrangements to EITEs (such as the inclusion of a trade exposure measure and the use of a measure that better reflects the operating margins of a company), the Western Australian Government would prefer a reassessment of eligible activities to reflect newer conditions.**

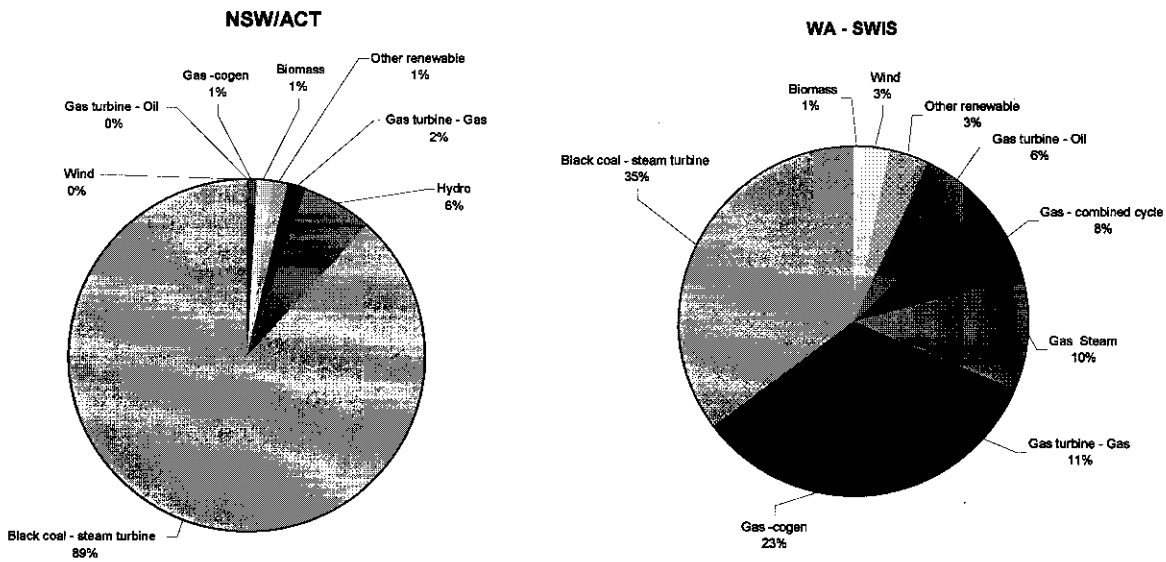
The Western Australian Energy Sector

Stationary energy

In 2006 the stationary energy sector was the source of 40% of Western Australia's emissions - the largest of any sector. Accordingly, stationary energy will be the sector most significantly affected by the CPRS.

Compared to a State such as New South Wales (NSW), Western Australia's stationary energy sector, by generation type, is relatively diverse. To illustrate, Figure 4 below shows the stationary energy generation composition of the SWIS in Western Australia, and of NSW and the Australian Capital Territory (ACT) in 2007[9]. By comparison, Western Australia is significantly less reliant on black coal (steam turbine), using a greater proportion of gas-based generation. In the north west of Western Australia this difference is even more pronounced, with almost all of the electricity in the NWIS generated from gas. Western Australia's greater reliance on gas, which is costlier and less emissions-intensive, means that at a lower permit price more abatement is likely to occur in States with a greater reliance on coal-fired electricity, such as NSW and Victoria.

Figure 4



[9] McLennan Maganasik and Associates 2007

Unlike most of the east coast of Australia, Western Australia is not serviced by a fully integrated transmission system. This is a result of the size of Western Australia and the remoteness and sparseness of its population outside of the metropolitan region. Depending on their needs and location, Western Australian businesses and communities source their energy by connecting to an integrated electricity system or from a pipeline or distribution system, or self-generate electricity from a stand-alone system. The options are:

- The SWIS – the integrated electricity network servicing the south west of the State and supported by the Wholesale Electricity Market (WEM);
- The NWIS – a partly integrated system servicing the north west of the State;
- The Dampier to Bunbury Natural Gas Pipeline;
- The Midwest Pipeline;
- The Goldfields Gas Transmission Pipeline;
- The Parmelia Pipeline;
- The WestNet Energy Gas Distribution Systems;
- The Gas Distribution Systems located in Esperance, Leinster and Margaret River; and
- Stand alone electricity generation plants (gas, coal, diesel and renewable).

The absence of a State-wide fully integrated energy system raises a number of issues when considering what responses to the proposed CPRS are feasible in Western Australia.

First, stand-alone diesel powered generation is the main source of energy for remote operations and communities where there is no option of connecting to an integrated system. Faced with a carbon price, these operations and communities will be unable to offset some of the carbon cost except by reducing consumption, as switching to cleaner fuels will not be an option due to the absence of alternative energy supplies in the short term. This could result in remote facilities becoming unviable for companies supplying products onto the international market at prices determined on a global basis. Negative social implications are likely where remote communities are closely aligned with a single production facility, such as Norseman. Norseman Gold generates its own power at its mine site and also supplies all of the nearby township's electricity.

Second, the Western Australian electricity market is split between the SWIS, the NWIS and other non-interconnected systems, and the size of each system is relatively small. The relatively small size of the market has been taken into account in the design of Western Australia's wholesale electricity market (WEM), which services the SWIS, by structuring it as a capacity market (with a Reserve Capacity Mechanism (RCM)) and a separate electricity market. As a result, the WEM is not expected to respond to the carbon price in the same way that has been predicted for the National Electricity Market (NEM) on the east coast. For example, the RCM provides more certainty that investment

in new generation will take place in a timely manner, so the investment shortfalls and supply security concerns for the NEM arising from the CPRS, are less likely in Western Australia.

Third, Western Australia has a range of excellent low-emission renewable energy sources. However, the system and network have not been developed with a view to optimising access to these resources. Although similar issues have been identified for the NEM, the issue in Western Australia is of a greater magnitude. The infrastructure task and technical challenges of responding to the carbon price through enabling large-scale deployment of low-emission renewable energy sources may therefore be more significant in Western Australia.

Expanded Mandatory Renewable Energy Target impacts and interaction with the CPRS

A substantial and rapid increase in the cost of carbon would be required to make renewable energy generation competitive on a large scale. It is not expected that the initial targets will be of the magnitude required to drive such an increase.

Consequently, the expanded national mandatory renewable energy target (MRET) scheme is expected to be the primary driver of renewable energy investment in Western Australia in the short to medium term. Western Australia is expected to be a competitive location for the development of renewable energy resources due to its comparatively high electricity prices.

Challenges to increasing renewable energy investment include managing the impacts of intermittent generation on the electricity network and accessing new renewable energy resources through a constrained and comparatively loosely meshed network.

In view of these challenges, a national MRET scheme design that encourages a lot of wind generation early in the life of the scheme will be unhelpful from a Western Australian perspective and will do the least to help facilitate Western Australia's transition to a low carbon emission economy.

Gas market

Western Australia has 80% of Australia's natural gas reserves and about 66% of Australia's natural gas production[10]. Demand for natural gas in Western Australia has risen from less than 20% of national consumption in the mid-1980s to a current level of around 35% of national consumption. This is a significant share, considering that the net amount of

[10] Argonaut Securities Pty Limited, *'The Western Australian Gas Market'*, September 2007, p.2

energy consumed in Western Australia each year accounts for only 14% of total energy consumption in Australia. Natural gas accounts for about 41% of total energy consumption in Western Australia, compared with 20% nationally[11].

The considerable distances between gas fields and markets and higher gas prices compared to the eastern states are likely to require a higher carbon price to encourage a shift to gas from coal for electricity generation in Western Australia. The majority of installed capacity in the north west is gas-fired with the current installed capacity of the NWIS being about 1100MW (all gas of varying efficiencies). Energy demand in the north west is growing so quickly that it is estimated that the load in the NWIS could double by 2015. This is largely due to the large number of resource projects proposed for the north west.

The future supply of domestic gas in Western Australia depends on the State's Domestic Gas Reservation Policy. New LNG projects must supply the equivalent of 15 per cent of gas for domestic use where access to Western Australian land or waters is required for processing or other purposes. Growth in the supply of domestic gas is therefore linked to new LNG projects and should be taken into account when considering the effects of the CPRS on the LNG industry.

Electricity prices

Regulated retail tariffs in Western Australia have been frozen for some time. Residential tariffs have not increased since 1997-98, resulting in an estimated real price reduction to 2009-10 of about 30%. Until July 2007, large business tariffs had not increased in nominal terms since 1991-92, resulting in a 34% reduction in real electricity prices to 2006-07. Small business tariffs have not increased since 1991-92, resulting in a real price reduction of 38% to 2009-10.

In the 2008-09 State Budget, the previous Government announced that electricity tariffs for small use customers would be increased by 10% in 2009-10, with further annual increases of no less than 10% to be phased in over a six to eight year period until the tariffs reach cost-reflective levels. The current Government is yet to announce its electricity tariff policy. The combined effect of a move to cost-reflective pricing and a carbon cost has the potential to result in significant increases in the cost of electricity for tariff customers which, if unmitigated, could lead to more households experiencing utilities hardship[12].

The Office of Energy has undertaken preliminary calculations to provide an indicative financial impact of the CPRS on residential consumers. Assuming a 10% tariff increase

[11] ABARE, *'Energy in Australia 2006'*, 2007, pp.55; and Chamber of Commerce and Industry of Western Australia, *'Meeting the Future Gas Needs of Western Australia - A Discussion Paper'*, May 2007, pp.38-41.

[12] Utilities (or essential services) hardship is defined as those households which have the intention but not the capacity to pay utility bills without negatively affecting their ability to meet their other basic living needs.

glide path to 2010-11, the indicative effect on a residential customer (using 5,200kW per annum) at various carbon prices is detailed in Table 1.

The indicative effect of the CPRS on residential customers in Table 1 only relates to 2010-11. If the carbon price increases each year, the effect on the residential customer bill will increase accordingly, but this will also depend on how the emissions intensity changes in the SWIS due to the CPRS. Table 1 does not take into account increases to network prices as a result of the CPRS – it is simply an indicative effect based on the creation of a carbon permit price.

Table 1: Indicative impact of a carbon price on electricity in 2010-11.

Permit prices ($)	27.02[13]	30.00[14]	40.00	50.00
Additional cost per k/Wh [15]($) (including GST)	0.03	0.03	0.04	0.05
Effect on the annual average residential bill ($)	143.90	159.78	213.04	266.30
Percentage change	15%	16%	22%	27%

It should be noted that these costs are in addition to an assumed glide path to return tariffs to cost-reflective levels

A uniform tariff policy applies in Western Australia, meaning that applicable regulated tariffs outside the SWIS are the same for the same classes of customers inside the SWIS who have access to the uniform tariff. Under this policy, the price increases shown above would apply to customers inside and outside of the SWIS (Horizon Power's carbon intensity is on average[16] similar to or lower than that of the SWIS).

Compensation for coal-fired electricity generators

The Green Paper highlights three main rationales for providing assistance to coal-fired generators that have been raised in previous scheme proposals or by stakeholders:

- energy security implications;
- fairness; and
- the effect of direct assistance on the investment environment.

[13] Carbon cost forecast from the Tariffs Review component of the Electricity Retail Market Review (April 2008)

[14] The carbon price is assumed to be in nominal terms.

[15] Based on the SWIS emissions intensity modelled by Frontier Economics for the Electricity Retail Market Review (April 2008). Frontier Economics estimated that the SWIS emissions intensity to be 0.8 tCO2/MWh in 2010-11.

[16] This is because Horizon Power supplies gas-fired electricity to the NWIS and operates 33 isolated systems.

To reduce the risk of adversely affecting the investment environment, the Green Paper proposes to provide a limited amount of direct assistance to existing coal-fired electricity generators as a means of offsetting some of their loss in asset value.

The State Government considers that energy security implications for Western Australia from the proposed CPRS are likely to be limited. As discussed earlier, coal-fired generation in Western Australia will remain viable at high gas prices and while carbon prices are relatively low. Furthermore, the WEM is designed to deliver greater investment certainty through the incorporation of the RCM.

As the proposed assistance is for loss in asset value and is not linked to production levels, existing coal-fired generators that are not viable after the commencement of the CPRS will shut down regardless of the provision of direct assistance. Communities, workers and regions economically linked to such generators will still be affected regardless of the provision of assistance. Accordingly, structural adjustments assistance for these groups should be given priority.

Direct assistance to existing coal-fired electricity generators will not affect electricity price rises as generators will pass through the carbon cost as higher prices. The only exception to this is when the generator is contractually restricted from carbon price pass through.

In Western Australia, Verve Energy, Griffin Coal (Bluewaters I & II) and Worsley Alumina (120MW coal-fired cogeneration unit) may be eligible for compensation for their coal-fired plants. The State Government is not aware of any other private self-generating facilities in Western Australia that utilise a coal-fired plant.

Equity Considerations

The Western Australian Government supports the provision of assistance to households affected by the introduction of the CPRS. The Green Paper's commitment to assisting households with the costs of the CPRS is welcomed.

The Green Paper proposes assistance to a variety of groups including low income households (income of $53,000 or less), those receiving pensioner, carer, senior and allowance benefits, and middle income households (with incomes of $150,000 or less). This assistance will help households meet the overall increased cost of living.

Estimates in the Green Paper, based on preliminary modelling and a carbon price of $20, project the price of all goods to rise by 0.9%. Assistance to low-income households is particularly important, as low-income earners are more than proportionally affected by increases in prices of essential goods and services because expenditure on these items makes up a greater share of overall income. They generally also have less scope to make energy savings and may not have access to the capital required to reduce energy and water use by purchasing more efficient equipment.

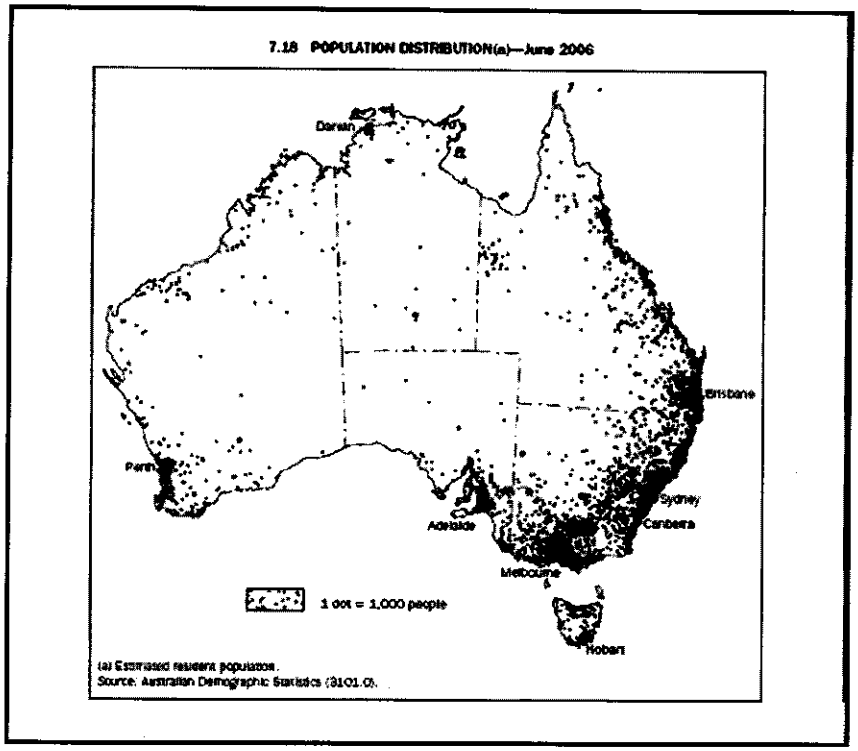
The issues for Western Australian households arising from the introduction of the CPRS largely mirror those elsewhere in Australia, however given the size of Western Australia and rapid economic growth in recent years some sections of the community may be disproportionately disadvantaged. These are:

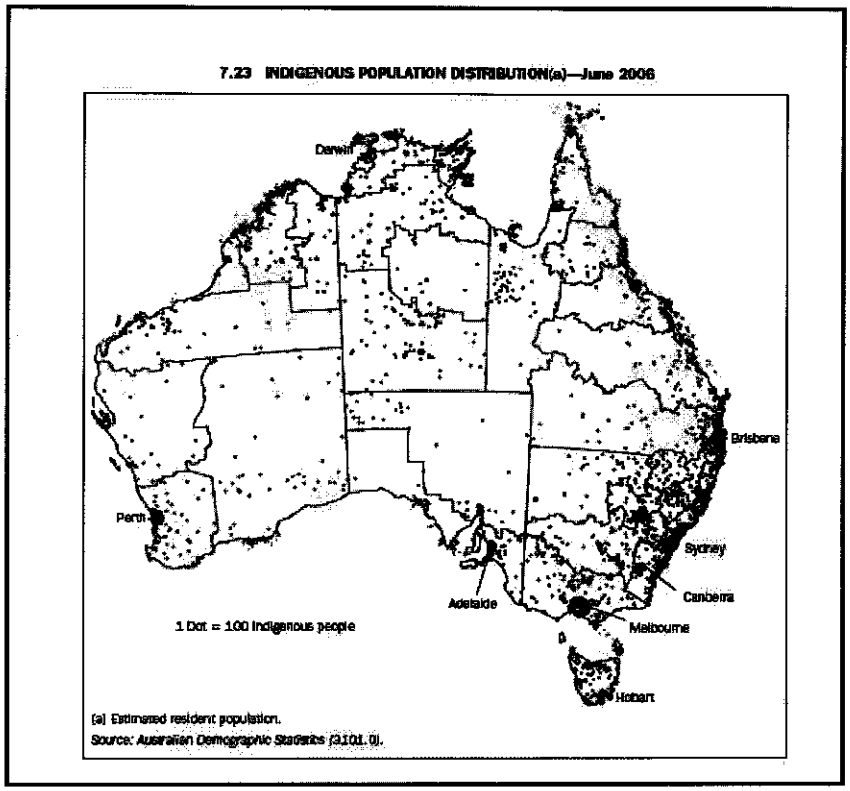
1. Remote and regional communities; and
2. Low income households.

Remote and regional communities

Regional Western Australia is sparsely populated compared to the other States and is characterised by large unpopulated areas with few large towns. There are a large number of remote aboriginal communities, pastoral leases and farming properties. This is illustrated in figures 7.18 and 7.23[17]. Many remote communities are outside the two main electricity networks and must generate their own power. They generally have small populations and lack basic infrastructure.

[17] ABS Catalogue 1301.0 pages 192 and 197.


7.18 POPULATION DISTRIBUTION(a)—June 2006
Darwin
Brisbane
Perth
Sydney
Adelaide
Canberra
Melbourne
1 dot = 1,000 people
Hobart
(a) Estimated resident population.
Source: Australian Demographic Statistics (3101.0).


7.23 INDIGENOUS POPULATION DISTRIBUTION(a)—June 2006
Darwin
Brisbane
Perth
Sydney
Canberra
Adelaide
Melbourne
1 Dot = 100 Indigenous people
Hobart
(a) Estimated resident population.
Source: Australian Demographic Statistics (3101.0).

In much of the north west and some parts of the south east of the State, on-grid electricity supply is limited and it is unlikely that many remote communities or properties will be connected to a networked (or grid) power supply in the near future. Self-generated power (usually diesel) is the only option in most of these cases. Self-generated power is more expensive and often unreliable. The CPRS will probably exacerbate the already high costs of electricity in these stand-alone power systems. These small communities are unlikely to be liable to purchase permits in the CPRS, however they will be affected by the carbon cost imputed in diesel fuel.

Diesel used to generate power for residential use is eligible for a rebate (currently 38.143 cents per litre) under the Diesel Fuel Rebate Scheme. However, diesel fuel used to generate electricity for other areas (such as schools or stores) is not eligible for the rebate and residents are not eligible for concessional tariffs if they generate their own power. The high cost of diesel fuel and resulting high cost of electricity means people are reluctant to use power, particularly those on low incomes[18].

Limited or non-existent public transport in most regional areas means that long distances are travelled by car. Many remote communities are hundreds of kilometres from a larger town which has shopping, health and banking facilities, for example Warburton is more than 900 kilometres from Kalgoorlie and other communities are even more isolated. This also means that transport costs comprise a greater proportion of the costs of essential goods and services. With little or no substitutes available these residents have little option but to pay the full carbon price.

Automotive fuel costs are, on average, around 10% higher in regional areas than in Perth[19], and in recent years, rises in liquefied petroleum gas (LPG) prices have disproportionately affected the cost of energy for regional households[20].

The costs of living in regional Western Australia has risen as a result of the commodity price boom - both directly, due a higher cost for petrol and LPG, and indirectly, due to increased demand for housing and other services by mining-related activities.

Rental prices in regional centres benefiting from the resources boom have increased significantly. For example, Real Estate Institute of Western Australia data shows that median rents in Kalgoorlie-Boulder increased by 28% over the year to March 2008 to $320 per week (just $10 per week below median rents in Perth, which had an annual increase of just 6.7%). Rents in other regional centres have increased to much higher levels reflecting the remoteness of these locations and the shortage of housing compared with demand. The range of average rental prices in regional Western Australia is outlined in the table below.

[18] http://fueltaxinquiry.treasury.gov.au/content/Submissions/Industry/downloads/ACC_217.pdf.

[19] WACOSS, The Rising Cost of Living in Western Australia, August 2007.

[20] Office of Energy, Summary of Public Hearings, Inquiry into LPG Affordability for Households in Western Australia found that prices of bottled LPG vary around the State from $75 in the Hills region of Perth to as high as $200 in the Pilbara region.

Table 2: Regional Rental Average Prices: Community Service Workers.

Location	Rent (per/week)
Broome - Derby	$300 - $700
Halls Creek	$300 - $400
South West/Great Southern	$175 - $480
Karratha - Roebourne	$800 - $1500
Port Hedland	$800 - $1400
Mt Newman	$800+

Source: WACOSS, WACOSS Survey - Accommodation for Community Service Workers in Remote Western Australia, December 2007

Regional households on lower incomes are struggling with increases in rental costs. This has reduced their capacity to afford other costs, including utilities. This is illustrated in Table 3, which shows a higher disconnection rate for regional customers whose power is supplied by Horizon Power.

Table 3: Annual disconnections by Western Australia's electricity suppliers, 2006-07.

Retailer	Number of disconnections	Disconnection (%)
Horizon Power	2,302	6.54
Synergy	6,535	0.74
Total	8,837	0.97

Source: Economic Regulation Authority, 2006-07 Annual Performance Report Electricity Retailers, January 2008, pg. 16

Given that increases in the cost of energy, transport and other goods and services flowing on from the introduction of the CPRS will be higher in many remote and regional areas of Western Australia, **it is important that the special circumstances of households in these areas, especially those on low incomes, are properly considered in the design of the CPRS.**

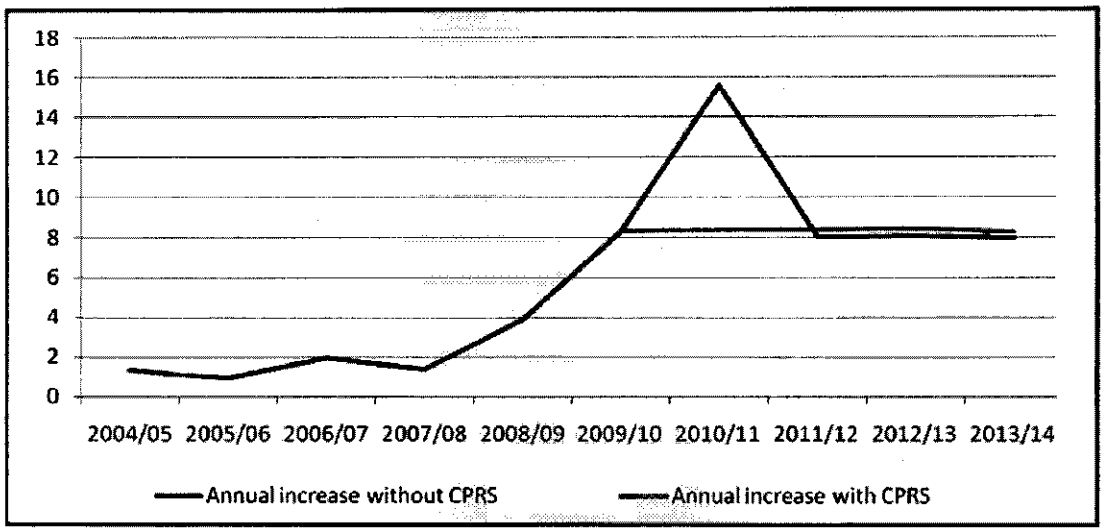
Low-income households

The situation for low and fixed income households in Western Australia has worsened over recent years due to the faster rise in the prices of goods and services in Western Australia. Over the four years to the June quarter 2008 the Perth 'All Groups'

Consumer Price Index[21] increased by 17%, 3 percentage points higher than the increase recorded nationally.

Indicative modelling has been undertaken to show the potential additional cost of the introduction of the CPRS on household utility bills (comprising electricity, gas, water and sewerage) under a carbon price of $30 a tonne. This is illustrated in the Figure 5 below. This modelling has only considered direct costs and has not, for instance, considered the potential effects of a carbon price on materials used for construction, which could affect capital costs. The modelling shows that, at a price of $30 a tonne, the CPRS could increase annual household utility bills by 7.25 percentage points.

Figure 5[22]: Illustrative Annual Percentage Increases in utilities bills for Western Australian households, based on a carbon price of $30 tonne.



Source: Western Australian government estimates based on: WACOSS, "The rising cost of essential services", June 2008, p3. ACF, ACOSS, Choice "Energy and Equity: Preparing households for climate change: efficiency, equity, immediacy" 2008, pg. 10; Office of Energy (Western Australia) estimates; Water Corporation estimates.

State Government utilities subsidies

The State Government currently provides a range of concessions and rebates for electricity, gas, water and sewerage. The total cost of these programs in 2008-09 will be around $90 million.

[21] ABS, cat. no. 6401.0

[22] It should be noted that the State Government has not yet determined an electricity price path.

Current expenditure on energy concessions and rebates alone is about $36 million a year and is delivered largely through the Energy Supply Charge Rebate (refer to Table 4). This rebate is delivered to holders of Pensioner Concession, Hardship Concession and Seniors cards (which are not means tested or are liberally means tested). It applies to about 190,000 or 25% of customers on the A1/A2 Residential Tariff.

The rebate applies to customers that hold the following means-tested cards:

Concession Cards	Seniors Cards
Centrelink Healthcare Card	Commonwealth Seniors Health Card
Pensioners Concession Card	Western Australian Seniors Card
Veterans Affairs Gold Card	
Veterans Affairs Pensioner Concession Card	

The effect of the CPRS on the cost of the Western Australian Government's rebate programs from an increase in costs sufficient to offset a carbon price would be at least $6 million a year (this does not take into account the potential for more households to become eligible for rebates due to price rises).

The other major rebate recipients are those that qualify for the Dependant Child Rebate, which applies to around 44,000 recipients. This rebate is means-tested and is paid based on the number of children in the household. Other rebates include Life Support Equipment, Thermoregulatory Dysfunction and Seniors Air-conditioning Rebates.

Table 4: List of State Government Concessions and Current Cost.

State Government Concessions	Annual costs ($ million)
Energy Supply Charge Rebate	23
Dependent Child Rebate	8
Account Establishment Fee Rebate	1
Seniors Air-conditioning Allowance	0.1
Meter Testing Rebate	-
Caravan Park Subsidy	0.2
Total Horizon Power costs for all the above	0.7
Life Support Equipment Electricity Subsidy	0.5
Thermoregulatory Dysfunction Energy Subsidy	0.1
Synergy and Horizon Power administration costs	2
Total	36

The State Government also provides additional support to the most financially disadvantaged households through a $24.4 million package of measures to tackle utility hardship. The package includes financial counselling, grants to assist those in genuine financial hardship and energy efficiency initiatives to lower power bills.

Other Issues

Scheme commencement date

The Western Australian Government recommends that the 2010 commencement date for the CPRS should be deferred for the following reasons:

- Activity level data is not available and no economic model exists to analyse activity level data;
- Current and accurate emissions data is not available and will not be available for some time;
- Further work is required on the compensation mechanism for the EITEs. This is unlikely to be resolved sufficiently within the existing timetable;
- Commonwealth Treasury modelling results have not been completed within the timeframe originally indicated (and are still unavailable) compressing the time available for the results to be considered by stakeholders;
- There is limited time between consultation milestones and no recognition given to competing processes such as the Garnaut Climate Change Review. For example the Garnaut Climate Change Review Draft Report was released one week in advance of the CPRS Green Paper;
- The final structure of the CPRS will not be known until the Federal Parliament considers it. This is not expected to occur until mid 2009, leaving approximately 12 months for liable parties to interpret the legislation and implement the necessary changes to their business practices. This means that many liable parties are unlikely to be fully prepared for the scheme; and
- The previous Commonwealth Government indicated that a 2012 commencement date for an Australian emissions trading scheme was feasible given the work required to design and implement it. It is unclear how the acceleration of the start date for the CPRS has been accommodated without compromising the quality of the final design and the level of preparedness of liable parties.

Market design, governance arrangements and international linkages

Market design

The Green Paper proposes an initial price cap through to 2014-15 in the form of a penalty regime without a 'make good' provision. Unlimited banking of permits will also be allowed. A price cap is extremely important in the early years of the scheme to provide

participants with certainty as to their maximum exposure. It should be noted, however, that this need lessens once secondary markets arise, as they can provide the same risk management effect from purchasing such instruments as options to purchase future permits, at a known price.

Banking creates incentives to bring forward abatement, secure in the knowledge that unneeded current permits can be applied to future liabilities. Generally, there should be no limits on the ability to bank.

However, the combination of unlimited banking and price capped permits does raise concerns about the duration of the initial scheme design, due to the following factors:

1. A price cap essentially creates a right to purchase unlimited permits at the capped price. Economic certainty is therefore delivered at the expense of the emissions cap.
2. If price-capped permits can be banked and there is a reason to suppose that future permits will be more expensive than price-capped permits, a rational response would be to get as many price-capped permits as possible and bank them.
3. As a result, the integrity of the scheme will be impaired due to exceeding the emissions cap during the price-controlled period but also importing those permits into the non-price-controlled period - effectively breaching future emissions caps as well.
4. It is understood that the EU regards price capped permits as inimical to linking with an Australian emissions trading scheme as linking would effectively allow importation of Australian price capped permits into the EU scheme.

For these reasons, the combination of banking and price caps needs careful design consideration. Options to manage this issue include setting the price cap at such a high level that it will be well above expected future permit prices (although this would degrade one element of a price cap - that of controlling financial exposure) or preventing price capped permits from being banked into non price capped years. Should the latter option be pursued, it seems likely that it would not be possible to distinguish between 'ordinary' permits and price-capped ones as they would be fungible within the price capped period.

The combination of rolling firm caps and gateways balances the need to provide certainty to business and other liable parties on future caps with the need for flexibility to adjust future targets up or down as circumstances change. The gateways principle provides a means of signalling future intentions while not locking the Government into unnecessarily tight trajectories that may need to be amended.

Governance arrangements and implementation

The use of the Council of Australian Governments as a consultation mechanism between the Commonwealth and States and Territories is supported. However, the Green Paper is largely silent on the level of consultation and engagement of State and Territory Governments. This needs to be clarified.

International linkages

A key element of an effective emissions trading scheme will be predictability and stability of prices. The significant swings in permit prices seen in the early years of the EU scheme are considered to have damaged confidence among EU participants and avoiding these should be a priority for the CPRS. In the longer term, it is expected that the development of secondary markets will act to minimise volatility but in the early years there is a case, as the Green Paper recognises, to limit the import of international permits. However, given the potential for international permits to act as a safety valve, this element must be well designed and the Green Paper does not appear to specify any particular limit.

There will be restrictions on the export of Australian emissions permits in the early years of the scheme. Similar considerations apply to preventing the export of Australian permits. If there is a significant price difference between Australian and international permit prices, overseas liable parties could seek to meet their requirements from Australia. Given the relatively small size of the Australian economy this could result in significant permit shortfall, resulting in much greater than predicted economic affects. This proposal is therefore supported although it is agreed that Australia can do nothing to prevent unilateral linking.

Coverage

Forestry

The Western Australian Government supports the treatment of forestry in the CPRS proposed in the Green Paper. Specifically, it supports the inclusion of forestry on an opt-in basis from the start of the scheme in 2010.

Western Australia has undertaken considerable work on the development of reforestation as a climate change mitigation option and would like to participate in the drafting of the detailed design rules and regulations for forestry in the CPRS.

Further information on the issues associated with the Western Australian forestry sector being included in the CPRS are provided in Appendix 4. The Western Australian Government is also preparing a separate submission in response to the Commonwealth Government's discussion paper on *'Detailed Design Issues Relating to Coverage of Reforestation'*.

Agriculture

The Western Australian Government is keen to work with the Commonwealth Government to determine the process for assessing whether agriculture should be covered by the Scheme.

If agriculture is to be covered by the Scheme, a number of issues will need to be resolved beforehand. In particular there needs to be:

- increased accuracy in estimating and measuring emissions;
- development of practical and cost-effective management practices and technologies that reduce agricultural emissions;
- development of a system for agricultural coverage that has low transaction costs; and
- identification of the required levels of assistance to EITE agricultural producers.

Resolution of these issues will require significant research for both agricultural emissions and possible reduction opportunities, such as soil carbon and revegetation.

Further information on the issues associated with the Western Australian agricultural sector being included in the CPRS, are provided in Appendix 3. The Western Australian Government may also provide a supplementary submission on agricultural issues.

Development of low emission technology options

The Western Australian Government seeks a more detailed consideration of the issue of research, development and commercialisation of low emissions technologies in the White Paper and a high level dialogue between the Commonwealth, States and industry regarding the best mechanisms to support low emissions technologies.

In this regard, the Garnaut Climate Change Review's Draft Report[23] highlighted the role of new low emissions technologies in minimising the costs of adjustment to the emissions trading scheme and the impediments to developing new low emissions technologies. To address this issue, increased funding for early research across relevant areas is recommended, potentially funded from revenue from the sale of permits.

[23] June 2008.

Appendix 1: Western Australia's Top Ten Exports, 2007-08

Rank	Commodity	Value ($million)
1	Iron ore and concentrates	19,793
2	Gold, non monetary (excl. gold ores and concentrates)	12,016
3	Combined confidential trade	9,549
4	Petroleum oils and oil obtained from bituminous materials, crude	9,181
5	Natural gas	4,784
6	Wheat (inc. spelt) and meslin, unmilled	1,818
7	Nickel ores and concentrates; nickel mattes, nickel oxide sinters and other intermediate products of nickel	1,158
8	Copper ores and concentrates; copper mattes, cement copper	1,151
9	Ores and concentrates of base metal (excl. iron, copper, nickel, aluminium, uranium and thorium)	936
10	Nickel	789
	Other	7,455
	Total	68,630

Source: ABS cat. no.5368.0.

Appendix 2: Level of Assistance to EITEs Equations

The short-run cost disadvantage faced by EITE exporters, if Australia is the only country in the relevant market to introduce a CPRS, is:

$$C_i = (P_{i,I} - P_{i,EITE}) * Q_{i,t-1}$$

where:

$$P_{i,I} - P_{i,EITE} = T_i * e_{si} * \left(\frac{1}{e_{si} - e_{dwi}} - \frac{1}{esi - e_{dAi}} \right)$$

$$e_{dAi} = n * e_{dwi} - (n-1) * e_{s,row}$$

where: C_i is the compensation for industry i, which produces product i;

$P_{i,I}$ = the ideal world price for product i if a worldwide carbon price was in place;

$P_{i,EITE}$ = the world price if only a proportion of the world is covered by a CPRS;

T_i = per unit production level of disadvantage faced by industry/activity i over and above any compensating macroeconomic effects;

e_{si} = the elasticity of supply of industry i;

e_{dwi} = the elasticity of the world demand curve for the products of industry I, if all producers were covered by a CPRS;

e_{dAi} = the elasticity demand curve facing the Australian industry i, if only Australia introduces a CPRS;

n = the number of countries producing product i; and

$e_{s,row}$ = the elasticity of supply from Australia's competitors for product i.

This can easily be generalised to the case where more countries than Australia introduce a CPRS, but less than full world coverage is achieved.

Broad judgements could be made about each of these parameters with, for example, industry i's supply elasticity determined by its capital intensity. The level of compensation will invariably be less than 90% across a wide range of parameters, with many values less than 60%. This should enable a spread of assistance to a wider range of industries or a transfer of assistance from existing industries to new investments.

Appendix 3: Agriculture

Emissions Uncertainty

The Western Australian Government is concerned that the emissions factors used in the National Greenhouse Gas Inventory (NGGI) may not be an adequate representation of actual emissions in agriculture. In the absence of more appropriate data, the Commonwealth Government adopts the International Panel for Climate Change (IPCC) default factors to calculate national emissions. Research undertaken across Australia found that nitrous oxide emissions were significantly less than the default value provided by the IPCC. Evidence of this kind led the Commonwealth Government to adopt a 'country specific' nitrous oxide emissions factor of 0.3% for non-irrigated crops, instead of the IPCC default value of 1.25%. Research is required to ensure that the emissions factors used by the NGGI are appropriate and adequately reflect actual emissions.

Cropland, grazing land management and revegetation (Article 3.4 sinks)

Article 3.4 of the Kyoto Protocol relates to carbon sinks associated with agricultural soils, land use changes (cropping or grazing systems) and forest management. Research is required to determine the sequestration potential and liability of emissions, particularly in crop and grazing land management. The forestry section notes that similar research is required to define emissions from forest management.

The Western Australian Government could support inclusion of Article 3.4 sinks in the CPRS if there was a scientifically accepted estimation method agreed to by all jurisdictions. The Commonwealth Government should consider disaggregating individual components of Article 3.4 sinks, so that those components can be separately assessed.

Appendix 4: Forestry

The Western Australian Government supports the treatment of forestry in the CPRS proposed in the Green Paper. Specifically, it supports the inclusion of forestry on an opt in basis from the start of the scheme in 2010.

The Western Australian Government recognises that reforestation produces significant environmental and economic benefits. This is particularly important to Western Australia where widespread salinisation and erosion threatens the sustainability of agricultural lands and water supplies. In some locations, these problems can be rectified by reforestation.

The Western Australian Government also supports other aspects of the CPRS, specifically:

- Using a Kyoto-compatible framework, with the potential for future Joint Implementation investment;
- Allowing reforestation established between 1990 and 2010 to be included in the scheme on a voluntary opt-in basis;
- Advocating the recognition of carbon stored in harvested wood products in the CPRS; and
- The initial exclusion of Kyoto Article 3.4 forest management from the CPRS. The Western Australian Government recognises that significant emissions accounting research will be required prior to the inclusion of this sector and advocates a co-ordinated national approach on this issue.

Additional economic and carbon mitigation benefits can be obtained through the use of forest harvest residues and purpose-grown crops for bio-energy. The Western Australian Government urges the Commonwealth Government to remove any impediments to the use of these materials. Moreover, the Government supports active investment in the development of technologies that produce liquid biofuels from woody crop materials and agricultural wastes.

For landholders, tools such as the National Carbon Accounting Toolbox (NCAT) are complex and should be simplified if they are to be used for reporting purposes. The forest industry should also be granted the option to use alternative tools to NCAT for carbon prediction, monitoring, reporting and measurement. This option to use alternative carbon accounting tools is consistent with requests from the forestry industry for more accurate tools, which integrate high resolution remote sensing data with land titling information and digital mapping.

The Western Australian Government also supports annual reporting of carbon balances in forests with permit acquittal occurring on a similar cycle. This reporting could proceed using verified carbon accounting models with more detailed occurring inventory at five yearly intervals.

Furthermore, the Western Australian Government recognises that the attractiveness of reforestation as a mitigation option will depend to a large extent on the design rules. A detailed response will be submitted to the supplementary discussion paper, '*Detailed Design Issues Relating to Coverage of Reforestation*'. The Western Australian Government has undertaken considerable work on the development of reforestation as a climate change mitigation option and would like to participate in the drafting of detailed design rules and regulations covering forestry in the CPRS.

Premier

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Tasmania

29 SEP 2008

Senator the Hon P Wong
Minister for Climate Change and Water
Parliament House
CANBERRA ACT 2600

Dear Senator Wong Penny,

Please find attached a copy of the Tasmanian Government's submission in response to the Commonwealth Government's Green Paper on the Carbon Pollution Reduction Scheme.

My Department will forward a copy of this submission directly to the Commonwealth Department of Climate Change.

Yours sincerely

David Bartlett MP
Premier

CARBON POLLUTION REDUCTION SCHEME

GREEN PAPER SUBMISSION

September 2008

Department of Premier and Cabinet

Tasmania

OVERVIEW

The Tasmanian Government supports the Australia Government's commitment to the introduction of a Carbon Pollution Reduction Scheme (CPRS). Climate change is a serious issue for Australia and we need to take action now. A well designed emissions trading scheme is fundamental to providing certainty and investment confidence for government, industry and the community about Australia's emissions reduction objectives and timeframes for achieving them.

Tasmania is a world leader in the generation of renewable energy and sustainable forest management. Because of Tasmania's early and substantial investment in renewable energy, our per capita emissions are already about 40% lower than the Australian average. A properly designed scheme should help reduce Australia's emissions substantially. However, it would be a perverse outcome if Tasmania, a state that already has many of the characteristics other states will need to emulate to achieve reductions in greenhouse emissions, suffered economically as a result of the introduction of a CPRS.

The Tasmanian Government is generally supportive of the design features proposed for the Commonwealth's CPRS and welcomes the opportunity to provide a submission on the Australian Government's Green Paper. The release of the modelling results and underlying assumptions will enable more detailed analysis of the proposed Scheme and its implications for Tasmania and we encourage the Australia Government to make these results available as soon as possible.

This submission provides some high level comments in relation to the following areas of interest:

- Support to low income households;
- Emissions-intensive trade-exposed industries;
- Forestry;
- National Parks and State Reserves;
- The expanded National Renewable Energy Target Scheme;
- Agriculture; and
- Shipping and Transport.

SUPPORT FOR LOW INCOME HOUSEHOLDS

We strongly support the Paper's emphasis on supporting families, and particularly low-income families, to adjust to the increased prices that will result from a CPRS. The Tasmanian Government believes that this is the highest priority for use of CPRS revenue and that the Scheme should be designed to ensure sufficient funds are available for this purpose.

The CPRS and the pricing of carbon will change the relative prices of the goods and services that all households use, adding to the cost of living. There is no doubt that assistance needs to be provided to the most vulnerable in the community, however, the Tasmanian Government believe it is essential that it is the right kind of assistance. Assistance through the tax and payment system alone, that meets or largely meets the higher cost of energy and other essentials is unlikely to encourage households to change the behaviours that will result in a reduction in greenhouse emissions. It will also be important to ensure that any assistance to support behaviour change be provided in a timeframe to smooth the adjustment for households.

It is on this basis that Tasmania supports a combination of cash support, together with a range of measures to support adaptation including education, financial assistance and other incentives and measures that assist low income households transition to a low-carbon economy and change behaviours.

COMPENSATION FOR COAL-FIRED ELECTRICITY GENERATORS

Tasmania is opposed to the proposal to provide assistance to coal-fired power generators, and the apparent move away from Garnaut's recommendation to auction all permits. We believe that both of these measures would undermine the CPRS by reducing the revenue available to assist low income families and the capacity to invest in research and development and impeding the price signals that are intended to alter resource allocation. Providing such assistance to coal-fired power generators effectively rewards some of the major producers of Australia's greenhouse emissions at the expense of those least able to adjust to higher prices.

However, if the Australian Government is committed to providing assistance to coal fire electricity generators then it should be in the form of transitional assistance that is designed to accelerate the structural adjustment of the coal fired power industry, not compensate it for financial loss.

In this regard, Tasmania recommends a Structural Assistance Scheme be established to help strongly affected industries adjust. The Scheme could provide capital assistance to companies to undertake projects which reduce the emissions intensity of their core business. The key features of this scheme could include:

- a percentage of the revenue derived from auctioning permits be allocated to the Structural Assistance Scheme;
- an independent expert body, with joint Government and Industry oversight, be established to distribute funding using a competitive process;
- funding rounds be conducted on a six monthly basis;
- bids be assessed and scored having regard to a range of criteria, including:
    - ⇒ the discounted stream of emissions reduction divided by the discounted value of the requested assistance (60 per cent weighting); and

⇒ public benefit/value, contribution to energy security, development of new technology, is it replicable elsewhere, is it relevant overseas etc (collectively 40 per cent weighting collectively); and

- successful bidders must produce their stated reduction in emissions intensity, without decline in gross product output, or surrender an equivalent number of permits.

Under this arrangement, coal-fired electricity generators would be able to access transitional funding to both facilitate and reward reductions in their carbon intensity, instead of being subsidised to maintain the status quo.

EMISSIONS-INTENSIVE TRADE-EXPOSED INDUSTRIES

Tasmania supports the provision of transitional assistance for certain emissions intensive trade exposed (EITE) companies in order to prevent "carbon leakage" associated with the relocation of companies to jurisdictions with less stringent emissions controls and to prevent the loss of economic activity. However, in designing these arrangements care needs to be taken to safeguard against unintended outcomes and to ensure there are incentives to transition to lower carbon intensity.

The Tasmanian Government notes the proposal to use "emissions per unit of revenue" as a basis for determining the materiality of carbon cost impact across industries. As currently defined, this measure does not adequately reflect the fact that many Australian industries are price takers in the international market and experience significant volatility in their revenue base from year to year. An alternative may be to determine materiality across EITE industries by reference to emissions per unit of average input cost. The advantage of this measure is it is a direct measure of the impact of the CPRS on the ongoing profitability of EITE industries. If there is a strong preference to use "emissions per unit of revenue", the use of a ten-year rolling average to calculate revenue may provide a more reflective measure.

The "electricity factor" used in calculating the level of assistance provided to emissions-intensive, trade exposed companies needs to be carefully considered. The Green Paper states that the electricity factor is:

> "...designed to relate the increase in electricity price faced by EITE entities as a result of the CPRS to the price of permits."

Tasmanian companies primarily use renewable electricity generated by Tasmania's hydro based electricity assets. As a result, the electricity factor of the electricity they use is about 15 per cent of the mainland average. Nevertheless, Tasmanian EITEs will see an uplift in their electricity price equivalent to that experienced by interstate competitors, as a result of our participation in the National Electricity Market.

In other words, if existing state-based electricity factors are used when calculating assistance levels then Tasmanian companies will be disadvantaged relative to their mainland counterparts even though they will experience almost identical increases in input costs. This issue may be addressed by expanding the definition of "electricity factor" to include the impact of the carbon price on electricity, whether directly or indirectly through the market.

The Tasmanian Government also notes that the Green Paper does not detail how, or if, assistance is to be provided to EITE entities that may be established in the future. We believe that consideration needs to be given to this issue and acknowledge it may be appropriate for eligibility to be based on different criteria to ensure that new EITE entities develop processes that meet environmental best practices.

FORESTRY

Tasmania supports the Green Paper's positive approach to forestry and the recognition that forests will play a key role in reducing Australia's emissions.

We strongly support the "opt-in" approach proposed in the Green Paper. If coverage of forestry was made compulsory, a broad cross section of the industry may be required to account for activities with little or no net benefit to the objective of the CPRS. The opt-in approach will reduce unnecessary transaction costs for industry.

The Tasmanian Government also supports the commitment to seek international recognition for the role that wood products and pre 1990-forests can make in capturing and sequestering carbon. However, given the inherent challenges of global governance and difficulties in reaching consensus on these matters, international agreement is likely to be some way off. A failure to act in the absence of international agreement would be a wasted opportunity for Australia to put in place initiatives that could have a real and immediate impact on carbon emissions.

The term "forestry" is sometimes incorrectly used in the paper to describe land use change arising from deforestation or land clearing for activities such as urban or agricultural development. "Forestry" has a more specific and widely recognised definition; the long-term management of forests.

Afforestation and deforestation are land use change components. That is, they add or subtract from the pool that is available for forestry, just as they add or subtract to the pool available for agriculture. Tasmania believes that it is important that these terms are used correctly and unambiguously to ensure the intent of the CPRS is clearly understood.

The Tasmanian Government has received representations from industry participants outlining concerns regarding detailed accounting and compliance issues. We appreciate the Australian Government is undertaking consultation with the forest industry directly and envisage that these issues are being addressed in that forum.

NATIONAL PARKS AND STATE RESERVES

Both the Green Paper and the Garnaut Climate Change Review recognise the importance of large reserved tracts of land including World Heritage Areas, National Parks and State Reserves as carbon sinks and for maintaining biodiversity. However, the Green Paper does not address whether any revenue from the CPRS will be assigned to assisting with the management of these areas, which will become increasingly important as a result of the impacts of climate change. Tasmania is keen to see this issue addressed further in the White Paper.

EXTENDED RENEWABLE ENERGY TARGET SCHEME

The Tasmanian Government believes that increasing renewable energy generation is an integral part of responding to the challenge of reducing carbon emissions levels and strongly supports the Australian Government's intention to increase the amount of renewable energy generated in Australia through an expanded Renewable Energy Target (RET) Scheme.

There are many benefits to be derived from an expanded RET Scheme, including:

- transforming Australia's stationary energy sector, which is where a high proportion of the nation's emissions currently originate;
- driving a rapid but sensible and sustainable development of renewable energy technologies and infrastructure in Australia; and
- developing new supplies of electricity and helping them to achieve economies of scale.

We believe that the expanded RET will complement a properly designed CPRS by driving the necessary rate and pace of change toward greater use of renewable energy.

The Tasmanian Government believes the RET Scheme should build on the successes of the Mandatory Renewable Energy Target (MRET) Scheme.

AGRICULTURE

The Tasmanian Government supports the position not to initially include the agriculture sector in the CPRS. However, the primary industry sector has the potential to make a significant contribution to the reduction of greenhouse emissions in Australia. Tasmania believes that outlining a framework for the inclusion of the agriculture sector, together with a date for inclusion is a necessary first step. Providing certainty about coverage will encourage investment and research into a range of issues including measurement, management practices, the potential for carbon sequestration in vegetation and soils. The Tasmanian Government would support appropriate complementary measures to provide incentives for emission reduction actions until this sector is covered by the CPRS.

SHIPPING AND TRANSPORT

The Green Paper states that transport emissions account for approximately 14 per cent of Australia's emissions, and of that road transport makes up 90 per cent with the remainder coming from rail, domestic aviation and shipping.

On this basis, Tasmania questions the proposed fuel excise offset for heavy vehicle road users and motorists which appears to provide concessions to user groups creating the greater proportion of transport emissions at the expense of transport modes that contribute significantly lower transport emissions. This will not send contemporary messages to motorists regarding fuel use or encourage better use of public transport.

The Green Paper states that fuels used for international shipping and aviation, including domestic sections of international voyages will be netted out from the CPRS. This exclusion is likely to have a negative impact on domestic shippers where freight is contestable, as international shippers will not be exposed to the same costs.

The competitive disadvantage the CPRS may bring to shipping and aviation is of particular concern to Tasmania as an island state dependant on sea and air for transporting goods and people to and from the mainland.

The Hon Carmel Tebbutt MP

Deputy Premier
Minister for Climate Change and the Environment
Minister for Commerce

In reply please quote: Doc08/4034

Senator the Honourable Penny Wong
Minister for Climate Change and Water
Parliament House
CANBERRA ACT 2600

Dear Penny Minister

Please find enclosed the NSW Government submission in response to the Green Paper on the Carbon Pollution Reduction Scheme. The Government appreciates the opportunity to contribute to the development of the Scheme, and strongly supports its proposed introduction.

Given its significance and complexity, the NSW Government submission outlines a number of implementation issues that will need to be carefully considered.

The NSW Government will continue to work with the Commonwealth to ensure that Australia has an emissions trading scheme which manages an orderly, smooth, but nevertheless profound, transition to a carbon-constrained future.

Yours sincerely

Carmel Tebbutt

Carmel Tebbutt MP

18 SEP 2008

Level 30, Governor Macquarie Tower, 1 Farrer Place, Sydney NSW 2000 Tel: (02) 9228 4866 Facs: (02) 9228 4855

The Carbon Pollution Reduction Scheme: Green Paper

NSW Government Submission

EXECUTIVE SUMMARY

For many years, NSW has strongly supported the introduction of an Australian emissions trading scheme. In 2003, NSW introduced the world's first mandatory greenhouse gas emissions trading scheme, the Greenhouse Gas Reduction Scheme (GGAS). As a result of successfully developing and implementing GGAS, NSW has a unique knowledge and skill base in this area. NSW also initiated the National Emissions Trading Taskforce, a collaborative process between States and Territories to design and implement an emissions trading scheme.

NSW, like the Commonwealth Government, has a greenhouse gas emissions reduction target of a 60% reduction on 2000 levels by 2050. This target was formally adopted in the NSW State Plan in 2006. NSW welcomes the introduction of the National Carbon Pollution Reduction Scheme (CPRS) and the opportunity to contribute to its development.

The introduction of a national emissions trading scheme is a landmark reform which will shape the NSW and Australian economies for decades. The CPRS should therefore be designed to attain the challenging greenhouse targets in coming decades as efficiently as possible, minimising economic risks and costs, and distributing them fairly between present and future households and businesses. While the NSW Government naturally has some concerns about the economic risks associated with the implementation of the CPRS, especially in the energy sector, the NSW Government believes these can be managed with appropriate design, and welcomes the transitional assistance measures and risk management instruments outlined in the Green Paper. In particular, maintaining market capacity to invest in new energy technologies will be essential to achieving a smooth transition to a low emission economy. This transition, however, needs to be profound as well as smooth. Delaying emissions reductions will increase the aggregate costs of achieving greenhouse emission reduction targets as well as increasing the risks of a carbon price shock in future decades.

Some of the key issues the NSW Government addresses in this submission to the Commonwealth include:

- The coverage of agriculture, reforestation, deforestation and land use: NSW supports the opt-in of reforestation and the exclusion of deforestation; the Commonwealth working to enhance international accounting rules on land-uses; and the use of offsets for agriculture in the interim while the feasibility of including agriculture in the scheme is being considered;

- The coverage of the waste sector: although the waste sector has emission characteristics that do not make it ideal for coverage, NSW nonetheless supports the inclusion of the waste sector and has developed two models for consideration as to how the waste sector could be covered. NSW believes that certain elements of the waste industry meet the criteria to be 'significantly affected' industries, but that this could potentially be obviated through the design of coverage rules;
- Emissions-Intensive Trade Exposed (EITE) industry arrangements: NSW broadly supports the proposed EITE provisions, but has concerns about the eligibility for assistance, or adequacy of assistance for sectors of importance to the NSW economy such as agriculture, pulp and paper making and coal mining;
- Strongly affected industries: NSW supports the provision of assistance to existing coal-fired generators, and seeks involvement in any final decision on the quantum involved.
- Investment in Research, Development and Innovation (RDI) and Infrastructure: major on-going investment to accelerate RDI and fund low-emissions infrastructure is going to be required to meet greenhouse targets at least-cost in the medium term. NSW would like to see an on-going allocation of permit revenue to RDI and infrastructure from the outset of the CPRS.
- The location of CPRS institutions: if Australia is to successfully compete to be the carbon trading hub for the Asia-Pacific region, it must consolidate regulatory and administrative infrastructure in Sydney where there is already a critical mass of financial services and carbon trading expertise.
- GGAS Transition: The Commonwealth and NSW must work together to ensure a fair and efficient transition.

It is vital to get the design of the CPRS right. NSW looks forward to working with the Commonwealth to do so.

THE CARBON POLLUTION REDUCTION SCHEME

The NSW submission is organised into comments on issues as they arise chapter-by-chapter in the Green Paper.

Chapter 2 Coverage

NSW believes the coverage of the scheme should be as wide as practical, as this will be the most efficient and fairest way of cutting greenhouse gas emissions. Exempting sectors potentially reduces scheme participants' access to cost-effective sources of abatement, increasing the costs for the remaining businesses covered by the scheme and for the community. Coverage should be broad, subject to the limitation that transactions costs must not form a significant proportion of abatement costs. Economic efficiency, risk management and distributional equity should also be considered.

NSW supports the coverage proposals of the CPRS on the basis of these principles. However, the inclusion of some sectors will need to be carefully managed.

FUGITIVE EMISSIONS

The Green Paper's preferred option is to include all fugitive emissions from coal mines, including those from open cut coal mines, on the commencement of the scheme.

Fugitive emissions from underground coal mines are better able to be measured, captured and utilised than are those from open-cut mines. If underground and open cut mines are treated equally under the scheme, underground mines would be advantaged relative to open-cut mines. NSW seeks clarification as to whether underground and open-cut mines will be treated equally, or whether some mechanism to accommodate differences in technical capacity for abatement will be developed.

Fugitive emissions from derelict or decommissioned mines can continue after mining operations have ceased. The Green Paper acknowledges this as a significant issue, but it is unclear how emissions from such mines will be dealt with under the scheme. Options include to cover derelict or decommissioned mines (subject to transaction costs) in the CPRS, exclude them and develop an offsets scheme encouraging companies to capture and utilise fugitive emissions from decommissioned mines, or complementary measures. The Green Paper indicates further consultation will take place on this issue. NSW would like to be involved in the analysis and consultation to identify an appropriate treatment for decommissioned mines.

AGRICULTURE, REFORESTATION, DEFORESTATION AND LAND USE

Agriculture

NSW supports the proposal to postpone the decision on whether or not to cover agriculture in the CPRS.

Timing

It is not clear from the Green Paper whether the decision on covering agriculture will be made *in* 2013 or *by* 2013. NSW would like clarity to provide certainty for the agricultural sector.

Interim measures

Delaying coverage until at least 2015 leaves a considerable period in which there may be no incentives in place to encourage abatement of agricultural emissions. Given the magnitude of emissions from agriculture (approximately 15% of Australia's total emissions in 2006), and the potentially significant impacts on agriculture from inclusion in the CPRS, every effort should be made to find complementary measures prior to 2015. NSW acknowledges there are policy and administrative challenges involved in

developing complementary measures for agriculture, and is willing to work with the Commonwealth and other States and Territories in the development of such measures.

Complementary measures for agriculture should have two policy objectives. First, increased adoption of best management practices. Many available technologies, for example, may not have been adopted because some farmers do not have the relevant information, do not have the skills to apply those technologies in a profitable manner, or face poor market signals in relation to those on-farm practices that have the potential to directly attract market premiums from consumers, or financial support from the broader public.

Second, reducing the cost of mitigation through the development of a wider range of farm level mitigation strategies and low emissions enterprises, and in so doing, minimise the impacts on profitability, food production, market share, and the costs of agriculture's possible future inclusion in the CPRS.

Whether abatement is driven by the inclusion of agriculture in the scheme or by some other policy measure, substantial research and development is needed to improve the capacity of the sector to reduce emissions. Specific needs include:

- developing a wider range of on-farm abatement strategies, particularly for methane from ruminant animals, but also for nitrous oxide emissions and sequestration of carbon in soils – including new technologies for long term carbon sequestration, such as biochar;
- refining emissions estimate and verification methods; and
- improving farmers' access to available abatement technologies and practices.

Work has been underway in each of these areas for a number of years now, but progress has been very limited to date, particularly in the area of ruminant methane control. Work in this area needs to be accelerated and will require significant financial commitment if agriculture is to make a meaningful, economically sustainable contribution to meeting emissions targets in the longer term.

Points of liability

NSW broadly supports the concept of aggregated liability, while recognising the trade-off between minimising transaction costs and providing incentives for mitigation by individual farmers. Enabling on-farm accreditation and allowing large emitters to manage their own emissions is supported to encourage on-farm abatement practices. Further innovation is required in systems to measure and verify emissions at least possible cost, which requires further R&D as a matter of priority. NSW has expertise to contribute to this aspect of scheme design.

Offsets

The issues surrounding the development of offset credits in the agricultural sector are substantial, as acknowledged in the Green Paper. However, these issues are not insurmountable.

There are likely to be some conditions under which offsets from agriculture are administratively straightforward, provide low-cost abatement and will not cause difficulties later if agriculture becomes a covered sector. In fact it could be argued that the additional revenue generated from offsets before 2015 could provide capital to assist small operations in implementation of the scheme, while also providing additional incentives to reduce their carbon liability before their CPRS obligations take effect.

Exclusion of changes in soil carbon limits the options available to farmers to minimise their costs under the CPRS such as for energy, fuel and fertiliser. It also limits the extent of other positive economic and environmental benefits that are associated with increasing levels of soil carbon (reduced erosion, improved water quality, improved farm productivity and resilience).

Further consideration is required about the shape of international accounting rules and Australia's coverage under optional elements beyond 2012.

NSW strongly supports leaving open the option of developing offsets from the sector and actively seeking opportunities. NSW has expertise arising from its experience with agricultural production systems and the NSW Greenhouse Gas Reduction Scheme, and is willing to share this with the Commonwealth.

Land Use

Coverage

NSW notes that it is not proposed to include in the CPRS sources of emissions and carbon capture and storage methods that are not currently covered in the international accounting approaches. In particular, it is not proposed to cover the land uses that Australia opted not to count in our Kyoto Protocol commitments: forest management, grazing land management, cropland management and non-forest revegetation.

This excludes important opportunities for sequestration such as soil carbon in farming systems, revegetation with non-Kyoto vegetation (for example low and sparse vegetation and land cleared post 1990) and management of Australia's remaining native vegetation. There may also be scope to go beyond previously defined sequestration opportunities to include potential carbon storage in other forms such as algae and biochar.

Negotiations on the second commitment period of the Kyoto Protocol (or a successor agreement) provide an opportunity to renegotiate and enhance the accounting rules and have these sources of emissions and removals included in Australia's international

commitments. It is essential that Australia consider these issues in time for the second commitment period.

NSW therefore supports the position in the Green Paper that Australia should increase its efforts to change the international accounting framework in ways that reflect Australia's particular circumstances. Specifically, work needs to be done to enable international accounting of reservoirs of carbon in agricultural soils, non-Kyoto vegetation and managed forests. The CPRS rules need to be sufficiently flexible to incorporate changing international accounting rules.

Complementary measures should be investigated to promote sequestration in non-covered land-uses prior to their coverage by the international accounting rules and the CPRS, such as participation in voluntary carbon markets. These activities will assist the development of practical estimation methods and administrative arrangements.

Reforestation/Forestry

Coverage

NSW supports opt-in coverage for reforestation. NSW also supports the principle that the CPRS cover greenhouse emissions only and that other measures be used to monitor and regulate biodiversity and water impacts.

Transaction costs

To maximise participation in the scheme, NSW advocates keeping the transactions costs to a minimum, without compromising the integrity of the scheme. More specifically, the following deserve consideration:

- Spatial data: The identification of forests that opt-in to the scheme should be flexible enough to facilitate participation of sub-parcels of land.
- Acquittal periods: Costs could be reduced by extending acquittal periods and enabling average carbon stock approaches.
- Transactions: The scheme should enable carbon pooling and agents to act on behalf of scheme participants.
- Land title: Land holders who have opted-in should be able to pass on the asset/liability with the land. Leasehold properties, including crown leases, should not be excluded from the scheme.

Accounting

Australia's reservoir of harvested wood products is growing however the international accounting rules assume that all reservoirs of harvested wood products are static, i.e. the pool of wood decomposes at the same rate that it is harvested. Current international

thinking recognises that this assumption is incorrect. Taking into account the store of carbon in harvested wood products in Australia could increase the carbon sequestration estimates from reforestation. This would in turn reduce Australia's estimated emissions and could provide additional incentive for reforestation if it were counted in the CPRS. Discussion has started internationally on how the rules could be changed to reflect current research on harvested wood products. Australia should take a leading role in these discussions to ensure that these changes can be incorporated into the CPRS as soon as possible.

Deforestation

NSW agrees with the Commonwealth's assessment that including emissions from deforestation within the scheme would duplicate the role of State-based land clearing legislation. However, it is acknowledged that there are still significant emissions from land clearing and complementary measures will be necessary to reduce emissions.

NSW supports the suggestion that incentive-based mechanisms be investigated for avoided deforestation.

TRANSPORT

NSW supports the inclusion of the transport sector in the CPRS and believes the CPRS should operate uniformly across transport modes. Transport is the third largest source of emissions, and an equitable and efficient scheme must therefore include the transport sector.

NSW is mindful of the financial stresses the community is experiencing due to recent increases in petrol prices, and notes the Green Paper proposes an adjustment to the fuel excise to offset the impact of permit prices until 2013.

It is important that the adjustment in the fuel excise does not introduce any distortions which would militate against the intent of the CPRS to induce substitution towards lower-emissions modes of transport or fuels.

NSW seeks confirmation that the fuel excise adjustment will be fuel-neutral (and not impact on the relative cost of biofuels).

Clarification is also sought on the application of the proposed measures for on-road business users and heavy vehicles. Under existing arrangements, heavy vehicles pay fuel tax up to the amount of the road user component of the charge with the remainder offset by a fuel tax credit. If the offset for the impact of the CPRS on fuel prices is to apply to the road user charge, this could inadvertently favour road over rail freight unless there is an equivalent compensatory offset for rail.

NSW also seeks clarification that the funds for the cent-by-cent offset on the price of transport fuel will be obtained from permit revenue rather than the road user charges. If

compensation for heavy vehicle operators is to be obtained from road user charges, this could have implications for the funding of NSW infrastructure.

The implications of the excise provisions for domestic coastal shipping companies should also be considered.

The proposed treatment of fuel excise also means that in the short-term the cost of operating electrified passenger rail services is likely to increase relative to road transport creating a perverse (but short-term) incentive in favour of car use.

That said, NSW notes the quantum of the fuel excise adjustment is not expected to be large in the early years of the CPRS, and a review of the excise arrangements is scheduled to take place in 2013. NSW also seeks clarification as to whether the review will consider the 'mechanism' or the policy of offsetting the impact of permit prices on transport fuel.

In addition, NSW considers that the interactions between the taxation system and the CPRS should be fully considered in the Henry Review to ensure there are no longer-term distortions towards higher-emissions modes of transport or fuels.

NSW supports measures which improve fuel efficiency and access to lower-emissions forms of transport as the most effective way in the medium term to reduce greenhouse gas emissions and alleviate financial stresses being experienced by motorists. The failure of the previous Commonwealth Government to introduce vehicle fuel efficiency standards has left many motorists exposed unnecessarily to high fuel prices.

WASTE

The Green Paper proposes making landfill facilities liable parties, either with a threshold of 25 kt CO-2e, or a dual threshold with a lower 10kt CO-2e per annum threshold for landfills in urban centres and surrounding areas. In principle, NSW supports the inclusion of the waste sector in the CPRS, but to be effective scheme design will need to address a number of complex issues as follows.

1. Scope of Coverage

Level and form of the emissions threshold for the inclusion of landfills in the CPRS?

The threshold for inclusion needs to be set with consideration given to the following factors:

- Transaction costs: if the threshold is set too low, the transaction costs will outweigh the greenhouse benefits. NSW has 436 landfills, but more than 85% of the waste generated each year in NSW is disposed of in only 25% of the landfills.

- Perverse incentives: if the threshold is set too high, it could create perverse incentives for the diversion of waste to sub-threshold landfills and for the proliferation of small landfills.

NSW supports setting a uniform threshold at 10,000 tonnes of waste per annum, to apply in all areas. This would cover approximately 85% of potential future emissions in NSW, while impacting on only 25% of landfills (~100 in NSW). Furthermore, relative to a 25,000 tonne threshold, it is not expected that this would lead to significantly higher transaction costs (it only encompasses a further 30 landfills), and would minimise perverse outcomes.

NSW supports a coverage threshold being expressed in tonnes of waste to simplify implementation and landfill compliance.

The potential for waste to be displaced from covered to uncovered landfills, and for new landfills to evade coverage, also exists in regional centres. NSW therefore supports a uniform coverage threshold for urban and regional areas.

Should closed landfills be covered by the CPRS?

NSW does not support closed landfills being covered under the CPRS. Whilst NSW supports the principle that landfill operators ought to be responsible for their emissions, the most cost effective means of mitigating emissions from closed landfills is by mandating gas capture. Covering closed landfills would create an incentive for gas capture. However, it also unfairly imposes a liability for emissions that cannot be captured due to the technical limitations of gas capture technology. Accordingly, NSW suggests State and Territory Governments should, in consultation with the Commonwealth, investigate the practicality of mandating gas capture at closed landfills.

Should emissions from pre-scheme waste be covered?

As acknowledged in the Green Paper, the issue of pre-scheme waste is a complicated matter. Waste can take up to 50 years to decompose, with emissions from waste disposed in the preceding 5 to 10 years usually dominating the emissions profile for the next 5 to 10 years. The *exclusion* of legacy waste would therefore excise a significant proportion of emissions from the CPRS and could also encourage the premature closure of landfills.

However, the *inclusion* of legacy waste would disproportionately affect two types of landfill (and therefore have an impact on industry competition):

- Landfills with above-average volumes of legacy waste in Sydney. In Sydney, the waste industry is highly price-competitive so these landfills will have limited capacity to pass on additional costs to consumers.[1]

[1] Outside Sydney, in areas where there is public management of landfills and limited competition, local authorities who operate the landfills will be able to recover these costs from users.

- Large landfills (in Sydney and other areas) that are close to ending their operational life. These landfills will have an ongoing post-closure liability, but no capacity to recover any of the costs of post-closure emissions.

The inclusion of legacy waste could therefore have a differential impact on landfill operators with the same emissions intensity per tonne of additional waste in landfill, but different emissions profiles due to different landfill size. The disproportionate impact on different landfills needs to be considered and may form the basis for compensation.

On balance, NSW therefore supports either covering all emissions from operating landfills and compensating landfills with large volumes of legacy waste to maintain a level-playing field, or excluding legacy waste emissions and addressing these emissions via mandatory gas management.

NSW supports further consideration being given to this issue.

2. Determining the emissions of liable landfills

The issue of determining emissions, and therefore the coverage threshold and permit liability, of landfills is particularly challenging. The estimation method should be as accurate as possible, while being both affordable and verifiable.

How will landfill emissions be determined (direct sampling, ongoing measurement, first order decay estimates, waste stream and/or waste type conversion factors)?

Direct measurement can be done through samples or continuous flow measurement. Sampling based methods are currently used in some situations, but they are not particularly accurate and very hard to verify due to a myriad of factors (e.g. variability in waste composition). Continuous flow measurement has the potential to be more accurate in the long term. NSW supports the scheme design rules specifying the use of waste emissions factors until the maturation of continuous flow technologies, either modelled or simple depending on the scheme design details.

There are technical advantages and disadvantages associated with either modelled or simple waste emission factors. For example:

- emissions liability would be very low for many years if the first order decay model is coupled with a coverage model that excludes emissions from waste disposed pre scheme commencement;
- the first order decay model requires historical records of waste disposal that are frequently non-existent; and
- there will also be transitional issues moving from factors based emissions estimates to a direct measurement based emissions estimates.

How will the permit liability of landfills be discounted by gas capture (direct measurement, back calculate energy generation, capture rate deemed by the regulator)?

Direct measurement of gas capture and treatment will provide an incentive to maximise its operational efficiency. NSW supports direct measurement of methane destruction where this is technically possible and can be audited (e.g. metered flares and electricity generation) and a deemed gas capture rate by the regulator where auditable, direct measurement is not possible (e.g. biofiltration).

Metered gas capture discounting may not be possible if the scheme does not cover 'old' waste, as it would be difficult to differentiate between 'old' and 'new' waste emissions. In this case a deemed capture rate would be preferable.

3. How will compliance be ensured?

The challenges of compliance could be significant as there will be increasing financial incentive to minimise liability. NSW has had considerable experience in this area in ensuring compliance with the NSW waste and environment levy. The NSW Department of Environment and Climate Change is available to provide advice in this area if required.

4. The role of complementary measures

Complementary measures should be considered for waste emissions that are not covered by the scheme, including waste water treatment, incineration and non-covered emissions from landfills. NSW supports mandating gas management at non-covered landfills, which will drive further abatement and minimise any perverse outcomes from the threshold. It is acknowledged that there will be practical limits that will need to be considered in detail by State and Territory Governments in consultation with the Commonwealth.

It is also important to note that there are at present technical limits to the abatement that can be achieved by the capture and treatment of landfill gas. The Intergovernmental Panel on Climate Change has observed gas capture efficiencies ranging from 10% to 85%. Once a landfill has installed efficient gas capture and treatment, further abatement can only occur by diverting waste from landfill to alternatives such as composting, pyrolysis, re-use and recycling. The permit price on the remaining gas, along with the cost of installing gas capture, will in most circumstances be added to the gate fee creating an incentive for diversion. However, due to non-price barriers and low price elasticity, there is likely to be a significant time lag when the permit price reaches the marginal cost of abatement, and when diversion activities commence. Complementary measures should be considered to encourage cost-effective diversion of waste from landfill.

In summary, NSW recommends the consideration of two different models for the inclusion of the waste sector in the CPRS.

Table 1: Options for the Inclusion of the Waste Sector

Coverage Option	Closed Landfills	Industry Impact	Measurement	Complementary Measure
Emissions from waste disposed from 2010 (scheme commencement).	Excluded	Equal impact – no case for compensation.	Waste stream conversion factors minus deemed methane destruction percentage.	Gas management for; closed landfill, old waste and below threshold landfill.
All emissions from operating landfills.	Excluded	Possible case for compensation for landfills with a lot of old waste.	First order decay method for emissions minus measured methane destruction.	Gas management for closed and below threshold landfills.

NSW is available to discuss these issues further or make a more detailed submission.

Chapter 3 Carbon Market

The Green Paper proposes a scheme price cap from 2010-11 to 2014-15. As the Green Paper acknowledges, there are significant drawbacks with a price cap. First, it allows breaches of the scheme cap (which will create a liability for the Commonwealth to meet any shortfall in meeting international obligations). Second, it may also slow the development of private sector risk instruments as it transfers risk away from liable parties. The carbon trading market is expected by the financial sector to function like other commodity markets and instruments for managing risk will develop here as elsewhere in the absence of a price cap. Third, a price cap could inhibit the development of international linkages.

NSW accepts that a price cap as a safeguard against extreme price volatility in the Scheme's early years, subject to review, is a reasonable compromise. However, as the Green Paper notes, there are other ways of managing up-side price risk.

NSW supports the removal of any price cap at the earliest, feasible point, and thereafter, a make-good provision to enhance the environmental integrity of the scheme and enhance the potential for linkages to other trading schemes.

Chapter 4 Emissions Targets and Scheme Caps

Until the economic modelling is completed, NSW cannot provide detailed comment on scheme targets, trajectories and caps. NSW would welcome the opportunity for further consultation with the Commonwealth Government at that time. NSW considers that the Commonwealth's White Paper and the exposure draft of associated legislation should take into account the outcomes of these discussions.

However, in setting the targets, trajectories and caps, NSW believes the following criteria should apply:

- The scheme design should provide the maximum possible confidence to investors, but also recognise that the Commonwealth may need to adjust the scheme's parameters as a result of international agreements and/or greater understanding of the science, likely impacts of climate change and the scope of adaptation potential. As such, the scheme should set out a framework that identifies an appropriate sharing of risk between the Commonwealth, scheme participants and other affected parties, to be applied if and when scheme parameters need to be altered with significant impact;
- design of scheme caps must aim for an emissions reduction trajectory that is consistent with a 60% or greater reduction on 2000 level emissions by 2050, and international commitments. It should also take into account the reductions adopted by other countries. One way of achieving this could be the approach proposed in the Garnaut Review; that is, setting out more stringent emissions reduction trajectories which would be adopted in the context of effective international agreement; and
- The scheme cap, targets and trajectory will need to balance the need for a smooth, orderly transition to a carbon-constrained economy with the need to minimise longer-term costs and risks by distributing the emissions reduction task over a longer time frame.

NSW will provide further comment on this element of the scheme once the modelling, trajectories and targets have been released.

Chapter 5 Reporting and Compliance

NSW reserves comment on the reporting and compliance arrangements for intergovernmental consultations on the National Greenhouse and Energy Reporting System.

Chapter 6 Linking the Scheme to International Markets

The NSW Government supports the development of linkages with international schemes subject to the quality of their scheme governance (including clarity of property rights and environmental integrity). NSW agrees with the Green Paper's assessment of the benefits of linkages with international schemes, and further notes the benefits of integration for accelerating the development of Australian carbon trading markets, but accepts the proposed limitations to minimise implementation and carbon price shock risk.

NSW also notes international linking is a key issue which needs rigorous data and analysis as the balance and mix of interests is complex. This analysis should be included in the Commonwealth Treasury's modelling work as a matter of urgency.

There is one issue on which NSW seeks clarification. It is unclear whether the CPRS will allow Joint Implementation (JI) projects being hosted in Australia for forests that have not opted in to the CPRS. Once other relevant limitations on integration with international markets are relaxed, NSW supports the capacity to host JI projects in non-covered forests.

Chapter 7 Auctioning of Australian Carbon Pollution Permits

The Green Paper proposes to allocate up to 20 per cent of permits (30 per cent if agriculture is to be included), and auction the remainder of permits.

Whatever the design of the auction process at the outset of the scheme, a mechanism for reviewing its design should be established to allow redesign should implementation outcomes be inconsistent with design criteria and objectives.

Chapter 8 Household Assistance Measures

NSW supports the initial use of all the permit auction revenue to assist households and businesses adjust to the CPRS.

In framing assistance for households, there are a number of general design principles which NSW believe should be paramount:

- Adjustment assistance should be focused on the most vulnerable groups – that is those who will suffer the most disproportionate adverse impacts and who have the least capacity to mitigate or adjust to those impacts;
- NSW agrees that direct financial assistance should not vary according to a households' actual energy consumption. Cost effective measures which help households adapt by using less energy should also be implemented. Energy efficiency measures often have a lag so they cannot obviate the need for assistance from the outset of the CPRS. However, helping households become more energy efficient is a more effective way in the medium and long-term of assisting them to manage the budgetary effects of rising permit prices. Cost-effective energy efficiency measures will also lower the price of permits. The NSW Government is implementing a $150 million energy efficiency strategy aimed (in part) at delivering these types of outcomes in NSW; and
- The funding of adjustment assistance for households and businesses today needs to be balanced against investments in energy efficiency, RDI and infrastructure which have the potential to lower the costs of the CPRS for households and businesses in the future. As the draft report of the Garnaut Review notes, addressing market failures which inhibit the development and deployment of low emissions technologies will substantially lower the overall cost of reducing emissions. Over time, as the economy adjusts, NSW would like consideration to be given to some of the household (and business) assistance being transferred into these uses. These issues are discussed further in relation to the Climate Change Action Fund.

The CPRS could also have significant impacts on the revenue of State Governments', and therefore their ability to deliver services to households which are their jurisdictional responsibility. NSW recognises that government agencies must become more energy efficient, as well as industry and the community, and that the carbon price signal is an important incentive for greater efficiency. To that end, NSW is investing heavily in energy efficiency measures for government agencies. However, NSW would stress the importance of a full consideration by the Henry Review of the interaction between the CPRS and taxation, including the impact on the revenue of State Governments.'

Chapter 9 Assistance to Emissions-Intensive Trade-Exposed Industries

Designing assistance for emissions-intensive trade-exposed (EITE) industries is a complex matter, which requires reconciling a number of different objectives such as:

- preventing 'carbon leakage' which results in local economic loss for no environmental gain;
- maintaining incentives for greenhouse abatement in EITE industries, not only to fairly distribute emissions reduction between industries, but also to maintain the competitiveness of EITE industries in the carbon-constrained economy of future decades. Genuine carbon leakage must be avoided, as this imposes an extremely high cost on Australia, and NSW is concerned EITE assistance be designed to ensure it remains an attractive location for investment in EITE industries. However, the scheme should also be designed to avoid protecting EITE industries in the longer term if those industries are genuinely non-competitive based on their carbon intensity relative to that of their competitors;
- maintaining the integrity of the CPRS, and the effectiveness and efficiency of the carbon market, whilst providing assistance for activities that represent a large percentage of Australia's greenhouse gas emissions; and
- the optimal use of assistance (revenue and permits) for least-cost abatement in the medium and long-term.

NSW is broadly satisfied that the proposed EITE arrangements address these objectives. Using an industry average as the baseline for determining assistance will reward firms that have already taken action to reduce their emissions below the average, and encourage those that have not, to do so. Unlimited banking and the allocation of permits should encourage further early abatement in the EITEs. The Green Paper makes clear that EITE assistance will need to be balanced against their impact on non-assisted industries and households. Support for EITE industries over the longer term is also recognised as unsustainable as it will affect the overall credibility of longer-term targets.

However, NSW has concerns about some specific aspects of the EITE arrangements:

- The Green Paper recommends up to 30 per cent of permits (if agriculture is included) be allocated free to EITE activities, and that up to 10 per cent be reserved for agriculture. However, there is little detail about the proposed distribution

arrangements, and the Green Paper proposes to defer any consideration of EITE assistance to agriculture until decisions are made with respect to scheme coverage. The proposed EITE guidelines also provide for a reduction in the total emissions cap over time and for assistance to EITE activities to be reduced at a similar rate. It will be important that all EITE activities receive equivalent treatment, and that if agriculture is included in the scheme, it is not disadvantaged as a result of its phased inclusion into the CPRS.

- Using just two years data (2006-07, 07-08) is too narrow a base for calculating eligibility for EITE assistance, especially in view of the extremely strong growth in commodity prices over recent years.
- The eligibility for assistance and adequacy of assistance for particular NSW sectors:

Coal mining: The chart (Figure 9.2) on page 313 calculates the emissions intensity of coal mining at between 1500 and 2000t CO_2e [1,722 t/$m]. The rise in coal prices has deflated the emissions intensity of coal. Partial compensation only would place Australian coal producers at a disadvantage in relation to other coal exporting countries which are not subject to a carbon price such as China, Russia, Indonesia and India.

Additionally, due to current differences in the technical potential to measure and capture fugitive emissions between open-cut and underground mining, the two types of mining have a different level of emissions intensity. If they are considered as the one activity, for a given level of output, both will receive the same number of permits, but the underground mining firm will need to acquit fewer permits than an open cut competitor.

Minerals: The impact on gold producers can be illustrated through the example of Cadia Valley Operations. The Cadia Valley Operations is the largest producer of gold in NSW. Newcrest Mining Ltd, mine operator, has released its gold production costs for the Cadia Hill open cut mine and the Ridgeway underground mine within its June 2008 quarterly report. The company has indicated that the site operating costs (not including copper credits) for 2007-08 were $675 (Aus) per ounce at Cadia Hill and $376 (Aus) per ounce at Ridgeway. These figures do not include Royalty (which was $36/oz and $51/oz respectively) or third party smelting, refining and transporting costs ($99/oz and $143/oz respectively). Nor do they include depreciation or amortisation charges.

The average annual historical Australian dollar gold price since 1991-92 is close to around $530-540 per ounce. If the commodity price moves back to historical averages, the Cadia Hill open cut mine will become unviable and the Ridgeway underground mine becomes questionable. Additional costs imposed on these operations under a cap and trade system will make these operations untenable.

Pulp and paper. If it were to be considered as a sector, Pulp and Paper may only just qualify for EITE assistance, and would only be eligible for assistance for 60% of its emissions. However, if the pulp and paper industry is further sub-divided on an activity basis, some activities within the sector are likely to fall just short of the lower

emissions intensity threshold of 1,500 tonnes of CO_2–e per million dollars of revenue, while others like mechanical pulp and paper making may exceed the higher emissions intensity threshold (2,000 tonnes of CO_2–e per million dollars of revenue). This would leave activities which do not meet the threshold highly exposed.

Using revenue as the measure for EITE assistance is likely to create perverse incentive for pulp and paper companies. For example, chemically produced pulp represents about half the value added of the final paper product, but produces very few emissions while converting pulp to paper accounts for the remaining half of the value and accounts for nearly all the emissions and most of the jobs. For companies looking to reduce their emissions exposure, transferring their paper making activities to another country (one that is not subject to a carbon price) is a logical solution but a perverse outcome for Australia. On this basis, the pulp and paper industry advocates the use of 'value added' as the basis for EITE assistance, rather than revenue, or to define pulp-to-paper as the 'activity' and it be treated as a sector.

In raising these issues, NSW acknowledges that setting an emissions intensity threshold as the basis for assistance is inherently arbitrary, leading to the inclusion and exclusion of different activities potentially on the basis of modest differences in emissions intensity. NSW recommends consideration of additional 'tiers' of eligibility in order to reduce the extent of unintended arbitrary consequences.

Accordingly, NSW also requests that the results of economic modelling on the impacts on particular sectors and sub-sectors of the CPRS be made available once completed.

The Green Paper also presents three options in relation to the phase-out of assistance for EITE's. NSW supports option 1; the removal of assistance should only be withdrawn when broadly comparable carbon constraints are introduced in competitor economies.

Chapter 10 Strongly Affected Industries

One of the three objectives for the CPRS identified in the Green Paper is to "*provide for transitional assistance for the most affected households and firms*". NSW welcomes this recognition and emphasis. Furthermore, one of the assessment criteria for design options is "*the minimisation of implementation risk*". NSW strongly endorses this emphasis on risk management, in particular the commitment of the Commonwealth to addressing the impact of the CPRS on "strongly affected industries".

The broad approach set out the Green Paper is endorsed, and the following comment is largely on points of detail. NSW endorses the Commonwealth's preferred position for defining strongly affected industries, and the eligibility criteria for the receipt of "*direct assistance*" (compensation), in particular entities that "*could experience significant losses in asset value*" (p345). However, because the Commonwealth Treasury modelling is not expected to be released until sometime in October the comments in this section are necessarily qualified. NSW reserves the right to change its position from that expressed here in response to the Commonwealth's modelling. It is essential that stakeholders are

given full access to the modelling methodology, along with all of the numerical assumptions and outputs, to provide feedback to the Commonwealth prior to any scheme design decisions being locked in.

The Green Paper lists electricity generation, waste, the production of natural gas and gas supply as 'possible strongly affected industries.' NSW wishes to comment on the waste and electricity generation sectors.

Electricity Generation

The Green Paper correctly recognises that some coal fired generators could experience significant losses in asset value, and will satisfy the eligibility criteria. Transitional direct assistance will be required for such generators. But, as the Green Paper observes (p362), assistance measures "*are not necessarily intended to keep particular facilities operating in an unchanged manner, or to support their financial position indefinitely where that runs counter to the long-run abatement imperatives*".

In considering how that assistance should be determined, the paper recognises that value loss for some entities could be exacerbated where there are long-term contracts in place that prevent the pass through of carbon costs (p344). To the extent that these contracts impact on individual entities differently they may need assistance or action separately to the general assistance measures for strongly affected industries.

As recognised in the Green Paper, the appropriate transitional assistance to eligible generators will depend on some of the design parameters, in particular the trajectories and targets. Those are yet to be determined, and the NSW government looks forward to finalising discussions on the provision of direct assistance when the details of the scheme have been resolved.

MRET

The MRET scheme that is being implemented ahead of the CPRS is intended to drive investment in renewable electricity generation capacities. The impact of the MRET on the CPRS should be carefully considered, because it will be driving significant changes to the same markets and market participants that will be affected by this scheme. Key links are:

- Maximising investment confidence - a critical issue for NSW in particular, because of the impending need for additional base load generation capacity.

- The extent of trade and capital flows - investment capital is highly mobile and competition for investment dollars will continue to be fierce. Capital will gravitate towards opportunities that offer the most attractive trade off between risk and expected returns.

- Operational dislocation - periods of unreliable electricity supply associated with the implementation of the CPRS and MRET would also discourage investors and have broader economic impacts.

- Direct assistance - While the CPRS and MRET will change the incentives for investment in various technology types, the aim of providing direct assistance to high emission generators should be to avoid reductions in their underlying investment capacity, and to minimise sovereign risk for existing and new investors and their financiers.

Investor Confidence

The NEM's ability to deliver new capacity is going to be critical over the next few years. This is the first significant test of market based investment in major base load capacity. In addition to the renewable capacity requirements driven by the CPRS and MRET schemes, ongoing investment is required to meet electricity demand growth.

The preferred position in the Green Paper for dealing with the setting and adjustment of key scheme parameters, including the abatement trajectory, is a reasonable approach that is designed to narrow the range of regulatory uncertainty and help predictability. However, the commencement of the CPRS will only eliminate one element of uncertainty. In view of the environmental, scientific, economic and international forces that will impact on the evolution of the CPRS, policy uncertainty cannot be wholly eliminated. Investors will be looking for reasonable assurance that if they do commit to investing in sunk assets, they will be shielded from the imposition of disproportionate costs in an evolving policy environment. As the Green Paper acknowledges (p.370), failure to provide adequate direct assistance to emissions intensive generators at the commencement of the scheme will send the opposite signal and 'increase risk assessments for future investments in the industry'.

Failure to provide direct assistance to strongly affected industries that have previously invested in good faith sends a strong sovereign risk message to prospective investors, regardless of whether they intend investing in fossil-fuel or renewable energy plant. Conversely, addressing disproportionate value impacts would encourage the long-term commitment required for investment in the industry. The earlier that new capacity is commissioned, the smaller the risk of insufficient reserve margins and supply unreliability.

Energy Security

The AEMC review of energy market frameworks is to consider the possible impacts of the CPRS on energy security (p364). NSW supports this review, but believes risks to energy security from the CPRS implementation should first and foremost be addressed through the design and implementation of the CPRS.

NSW agrees with the Green Paper that there will be a relationship between emission trajectories and other scheme parameters and energy security that will be mediated through the permit price. The proposed measured approach to the implementation of the CPRS is supported in principle. But this alone will not be sufficient.

There are three potential financial impacts from the CPRS on coal-fired generators :

(i) a loss of asset value upon announcement of CPRS design;
(ii) an increase in cost of capital impacting on their capacity to invest; and
(iii) the requirement for significant additional capital for permit purchases (at $20 per tonne of CO2, the annual cost to generators nationally of covering all existing emissions would be over $4 billion).

NSW agrees with the Green Paper that the risk of early retirement of generators is subject to mitigating factors, but all things being equal, it increases its likelihood. It is not certain that there will be no impact on the supply capacity of the industry, and there is a non trivial risk of consequential impacts on energy security. Electricity is a unique commodity. It has to be manufactured at the moment of its consumption through a capital intensive process, and is characterised by significant and complex network related issues that require ongoing centralised control and regulatory oversight. Investment lead times are typically long. For these reasons, investment decisions need to be made well in advance of the delivery of capacity to the market. Given the high cost of unreliability, risk aversion is appropriate in dealing with the electricity sector.

Level and Distribution of Transitional Assistance

NSW supports providing transitional assistance to address disproportionate loss. Equally, windfall gains should be avoided, and conditionality options for direct assistance should be further explored. While the CPRS and MRET will change the incentives for investment in various technology types, the aim of providing direct assistance to high emission generators should be to maintain their underlying investment capacity, and to minimise sovereign risk for existing and new investors and their financiers.

NSW supports defining disproportionate loss relative to an economy-wide benchmark, as proposed by TGET and NETT and outlined in Box10.10 on page 373.

NSW supports the proposed asset by asset method as the broad approach for determining transitional direct assistance, and relating direct assistance to each assets nameplate capacity (p384), and emissions intensity (p381). If this approach is taken, it is not clear that there is any benefit from establishing separate compensation pools for black coal and brown coal generators. NSW also supports the preferred definition of black coal generators entitled to transitional assistance as excluding dual fuel generators (p382). NSW notes the proposal in the Green Paper for the asset by asset method to include a "review process" (p388), which is taken to mean an ex ante assurance review. NSW supports such a review being included in the determination process.

NSW supports the preferred cut off date of 3rd June 2007 for eligibility for direct assistance. NSW also supports the proposed approach to managing changes in ownership, of the assistance being given to whoever is the registered generator on the day assistance is delivered (p377).

NSW also supports that transitional direct assistance should be determined as a once off provision, irrespective of the timing of its provision (p388-9). In order to avoid perceptions of recipients benefiting from windfall gains associated with their transitional assistance, NSW supports further consideration of options to make that support conditional on observable outcomes in the NEM (p387) provided that those outcomes are 'incentive compatible'. This could provide for the possibility of some clawback of the transitional direct assistance that had been provided to some generators, given that certain predetermined circumstances had arisen (p388). Note that provision of assistance by free permits rather than cash removes completely the permit price risk and thus substantially reduces the need for any clawback. The possibility of clawback without an incentive compatible mechanism may lead to perverse incentives and gaming behaviour by participants.

As the National Electricity Market is an administered rules based market, it lends itself to detailed bottom-up modelling much more than any other commodity market to determine the level of transitional assistance. Bottom-up modelling is used to inform decisions by investors in the NEM. Model based estimates are therefore apt for developing rules for allocating the overall quantum of direct assistance to high emission generators. While the bottom-up models of the NEM are technically complex, the modelling framework is conceptually straightforward, and conventional valuation methods can be applied. The NSW Government supports the Commonwealth position that assistance should be based on readily observable criteria, but believes that modelling of the NEM is still required to provide some assurance that the quantum of assistance proposed is likely to be adequate, and that the observable criteria are appropriately applied. Given this, NSW also supports using such modelling to allocate the total assistance pool between black coal and brown coal generator pools, if a decision is made to establish two such pools.

The Green Paper includes the suggestion that the total quantum of transitional assistance may be determined by taking into consideration the net gains for the industry, and limiting that available for coal generators accordingly (p374). This approach is not consistent with the asset by asset approach and is not supported. In particular, it fails to address the issue of sovereign risk for new investors.

If a clawback mechanism is to be applied to coal generators receiving transitional assistance, NSW supports consideration being given to a clear, transparent, predetermined mechanism being applied ex post to low emission generators who enjoy significant windfall gains. The approach would have to avoid creating perverse incentives, or otherwise being detrimental to future investment. A one-off windfall levy tied to observable outcome measures that cannot be controlled by individual generators is a possible mechanism that could be considered.

The Green Paper raises the possibility of the quantum of assistance depending on the timing for the commissioning of carbon capture and storage technologies (p351-2). Due to the very long commercialisation lead time and huge uncertainty about the timing and cost of this technology, this is impractical and NSW does not support any such adjustment to the compensation pool.

NSW supports the Commonwealth's proposed timing for decisions on direct assistance, that it should be after the setting of medium term national targets. But NSW does not support it being decided after the determination of assistance to EITE industries, and the auction time-frames (p389-90).

Permit Allocations

Permit allocations provide a better vehicle for assistance than a cash payment, as changes in the value of permits help to correct for errors in forecasting the impact of the CPRS. Given that the intent of assistance is to offset exposure to regulatory risk associated with the CPRS, it is logical that assistance is provided in the form of an asset of correlated value (i.e. a right to a permit allocation) rather than a cash payment of fixed value. An up-front cash payment only partly addresses the risk issues, and it would be good fortune to have determined the appropriate quantity of cash in advance. This could include some future dated permits. This approach will provide greater reassurance to investors by insulating future permit price risk.

NSW modelling suggests that when expressed as a percentage of total permits, the required allocation to electricity generators to offset disproportionate loss is relatively modest. It will not excessively erode the permit revenue available to assist households and EITE industries, and fund some RDI. The relatively small quantity required will also make it easy to differentiate the approach taken in Australia from the flawed EU approach, and help communicate the public interest there is in its provision.

Waste

The Green Paper notes that the waste sector exhibits many of the proposed characteristics of a strongly affected industry, but does not propose to designate it as such based on two factors.

As previously described, landfills with above average volumes of old waste in Sydney and those approaching the end of their lifetime, are constrained in their ability to pass on costs.

The Green Paper notes the potential for large landfills to earn revenue through the Mandatory Renewable Energy Target scheme to offset any new costs. However, it is understood that only 8 NSW landfills currently find it economic to generate power. The NSW Government is not in a position to comment as to whether earnings from generating power would offset its costs plus the liability of the CPRS for those landfills that are able to do so.

NSW's preference is for these issues to be addressed through coverage rules, but otherwise the waste sector should be designated as a significantly affected industry and arrangements developed to compensate the two types of landfill unable to pass through costs.

If the uneven impacts on these two types of landfill are not addressed through coverage rules, NSW is willing to work with the Commonwealth to determine which landfills in NSW will be disproportionately affected and the compensation arrangements.

Chapter 11 Tax and Accounting Issues

The Green Paper proposes to develop discrete amendments to relevant sections of the existing income tax legislation to provide equivalent treatment of taxpayers carrying on existing income earning activity.

NSW has no objection to this approach. However, we note that the Green Paper is silent on a range of other related tax issues which may have an impact on future investment in the NSW economy; the treatment of transfer pricing in respect of permits traded between jurisdictions and the GST treatment or customs duty treatment of alternative energy sources to name two examples. NSW would expect such issues to be addressed in greater detail during the development of legislative amendments.

To the extent that Commonwealth modelling can aid the states to assess the tax impacts of the CPRS on state budgets, NSW requests as much relevant detail as possible to be released in modelling results in October.

Chapter 12 Transitional Issues

Greenhouse Gas Reduction Scheme (GGAS)

Upon commencement of the CPRS, the bulk of GGAS will cease to operate.

However, a smooth transition is critical to protect the legitimate business interests of scheme participants, minimise avoidable impacts on NGAC and CPRS permit markets, and maintaining incentives for abatement projects in the transition to the CPRS.

The Green Paper contains little detail on the Commonwealth's preferred arrangements for the GGAS-CPRS transition, but NSW welcomes the commitment to work cooperatively on transition issues. This is a very important matter for NSW and GGAS participants. GGAS has led to the establishment of a set of 'early mover' businesses and it is vital that these parties are not disadvantaged as a result of the CPRS transition.

While it is not possible to provide definitive positions until the Commonwealth Government releases further details of its scheme design, some broad assessments can be made.

Some issues that have been raised in the consultation with stakeholders that need to be addressed in the transition to the CPRS when GGAS ends include:

- the treatment of projects that were committed after GGAS was extended beyond 2012 and before the Commonwealth Government committed to a national emissions trading scheme. In general, it is reasonable to assume that most project proponents had an expectation that GGAS would continue until 2012, but this will need to be assessed on a case-by-case basis;
- the treatment of different classes of accredited abatement certificate providers who may be disadvantaged by the introduction of the CPRS. For example, the method of permit allocation to existing coal-fired generators could disadvantage generators who have responded to GGAS and reduced their emissions intensity;
- Waste coal mine generators (and landfill gas generators if as seems likely the waste sector is covered under the CPRS) could potentially be disadvantaged by the introduction of the CPRS as they will become liable parties under the CPRS and will be reducing the liabilities of coal mines (and landfill operators) rather than being credited with activities that reduce the release fugitive methane emissions under GGAS. These projects will need to be assessed on a case-by-case basis;
- Cogeneration projects are encouraged by GGAS, but may not receive the same incentive under the CPRS. These projects are clearly providing low emission outcomes and should be supported;
- When GGAS commenced in 2003, NSW was the only jurisdiction that imposed greenhouse targets on its economy. Accordingly, GGAS recognises the mitigation activities of some generators that pre-date GGAS (so called Category A generators) and allows them to create abatement certificates. Retailers that are able to claim certificates under these provisions had an expectation that these provisions would continue until 2012
- GGAS was the first scheme in the world to include forest carbon sequestration and has a robust methodology for estimating carbon sequestered based on Kyoto compliant forests. It would be appropriate for projects currently accredited under GGAS to be transferred into the proposed voluntary reforestation category of the CPRS;
- GGAS also contains provisions to encourage the reduction of industrial process emissions from the operations of large electricity users. While a number of these companies will be classified as Trade Exposed Emissions Intensive (TEEI) and provided with a level of assistance as proposed in the Green Paper, transition arrangements need to recognised that for these companies and others that are not TEEI, full return on investments in abatement projects may not be realised by 2010. These projects will need to be assessed on a case-by-case basis;

- Energy efficiency projects will not be able to create credits under the CPRS as they can under GGAS. However, as part of its transition arrangements, the NSW Government is committed to continuing the incentive for energy efficiency projects in NSW and will implement the NSW Energy Efficiency Trading scheme (NEET) from 1 January 2009. Arrangements being considered include transition of existing GGAS accreditations into NEET; and

- Treatment of unused abatement certificates at the end of GGAS. At the foreshortened end of GGAS in 2010, parties will be left holding unused abatement certificates. An appropriate treatment of unused certificates is important to maintain investor confidence in the remaining years of this world leading emissions trading scheme. In response to the transition consultation paper, a majority of stakeholders indicated their preferred treatment would be for GGAS abatement certificates to be converted to CPRS permits on a tonne-for-tonne basis. However, it is also recognised that the treatment of unused GGAS certificates should ensure that GGAS targets are met until GGAS is terminated.

Climate Change Action Fund

NSW supports the proposed establishment of a Climate Change Action Fund (CCAF).

However, as the CCAF is earmarked only to be 'transitional', there is no provision for an on-going allocation of permit revenue to Research, Development and Innovation (RDI) and infrastructure in the Green Paper.

NSW notes that the Commonwealth Government has allocated significant funding elsewhere to RDI and infrastructure, such as the water, energy and climate change component of the Building Australia Fund.

However, major on-going investment to accelerate RDI and fund low-emissions infrastructure will be required to meet greenhouse targets at least-cost to the community and economy in the medium term. The draft report of the Garnaut Review, for example, estimates Australia needs to invest over $3 billion per annum towards the research, development and commercialisation of low-emissions technologies.

One important example is carbon capture and storage (CCS). The Green Paper is very supportive of carbon capture and storage, recognising that ongoing government support will be needed to continue to help drive the development and deployment of CCS technology, and NSW supports this emphasis. However, there is a need to accelerate research, development and deployment of the technology. The Stern Review states that a failure to develop CCS technologies would result in a narrower portfolio of low-carbon technologies increase abatement costs. This will require significant additional funding for research and demonstration plants.

The draft report of the Garnaut Review also notes large-scale infrastructure investment in sectors such as energy and transport will be required, and endorses the use of permit

revenue to fund investment in public transport. Complementary measures are of vital importance for the transport sector and there is a sound case for the use of permit revenue to fund investment in transport infrastructure and research and development.

NSW believes a share of permit revenue should be allocated over time to investment in RDI and infrastructure from the outset of the CPRS. In view of competing claims for household and business to smooth the introduction of the CPRS, this allocation might be small initially, but could increase over time as transitional assistance is transferred into investment in RDI and infrastructure.

Chapter 13 Governance Arrangements and Implementation

If Australia is to compete for the location of the Asia Pacific region's carbon hub, the Commonwealth's decision on where to locate the financial and administrative institutions associated with the CPRS is critical.

Trading and finance hubs world-wide demonstrate that a critical mass of co-located shared infrastructure, skilled labour, supporting services, and governance institutions within a single city is essential.

Sydney is already the regional financial hub, and is home to a pool of skill and experience in carbon trading that is unique in Australia:

- the Australian Stock Exchange, the Sydney Futures Exchange (which already services the energy and environmental products market), and the Australian head offices of major national and international banks, funds managers, and brokerage firms;
- high-volume derivatives markets;
- major financial market governance infrastructure (the Australian Securities and Investments Commission, the Australian Prudential Regulation Authority, and the Reserve Bank of Australia); and
- the largest financial services market in Australia. Sydney hosts a significant cluster of energy companies, financial service providers, law firms and accounting firms, with several years of experience in carbon trading under GGAS.
- In addition to this concentration of industry activity, New South Wales has unique experience in administering and regulating a mandatory emissions trading scheme. The NSW GGAS Scheme, established in 2003, was one of the first such schemes in the world, and is the second largest mandatory emissions trading scheme after the EU.

The knowledge and experience New South Wales has gained in administering this scheme, combined with the natural advantages of Sydney as a financial hub, make Sydney the ideal location for the CPRS registry and regulator.

These represent strategic advantages upon which Sydney can build to become a carbon finance hub in the Asia-Pacific region. The economic benefits of successfully developing a carbon trading hub in the Asia-Pacific region will be substantial. The UK Government successfully helped position London as the financial hub of the global carbon market. London now captures over 70% of a global market presently worth around US$100 billion a year in traded emissions and supporting legal and financial services, and a further US$200 billion in clean and low carbon technology project investment.

However, seizing the opportunity will require early action and a partnership between different levels of Government and industry. Singapore, Hong Kong, Tokyo and even New Zealand are already taking decisive steps to try and position themselves for this role in the Asia Pacific.

Headquartering the regulatory and administrative infrastructure for the CPRS in Sydney is a vital first step in making this happen. Sydney should be the location for scheme administration, including the carbon registry and scheme regulator. The Commonwealth's Kyoto Protocol instruments such as the Designated National Authority (DNA) and the Carbon Fund (if established) should be also located in Sydney.

If we fail to consolidate our existing strengths and spread expertise across Australia, then Australia runs a strong risk of losing out to another city overseas.

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D08/319119

The Hon Kevin Rudd, MP
Prime Minister of Australia
Parliament House
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Dear Prime Minister Kevin

VICTORIAN GOVERNMENT RESPONSE TO THE CARBON POLLUTION REDUCTION SCHEME GREEN PAPER

The Victorian Government is a strong supporter of emissions trading as a primary policy tool for reducing Australia's greenhouse gas emissions in an effective and least cost manner. The Government welcomes the progress being made by the Commonwealth in developing the Carbon Pollution Reduction Scheme (CPRS).

Victoria recognises that the Commonwealth Government is responsible for the final decisions on the design and implementation of the CPRS and has a primary role in dealing with many of the scheme's consequences.

However, the goals of the Commonwealth Government outlined in the Green Paper will benefit significantly from State and Territory Government input and involvement. In particular, I consider that collaboration will be critical on the best use of the Commonwealth's proposed Climate Change Action Fund, Electricity Sector Adjustment Scheme and National Clean Coal Initiative.

I am pleased to take this opportunity to make a formal submission to the CPRS Green Paper. Please find attached Victoria's submission.

Yours sincerely

HON JOHN BRUMBY MP
Premier of Victoria

CC Penny Wong
CC Department of Climate Change

Victorian Government Submission on the Carbon Pollution Reduction Scheme Green Paper

September 2008

Victorian Government Submission on the Carbon Pollution Reduction Scheme Green Paper

Victoria strongly supports an emissions trading scheme as the central policy pillar in reducing Australia's greenhouse gas (GHG) emissions. Accordingly, the Victorian Government welcomes this opportunity to comment on the proposals of the Carbon Pollution Reduction Scheme (CPRS) *Green Paper*.

This submission will outline the high level principles which the Victorian Government believes are of greatest significance to the State of Victoria in the ongoing development of the CPRS design. These principles are intended to act as a starting point for more comprehensive consultations, which will be necessary on specific design areas.

Recognising that the Commonwealth will make the final decision on the design and implementation of the Scheme, the principles outlined in this submission are intended to assist the Commonwealth in designing a scheme that is as robust and effective as possible. The Victorian Government also notes that the recommendations of the Garnaut Climate Change Review, which relate to the CPRS will need to be closely considered by the Commonwealth in its ongoing deliberations.

The Victorian Government looks forward to working closely with the Commonwealth Government to finalise these design details. To further facilitate on-going consultation, an attachment is included which provides greater detail of how the Commonwealth and State Governments can cooperate in delivering structural adjustment assistance to strongly affected regions.

Seeking a balanced approach – key objectives

The Victorian Government recognises that a balance must be sought between a number of competing interests. The design must seek to minimise adjustment costs for industry and the community by keeping transaction costs low and ensuring the security of supply of key economic inputs.

However, maximising the abatement efficiency of the CPRS must remain central to all deliberations on the design of the scheme.

A collaborative approach with State and Territory Governments

The goals of the Commonwealth Government outlined in the *Green Paper* will benefit significantly from State and Territory Government involvement. Coordinated, comprehensive and efficient action to address climate change is needed with the Commonwealth, the States and Territories and Local Government each having a clear role to play.

The new era of cooperative federalism, which the States, Territories and Commonwealth have now embarked upon provides a unique opportunity for collaboration to address climate change between all levels of government in Australia.

Victoria recognises that the Commonwealth Government is responsible for the final decisions on the design and implementation of the CPRS and has a primary role in dealing with many of the schemes consequences.

However, Victoria supports the principle of subsidiarity as it applies to programs and activities that will assist individuals and businesses in dealing with the impacts of the scheme. Consequently, collaboration on the best use of the Commonwealth's proposed Climate Change Action Fund, Electricity Sector Adjustment Scheme and National Clean Coal Initiative will be critical.

Many measures which will support the introduction of a CPRS are activities currently carried out by State and Territory Governments including:

- research and development into low-emissions technologies (such as the Victorian Government's *Energy Technology Innovation Strategy*);
- assisting households achieve energy savings through the *Victorian Energy Efficiency Target* (VEET) scheme;
- aiding the transition of specific regional and communities (similar to work being carried out in Victoria's *Moving Forward* strategy); and
- promoting the affordability of essential services to low income households (through energy concessions and public housing retrofits).

Significant decisions about the capacity of the nation to adjust successfully, and consequently the setting of key design features, will need to take into account the differing circumstances of State and Territory economies and communities.

Victoria seeks to further collaborate with the Commonwealth to ensure fair and efficient outcomes are delivered.

CPRS DESIGN FEATURES

[Principles supported by the Victorian Government are included in the blue boxes]

Setting of CPRS caps

As the CPRS will be the primary measure for delivering emissions reductions across most of the economy, its cap will be a major determinant in achieving overall national emissions reduction. To this end, it is important that the CPRS cap is set at a level consistent with achieving national emissions targets – recognising the likely potential for emissions reduction (or increases) in non-covered sectors.

At the time of preparing this response to the CPRS *Green Paper,* Victoria had not yet had the opportunity to analyse the preliminary modelling conducted by the Garnaut Review and the Federal Treasury. Consequently, Victoria reserves its comment on the setting of caps until this has been done. However, in principle Victoria supports a slow start, allowing time for electricity markets, industry and the community to adjust whilst at the same time sending longer-term price signals consistent with achieving a 60 per cent reduction in GHG emissions on 2000 levels by 2050.

Further, in order to provide greater investor certainty, Victoria believes that the scheme caps for the first five years of the CPRS need to be announced as soon as practicable.

> The emissions caps should be consistent with achieving whole-of-economy GHG emissions reduction targets while ensuring a smooth transition for businesses and households and a secure and reliable energy supply.

Emission trajectories

To best prepare for the changes necessary in moving to a low-carbon economy, investors in industry, business and infrastructure require policy certainty when making long-term decisions. While some degree of uncertainty regarding the future price of CPRS permits will be unavoidable, investors should be able to make plans based on a clear understanding of the total number of permits that will be available in the near-mid term, and the longer-term possibilities determined by the possible gateways.

This need must be balanced with recognition that Australia's future international obligations in relation to GHG emissions reduction are also uncertain. Therefore, the scheme must provide

sufficient flexibility to accommodate potential developments in relation to international agreements.

Victoria notes that the arrangements outlined in the *Green Paper* mean that market participants will, at all times, have certainty surrounding the scheme caps for five years in advance, followed by a range within which future caps will be set that would extend a further five to ten years.

Victoria considers that any period less than that proposed in the *Green Paper* would not provide adequate investor certainty. Consultations around the *Green Paper* will need to determine whether a longer period would be required from a business perspective.

The caps and gateways must provide a high level of policy certainty for investors while recognising the need for government flexibility.

Coverage

Emissions reduction requires action from all sectors of the economy. While it would be ideal to include all sectors in the CPRS, inclusion of a number of sectors is currently problematic due to the difficulty of accurate measurement and reporting. Nevertheless, the goal should be to incorporate non-covered sectors into the CPRS as soon as practicable.

Victoria notes the intent outlined in the *Green Paper* to include a broad range of sectors included from scheme commencement with the inclusion of agriculture by 2015 being explored.

Victoria considers that to allow adequate certainty for participants in both covered and non-covered sectors, a specified process (including prospective timelines) should be established to provide participants with reasonable notice and certainty of changes to coverage.

Methods for adjusting the cap to coincide with expanded coverage should be defined in advance with clear milestones and consultations with key stakeholders.

Coverage should be as broad as possible based on the practicability of appropriate measurement and reporting arrangements.

The Victorian Government supports the inclusion of transport as a covered sector in the carbon pollution reduction scheme.

The Victorian Government notes that the reductions in the fuel excise will soften the impacts of the CPRS on the transport sector, but acknowledges that the Commonwealth Government is seeking to provide time for consumers to change their vehicle stock and transport choices.

However, Victoria would like to highlight that public transport powered by electricity (including heavy and light rail) will face the increased costs of a carbon price immediately, and public buses after one year.

The proposed excise cut may also impact on the carbon price differential between biofuels and petrol/diesel. This would reduce incentives of fossil fuel users to seek to minimise their emissions through the use of alternative fuels.

Further, where rebates are offered because the excise system does not apply to a sector (the *Green Paper* highlights agriculture and fisheries) they should be made available to all such sectors, including forestry.

Any offsetting measures to deal with petrol price increases should take account of the impacts that this approach may have in relation to competing transport modes, alternative fuels and impacts for future State and Commonwealth Government revenue.

Offsets

The *Green Paper* appropriately points out that the wide coverage of the proposed CPRS results in a somewhat limited scope for offsets. To the extent that provision for offsets is required, the Victorian Government believes offsets must be subject to rigorous regulatory and verification standards. Domestic offsets which comply with the schemes standards of credibility and verifiability should be able to be used.

On the basis that the cap is set recognising the scope for emission reductions in non-covered sectors, the use of domestic offsets should be unlimited.

Offsets should be internationally credible and verifiable, and apply to activities in non-covered sectors that meet strict criteria for additionality – recognising that over time eligibility criteria may change.

International Linkages

The primary aim of developing a CPRS by 2010 should be to establish a mechanism suitable for achieving emission reductions domestically. However, linking an Australian emissions trading scheme with other international schemes may produce a lower overall cost of abatement.

Victoria supports the position presented in the Garnaut Draft Report that any linkages must be based on rigorous certification of international permits markets which should be reviewed on a periodic basis.

Unilateral linkages based on the acceptance of international offsets should be strictly regulated and limited to maintain the environmental integrity of the scheme, and to comply with the Kyoto 'supplementarity rule'.

The option of linking bi-laterally with schemes in our region should be considered as part of the design process. In particular, New Zealand may offer the first linkage opportunity.

The CPRS design should occur in a manner which enables future international linkages with other trading schemes.

Permit allocation

Victoria considers that the most efficient method of allocating permits is through auctioning. Auctioning allows the free operation of the market to determine the price of emissions permits and provides Government with funds to address adverse regional and community impacts.

Victoria considers the costs to business of a carbon market, and the challenge of managing businesses cash flows, will be minimised by a dynamic and liquid market for permits. While it is recognised that optimal auction frequency is still an unresolved design issue, auctioning timing and the auctioning of current and future permits should be considered as ways in which an active forward market can be facilitated.

The method of allocation should reduce, as far as possible, the cost of the CPRS on the economy, and promote the effectiveness of the carbon price signal in informing investment decisions through a forward market.

Compensation

Victoria considers that there should be no compensation to firms for a loss in asset value experienced from the introduction of a CPRS. In order to promote the economic efficiency of the CPRS, and to avoid undesirable distributive impacts, assistance should be considered through mechanisms that directly address the economic or social outcomes being sought, rather than providing compensation for the introduction of a policy.

Victoria notes the *Green Paper* position on emissions intensive trade-exposed firms and strongly affected industries and will discuss these in the section below.

There should be no compensation to firms for a loss in asset value experienced from the introduction of the CPRS. If required, assistance to deal with difficulties encountered by firms in adjusting to a CPRS should be addressed as a part of a package of transitional measures.

Compliance

The success of the CPRS will be dependent on the existence of an effective and comprehensive monitoring and enforcement regime. This means that the compliance provisions will be of upmost importance.

Victoria considers that the compliance regime applied to the scheme to reduce greenhouse gas emissions must be robust, credible and clear.

Transitional assistance – Emissions intensive trade-exposed (EITE) industries / enterprises

Victoria supports, as far as practicable, providing transitional assistance to EITE industries / enterprises while their competitors do not face similar carbon price costs. Victoria recognises that assistance to EITE industries / enterprises will be a major issue to be finalised in the CPRS design.

Victoria believes that for firms to qualify as an EITE entity, they should be required to meet strict criteria assessed by an independent body. Transitional assistance should be provided through a robust and transparent mechanism to a level which allows the EITE entity to maintain its competitiveness to such an extent that inefficient adjustment is avoided.

The method for calculating assistance, including the setting of baselines, needs to ensure that it meets the overall objectives of the assistance.

Any assistance provided should also be done in a manner which maintains incentives for firms to reduce emissions and produces efficient and equitable outcomes for the rest of the economy.

The final decision in this area will need to carefully balance the needs of EITE industries / enterprises. If there is a fixed pool of assistance available for EITE industries / enterprises, decisions to broaden eligibility for this form of assistance could lower the quantity of assistance to the most affected firms. By contrast, expanding the pool of permits available to EITE industries / enterprises will increase the emissions reduction task on remaining covered entities in the economy.

Victoria considers this to be a problem of great relevance to the overall design of the scheme and will have direct economic ramifications for jurisdictions.

Although implementing the scheme will be the responsibility of the Commonwealth, Victoria will work closely with its local industries to determine what impacts they will experience under current *Green Paper* proposals. These data will allow for more detailed and informed discussions with the Commonwealth regarding the appropriate level of the EITE assistance, including the option for assistance to be better targeted at an enterprise level.

Substantially impacted EITE industries / enterprises should be eligible for transitional assistance where major international competitors do not face similar direct or indirect costs or restrictions on their emissions.

The Victorian Government will work closely with the Commonwealth Government to examine the impacts of the CPRS proposals on Victorian EITE industries / enterprises to establish effective and appropriate transitional assistance measures.

In general Victoria supports a scheme that promotes lowest cost emissions reductions; avoids carbon leakage; promotes innovation and new efficiencies; and does not penalise firms which have demonstrated early action.

Transitional assistance – regions, communities and workers

The CPRS will have broad impacts on all Australians. While in some cases this will lead to opportunities for workers and regions from new or expanded markets, there will nevertheless be some sectors or regions which are adversely affected.

Victoria notes the *Green Paper's* proposal to provide structural adjustment assistance through two initiatives, the Electricity Sector Adjustment Scheme (ESAS) and the Climate Change Action Fund (CCAF).

Victoria supports this approach and notes that transitional assistance should be structured so that:

- eligibility for assistance is determined based on transparent criteria (established at the outset of the scheme);
- while the Commonwealth should be responsible for funding adjustment schemes, State Governments should, in many cases, largely be responsible for design and implementation;
- the type and level of assistance to workers, regions or communities is tailored to the impact of adjustment on the affected group;
- climate change adaptation issues be considered in developing regional adjustment packages; and
- pro-active assistance is available for areas of need (based on national modelling once the final details of scheme design are determined).

These principles have been expanded in Attachment 1, and a recommended application of this approach is presented in Attachment 2 which focuses on the Latrobe Valley as a likely adversely affected region.

Victoria also seeks to clarify that regions which are adversely affected by the CPRS, but which are not eligible for ESAS assistance (i.e. outside the electricity sector), would have access to a similar level of support through CCAF.

Victoria supports the Commonwealth's desire to provide transitional assistance to disproportionately affected regions, workers and communities. Assistance based on strong collaboration between State and Territory Governments and the above principles will provide the platform to achieve shared goals.

Transitional assistance – Low income

Victoria recognises the need to aid low income households to adjust to the CPRS as a key consideration in designing and implementing the scheme. Victoria supports the Commonwealth's proposal of payments to households through the tax and social security systems to offset increasing costs of fuels, energy and commodities for low income households caused by the CPRS and awaits further detail on the specific nature of these proposals. The potential of achieving these goals through the delivery of energy efficiency initiatives should also be considered.

In developing the details of these proposals, Victoria believes it is important to:

- seek to ensure that low income households are not left worse off when compared to the broader population as a result of the CPRS;
- seek to ensure the continued affordability and provision of essential services to low income households;
- develop the capacity of households and communities to deal with the impact of the CPRS, recognising that an effective way to minimise costs for low income households is to help them reduce energy consumption (the Victorian Energy Efficiency Target (VEET) scheme is a good example of this approach); and
- enhance community knowledge about the impacts of the CPRS and climate change to assist the capacity of communities to develop local responses.

These principles should be implemented in a way that does not significantly undermine the price signal intended by the CPRS.

Victoria awaits more detailed analysis of these impacts in the modelling being undertaken by the Federal Treasury and the Garnaut Climate Change Review. In particular, Victoria is interested in specific modelling results on the effects of Australia's climate change policy response on low income and regional households.

Victoria welcomes the Commonwealth's commitment to fully offset the impact of the CPRS on low income households through the tax-transfer system.

Victoria supports the Commonwealth's decision to aid low income household transition to the CPRS. Assistance should be structured according to the above principles accompanied by strong collaboration between State and Territory Governments.

Transitional assistance – Strongly affected industries

Due to Victoria's heavy reliance on brown coal as a source for much of its electricity supply, the issue of strongly affected industries is of significant interest.

Victoria supports the general approach of the *Green Paper* through the proposed Electricity Sector Adjustment Scheme, noting also that the methodology for determining and taxing the assistance should not undermine the objectives of providing the assistance.

In order to promote the economic efficiency of the CPRS, and to avoid undesirable distributive impacts, assistance should be considered through mechanisms that directly address the economic or social outcomes being sought, rather than providing compensation for the introduction of a policy.

However, Victoria believes that this adjustment scheme will be most effective when positioned as part of a broader approach to addressing transitional issues as outlined in Figure 1 below.

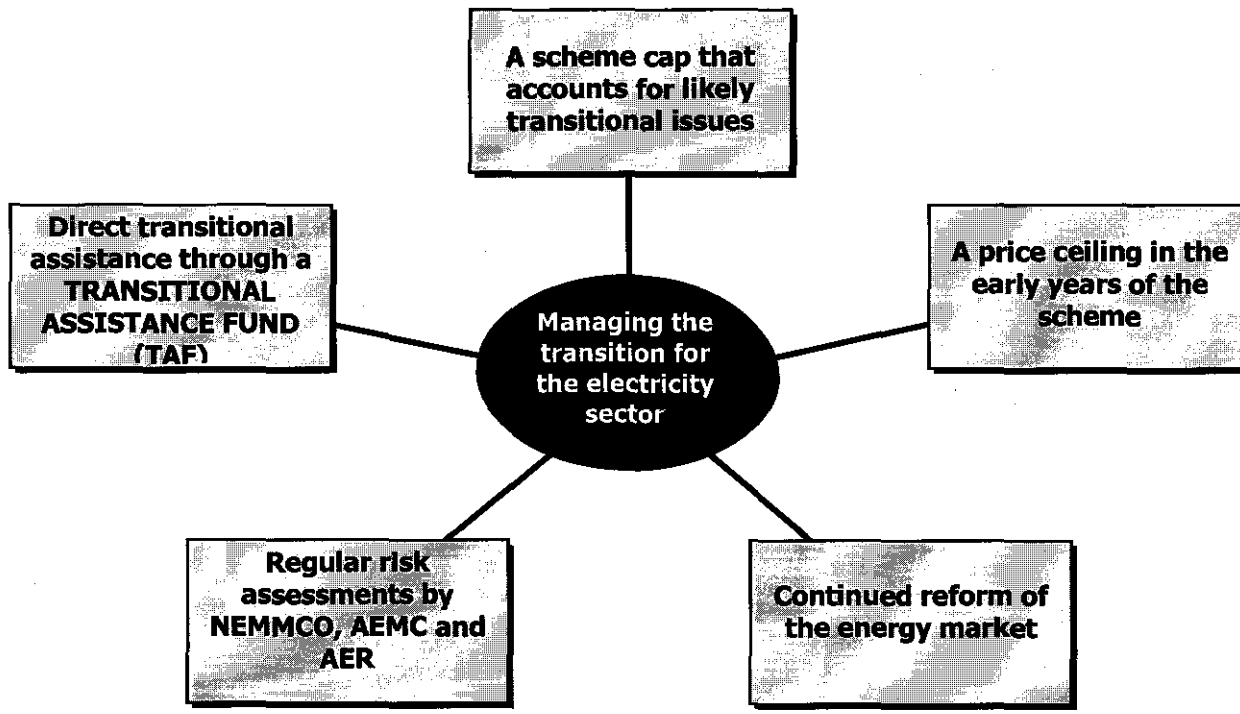

Figure 1 – Achieving a smooth transition for the electricity sector

Victoria recommends a scheme design that supports a smooth transition of the energy sector to a carbon-constrained future, including setting emissions caps that are not overly ambitious during the transitional period and designing the auction process in a way which takes into consideration the potential cash flow implications to covered firms.

Victoria supports the adoption of a permit price ceiling for the early years of the scheme, provided this does not compromise the achievement of the longer-term emissions target. Accordingly, Victoria believes a 'make-good' provision should not be applied while a price ceiling is operating. Once the initial transition period has passed and covered entities become familiar with operating under the CPRS, the merit of a 'make-good' provision to maintain the scheme's environmental integrity should be reassessed.

The continued reform of the national energy market will also help to create a more adaptive energy network. Ongoing reforms should include the transition to a single energy market operator (Australian Energy Market Operator) with enhanced functions (national transmission planner, Gas Statement of Opportunities, gas short-term trading market and bulletin board), and a review by the Australian Energy Market Commission of the energy market framework in light of climate change policies.

This ongoing reform should include retail price deregulation in energy markets to ensure that the costs associated with a CPRS are passed through to consumers, to facilitate optimal energy efficiency and demand reduction measures. In addition, the national energy reform process should include removal of retail price caps in all jurisdictions in order to promote efficient and timely investment in a new low emissions generation.

Victoria believes ongoing periodic risk assessments by NEMMCO, AEMC and AER of the impact of a Carbon Pollution Reduction Scheme on the energy market will be essential to developing sound policy responses. To the extent that any risks are identified, the Commonwealth Government, in consultation with the national market regulatory bodies, should put in place strategies to manage these issues on behalf of the Australian community.

Finally, Victoria considers that the Commonwealth's proposal for limited direct transitional assistance to electricity generators should be provided through a Transitional Assistance Fund (TAF). This fund would be managed by an independent body with funding provided on the following conditions:

- it can be demonstrated that such assistance would be aimed at improving electricity generator investor confidence and thereby ongoing investment in generation capacity to provide a secure and reliable electricity supply for Victoria in transitioning to the Carbon Pollution Reduction Scheme;
- assistance should be limited and once-off;
- the provision of assistance should be transparent, simple, provided in the most efficient form (i.e. either cash or permits) and not deliver windfall gains;
- eligibility criteria, and obligations for use of the fund, would be established at the scheme outset and implemented by the independent body;
- generator access to the TAF would be based on demonstration of either:
  - investment in low emissions technologies including, for example, coal pre-drying and carbon capture and storage; and/or
  - generators commitment to facilitating a smooth transition to a lower emissions generation sector for Victoria; and
- assistance funding would be withdrawn if it were proven, by the independent body, that the recipient acted intentionally to adversely affect the operation of the electricity market.

Victoria considers that achieving a smooth transition for the electricity sector is best achieved by taking a measured and coordinated approach to a number of key scheme design elements including scheme cap; price caps; energy market reform; regular risk assessments; and transitional assistance through a dedicated fund administered by an independent body.

States and Territories role in supporting the CPRS

Victoria recognises that successfully implementing the CPRS and appropriate transitional measures will require collaboration from States and Territories.

The CPRS will have an impact on State Budgets in many areas.

Victoria understands the needs for all participants in the Australian economy to adjust to the impact of the CPRS and is not seeking funding from the Commonwealth to offset all budgetary impacts. However, in some instances there is the potential for undesirable consequences on the delivery of public services.

Accordingly, in the areas identified below, Victoria is seeking Commonwealth action to avoid these negative outcomes.

- ***Neutralising the impacts on public transport***

  The CPRS *Green Paper* proposes to reduce fuel excise to completely offset any

increase in the price of petrol induced by the scheme. However, public transport powered by electricity will face the increased costs of a carbon price immediately, and public buses after one year.

The additional public transport costs can either be dealt with by increasing government subsidies or by increasing fares. A fare increase would result in a lower emitting form of transport (in most circumstances) costing more to the public as a result of the CPRS, while the alternative of using private cars would not experience the price increase. Increasing government subsidies would prevent this perverse outcome, but at an additional cost to State and Territory Governments.

Victoria seeks Commonwealth funding to correct this perverse outcome.

- ***Support for raising energy concession payments***

  Currently, the Victoria Government provides energy concessions to holders of Federal Government concession cards. As the CPRS will increase the price of energy, Victoria's concession payments will increase as a result.

  Victoria seeks a Commonwealth commitment to address the consequences of this change on State Budgets.

- ***Fund to undertake energy improvements on State and Territory assets***

  Victorian notes that there will be additional capital expenditure required to increase the energy efficiency of its public assets (such as hospitals and schools). To ensure that service provision is not compromised due to CPRS-driven price increases, Victoria recommends a process for facilitating this upgrade through the joint funding by State and Territory and Commonwealth Governments.

- ***Directing the Building Australia Fund toward low emissions transport infrastructure***

  The Garnaut Climate Change Review's *Draft Report*, states that the provision of transport infrastructure was identified as a key way of addressing equity issues surrounding the introduction of an emissions trading scheme.

  The Commonwealth Government has allocated $20 billion in the Building Australia Fund to build critical economic infrastructure such as roads, rail, ports and broadband. While around $4.7 billion has been allocated to broadband infrastructure, Victoria suggests that a further sum be set aside for low emissions transport infrastructure to be added to through co-funding by the relevant State or Territory Government.

ATTACHMENT 1

STRUCTURAL ADJUSTMENT ASSISTANCE FOR REGIONS, COMMUNITIES AND WORKERS *PRINCIPLES AND IMPLEMENTATION*

The CPRS Green Paper proposes to offer structural adjustment assistance on the basis that:

- existing generally applied measures be taken into account;
- be provided where a burden is identified;
- be designed to assist not prevent or hinder adjustment; and
- apply regardless of access to other transitional assistance.

Victoria supports these general rules but seeks to ensure that the delivery of the assistance is most effectively used. Accordingly, it is recommended that the following principles be developed for adoption by the Commonwealth in the design of their structural adjustment programs and to guide other levels of government on their role and responsibilities.

1. *That eligibility for assistance be determined based on transparent criteria established at the outset of the CPRS.*

   Clear up-front criteria will ensure certainty and fairness in delivering assistance. Given the shared roles of local, State and Commonwealth Governments in this area, these criteria should be based on a framework of National Principles for Adjustment Assistance for regional Australia such as those intended to be developed through the national Regional Development Council.

2. *That the design of assistance be provided based on sound principles.*

   These include:

   - maximising efficiency – having the least distortionary impacts on the wider economy;
   - be cost effective – choosing options that have the greatest impact for the money spent;
   - minimising transaction costs – complex programs can lead to large proportions of available funds being used for administrative purposes; and
   - developing a package best suited to achieving the adjustment objectives – often a package of measures will be required, and it is important that these operate in synergy.

3. *That while the Commonwealth should be responsible for funding adjustment schemes, State Governments should largely be responsible for design and implementation.*

   Appropriate forms of assistance will tend to vary based on the specific factors involved in each case. In keeping with the subsidiarity principle, State Governments are generally best placed to deliver this assistance as they are closer to the communities to which the assistance is targeted and experienced in delivering related regional development, skills and training programs.

4. *That the type and level of assistance to workers, regions or communities be tailored to the impacts of adjustment on the affected group.*

   For example a region with high existing levels of social disadvantage and a narrow economic base is likely to need higher levels of coordinated adjustment assistance.

5. *That other development needs, including climate change adaptation issues, be considered in developing regional adjustment packages.*

   Where larger adjustment schemes are necessary, the development of the package should include consideration of the likely climate change impacts (such as availability of water or possible infrastructure needs) and other drivers of change on the region over the medium-term.

6. *That pro-active assistance be considered for areas of need based on national modelling once the final details of scheme design are determined.*

   Building on the Commonwealth recommendation that assistance be provided where an impact is identified, there may be potential in certain instances to predict that certain regions may be significantly impacted by a carbon pollution reduction scheme. In such cases there would be scope to undertake more detailed planning regarding the form that adjustment assistance may take. This would allow comprehensive regional reviews to establish the best way of incorporating structural adjustment assistance into a broader regional strategy.

ATTACHMENT 2

PRE-EMPTIVE STRUCTURAL ADJUSTMENT
EXAMPLE – ASSISTING THE LATROBE VALLEY

Purpose
To outline an approach to regional and community structural adjustment in response to the CPRS, using the Latrobe Valley as a pilot case example of applying the Electricity Sector Adjustment Scheme (ESAS).

Background
The CPRS will be implemented and managed by the Commonwealth Government. The Commonwealth will also receive significant revenue from the sale of emissions permits.

The *Green Paper* notes that auction revenue will be used to fund ESAS. This scheme has three components:

- support for the deployment of Carbon Capture and Storage technology;
- commitments to address particular impacts of the scheme on workers, communities and regions; and
- direct assistance to coal-fired generators.

While Victoria notes that there is potential for many regions to be adversely affected by the CPRS, and not all will relate solely to electricity sector adjustment, economic modelling done to date repeatedly indicates that the Latrobe Valley will likely be the most strongly affected region in Australia.

Victoria believes there is a strong case for **taking pre-emptive action in the Latrobe Valley** to achieve the best structural adjustment outcomes. This paper will provide an outline of the form such an assistance package may take.

Latrobe Valley Profile

The Latrobe Valley is one of Victoria's key economic regions: home to over 73,000 people, it is the centre of Victoria's electricity generation sector. The region's recent history has seen its economy evolve following significant structural change over a decade ago, to today boast a diversified economic base with major activities in the services, retail trade and manufacturing sectors complementing the region's natural assets in energy.

Despite these strengths, as home to Victoria's sizeable brown coal resource, the Latrobe Valley is vulnerable to adverse economic consequences from a CPRS as the Victorian economy transitions towards a lower carbon future. These vulnerabilities could eventually bring future economic strength to the region as clean coal technologies develop and are potentially commercialised in coming decades. There is also a need to continue the process of broadening the region's economic base. The Victorian Government is committed to retaining economic prosperity in the Latrobe Valley during the transition to a clean energy future, and beyond.

The electricity sector in the Latrobe Valley currently employs around 3,000 people, primarily workers with technical, trade and machinery operating and driving skills. These skills will be invaluable as the energy industry moves forward, as well as providing a potentially rich resource for new industries to capitalise on. The region also has other natural strengths – such as proximity to possible carbon storage sites in Gippsland's oil and gas fields, and a strong education sector – that will see it well placed to make the most of the many opportunities climate change can bring.

The Victorian Government has already shown strong commitment to the Latrobe Valley's future by investing in new technology initiatives in the area of clean coal and carbon capture and storage, a key plank of the region's future economy. These initiatives have been funded through the Victorian Government's *Energy Technology Innovation Strategy* and include clean-coal research funds (around $9.4 million), installation of coal drying and a pilot carbon capture facility at Hazelwood Power Station ($30 million), and the facilitation of the clean coal HRL development near Loy Yang B ($50 million). A further $110 million over six years has recently been announced for large-scale, pre-commercial demonstration projects, as well as establishing Clean Coal Victoria in the Latrobe Valley. In addition, the Victorian Government has provided support to the local economy and community through Regional Development Victoria by currently providing around $6.5 million in grants through funds such as the *Regional Infrastructure Development Fund* and *Regional Investment Initiative*.

Box 1. Latrobe Valley Profile

Implementing adjustment assistance to affected regions

The details provided below represent a recommendation of how structural adjustment assistance could be delivered to key affected regions, workers and communities.

The Latrobe Valley is an important case study due to the prominent role of high emissions industry in its current economic structure. Maintaining the region's prosperity and smoothing the transition of the region to a lower carbon economy is a priority of the Victorian Government.

Accordingly, Victoria is keen to work with the Commonwealth in establishing effective means of integrating CPRS related assistance with existing State and Commonwealth programs and within the framework of existing regional planning activities for Gippsland.

A Latrobe Valley Assistance Fund

Victoria proposes that a sub-program of the ESAS be developed as a **Regional Communities Assistance Fund** (RCAF) and established as a matter of priority to allow preparatory work to commence in the Latrobe Valley. It is particularly important that governments give a clear and early commitment to work with the people of the Valley to protect vulnerable communities from potentially adverse impacts and ensure a successful transition.

Victoria is keen to explore a number of delivery models for the implementation of this fund with the Commonwealth Government. Options may include a fully funded Commonwealth administered fund with the State playing a key role in the design and implementation, or collaborative approaches with governance structures based on the successful *Geelong Innovation and Investment Fund* (GIIF).

Importantly, State Government partnership can bring many advantages as such strategies are very context and location specific and the State has an active presence in these locations. This involvement promotes work with local government, regional development organisations and business associations.

Under the RCAF eligibility and assessment of programs would be based on an agreed framework developed by Commonwealth and State governments prior to the CPRS beginning. This would include agreement on general principles of adjustment and specific principles relating to the CPRS.

This approach should be designed to integrate with and build on existing (and possibly modified) programs to assist communities adjust to economic change.

Examples of potential eligible programs are included below:

Region

- the completion of a study into the opportunities that exist within the region to drive economic growth. The study would analyse the contribution of other industries to the Latrobe Valley economy and identify the potential uses of infrastructure already in place;
- funding to support communities, industries and businesses plan and adjust to economic change by programs sponsored by the *Regional Infrastructure Development Fund*, and/or *Provincial Victoria Growth Fund* in the Latrobe Valley (see the *Moving Forward – Update* action plan for detail);
- projects aimed at diversifying the economic base of the region including innovation policies that promote new developments in non-stationary energy technologies;
- additional funding assistance for the research, demonstration and deployment of new, lower emission generation technologies in the region; and
- further roll-out of broadband infrastructure to promote the uptake of service based industries in the region.

Workers

- funding boost to *Community Regional Industry Skills Program (CRISP)*- CRISP is intended to contribute to the generation of industry development, new jobs, increased skills and improved services for rural and regional communities;
- assistance in the identification of alternative employment opportunities within the region, building on Victoria's *Skills and Labour Needs Surveys* that are undertaken at the sub-State level;
- enhanced provision of Skills Victoria reskilling programs like *Skill Up*, accreditation programs, and other educational opportunities to be made available to displaced workers;
- assistance in the securing of alternative employment opportunities, for example, CV preparation, interview techniques, for workers who may not be eligible for the full range of JobNetwork services (such as might occur if a spouse is working) by appropriate service providers;
- programs aimed at supporting mature aged workers, possibly including support for reskilling and moves into alternative full-time employment (like Victoria's *Experience Counts* program); support for firms to encourage work in a part-time or casual capacity training or mentoring younger people in the workforce; providing assistance for spouses to return to work after time spent out of the workforce; and/or supporting retiring workers to continue to be active and contribute to the local community (such as volunteer work with youth at risk, mens' sheds etc); and
- investment or retirement advice if workers receive lump sum payments.

Communities

- a Cooperative Research Council based in the region to examine the use of offsets in agricultural and forestry industries, including partnerships with local universities;
- increased support for schools in highly disadvantaged towns/cities;
- boosting community resilience through the extension of the *Neighbourhood Renewal Program* in the Latrobe Valley beyond 2009; and
- developing environmental enhancement packages.

International opportunities

- opportunities could be explored to export technology, production techniques and innovations with Victoria's Chinese sister state of Jiangsu – including, for example, potential electricity generation innovations derived from the Victorian Government's *Energy Technology Innovation Strategy*.

As a first step, given eligibility criteria are met, Victoria believes the RCAF should be used to fund a regional study in the Latrobe Valley. This study would look into the impacts and opportunities of a CPRS including an in-depth analysis of local skills and labour needs.

This approach would serve to be an integral component of the regional planning activity underway for the Gippsland regions overseen by the new Ministerial Taskforce on Regional Planning.

This activity will coordinate planning that emphasises long-term productivity, liveability and sustainability of provincial Victoria and support to communities and government to manage change, plan for growth and respond to changing environments.

Queensland Government

Carbon Pollution Reduction Scheme
Green Paper Submission

September 2008

SUBMISSION TO CARBON POLLUTION REDUCTION SCHEME - GREEN PAPER

Name of organisation:
The Queensland Government

Name/s of author/s:
Department of the Premier and Cabinet

Date:
15 September 2008

Confidentiality statement:

All submissions will be treated as public documents, unless the author of the submission clearly indicates the contrary by marking all or part of the submission as 'confidential'. Public submissions may be published in full on the website, including any personal information of authors and/or other third parties contained in the submission. If your submission contains the personal information of any third party individuals, please indicate on the cover of your submission if they have not consented to the publication of their information. A request made under the *Freedom of Information Act 1982* for access to a submission marked confidential will be determined in accordance with that Act.

I **do not** want this submission to be treated as **confidential** ~~and/~~or **anonymous**
(delete or strike out that which is not applicable)

Overview

The Queensland Government welcomes the opportunity to provide a submission on the Australian Government's proposal for a *Carbon Pollution Reduction Scheme (CPRS).*

Reducing greenhouse gas emissions is central to the environmental, social and economic future of Queensland, Australia, and the world. Queensland has committed to contribute to a national greenhouse gas emissions target of 60 per cent below 2000 levels by 2050, and supports a suite of abatement measures, including the implementation of an emissions trading scheme.

The Queensland Government's decision to end broadscale clearing of native vegetation in Queensland at the end of 2006 is the single largest emissions reduction measure in Australia to date, and is instrumental in assisting the Australian Government to meet its Kyoto commitment of limiting emissions to 108 per cent of 1990 levels over the period 2008 to 2012.

A well designed emissions trading scheme is crucially important to providing certainty for government, industry and the community about the emissions reductions that need to be achieved by Australia and the timeframe needed for emissions abatement. Emissions reduction targets and a framework for future carbon prices are essential to providing investment confidence, particularly in new energy generation technologies.

The Queensland Government is generally supportive of the CPRS as described in the Green Paper. In summary, the Queensland Government:

- supports a commencement date of 2010, with market rules to be available ideally by the end of the first quarter of 2009, and potentially a 'soft start' for the period 2010 to 2012;
- supports broad coverage of the CPRS including transport, agriculture (from 2015 onwards) and fugitive emissions (including waste and open cut mining);
- would support the Australian Government assisting to help the coal industry to rapidly develop more accurate measurement techniques for open cut mining, for implementation in the CPRS within two years;
- supports the need to preserve the international competitiveness of emissions-intensive trade-exposed industries (EITEs), as proposed by the Australian Government but with a three year review of eligibility rather than the single, upfront assessment proposed in the Green Paper, and using a rolling average of revenues to allow for smoothing of revenue peaks and troughs as opposed to a two year period as proposed in the Green Paper;
- requests the Australian Government reserve a tranche of permits for new EITE investments operating world best practice production processes, which could be sourced in addition to, or from within, the existing 30% reserve of EITE permits;
- support the provision of one-off and up-front direct assistance in the form of free permits to coal fired generators, for at least 50% of the loss in value over the economic life of energy assets;
- does not support conditions being attached to direct assistance for coal-fired generators on economic grounds, but considers that, should conditionality be pursued by the Australian Government, it should be provided in a manner which does not create poor market incentives (including higher electricity prices);
- would like further consideration be given to compensation for generators to take account of commitments under existing contracts;

- supports the Australian Government's international negotiations for the recognition of carbon stored in harvested wood products in Kyoto eligible plantation forests;
- strongly supports the need for household assistance through welfare and tax measures to minimise regressive income distribution effects which may arise for low income households and rural and remote communities;
- would strongly encourage the Australian Government to clearly and explicitly identify to households that assistance provided is to address the increases in energy prices;
- advocates for the continued need for the Australian Government to invest in research and development in low and zero-emissions technologies and the potential need for a contribution in addition to permit revenues;
- supports funding of complementary measures in the agriculture sector from a portion of the permits reserved by the Australian Government to acquit on the sectors behalf;
- supports transitioning out of the Gas Scheme to the CPRS at a time when the benefits of the CPRS are broadly equivalent to that of the 18% Gas Scheme;
- supports arrangements that encourage greater use of rail in managing Australia's freight task; and
- intends sending the Australian Government a supplementary submission in October on the quantum of additional permits needed for new investments in emission-intensive trade-exposed sectors and other significant issues following further analysis.

1. The Queensland context

In absolute and per capita terms, Queensland has the highest emissions profile in Australia and an economic structure which is more heavily reliant on energy and emissions-intensive industries than other States and Territories. Queensland's economic structure has large resource-based and traded good sectors with a strong mining and minerals processing sector, a large agricultural base, extensive transport sector and a large tourism sector.

For almost two decades, the Queensland population has grown at nearly twice the national average, representing about 41 per cent of the total Australian population growth. Migration to Queensland is projected to continue into the foreseeable future, with increasing demand for energy as a result.

Since 1998, $4.7 billion, or 75 per cent, of new generation investment in the National Electricity Market (NEM) has occurred in Queensland. Additionally, by 2015 approximately $12 billion more is expected to be invested in more than 10,000 megawatts (MW) of new generation capacity across the NEM to meet growing demand. A large proportion of this additional energy generation investment will need to occur in Queensland, in the absence of significant demand management measures.

Queensland also faces the challenge of dispersion. Road, rail and air transport are integral to Queensland's economy and present a significant challenge in a carbon constrained environment.

Scientific modelling indicates that Queensland is particularly vulnerable to the physical impacts of climate change, with two of the six Intergovernmental Panel on Climate Change (IPCC) 'hot spots' being Queensland's wet tropics (including the Great Barrier Reef) and south-east Queensland. Major vulnerabilities include extinction of species, deterioration of coral reefs, loss of buildings from increased flooding and storm surges and reduced availability of surface water. Queensland faces direct economic impacts from climate change on its agricultural, built environment and tourism sectors, as well as additional challenges in providing infrastructure for its rapidly growing population.

Economic modelling of the impacts of implementing an Australian emissions trading scheme shows that Queensland is the most heavily affected of the States and Territories compared to a business as usual scenario.

Queensland faces a real economic challenge in contributing to national emissions reductions targets. The Queensland Government considers the design of an emissions trading scheme, and associated equity considerations, must adequately account for the disproportionate impacts facing the Queensland economy.

As Queensland has such a high per capita emissions profile and accounts for approximately 30 per cent of 2006 national emissions, it must make a significant abatement contribution to the national 60 per cent reduction target and any interim targets adopted by Australia.

2. Design of the Australian Carbon Pollution Reduction Scheme

The Queensland Government generally supports the proposed architecture for the CPRS.

A well-designed emissions trading scheme which has the capacity to provide appropriate price signals over the short and medium term is important to creating investment confidence and sending the necessary price signals for business and industry.

2.1 A 2010 commencement date

The Queensland Government acknowledges the Australian Government's proposed 2010 commencement date for the CPRS. This date is ambitious and provides a strong signal about Australia's commitment to make genuine emissions reductions in the short, medium and longer term.

The Queensland Government also appreciates that achieving a 2010 commencement date will be challenging for both Government and industry, albeit in an environment where there is strong commitment from all sectors to the implementation of the scheme.

However, a key consideration in setting the start date will be the ability to provide business and industry with scheme rules as early as possible before the commencement date for the scheme. Ideally, this would occur at least 18 months prior to the start of the CPRS.

The Queensland Government would support a 'soft start' giving the market the opportunity to become familiar with the trading rules and for secondary markets to develop. This could be achieved through either a low carbon price to 2012 (or potentially longer), or by setting a cautious interim target which reflects the capacity of the economy to respond to technology and abatement opportunities in the short term.

2.2 An initial price cap

In this context, the Queensland Government supports the Australian Government's consideration of an initial price cap, acknowledging the need to set this price cap in a manner which limits short term volatility in permit prices, especially very high, or very low, prices. Such volatility leads to uncertainty and can subsequently reduce investment.

In theory, such volatility can be managed efficiently through forward markets for carbon. However, in the first few years of the scheme's operation, these markets are likely to be immature and only able to provide a less-than-perfect mechanism for risk management.

This creates an argument for limiting risk through the operation of price caps, at least in the early years of the scheme or, as Professor Garnaut proposed, fixed carbon prices for 2010-2012.

2.3 Medium term targets

The Queensland Government supports setting medium-term emissions reduction targets consistent with the national goal of achieving a 60 per cent reduction of 2000 emissions levels by 2050. The Queensland Government also supports the Green Paper position that in setting a medium-term national target range, the Australian Government will be mindful of the speed with which the economy, including the electricity generation industry, can adjust.

Queensland's capacity to contribute to targets will need to take account of the capacity of the economy and industry to meet the abatement challenge. There will need to be significant structural adjustment during the critical period of 2020 to 2030 when Australia will be heavily reliant on technological breakthroughs in the provision of low and zero-emissions base load energy generation capacity. Queensland is particularly impacted in this regard. There is a need for continued research and development investment by both the Australian and State Governments and the private sector to manage the transition to the low carbon economy.

For a population which is so heavily dependent on transport services, the Queensland Government is also concerned about the lead time required to develop potential alternative transport fuels such as hydrogen, syngas and ethanol. It will also take time in urban areas to change urban densities and further enhance public transport networks. This same issue also applies to some agricultural emissions – cost-effective emissions-reducing technologies (e.g. methane emissions from ruminant animals) are still some years off.

2.4 CPRS regulator

The Queensland Government supports the establishment of an independent scheme regulator as soon as practicable after the commencement of the CPRS. The Government acknowledges the challenges facing the Australian Government in implementing the CPRS by 2010, and the need to be more flexible in the early years of the scheme design.

The Green Paper's preferred position is for the Australian Government to be making both high-level decisions (international agreements, interim and longer term targets, compensation agreements) and operational decisions about scheme management (gateways, purchasing of international offsets, setting of price caps etc), at least in the initial years of the scheme.

The Queensland Government notes that an independent carbon regulator (Commonwealth body) would be established; but it would have a limited role focussed on technical market supervision as opposed to more active regulatory management.

The Queensland Government believes further consideration should be given to the Garnaut model of an independent carbon bank. In this approach, the Australian Government would still set high level objectives, but the carbon bank would take a more active role in managing the market and determining how best to achieve these targets. This would essentially include market operations (eg carbon price smoothing).

The main benefit of this approach would be to increase the perception of independence in decision-making while still allowing the Australian Government to set key policy objectives.

3. Coverage of Australia's Carbon Pollution Reduction Scheme

The Queensland Government supports the Green Paper's position that an effective emissions trading scheme should have as broad coverage as is practicable. Queensland supports the proposed inclusion of stationary energy, transport, waste, fugitive emissions and industrial processes in the scheme from its commencement, noting that the details of measurement, liability and verification for each of these sectors require further consideration.

The Queensland Government also supports, in principle, the inclusion of agriculture and the Australian Government's proposal that agriculture be considered for inclusion in 2015, subject to measurement issues being satisfactorily resolved.

The Queensland Government would also support the inclusion of other sectors in the scheme, when their inclusion clearly adds to the scheme's operational efficiency and effectiveness in achieving emissions reductions and when practical implementation issues are fully resolved.

3.1 Transport

Population dispersion and strong agricultural and mining sectors make Queensland heavily reliant on road, rail and air transport. In 2006, the transport sector contributed 13.7 per cent of Australia's net emissions; with Queensland responsible for emitting 23% of total transport emissions.

The Queensland Government supports the Australian Government's preferred position to include transport in the CPRS from 2010.

The Queensland Government is also very aware of the particular implications that emissions abatement has on the transport sector, of all sectors proposed for inclusion in the CPRS, in terms of costs for households and industry. In this context, the Queensland Government considers there to be a strong role for both the Australian Government and state governments to continue to provide support for related measures including:

- regulatory approaches to reducing vehicle emissions;
- increasing investment in public transport;
- more aggressive approaches to congestion management in urban areas; and
- review of other taxation measures for fuel.

The Queensland Government supports the Green Paper's proposal to cut fuel taxes for the first three years of the CPRS, giving motorists time to plan and adjust for the impacts of higher fuel costs. The Queensland Government also supports the proposed rebate system for agricultural and fishing industries in the first three years.

It is also important to note that inclusion of the transport sector in the CPRS will have more pronounced impacts for communities in rural and regional Queensland, as well as for agricultural production (agricultural production is discussed in more detail below) than for other communities and sectors. The Queensland Government strongly encourages the Australian Government to consider more targeted fuel cost adjustment measures for rural and remote areas after the initial three year fuel tax adjustment period.

The Queensland Government also supports the Green Paper's proposed fuel tax offsets for heavy vehicle road users, noting the proposal to review the measure after one year. While it is expected that heavy transport will be able to pass through some or all of the additional costs, these impacts will be felt more heavily in rural and remote areas.

The Queensland Government is concerned however that the proposed diesel rebate for road transport will reduce the existing price differential between road and rail transport. Given the relatively lower emissions profile of rail compared to road transport, it is important that the CPRS design not create a situation where road transport is comparatively more cost competitive than under current arrangements. The Queensland Government is supportive of arrangements that encourage greater use of rail in managing the freight task.

3.2 Agriculture

Primary industries have an important role to play in meeting national emissions reductions targets. Agriculture is a significant source of greenhouse gas emissions – accounting directly for some 16 per cent of Australia's emissions in 2006. With more than 40 per cent of the national cattle herd, Queensland was responsible for 29 per cent of agricultural emissions in 2006.

Agricultural emissions are amenable to reduction through changed management practices, patterns of production and land use. In addition, the sector has significant potential for biosequestration of carbon dioxide in vegetation and soils. However, minimising net emissions involves a large number of management practices, not all of which are fully understood (particularly biosequestration in soil).

Most of the agricultural sector is trade exposed. Approximately 60 per cent of production is exported, and primary industry products account for some 15 per cent of Queensland's exports.

The Queensland Government believes that the agricultural sector should be included in the CPRS if supported by a clear cost benefit assessment. Coverage of the agricultural sector could significantly reduce greenhouse gas emissions if appropriate price signals are transmitted to producers and opportunities for emissions-reducing changes in technologies and management practices are identified. There will, however, be higher transaction costs than in other sectors because of the diffuse nature of agricultural emissions, and the way in which the sector is covered may create additional economic costs.

The Queensland Government agrees with the Green Paper proposition that it should be possible to resolve these issues in time for coverage of the sector in 2015. However, delay will cause uncertainty in the sector, with a need for the Australian Government's intentions in this area to be expressed as soon and as clearly as possible, and that transitional arrangements should be considered.

The Queensland Government's position for the coverage of agriculture in the CPRS, is that the policy framework should be around:

- ensuring producers have a clear incentive to identify and adopt management practices to reduce emissions;

- taking account of the wide variation in emissions factors across soil, climate and industry, with circumstances largely beyond the control of individual producers. For example, the emission factors used by Australia in its greenhouse gas accounting vary by a factor of five for nitrous oxide emissions across just five commodities/ regions – the true variability would be much greater. In greenhouse gas accounting terms, the accounting needs to be at least at "Tier 2", if not "Tier 3"; and

- minimising costs to ensure they do not exceed the value of emissions reductions. This includes not only transaction costs but also other economic costs.

Direct coverage clearly offers the best option in relation to the first two criteria as direct coverage provides an immediate incentive for emissions reduction and can be developed in a way that fully recognises the relevant circumstances of individual properties. It is accepted that direct coverage may have higher transaction costs, as it requires sufficiently robust estimates of net farm emissions on a property basis. However, the current Commonwealth/State work on emissions intensity benchmarking provides a vehicle for developing such a system. Moreover, other economic costs are likely to be lower.

Direct coverage raises the question of a threshold to be applied. The 25ktCO_2–e threshold proposed for industrial processes would catch only a small proportion of agricultural emissions. While a lower threshold would raise concerns about inequitable treatment, these could be addressed by ensuring that the total proportion of agricultural emissions caught by the scheme does not exceed those of other covered sectors. A threshold that caught 80 per cent of emissions would involve fewer than half of all producers, while a threshold that caught 60 per cent of emissions would involve only around 20 per cent of producers. It is recognised that there would be distortions around any threshold, but given the wide diversity in the sector and the availability of EITE assistance, such distortions are unlikely to have a significant impact.

On the other hand, it would be difficult to devise a system of indirect coverage to provide full recognition of the divergence in producer circumstances and management practices. In the absence of such recognition, it would operate as a food tax – with adverse economic (and social) consequences well in excess of potential transactions costs benefits. The Green Paper suggests a system of accreditation of low emissions management practices. Such a system should certainly be investigated and would be an essential companion to indirect coverage. However, it would be necessary for such a system to provide adequate recognition of the wide range of circumstances and management practices in the sector, with capacity to recognise continuous improvement in practices and hence emissions. It is likely that such a system would therefore replicate the transaction costs of a direct obligation approach.

The Green Paper also suggests consideration of a hybrid system, with larger producers who are in a position to estimate their emissions given the opportunity to do so, and smaller producers covered through an indirect obligation. This option is worth exploring and may provide a transition path to broader direct coverage. However, it is unclear how such a system would work given the complexities of supply chains, and it would remain important for the indirect obligation component to recognise the circumstances and management practices of the producers it relates to.

The Green Paper also recommends that domestic offsets from agricultural emissions not be available in the period prior to coverage of those emissions. This means that agriculture has no incentive to reduce emissions prior to 2015. In the interim period prior to 2015, complementary measures should provide comparable incentives for the

uptake of commercially attractive abatement opportunities to adequately prepare for the sector for coverage in 2015.

A tranche of the permit pool retained by the Australian Government on the agricultural sectors behalf prior to 2015 could be used for this purpose. This includes activities such as research and development for emissions reducing technologies and practices and soil carbon management to enhance carbon retention.

3.3 Waste

The Queensland Government notes that the preferred position in the Green Paper is for emissions from the waste sector to be covered from scheme commencement, with the precise scope of coverage, thresholds and other detailed design issues to be determined.

Given the lack of information provided by the Australian Government regarding the details of coverage for the waste sector, the Queensland Government is unable to form a definitive position on the issue of what the appropriate liability thresholds may be for this sector. However, the Queensland Government supports in-principle the Australian Government's preference to cover emissions from the waste sector from the start of the scheme.

Accordingly, the Queensland Government requests more detailed information on the following issues:

- Availability of credible emissions estimation techniques and implications for the timing of inclusion, with concerns there may be perverse incentives for the waste industry to delay the development of estimation techniques in order to defer coverage;

- The percentage and numbers of waste facilities that will be covered at various thresholds, possible perverse outcomes at each threshold, and the administrative and compliance requirements of each threshold;
  - preliminary calculations undertaken by the Queensland Government indicate that at least 84 facilities in Queensland would be covered under the higher 25kt CO_2-e/year threshold. This would result in considerable adjustment for the waste industry in Queensland, and indicates that the Australian Government's coverage calculation of 100 sites *nationally* (at 25kt per year) could be a significant underestimation;
  - the Queensland Government notes that a higher threshold may encourage the establishment of a greater number of smaller waste disposal facilities to avoid triggering the threshold, while a lower or differentiated threshold would increase the administrative burden;

- Accessibility to economically viable abatement opportunities, and the effect of different types of waste management ownership structures. Private sector waste management companies are likely to be in a good position to access economically viable emissions abatement measures. However, in Queensland, the majority of landfills are run by local governments, who may not have the same opportunities to access and apply economically viable abatement measures, or to pass-through costs;

- The adjustment implications of the age of the waste management facility given the potential for perverse incentives to close older sites to avoid inclusion; and

- Interrelationships with other complementary emissions abatement measures designed to send economic signals to the waste sector (such as current state government policies including landfill levies).

3.4 Offsets

The Queensland Government supports the Australian Government's preferred approach to the recognition of offsets including:

- the Australian Government's preference for broad coverage of sectors effectively limiting the potential for offsets from uncovered sectors;
- not recognising offsets from the agriculture sector until the practical constrains associated with cost effective measuring and monitoring of agricultural emissions are resolved and a decision is made on coverage of the agriculture sector in 2013; and
- supporting consultation with Indigenous Australians on the potential for offsets from reduction in emissions from savanna burning and forestry opportunities and the need for further R&D into the methodologies to aid the participation of indigenous land managers in the CPRS.

The Queensland Government also supports, in-principle, the Australian Government's intention to place short term constraints on the import of international offset credits that liable firms will be able to purchase and surrender for compliance. However, in the longer term, the Queensland Government supports unlimited and unfettered trading in the international market.

The Queensland Government strongly supports the Australian Government's international negotiations for the recognition of carbon stored in harvested wood products in Kyoto eligible plantation forests, noting that international negotiations on the Kyoto Protocol's second commitment period opens the way for possible inclusion of wood products post 2012.
The Queensland Government supports further investigation by the Australian Government into developing national accreditation standards for the voluntary carbon in Australia. For example, continuing accreditation of offsets from avoided deforestation within the voluntary market could deliver positive regrowth vegetation outcomes.

3.5 Deforestation

The Queensland Government notes that the Australian Government does not propose to include deforestation in the CPRS but, given the potential for low-cost abatement in the sector, it will investigate options for incentive-based mechanisms to further reduce deforestation.

The Green Paper attributes State-based restrictions on clearing as the key driver for markedly reducing rates of deforestation of mature and remnant forests in Australia. Australian deforestation emissions have reduced markedly since 1990, largely due to increased protections against land clearing. Problems of coverage include setting thresholds for coverage, exemptions from coverage, prediction of emissions and monitoring, reporting and compliance issues. It suggests that if emissions from

deforestation were to be included in the scheme it would create a powerful incentive for pre-emptive land clearing to avoid future obligations.

However, the Queensland Government is concerned that, without some incentive to reduce deforestation, the proposal as it stands may encourage the clearing of unprotected and regrowth vegetation, particularly in Queensland to make way for other land uses including plantations. Regrowth vegetation in Queensland is on average about 19 years old. If the regrowth vegetation does not meet the definition of a Kyoto forest and the value of carbon sequestered in regrowth vegetation cannot be recognised in the market; landholders may be encouraged to clear tracts of regrowth vegetation to establish new plantations (reforestation) in its place then voluntarily 'opt-in' to the scheme to receive permits for the sequestration generated by the plantation. The clearing of regrowth vegetation will lead to a release of stored carbon and could also impact on local biodiversity and land management conditions.

Incentives directed to reducing deforestation emissions provide an alternative mechanism to recognise and reduce deforestation outside the coverage of the CPRS. Incentives of a sufficient magnitude will encourage the retention of, for example, regrowth vegetation which is legally able to be cleared. Actions at the property level would need to be taken to appropriately manage and protect such areas of eligible vegetation.

The Queensland Government encourages consideration of a competitive approach to any allocation of incentive funds. A market based approach to the allocation of incentive funds would enable the emission reduction outcomes from the funds invested to be maximised. Auction approaches to the allocation of funds for the supply of environmental services have been increasingly applied across Australia and landholders are increasingly accepting of such mechanisms.
It is recognised that methodology and metrics to underpin the quantification of carbon benefits may need to be developed further. Options for the delivery of such a program could be at the national level or devolved appropriately down.

3.6 Open cut mining

The Queensland Government notes concerns about the measurement issues associated with the Australian Government's preference to cover fugitive emissions from open cut coal mines from the start of the scheme, and the strong need to improve estimation techniques. However, the Queensland Government supports the Australian Government's preference to cover fugitive emissions from open cut coal mines from the start of the scheme.

While Queensland's fugitive emissions from open cut coal mining is relatively small within the context of state emissions (accounting for 3.1MtCO2-e in 2006, or around 1.8% of Queensland's total net emissions), there are potentially substantial cost imposts for this sector outside of their direct control.

Currently, fugitive emissions from open cut coal mines are estimated using indirect proxy methods (emissions factors averaged at a State level) derived by the CSIRO and applied to the volume of gas released per tonne of coal produced (m^3/tonne). The CSIRO emissions factor for Queensland is 1.2m^3/tonne, but the underpinning CSIRO research shows that site specificity can deliver confidence ranges of between 0.1 to 4.5m^3/tonne across open cut mines in Queensland.

Given the measurement uncertainties which exist for fugitive emissions, the Queensland Government would support special priority and provision of Australian

Government assistance in the rapid development of more accurate measurement techniques over the next two years.

4. Emissions-Intensive Trade – Exposed Industries

The Queensland Government supports the provision of assistance to Australia's emissions-intensive trade-exposed industries (EITEs) on economic and environmental grounds.

Queensland's agricultural, mining and minerals processing industries will be significantly affected by the introduction of the CPRS. The Queensland Government supports the consideration of EITEs in the international context within which they operate to retain competitiveness and avoid carbon leakage to countries which have not yet implemented emissions reductions arrangements in the relevant sectors.

The Queensland Government supports the proposal that assistance to EITEs be phased out beyond 2020, if a comprehensive global emissions reduction agreement comes into force.

4.1 Amount of assistance to EITEs

While supporting assistance to EITEs, the Queensland Government recognises that a well-designed CPRS needs to ensure that all sectors of the economy contribute to national greenhouse gas reduction targets and strike an appropriate balance between support for the EITEs and the additional costs borne by the domestic economy to meet the national targets.

The CPRS therefore needs to ensure a sufficient but not excessive level of support is provided to EITEs. The Queensland Government considers that the proposed capped level of assistance for EITEs of around 30 per cent of total permits (including about 10 per cent set aside for agriculture) is a reasonable starting point. . It should ensure that adequate resources are available to assist other sectors of the economy, including households and strongly affected industries.

4.2 EITE Thresholds

On balance, while the Queensland Government could consider supporting the revenue based EITE formula, it recommends the Australian Government uses a rolling average of revenues to allow for smoothing of revenue peaks and troughs as opposed to a two year period as proposed in the Green Paper. However, the Queensland Government also acknowledges that the revenue based formula may not be as robust as a value added methodology, and suggests the Australian Government further explore the practicality and feasibility of using a value added formula to determine whether it makes a material difference to the allocation of sectoral assistance.

It is important that the eligibility formula be a transparent and comparable indicator of the materiality of the carbon cost impacts, and the capacity of industries to absorb or pass through such costs, across different traded industries.

The Queensland Government notes that while an alternative value-added approach may provide a more comprehensive alternative for measuring impacts, it acknowledges that this approach may be more subjective, information intensive and administratively complex. The UK Government has been using a value added scorecard approach for several years to assess 800 of its top companies.

The Queensland Government broadly supports the proposed 'two-tier scheme' relating to emissions intensity based on emissions per unit of revenues specifically:

- above 2,000 tonnes of carbon dioxide (tCO2-e) per $1 million revenue to receive assistance to offset about 90 per cent of the impact of the carbon cost; and
- between 1,500 tCO2-e per $1 million revenue and 2,000 tCO2-e per $1 million revenue to receive assistance to offset about 60 per cent of the impact of the carbon cost.

However, the Queensland Government is concerned that the proposed lower threshold may not take adequate account of EITEs which will be impacted by the CPRS. In this context, the Queensland Government suggests the Australian Government gives further careful consideration to the EITE assistance threshold cut off (eg. for those less than 1,500tCO_2-e per $1M revenue).

The establishment of such a third tier should not, however, mean that the 30 per cent overall cap on EITE assistance is increased. It is recognised that this could reduce the amount of assistance available per competing claim than might otherwise have been the case under the higher thresholds.

4.3 Review of industries within EITE thresholds

The Queensland Government supports the Green Paper proposal to target assistance to those activities facing the largest material impact from the introduction of the CPRS.

To ensure this intent is maintained over time, the Queensland Government considers that eligibility for assistance should not be determined on a "once and for all" basis, as is proposed for domestic significantly affected industries.

The Queensland Government proposes a three year review process of EITE eligibility, to take account of fluctuations in key parameters including commodity prices. This would provide a mechanism to direct EITE assistance to those industries at greatest risk in the competitive international market and provide a mechanism to ensure activities significantly exceeding the revenue thresholds do not continue to receive assistance at the expense of industries which may have experienced significant price falls and whose competitiveness is significantly disadvantaged by the imposition of a carbon price. The Queensland Government notes that the EU ETS is considering a three year review process for its equivalent EITEs, although the thresholds for identification of these industries are still being considered.

In addition, incumbent firms could continue to be assessed against industry average baseline production processes to maintain incentives for eligible activities to reduce the emissions intensity of their production process.

4.4 New entrants and industry expansion

The policy intent of providing assistance to EITEs is to minimise carbon leakage to other countries where no comparable emissions reduction policy is in place. On this basis, the Queensland Government supports EITE assistance being available for new entrants to EITE sectors and for incumbent industry expansion, and suggests the Australian Government further consider how to avoid discriminating against these interests.

The Queensland Government acknowledges two approaches are possible under the existing treatment of EITEs:

(i) a permit reserve from the EITE permits be 'earmarked' for new entrants and industry expansion, with the annual permit pool being maintained at a constant 30 per cent of total permits; or

(ii) expanding the existing tranche of permits available to EITEs, however, this will reduce the total amount of assistance available to non EITE interests.

To promote both environmentally and economically efficient investment, the eligibility of new entrants for EITE assistance should be based on world's best practice production processes, rather than historical industry average baselines.

4.5 Treatment of indirect emissions

Given the significant information and measurement complexities associated with measurement of indirect emissions, the Queensland Government supports the Australian Government's preferred position that indirect emissions (except for electricity related) be excluded from the thresholds for EITEs.

However, the Queensland Government notes that the exclusion of indirect transport emissions from EITE assistance arrangements is potentially an important issue for Queensland given the significant transport task associated with many of the State's trade-exposed sectors, particularly primary industries. While there should be minimal costs associated with transport emissions in the initial stages due to equivalent fuel excise offsets, the issue may be of concern post 2013 when offset arrangements may cease.

As a result, the potential additional costs of indirect emissions for EITEs in sectors such as agriculture need to be taken into consideration in developing future support measures, whether through the Climate Change Action Fund or alternative fuel taxation measures.

5. Impacts on the electricity generation sector

Queensland is heavily dependent on stationary energy. Low cost electricity generation has provided the State with a competitive economic advantage. Reliable, cost-effective energy is critical to Queensland's continued economic growth and competitiveness.

The Queensland Government is very aware that the stationary generation sector will be one of the key sources of national abatement requiring significant changes to the way, and where energy is generated and potentially transmitted.

Coal-fired base load generators contribute approximately 78 per cent (8,760MW) to Queensland's total NEM-connected electricity generation capacity (11,267MW) of electricity. While this concentration of low-cost coal-fired generation currently offers an advantage to Queensland with respect to competitively priced electricity, it also represents high risk to Government and the State in a future carbon-constrained environment.

There is also direct risk to the Queensland Government which owns substantial shareholdings in generation capacity in the State. Nearly 62 per cent (5,392MW) of the total coal-fired capacity is state owned.

With the weighted average age of Queensland's coal-fired generation assets (against capacity) being around 17 years, commissioning dates of some of Queensland's existing coal-fired plants go as far back as the 1970s. Many of the investment decisions in these plants were made prior to a carbon aware environment, and were based on the cost competitiveness and ongoing availability of coal.

As indicated earlier, Queensland is also in the position of requiring additional electricity generation capacity to meet the demands of a growing population and economy. NEMMCO forecasts that from 2007-08, total annual energy demand in Queensland will grow on average by four per cent per annum until 2016-17, with total demand growing by 18,855GWh over this period, in the absence of significant energy efficiency savings.

While Queensland has access to natural gas supplies as a transitional fuel in the short to medium term, its longer term energy demands will make the impacts of a CPRS more pronounced than in other states. For this reason the Queensland Government has made, and continues to make, a strong commitment to research and development efforts which can potentially secure cost-effective options for low emissions generation.

5.1 Energy supply security

The Queensland Government supports the Green Paper's analysis that the setting of the national medium term target will have the greatest bearing on energy security. The Queensland Government considers that energy supply security issues are manageable in the short, medium and longer term but the technical capacity of transitioning to alternative low or zero emissions technologies will need to be one of the key considerations for setting future national emissions reduction targets.

Integrated gasification and combined cycle (IGCC) technology with carbon dioxide capture and storage (CCS) may not be commercially attractive in the medium term, so this option is not available to meet medium term investment requirements. Other technologies, such as solar-thermal and geo-thermal generation also cannot be factored into an emissions reduction scenario at this stage.

Energy security will need to be efficiently managed through the transitional period for the energy sector, where substantial investment in alternative low/zero-emission base load generation will be required to compensate for reductions in traditional coal-fired base load capacity.

The Queensland Government supports the analysis undertaken by Professor Garnaut in respect of the potential impacts on transmission networks. Again, while these challenges are manageable, they will not come without some additional cost. The Climate Change Action Fund should include potential consideration of the additional costs for network infrastructure into the longer term which may need to be offset partly, or fully, to manage potential price jumps for energy consumers. This is particularly relevant for Queensland given the size and distribution of the State's network which extends for 1,700km, approximately half of Australia's eastern seaboard.

5.2 The Electricity Sector Adjustment Scheme

The Queensland Government strongly supports the Green Paper proposal for an Electricity Sector Adjustment Scheme, including the provision of direct assistance to coal-fired generators to ameliorate the impacts of a CPRS on investment premiums.

The Queensland Government's analysis for its own coal-fired generators indicates that over the medium to longer term generator companies face difficulties recovering the full costs associated with a CPRS, with a resultant loss in asset values, disproportionate to other sectors of the economy.

From a future investment perspective, if the Australian emissions abatement task is to be achieved, the combined resources of both public and private sectors will need to be fully engaged to achieve innovation and investment. The challenge for governments is to develop effective caps and associated market conditions, to encourage abatement effort while still ensuring the security of a supply of energy in a clean, cost efficient manner.

Much of the initial investment in significant emissions abatement will occur from the electricity generation sector. In this respect, maintaining investor confidence, whether for retrofitting/refurbishment of existing plant or investment in new, potentially unproven technologies, is an important part of achieving emissions abatement.

Once-off, upfront assistance will not alter abatement outcomes, as there is a finite number of permits available within the CPRS – as determined by the emission cap. Assistance to generators will not increase the number of permits required to meet abatement targets.

5.3 The allocation of direct assistance

In respect of the specific permit allocation proposals in the Green Paper, the Queensland Government supports:

- a cut-off date of 3 June 2007 for eligibility;
- the separation of direct assistance to separate black and brown coal pools, based on an emissions profile by plant. The Queensland Government considers that a 65:35 black:brown coal split is reasonable, however, further details will be provided in its supplementary submission in October;
- an asset-by asset allocation of direct assistance rather than a portfolio assessment of emissions; and

- providing up-front direct assistance. While acknowledging the policy concern for a potential windfall gain, the Queensland Government is concerned that a windfall gain review process will not achieve the investment confidence which is the purpose of the provision of direct assistance in the first instance. In addition, the Queensland Government agrees that a bottom up approach to determining the amount of allocation and to undertake any windfall gains review will be complex and that inherent uncertainty required for such modelling may make results inadequate on a stand-alone basis for Government decision making.

5.4 The provision of direct assistance - cash or free permits?

The Queensland Government supports the use of free permits rather than cash as the preferred position for the allocation of direct assistance to coal-fired generators.

In theory (and with perfect information), electricity generators should be indifferent between free permits and cash as a form of direct assistance. Neither option will increase the level of carbon emissions if provided on an up-front, once-off basis.

Free permits have the advantage of removing some of the uncertainty associated with estimating the cash value impacts of direct assistance up-front before the scheme commences and is a medium with a value which can fluctuate with the market.

The allocation of free permits rather than cash also has the advantage of limiting the amount of cash needed to be raised by the Australian Government in making direct assistance available in the initial year of the CPRS for the Electricity Sector Adjustment Scheme.

5.5 Attaching conditions to direct assistance

On economic grounds, the Queensland Government does not support the imposition of conditions on direct assistance provided to energy generators. Placing conditions on direct assistance, particularly if direct assistance is provided via free permits may limit permits moving to their 'highest and best valued' use, and potentially encourage investment in higher cost abatement options making emissions reductions and energy comparatively more expensive. Conditions on direct assistance could also give incumbent energy generators a competitive advantaged over new entrants, particularly smaller renewable options.

A particular concern is that conditional assistance could lead to less assistance from a commercial perspective than direct assistance of a similar amount. This would be the case where assistance is provided for research and development or technology uptake whose cost is well above the commercial return that such research and development or technology uptake will result in. For example, $500 million of assistance to a generator on the condition that it be used for CCS would be unlikely to lead to a commercial return of the same amount.

However, in the event that conditions of some form are imposed on direct assistance, the conditions should be designed in a way which does not:

- present a barrier to exit for incumbent generators; and
- provide competitive advantage for incumbent generators.

Any proposals to attach conditions to direct assistance should be subject to adequate consultation with all affected parties to ensure that any conditions enhance carbon reduction strategies at least cost.

5.6 Amount of direct assistance to be provided for coal-fired generators

The Green Paper does not nominate a specific amount of funds for direct assistance to coal generators. Instead, the Green Paper indicates that the quantum of assistance will be considered after the medium term target is set.

Many generators necessarily have to enter into long term contracts (power purchase agreements) with retailers and other large customers to support the financing of investments. This tends to lock them into long dated price paths (typically 10 years and beyond) and constrains their ability to pass on material changes to the costs of generation (such as carbon costs). The Queensland Government would like further consideration be given to compensation for generators to take account of commitments under existing contracts.

The Queensland Government considers reasonable the provision of one-off and up-front direct assistance in the form of free permits to coal fired generators, for at least 50% of the loss in value over the economic life of energy assets.

5.7 Queensland Gas Scheme

The Queensland Government will be seeking to transition the Queensland Gas Scheme into the CPRS as soon as practicable. The Queensland Government will work closely with the Australian Government to develop appropriate transitional arrangements once the interim and medium-term national emissions reduction targets are announced, and once it is satisfied that the objective of the gas scheme will be efficiently serviced through the CPRS.

It is likely that when the benefits of the CPRS are broadly equivalent to that of the 18% Gas Scheme, the CPRS will be the main mechanism driving new investment in gas fired generation in Queensland. At this time, the Queensland Government will consider transitioning out of the Gas Scheme to the CPRS.

6. Household and business assistance measures

6.1 Impacts on households

The Green Paper estimates that, given an indicative carbon price of $20 per tonne, electricity prices by would increase by 16 per cent, gas and other natural fuels by nine per cent and the CPI by 0.9 per cent in 2010-11.

The Queensland Government is concerned about the income distribution effects that an emissions trading scheme could have on households, particularly those on low incomes. The Queensland Government supports the Green Paper's position that there are strong equity and environmental reasons for reducing the impact of the CPRS on the living standards of low-income households.

The Queensland Government recognises that the household expenditure effects of a carbon price will be felt Australia-wide, although potentially, the impacts may be more evident in some States than in others. In this regard, national measures such as adjustments to the social security and income tax systems can provide for the efficient and equitable provision of compensation to households nationally. There may also be a case for special consideration to be given to the more heavily impacted States through other support measures, if required.

It is appropriate to provide household assistance primarily through the national tax and payment system as this will maintain price increases in energy, fuel and other carbon intensive products. Key to the achievement of emissions reductions targets are price signals which are not muted by direct price subsidies. The Queensland Government also considers essential that the Australian Government clearly and explicitly identifies to households that the assistance provided in this way is specifically aimed at addressing the increases in energy prices due to the impact of the CPRS.

The Green Paper proposes that assistance will be provided to low income households through the tax and payment system to meet the overall cost of living increase and that tax concessions to middle income households would be increased to help meet the cost of living increase. More specific measures are to be considered as part of the inquiry into *Australia's Future Tax System*. This should include a mechanism for periodic review of CPRS and offsetting taxation measures following the implementation of the scheme.

The Queensland Government also notes the important related review of the pension system currently being undertaken by the Australian Government. Increasing energy and fuel costs, along with the flow-on costs of living associated with the introduction of the CPRS will need to be a key consideration for the Australian Government in making decisions about future pension rates.

In addition, the Queensland Government notes the proposed energy efficiency measures supported by the Australian Government including the provision of low interest loans to households, subsidised insulation for rental properties, and solar hot water rebates.

6.2 Impacts on small and medium enterprises

The Queensland Government supports options for making assistance available to small and medium enterprises (SMEs) through the Climate Change Action Fund,

including measures to support energy efficiency and specific industry awareness measures.

The Queensland Government considers SMEs will likely to be among some of the most unprepared for the indirect impacts of the CPRS, and so potentially face substantial carbon risks. It will be important that the Australian Government assist the capacity of these firms to operate under future carbon constraints.

SMEs comprise about 99 per cent of Queensland business. Most of these businesses will not be captured directly by the CPRS and are unlikely to trade permits but will still be affected by increased input costs across their supply chains. This impact will be especially high in regional areas as a result of high fuel costs and a concentration of often unique-to-region energy-intensive industries. This may exacerbate effects on local business and across communities.

The impact of the CPRS will be particularly pronounced on Queensland firms that are expanding into offshore markets. While they may be below the threshold for assistance as EITEs, their competitiveness will still be challenged. The changing behaviour of customers and supply chains as a result of higher prices could also substantially impact on their business.

The manufacturing sector, for example will face significant challenges in adjusting to the CPRS. The Green Paper identified 28 manufacturing sectors in the top 60 emissions intensive industry sectors. These sectors employ over 68,000 people or over one-third of the Queensland manufacturing industry's total number of employees (192,600). Many Queensland manufacturers, while not classified as emissions-intensive are trade exposed and will benefit from assistance.

The tourism sector will also be impacted. Tourism is one of the State's fastest growing export industries, now the second largest export earner, behind coal. Tourism accounts for $8.1 billion or 5.6 percent per cent of the State's economic activity as measured by gross state product, generates domestic and international visitor expenditure of over $19.4 billion[1] and employs 103,500 Queenslanders[2].

In Queensland, the tourism industry is comprised largely of SMEs, with a significant proportion of operators located in regional areas where they are often central to local economies with the social and environmental benefits derived from visitor expenditure.

While the tourism industry is not emissions-intensive, it does operate in a global market. The industry's competitiveness is dependent on Queensland's and Australia's attractiveness to international and domestic visitors. The introduction of the CPRS will impose budgetary constraints across the sector resulting in the increased price of tourism products and services. This decreases the appeal for both domestic and international tourists which ultimately results in a loss of market share and profitability.

The Queensland Government is currently taking steps to engage with business and industry throughout Queensland in an effort to provide SME businesses with information on climate change impacts and the tools necessary to adjust. The Australian Government will need to be a key partner in this process.

The Australian Government has stated that it will establish the Climate Change Action Fund to support businesses to prepare for and minimise threats to business viability

[1] Tourism Research Australia, Year ended March 2008
[2] STCRC, Year to June 2004

while maximising commercial opportunities. It is critical that this fund recognise the impact that a carbon price will have on the profitability of SMEs and provide appropriate compensation to those that will not be eligible for assistance through other mechanisms.

6.3 Climate Change Action Fund

The Queensland Government strongly support the Australian Government's establishment of the Climate Change Action Fund, noting that its quantum and source of funding is still be determined.

The Queensland Government supports the role of the CCAF in providing assistance to workers and communities and firm-specific support. The Government also considers the CCAF, or other Australian Government funding, should support research and development activities to support emissions-reduction in sectors that do not receive free permits,.

The Queensland Government believes there is also role for the CCAF to provide support for the following initiatives:

- there is a continued need for the Australian Government to substantially invest in research and development in low and zero emission technologies, as well as transmission infrastructure to facilitate the siting of generation power that is a long way from the national grid. Given the importance of this, the Commonwealth Government may need to allocate additional funds on top of permit revenues.

- funding for energy network infrastructure. Additional investment is likely to be needed for transmission infrastructure to provide sufficient capacity to realise the generation potential low emissions and renewable energy.

- dissemination of information and provision of incentives to promote uptake of, emissions reduction technologies and practices. This includes for SMEs and the primary industries and land sector have significant but largely unknown abatement opportunities including carbon sequestration in soil and vegetation.

7. Complementary measures

7.1 Complementary measures

It is not the purpose of the Green Paper to propose a suite of measures complementary to the CPRS. However, a CPRS remains only one part of the overall suite of measures required to respond to climate change.

Not all aspects of the economy are likely to respond effectively to the carbon price, especially in the short term. Additional complementary measures are necessary to assist a timely and smooth transition towards a low-emissions society. Complementary measures will be necessary to assist with delivery of the emissions trading scheme, and to compensate for factors that fall outside the design of the scheme.

Energy efficiency is of decisive importance. A key finding of a recent McKinsey and Company report titled *An Australian Cost Curve for Greenhouse Gas Reduction* indicates a significant opportunity for energy efficiency to deliver no-regret abatement by 2020.

Modelling convincingly demonstrates that the presence of 'easy and early gains' in energy efficiency makes achieving emissions reductions much less costly to the community. Typically, energy efficiency measures have not been adopted despite their apparent economic benefits. Therefore, it is unlikely that marginal increases in economic benefits arising from the introduction of the CPRS will be adequate to significantly increase the uptake of energy efficiency, at least in the early stages. Energy efficiency and demand management initiatives as complementary measures to the CPRS have the potential to provide significant benefits in terms of achieving early abatement and easing the transition to a low carbon-economy.

Depending on the chosen emissions reduction trajectory, it may be several years before the CPRS results in significant energy cost increases, and in the meanwhile investment decisions in relation to building and equipment design and equipment purchases will continue to be made, based upon prevailing energy prices. Given the long life span of many of these decisions (e.g. building design) it is appropriate (to achieve emissions reductions and cost savings) to encourage energy efficiency earlier rather than later, if necessary by regulatory means.

There needs to be a cultural shift in businesses' and the community's mindset regarding energy consumption and efficiency. It is generally considered that the scheme alone will not facilitate the change to the degree required.

Analysis has shown that there are market failures which inhibit the take up of energy efficiency measures even where there is already a clear economic benefit. These failures may result in a reduction in the effectiveness of price signals provided by the emissions trading scheme.

National consideration of energy efficiency programs beyond existing measures is warranted. While this work is being progressed through the COAG Climate Change and Water Working Group, Queensland would support the allocation of funding from permits to the Climate Change Action Fund to support the uptake of energy efficiency measures.

7.2 The critical role of technology improvement

New technology will play a vital role in meeting Australia's emissions reduction targets. A carbon price which stimulates innovation and investment in low and zero-emissions technologies is a crucial part of this agenda.

Economic modelling of the potential cost impacts on the Australian economy demonstrates the critical importance of new low-emissions technologies to achieving substantial reductions in greenhouse gas emissions.

Australia's economic growth in a carbon-constrained future will also be strongly dependant upon its capacity to implement step-change technologies. This is particularly so in the energy sector, which accounts for well over half of Australia's greenhouse gas emissions, but is also the case in other emitting sectors such as agriculture and transport.

The critical importance of technological advancements to achieving emission reductions demands private and public sector support for research and development, particularly in areas of strategic interest to Australia. Those strategic interests include our energy-based industries as well as other significant emitting industries such as agriculture. Meeting the unparalleled challenge of climate change will require unprecedented cooperation on strategic innovation and investment projects.

Given Australia's resource endowments and heavy reliance on coal-fired electricity generation, the development of commercially viable CCS and other clean coal technologies provides a potential opportunity for considerable reductions in Australia's emissions. Similarly, other areas in the energy sector where Australia could potentially gain a strategic advantage are geothermal and solar technology.

While the Queensland Government strongly supports the allocation of funding to research and development efforts in these areas of strategic interest, it recognises that technological potential may evolve in other areas over time and may require additional government support.

Delayed action in research and development increases the risk that the development and uptake of low-emissions technology will be deferred, resulting in lost opportunities for abatement and greater difficulty in achieving the necessary emissions reductions in the future when carbon costs are expected to be higher. The Queensland Government therefore supports ongoing investment in research and development activities.

Such investment must be a national priority and involve all sectors of industry and levels of government. The Australian Government – given the national nature of the task and its access to emissions permit revenues – will need to take prime funding responsibility within the public sector.

The Queensland Government encourages the Australian Government to supplement funding for additional research and development for key climate change technologies, such as carbon dioxide capture and storage, solar thermal and geothermal.

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Background of SECV and Alcoa

The SECV purchases electricity from the wholesale energy market and sells this electricity to Alcoa for its Point Henry and Portland aluminium smelters.

The SECV is also the registered participant (with NEMMCO) for the Anglesea Power Station (APS) which is owned and controlled by Alcoa. This unusual situation has arisen because of contractual obligations detailed in various agreements which preclude Alcoa from purchasing electricity from any entity other than the SECV.

The normal practice is for owner/operators of generators to be registered with NEMMCO.

The fact that the SECV is the registered participant for the APS is now likely to have unintended consequences based on proposals contained in the federal government's Carbon Pollution Reduction Scheme Green Paper (CPRS).

Identification of Problems Arising from Definitions within the Green Paper.

In the Green Paper, the government proposes to place liabilities on entities that emit 25,000 tonnes of CO2 equivalent or more. It also proposes to provide some of these entities with financial assistance to alleviate the financial burden the scheme will create.

The Green Paper proposes different methods by which to identify liable entities and entities that qualify for assistance. If the proposals proceed, Alcoa will be identified as a liable entity for the emissions of the APS and the SECV will be identified as the entity qualifying for assistance.

Extracts from Green Paper

Section 5.2 (Preferred Option) of the Green Paper states, that "*In general, entities with operational control over covered facilities or activities would be liable for emissions obligations arising from those facilities or activities under the scheme.*" This clearly identifies Alcoa as the liable entity for APS.

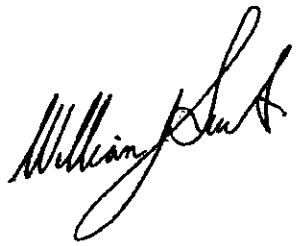
Section 10.5.2 which deals with providing assistance to coal-fired electricity generators states "*The Government's purpose would be best achieved by targeting the assistance to those ultimately affected by the changes in wealth – that is, the ultimate owners of those assets.*" The paper goes on to say that identifying the "ultimate owner" with sufficient certainty may not be possible because of complex company structures.

The Paper notes that NEMMCO registers entities, which own, control or operate individual generation assets and states "*The effect of this is that there is a readily identifiable registered entity in respect of every generation unit that dispatches into the NEM and WEM.*"

This proposed approach would identify the SECV as the recipient of assistance which is clearly contrary to the governments stated intention.

Recommendation:

That the definition of an entity which receives assistance be aligned to the definition of a liable entity and that the methodology used to identify both is the same.



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9th September 2008