CARBON MARKETS AND POLICY IN AUSTRALIA: RECENT DEVELOPMENTS

MARTLIN WILDER* AND LOUISA FITZ-GERALD**

I INTRODUCTION

The election of the Australian Labor Party ('ALP') to Government on 24 November 2007 has resulted in a significant shift in Australian climate change policy. The Rudd Government immediately ratified the Kyoto Protocol¹ and reaffirmed its intention to introduce an Australian Emissions Trading Scheme ('AETS') to commence in 2010.2 It also set a longer term target to reduce emissions by 60 per cent by 2050³ and has announced plans to increase the share of renewable energy in our national generation mix to 20 per cent by 2020. This bundle of measures represents a complete turnaround of the position adopted by the previous Government, and establishes Australia as a global leader alongside the European Union in terms of climate change policy development. It also signals a clear commitment on the part of the Government to ensure levels of anthropogenic emissions of greenhouse gas emissions are in accordance with those safe levels recommended by the Intergovernmental Panel on Climate Change, a commitment that has been borne out by policy details released throughout the year. Minister for Climate Change and Water Penny Wong's recent comments that 'absolutely clearly, the time for playing political games with this issue is over'4 suggest that this Government is aware of the dire

^{*} Partner, Baker & McKenzie; Chairman, NSW Climate Change Council; and Adjunct Professor, Australian National University.

^{**} Associate, Baker & McKenzie.

¹ Kyoto Protocol to the United Nations Framework Convention on Climate Change (1998) opened for signature 16 March 1998, 37 ILM 22 (entered into force 16 February 2005) ('Kyoto Protocol').

Kevin Rudd, Peter Garrett and Wayne Swan, Labor's Five Tests for an Effective Emissions Trading Scheme (2007) Official Website of the Australian Labor Party http://www.alp.org.au/media/0507/msCCloo301.php> at 14 September 2008.

³ Peter Garrett, Labor's Greenhouse Reduction Target – 60% by 2050 Backed By the Science (2007) Official Website of the Australian Labor Party http://www.alp.org.au/media/0507/msCC020.php at 14 September 2008.

⁴ Penny Wong, 'Transcript of Press Conference, Commonwealth Parliamentary Offices Adelaide: Garnaut Review Draft Report' (Press Release, 4 July 2008)
http://www.environment.gov.au/minister/wong/2008/pubs/tr20080704a.pdf> at 14 September 2008.

environmental and economic consequences that may stem from a failure to take appropriate action.

This article will examine the recent developments in climate policy in Australia, with a specific focus on the proposed frameworks for emissions trading in Australia. It will begin with the proposed design of the AETS, including the scheme design recommendations made by the Garnaut Climate Change Review in its Final Report⁵ (led by the Australian National University's Professor Ross Garnaut). The article will also consider the newly implemented mandatory greenhouse and energy reporting regulations, which provide detail on the mandatory corporate greenhouse emissions and energy reporting scheme, and the design proposals for an expanded national renewable energy target. The article will conclude by considering some recent developments in the voluntary carbon market in Australia, including the investigation by the Australian Competition and Consumer Commission (ACCC) into 'green' marketing.

II A NATIONAL EMISSIONS TRADING SCHEME FOR AUSTRALIA

Under the *Kyoto Protocol*, Australia is now required to keep annual emissions to within 108 per cent of 1990 levels between 2008 and 2012.⁶ While Australia is on track to meet this target based on the Government's most recent reports,⁷ the central policy measure to manage Australian emissions is the introduction of an emissions trading regime.

Designing an emissions trading scheme is a detailed and complex exercise that involves consideration of a wide range of economic, political, social and environmental factors. While prior to the federal election in November 2007, both the former Liberal Government under John Howard and the new Labor Government under Kevin Rudd (as well as the States and Territories through the National Emissions Trading Taskforce ('NETT')) had committed to implementing an emissions trading scheme, the development of the detailed design of such a system had not, at the time of the election, been undertaken. The analysis that was carried out, while in many ways substantial and incorporating a range of economic modelling, remained focused on identifying the issues and options for scheme design. The actual decisions on what options to pursue remained unanswered.

Only now is the Department of Climate Change actually undertaking this task, and to this end, on 16 July 2008 the Federal Government released a Carbon

⁵ Ross Garnaut, Garnaut Climate Change Review: Final Report (2008) http://www.garnautreport.org.au/reports/Garnaut%20Climate%20Change%20Review%20-%20Final%20Report%20-%2030%20September%202008%20(Full%20version).pdf at 2 October 2008.

⁶ *Kyoto Protocol*, opened for signature 16 March 1998, 37 ILM 22 (entered into force 16 February 2005).

⁷ Department of Climate Change, Tracking to the Kyoto Target: Australia's Greenhouse Emissions Trends 1990 to 2008-2012 to 2020 (2008)

http://www.climatechange.gov.au/projections/pubs/tracking2007.pdf at 14 September 2008.

Pollution Reduction Scheme Green Paper.⁸ The design features set out in the Green Paper are summarised and compared with the recommendations of the Garnaut Review in Table 1 below.

III THE GARNAUT REVIEW

While still in opposition, the Australian Labor Party commissioned Professor Ross Garnaut to conduct an Australian version of the Stern Review on the Economics of Climate Change. In February 2008, the Garnaut Review released an interim report, and a further report specifically on emissions trading scheme design was released on 20 March 2008.9 A Draft Report considering the potential impacts that climate change may have on Australia's environment and economy, and recommending a number of key design features for an AETS, was released on 4 July 2008. The Garnaut Review's Final Report to the Prime Minister and the Premiers and First Ministers of the States and Territories was released on 30 September 2008.

Prior to the election, the ALP indicated that it would await the release of the Review to establish an appropriate interim target for emissions. Having justified its refusal to set such a target on the pending release of the Review's report, the ALP identified the Review as the primary input into emissions policy. However, comments made by Climate Change Minister Penny Wong following the release of the Interim and Draft Reports appear to downgrade its significance to being a 'key contribution' and an 'important input' into government policy, while emphasising that other inputs, such as modelling currently being conducted by the Treasury, will also influence the Government's ultimate policy decisions on elements of AETS design.

On 5 September 2008, the Garnaut Review released its Supplementary Draft Report on Targets and Trajectories. 12 In summary, the Review recommended that the scheme should set a target to reduce emissions by 10 per cent from 2000 levels by 2020 (equivalent to 30 per cent per capita, taking into account population growth), and 80 per cent from 2000 levels by 2050 (90 per cent per capita). The Review's modelling suggests that these targets would cause the

⁸ Australian Government Department of Climate Change, Carbon Pollution Reduction Scheme Green Paper (2008) http://www.climatechange.gov.au/greenpaper/report/pubs/greenpaper.pdf at 14 September 2008.

⁹ Ibid.

¹⁰ Senator Penny Wong, 'Transcript of Interview with Sabra Lane, ABC Radio, AM: Garnaut Interim Review' (Press Release, 22 February 2008)

http://www.environment.gov.au/minister/wong/2008/pubs/tr20080222a.pdf at 14 September 2008.

Senator Penny Wong, 'Transcript of Press Doorstop in Mural Hall: Garnaut Interim Review' (Press Release, 21 February 2008) http://www.environment.gov.au/minister/wong/2008/pubs/tr20080221.pdf at 14 September 2008.

¹² Garnaut Climate Change Review, Targets and Trajectories – Supplementary Draft Report: September 2008 (2008) 7 http://www.garnautreport.org.au/reports/Garnaut%20Review%20-%20Targets%20and%20trajectories%20-%20Supplementary%20Draft%20Report%20-%205%20Sept%202008.pdf at 14 September 2008.

permit price to settle at around \$23 per tonne in 2013, rising by 4 per cent plus the increase in the general price level every year thereafter. The Review notes that 'the proposed targets for Australia have been selected because they involve comparable abatement effort to other developed and developing countries, calculated within an internally consistent framework compatible with global agreement around specified emissions concentrations objectives'.¹³

The emissions concentration objective selected by the Garnaut Review is to stabilise atmospheric concentration of carbon dioxide-equivalent at 550 parts per million (550 ppm). While the Review warns that stabilisation at this level may cause significant damage, potentially including the loss of the Great Barrier Reef, a more ambitious goal of 450 ppm is considered to 'require tighter constraints on emissions than now seem feasible in the period to 2020'. Since the release of the Draft Supplementary Report, the targets proposed by the Review have been criticised by the Green Party and some international scientists as too weak.

The policy recommendations put forward by the Garnaut Review in its Final Report fall into four 'clusters', as follows:

- Australia's commitments in a global context: Australia should play a proportionate part in strong mitigation action (with the objective of holding atmospheric concentrations of greenhouse gases to 450 ppm CO₂-e). Leadership by Australia should involve an expression of willingness to reduce emissions by 25 per cent on 2000 levels by 2020, and 90 per cent by 2050 in the context of an international agreement, and an unconditional offer (not dependent on agreement) to reduce emissions by 5 per cent on 2000 levels by 2020. Australia should also express a willingness to contribute its share of US\$100 billion per annum funding from developed countries for low-emissions technology research, development and commercialisation, particularly carbon capture and storage.
- **Design of an emissions trading scheme** (discussed further below).
- Research and application of new knowledge: a stronger commitment to climate science research is required as a basis for the identification of targets and trajectories under an emissions trading scheme and also for the development of adaptation strategies. Australia should establish a multi-disciplinary climate change policy research institute, with experts from the physical and biological sciences, economics and other relevant social sciences.
- Sharing the burden of mitigation: measures to address climate change must take account of equity concerns, both within Australia (maintaining

Ross Garnaut, *Targets and Trajectories – Supplementary Draft Report* (National Press Club Address, 5 September 2008) 7 http://www.pca.org.au/uploads/00588.pdf at 2 October 2008.

¹⁴ Garnaut Climate Change Review, Targets and Trajectories, above n 12, 3.

high employment and an effective social security net to assist low-income households to adjust to the impacts of an emissions trading scheme, potentially through the use of revenue from the sale of permits) and internationally. Garnaut argues that the case for compensation of adversely affected industries, such as coal-fired generators, appears weak alongside the claims of low-income Australian households.

Table 1: Emissions Trading Scheme Design Recommendations of the Garnaut Review and the Green Paper

	GARNAUT REVIEW	GREEN PAPER
Caps and targets	The overall national emissions limit should be expressed as a trajectory of annual emissions targets over time, which define long-term budgets.	Target range for 2020 and the indicative national emissions trajectory for the period from 2010–11 to 2012–13 to be announced at the end of 2008.
	A number of trajectories should be specified upon establishment of the scheme. The first, up to 2012, should be based on Australia's Kyoto commitments (Australia's existing emissions limit). The others, for the post-2012 period, should reflect increasing levels of ambition. Movement between them should be based on determining the comparability of Australia's response to international effort. Movement from one trajectory to another should only be on the basis of international policy developments and agreements (which should allow for new information and developments of an economic or scientific kind). The Government should provide five years' notice of movements to another trajectory. Any gap between the domestic emissions trajectory and international commitments during this period would be reconciled by the purchasing of international permits.	Caps could be set for five years in advance, or longer if international obligations extend for longer than this. Scheme caps would be extended by one year, every year, to maintain a five year cap horizon. Scheme caps for the first five years of the scheme (2010–11 to 2014–15) and ten years of gateways beyond this period are to be announced in early 2010. Initial gateway length of 10 years beyond the minimum five years of scheme caps. Gateways will be extended by five years, every five years, as part of a strategic review of international conditions and Australia's likely future international commitments.

	GARNAUT REVIEW	GREEN PAPER
Coverage	Stationary energy, industrial processes, fugitive emissions from fuel production, and transport to be covered immediately. Waste and forestry to be included as soon as practicable. The inclusion of agriculture to be subject to progress on measurement and administration.	Stationary energy; transport; industrial processes; synthetic greenhouse gases; fugitive emissions; and waste to be included immediately. Avoided deforestation; biofuel and biomass combustion to be excluded. Voluntary opt-in for forestry; agriculture not covered until 2015 at the earliest.
Point of obligation	At the source for stationary energy (possibly with an option for large energy users to opt-in) and waste. Upstream for transport (at point of excise) – possibly with an option for large liquid fuel users to opt-in. At the facility level for oil and gas production, gas processing and fugitive emissions from coal mining.	Point of obligation at the point of physical emission, except where it is more efficient and/or administratively less onerous to move point of obligation upstream. Transport: Upstream fuel suppliers; LNG / LPG / coal: Possible liability for suppliers of small users; and Waste: Yet to be determined.
Permits	Permits released according to the emissions reduction trajectory. Permits should be sold into the market as soon as possible after the full details of the scheme are finalised. If fixed price permits are to be used in the Kyoto period (2010–12), then some permits for use after 2012 should be sold into the market from 2010. All permits should be auctioned at regular intervals – weekly, monthly, quarterly or any other basis that suits participants. Some permits may be used in lieu of cash to provide assistance to eligible firms that are in emissions—intensive, trade—exposed industries ('EITEIs').	Allocations to move towards 100 per cent auctioning as the scheme matures, subject to provision of transitional support for EITEIs and strongly affected industries. The Scheme regulator would ultimately assume all auction policy responsibilities, initially under the direction of the relevant Government minister. Ascending clock auctions would be used for single vintage auctions, with simultaneous ascending clock auctions for multiple vintage auctions.

	GARNAUT REVIEW	GREEN PAPER
Price caps and penalties	Not supported, except during transition period to end 2012. The Government should set a penalty as a compliance mechanism. Imposing a penalty will not, however, replace liable entities' obligation to acquit permits; a 'makegood' provision would also apply. This would require liable parties with emissions exceeding their permit holdings to obtain and surrender an additional quantity of permits to 'make good' the excess emissions.	Transitional price cap for the period 2010–11 to 2014–15. Quantum not yet determined but expected to be set high enough above the expected permit price, taking into account the allowance for banking, to provide 'a very low probability of use'. Price cap also be reviewed at the first review point, taking into consideration banking and borrowing arrangements, importation allowance for international units, the maturity of the market and future international linking commitments.
Banking and borrowing	Unlimited hoarding allowed. Official lending of permits by the independent carbon bank to the private sector allowed within five-year periods. Risks associated with lending can be further reduced if an interest rate is applied to the loan, and if loans are only made available to creditworthy borrowers, backed by security.	Unlimited banking of permits allowed. Limited short term borrowing by allowing liable entities to surrender up to a certain percentage (less than five per cent) of their liabilities by using permits dated from the following year.
Assistance measures	Government to pursue global and sectoral agreements to achieve comparable treatment of emissions between important competitors as a priority. If such agreements have not been reached post–2012, assistance should be provided to account for material distortions arising from major trading competitors not adopting commensurate emissions constraints. Assistance should only be provided in order to avoid a temporary loss of real production until Australia's global competitors act to limit their	Assistance to be provided to EITEIs with upfront (ex–ante) free allocations of permits contingent on continued production. Assistance would be calibrated over time such that the EITEI sector broadly shares in the task of meeting the national commitment to reduce emissions and withdrawn in the event of acceptable international action. Could be provided in respect of activities with an emissions intensity above 1500t/\$m, but at a rate that does not cover all of

	GARNAUT REVIEW	GREEN PAPER
	greenhouse gas emissions. However, this is qualified to only industries that are at a 'genuine risk of large, excessive reductions in domestic production'.	the emissions liabilities of the activity. Overall, allocations to EITEI activities up to around 30 per cent of national emissions.
	There are a limited number of industries that have the potential to be trade— exposed, including aluminium smelting, cattle and sheep products, cement production and iron and early stage steel manufacturing. It is immaterial whether the assistance comes in the form of cash or free permits.	Assistance to workers and regions in the form of structural adjustment assistance. Some limited direct assistance to businesses able to demonstrate that: they are not trade—exposed; their emissions intensity exceeds 1500 tonnes of CO ₂ -e per million dollars of revenue; they have 'very large, sunk capital costs'; their capacity to pass on costs is constrained by competition; and significant economically viable abatement is not available to them.
		Direct assistance for coal-fired electricity generators. Three core elements: support for development and deployment of CCS technologies; structural adjustment packages to workers, communities and regions; and direct assistance to generators
Offsets	Domestic offsets will have a relatively small role, given the proposed broad coverage of the ETS. In its early years, however, the Scheme will not cover all sectors that contribute to Australia's emissions inventory under Kyoto.	Not included until at least 2013, when final decision is to be made on possible coverage of agriculture.
	Emission reductions in these non- covered sectors may, in some cases, represent the lowest cost mitigation option. Recognising this, emission reductions in sectors not covered by the Scheme should be	

	GARNAUT REVIEW	GREEN PAPER
	eligible to create 'offset credits'. These credits would be treated as substitutes for permits and could be used by parties in covered sectors to meet their obligations under the Scheme.	
	Unlimited offset credits should be accepted from forestry before and during coverage in the scheme.	
	The Government should consider waste and agriculture as potential sources of offsets, prior to including them as covered sectors under the AETS.	
Linking	The Government should seek opportunities for international linking of the Australian scheme in a judicious and calibrated manner. The independent regulatory authority would certify individual permit markets as being of a suitable standard for linking and certification would be reviewed periodically. Issues for the independent regulator to consider when certifying international schemes would include: mutually acceptable levels of mitigation ambition, adequate monitoring and enforcement and compatible market rules. Initially, it may be a useful precaution to set a limit a quantitative limit on aggregate permit purchases from certified international schemes. However, ideally there should be no limit at the individual or aggregate level. As a priority, the Government should	Long term preference is for an open linking within the context of an effective global emissions constraint. Initially no export of Australia's own <i>Kyoto Protocol</i> compliance units. Liable entities able to acquit their compliance obligations by using eligible Kyoto units, but in the short term up to quantified limits (eg 5 per cent). CERs, ERUs and RMUs accepted subject to this limit. However, tCERs and ICERs not accepted, nor AAUs. International non–Kyoto units also not accepted, but this would be reviewed for the post–2012–13 period.
	discuss linking with New Zealand, the EU and Japan. The development	

	GARNAUT REVIEW	GREEN PAPER
	of a regional market that encompasses Indonesia and PNG is also desirable.	
	International offsets (e.g. from the CDM), should have a limited role, particularly after 2012. To the extent that international offsets are allowed, they would be limited by source (eg, only a certain number of credits from low income developing countries) and quantity (eg, through the use of a centralised purchasing agency that would then auction supplementary permits. These permits would allow the holder to acquit one Clean Development Mechanism credit (CER). The market price of permits to acquit CERs would reflect the expected differential between the price paid for CERs in the international market and the domestic permit price in the AETS).	
Governance	The Review proposes that the Government should set the emissions limit and policy framework for the Scheme directly. The AETS should be administered by an independent authority (called the 'Independent Carbon Bank').	Independent scheme regulator – primary responsibilities to monitor and enforce compliance, run auctions for permits, allocate free permits according to the rules clearly specified by the Government, and to maintain the national registry. Independent scheme reviews are proposed for a number of scheme components every five years.

IV MANDATORY REPORTING

The framework for mandatory corporate reporting of greenhouse gas emissions and energy production and consumption was set out in the *National Greenhouse and Energy Reporting Act 2007* (Cth) ('the Act'), passed in 2007. The *National Greenhouse and Energy Reporting Regulations 2008* (Cth) ('the Regulations') released this year set out particular definitions, criteria and rules

that corporations should apply when reporting greenhouse and energy data under the Act.

The National Greenhouse and Energy Reporting Scheme ('NGERS') is critically important for an Australian national trading scheme as the information reported under NGERS will inform emissions liabilities and caps and depending upon the approach adopted to permit allocation, the number of permits that will be allocated to each eligible firm. Previous experience under Phase 1 of the European Union Emissions Trading Scheme demonstrates the importance of using robust data to ensure correct allocation of allowances.

The Act imposes mandatory annual reporting obligations on corporations in control of corporate groups that emit greenhouse gases, or produce or consume energy, in volumes that exceed particular thresholds. The reporting thresholds for corporate groups become progressively lower during the first three reporting years as shown in Table 2.

Year commencing	Greenhouse gas emissions (in kt CO ₂ -e)	Energy production or consumption (in TJ)
1 July 2008	125	500
1 July 2009	87.5	350
1 July 2010	50	200

Table 2: Greenhouse gas emissions and energy production by year

An annual facility-level threshold of greenhouse gas emissions in excess of 25kt CO₂-e or energy production or consumption in excess of 100TJ has applied since 1 July 2008, when reporting obligations under the Act commenced.

If a corporate group exceeds any of the above corporate group thresholds, then the corporation in control of the corporate group must register and report on behalf of the entire corporate group. If only a facility under the operational control of a member of the corporate group exceeds the facility threshold, the controlling corporation only has to report the greenhouse and energy data for that facility. Corporations that fail to comply with the Act face civil and potentially, criminal penalties under the Act.

A Policy Paper and Technical Response

The Australian Government released the National Greenhouse and Energy Reporting System Regulations Discussion Paper in February 2008 ('Policy Paper'), setting out the Government's proposed approaches to all the issues to be covered by the Regulations. The Government has amended some of the approaches set out in the Policy Paper, on the basis of feedback received in response to it. These amendments were described in the document entitled 'National Greenhouse and Energy Reporting System: Technical Responses to Stakeholder Feedback on the Regulations Policy Paper' ('Technical Response').

B The Regulations

The Regulations were released on 26 June 2008 and came into force on 1 July 2008. They provide detailed definitions for a number of terms used in the Act.

1 Energy

Section 7 of the Act defines 'energy' to include 'fuel, or any other energy commodity, of a kind specified in the regulations'. Schedule 1 of the Regulations specifies several fuels and other energy commodities. The following additional fuels are set out in the Regulations but were not included in the Policy Paper:

- sulphur
- biogas captured for combustion other than sludge gas and landfill gas
- wood (green and air-dried)
- unprocessed natural gas
- solid fossil fuels other than black coal and municipal materials recycled for energy
- uranium
- hydrogen and reductants
- other energy in the form of steam, compressed air or waste gas acquired from another facility.

2 Defining Facilities: Characterising Activities as a Single Undertaking or Enterprise

A 'facility' is defined in section 9 of the Act as 'an activity, or a series of activities (including ancillary activities), that involve the production of greenhouse gas emissions, the production of energy or the consumption of energy and that ... form a single undertaking or enterprise and meet the requirements of the regulations'. Pursuant to this definition, the Regulations define particular circumstances in which activities will be considered to form a single undertaking or enterprise for the purposes of the Act. These are summarised briefly below.

Note that, with respect to activities, the Regulations attribute reporting responsibility to the corporation that has 'overall control' over the activity. Overall control with respect to activities is defined identically to operational control with respect to facilities.

(a) Different Activities at a Single Site

Under the Regulations, activities that are conducted at a single site and together produce one or more products or services will form a single undertaking or enterprise, and therefore a facility, for the purposes of the Act. If other activities that produce a separate product or service are also undertaken at the

site, and are under the overall control of the same corporation, they will also form part of that single undertaking or enterprise.

(b) Transport Sector Activities

The Policy Paper proposed that transport sector facilities consist of a single national facility, to which a principal transport activity and related activities would be attributed, including where such activities cross state and territory boundaries. The Policy Paper further indicated that reporting for transport facilities would need to be broken down to sub-facility level, to identify fuel purchases in individual states and territories.

Contrary to the Policy Paper, the Regulations define transport sector facilities by reference to the state or territory in which the relevant corporation purchases the fuel consumed by the facility. In this way, rather than being national, transport facilities are confined under the Regulations to state or territory boundaries.

(c) Gas, Electricity and Other Infrastructure Services

Any activity in the following sectors (along with any ancillary activities related to it) will form a single undertaking or enterprise and therefore a facility – provided that those activities are under the overall control of the same corporation:

- electricity transmission or distribution
- gas or water supply
- sewerage or drainage services
- telecommunications

3 The Extent of Reporting Obligations: Small Facilities, Minor Sources and Contractors

(a) Reporting with Respect to Small Facilities

The Policy Paper proposed that corporations not be required to report data for small facilities that, among other things, emitted less than 3ktCO₂-e of greenhouse gases, and did not produce or consume more than 12TJ of energy, in a reporting year.

Under the Regulations, corporations are required to report on small facilities, but rather than being required to report detailed data, may instead report the greenhouse gas emissions and energy production and consumption of such facilities as an estimated percentage of the group's total emissions and energy production and consumption. Corporations may report estimates for small facilities that, among other things, emitted less than 3ktCO₂-e of greenhouse gases, and did not produce or consume more than 15TJ of energy, in a reporting year.

(b) Reporting with Respect to Minor Sources of Emissions or Energy

Materiality thresholds for reporting on sources of emissions or energy within a facility were explicitly excluded in the Policy Paper, on the basis that such thresholds could affect a corporation's liability under the Australian Emissions Trading System currently being developed, and should therefore be developed in light of AETS requirements.

The Regulations, rather than applying materiality thresholds, provide that corporations required to report under the Act may estimate 'incidental' greenhouse gas emissions and energy production and consumption. The Regulations define as 'incidental':

- greenhouse gas emissions which (among other things) total less than 3kt CO₂-e, and represent less than 0.5 per cent of the greenhouse gas emissions from the facility, in a reporting year; and
- energy production or consumption that (among other things) totals less than 15TJ, and represents less than 0.5 per cent of the energy production or consumption from the facility, in a reporting year.

Estimates of incidental greenhouse gas emissions and energy production and consumption are to be prepared in accordance with the *National Greenhouse and Energy Reporting (Measurement) Determination 2008* (Cth) ('Measures Determination Act'), introduced to implement section 10(3) of the Measures Determination Act (see below).

(c) Reporting with Respect to Contractors

The Policy Paper proposed that where the data to be reported for a facility includes data from major contractors that are not in the same Australian and New Zealand Standard Industrial Classification ('ANZSIC') division as the facility, the corporation responsible for reporting is required to separate the facility data into indigenous data and contractor data at the sub-facility level.

The Regulations, by contrast, do not make any distinction on the basis of ANZSIC sector. The Regulations instead provide that where:

- (a) a contractor is engaged to perform an activity at a facility; and
- (b) in performing that activity, the contractor produces 25kt CO₂-e of greenhouse gas or more, or produces or consumes 100TJ of energy or more, then the report prepared for the facility must:
- (c) specify the greenhouse gas emissions and energy production and consumption associated with the contractor's activity; and
- (d) provide details identifying the contractor.

4 Aggregation and Disaggregation of Data

(a) Aggregation by Business Unit

The Regulations introduce scope for reporting of data aggregated by reference to 'business units'. The Regulations define a 'business unit' as 'a unit that is

recognised by the corporation [responsible for reporting] as having administrative responsibility for facilities of the corporation'. A corporation is able to aggregate and report data by reference to a business unit where:

- (a) the corporation is required to report on more than one facility that emits less than 25kt CO₂-e of greenhouse gases or produces or consumes less than 100TJ of energy in a reporting year; and
- (b) all such facilities are located within a single state or territory, and are attributable to a single industry sector under the Regulations.

In addition, the Amendment Bill proposes to amend the Act to define 'business unit' by reference to the Regulations.

(b) Aggregation of Vertically–integrated Production Processes

The Policy Paper provided that when reporting data for integrated facilities that cross ANZSIC divisions, the corporation would be required to break down and report data at the sub-facility level for each ANZSIC division within that facility's operations.

The Regulations adopt a different approach. Where a corporation has operational control over facilities that represent a vertically–integrated production process, and the production process is located within a single state or territory, then the corporation may aggregate data from the facilities that form part of the production process for the purposes of reporting under the Act. The Regulations define 'vertically–integrated production process' as:

- (a) a production process with two or more stages involving two or more facilities:
- (b) where, except for the final stage in the production process, the output of one facility in the production process represents the input for another facility in the production process; and
- (c) where output from the facility in the final stage of production produces a product or service that is sold on the market.

(c) Disaggregation of Data for Networks and Pipelines

With respect to network and pipeline facilities in the electricity transmission or distribution, gas or water supply, sewerage and drainage services or telecommunications sectors, where the facility crosses multiple states and/or territories, data reported for the facility must be apportioned with respect to each state and/or territory in which the pipeline or network is located. This position matches that proposed in the Policy Paper.

V OTHER GOVERNMENT POLICIES

Emissions trading will remain at the centre of Australia's climate change policy over the next few years. However, the Government has a number of other policy measures to supplement emissions trading¹⁵ including:

- The increase of the existing Mandatory Renewable Energy Target ('MRET') from two per cent to 20 per cent by 2020.
- The inclusion of a 'greenhouse trigger' of the *Environment Protection* and *Biodiversity Act 1999* (Cth), under which new projects of commonwealth significance with greenhouse emissions above a certain threshold will require environmental impact assessment approval.
- Introduction of the Tax Laws Amendment (2008 Measures No. 1) Bill 2008 (Cth) into the House of Representatives ('2008 Bill') on 13 February 2008 under which taxpayers, subject to certain conditions, who carry on a business can claim an upfront tax deduction for expenditure on trees (that happen in addition to create carbon sinks).

VI NATIONAL RENEWABLE ENERGY TARGET ('NRET')

During the election campaign, the ALP pledged to significantly expand the national renewable energy target to 20 per cent by 2020. On 2 July 2008, in fulfilment of that commitment, the Council of Australian Governments Working Group on Climate Change and Water released a Green Paper entitled 'Design Options for the Expanded National Renewable Energy Target Scheme' ('NRET Green Paper').¹⁶

The NRET Green Paper sets outs two design options for an expansion of the existing MRET to meet the Federal Government's commitment to increasing Australia's renewable energy capacity to 20 per cent by 2020 as part of Australia's response to climate change. It also sets outs the various issues currently being considered by the Working Group in its design and development of the NRET, and invites public submissions in response to these issues.

The final design of the NRET, which will reflect public submissions in response to the NRET Green Paper, will be presented to the Council of Australian Governments ('COAG') for approval in October 2008.

The NRET will subsume existing national and state renewable energy target schemes and is intended to provide interim support to Australia's renewable

¹⁵ Penny Wong, Climate Change – A Responsibility Agenda (2008) Australian Government Department of the Environment, Water, Heritage and the Arts

http://www.environment.gov.au/minister/wong/2008/pubs/tr20080206.pdf at 14 September 2008.

¹⁶ COAG Working Group on Climate Change and Water, Design Options for the Expanded National Renewable Energy Target Scheme (2008) Australian Government: Department of Climate Change http://www.climatechange.gov.au/renewabletarget/consultation/pubs/ret-designoptions.pdf> at 14 September 2008.

energy industry during the development and early operation of the national emissions trading scheme when the price of carbon is expected to be relatively low. A number of key issues for the design of the NRET are identified in the NRET Green Paper. These are summarised in Table 3 below.

Table 3: NRET Green Paper Key Features

Issue	Proposal
Liability and annual	The profile of the annual targets applied in the NRET will affect the
targets	rate and extent of investment in renewable energy in Australia, by
	determining the levels of renewable generation that must be
	achieved and the dates by which these levels must be reached.
Eligible sources	The eligibility of sources of renewable energy under the NRET will not only determine which renewable energy sources will benefit from the NRET, but also the extent of those benefits for individual
	sources. A broader range of eligible sources should result in a
	broader distribution of the benefits of the NRET, meaning that more
	renewable energy technologies will be supported, but also that
	individual technologies may receive less support in total during the
	life of the scheme. Key questions here concern whether solar water
	heaters and particular biomass sources (native forest products) will
	be eligible to generate RECs under the scheme.
Banking of Renewable	Banking of RECs under NRET would ensure a least–cost approach
Energy Certificates	under the scheme, but would create the parallel risk that the amount
('RECs')	of renewable energy capacity installed under the scheme was less
	than the target, or less than the amount that would be installed if
	banking was not permitted. Banking is permitted under the MRET
	and existing state renewable energy target schemes.
Project eligibility periods	Limiting the eligibility of renewable energy projects to generate
	RECs under the NRET would help the NRET to provide an incentive
	to install new renewable energy capacity for longer, and avoid the
	NRET target being exhausted relatively early in the scheme's life.
	Such an approach would, however, limit the revenue that individual
	projects could generate from REC sales under the scheme.
Existing generators	The Green Paper distinguishes three types of renewable energy
	generators: those built before the introduction of MRET in 1997;
	those built after the introduction of MRET but before the
	announcement of the NRET in December 2007; and power stations
	eligible for support under Victoria's Renewable Energy Target
	scheme (VRET), which is to be subsumed into the NRET. Treatment
	of existing renewable energy generators will affect the amount of
	new renewable energy capacity required to meet the scheme's
	targets, and therefore the overall cost of the scheme.
Duration and phase-out	The Green Paper acknowledges that renewable energy projects will
	require extended REC revenue streams in order to be implemented
	successfully under the NRET, but also that the scheme should be

	phased out once the AETS has established a carbon price signal
	that improves the cost–competitiveness of renewable energy.
Compliance	The REC shortfall charge applied in the NRET will provide an
mechanisms	incentive to comply with the scheme (assuming it is set higher than
	the cost of purchasing RECs), but will also act as a cap on the
	maximum REC price.
Trade-exposed	MRET did not include any exemptions for trade-exposed electricity-
electricity-intensive	intensive industries, but the Green Paper indicates that the
industries	treatment of such industries under the NRET will be considered in
	the context of their treatment under the AETS.

The NRET Green Paper sets out two possible design approaches to the NRET currently being considered by the Working Group. These two approaches will provide the focus for modelling and analysis of the NRET and its impacts. The objectives and distinguishing features of each are summarised below:

A Approach 1 – NRET Structured to Achieve Target at Least Cost

The first approach being considered by the Working Group focuses on achieving the NRET target at least cost, and incorporates the following design features to contribute to this objective.

1 Longer Project Eligibility Periods

New renewable energy projects would be eligible under Approach 1 to generate RECs throughout the duration of the scheme. This would maximise the revenue that new renewable energy projects can generate from REC sales under the scheme, but potentially reduce the amount of new renewable energy capacity installed during the scheme's later stages (as early projects would continue to generate RECs that could be used to meet annual targets).

Existing renewable energy generators, except those accredited under the Victorian scheme, would be eligible to generate RECs only up until the end of 2020, as the date at which REC generation under MRET was to cease.

2 Inclusion of Solar Water Heaters as Eligible Sources

Under Approach 1, solar water heaters would be eligible to generate a volume of RECs equivalent to an amount of renewable electricity deemed to be generated during ten years of operation, allowing part of the NRET target to be met by renewable sources that do not contribute on—grid electricity. Native forest biomass would be eligible to generate RECs under MRET, subject to particular conditions.

3 Unlimited Banking of RECs

Approach 1 would allow for unlimited banking of RECs throughout the duration of the NRET, such that RECs generated during the early stages of the scheme could be held and used to meet liabilities later in its life. Allowing banking in this way would create a strong incentive for early action in installing

new renewable energy capacity, by enabling RECs generated in excess of annual targets to be sold to liable parties for retirement in later years.

Unlimited banking could, however, potentially reduce the amount of new capacity installed later in the scheme, and in total during its life, as later demand for RECs could be met using banked RECs generated during its early stages.

B Approach 2 – Least Cost Balanced Against Technology Development and Deployment

The second approach set out by the Working Group in the NRET Green Paper seeks to balance the least cost objectives of Approach 1 against other NRET objectives, including the reduction of greenhouse gas emissions and development and deployment of new renewable energy technologies. Approach 2 incorporates the following design features.

1 Extension of Scheme Life and Targets

The annual renewable generation targets under Approach 2 would peak at 2020 and remain at that peak level through to 2024, and then phase out relatively gradually (ie, less rapidly than under Approach 1) after 2024, subject to review of the scheme in 2015. This would maintain the targets to be met by liable entities.

2 Eligibility of New Projects Limited to 15 Years

Under Approach 2, the period during which new renewable energy projects would be eligible to generate RECs would be limited to 15 years. This limitation would ensure that the incentive to install new renewable energy capacity was maintained until relatively late in the scheme, when compared to Approach 1, but would entail higher costs in maintaining the investment needed to finance this additional capacity. As for Approach 1, existing renewable energy generators, except those accredited under the Victorian scheme, would be eligible to generate RECs only up until the end of 2020.

3 Exclusion of Solar Water Heaters after 2020

Solar hot water heaters would be eligible to generate RECs under Approach 2 only up until 2020, after which they would become ineligible. This exclusion would increase the level of renewable electricity required to be generated in order to meet the NRET target, which would in turn drive greater installation of new renewable energy capacity than under Approach 1, although at potentially greater cost. Approach 2, like Approach 1, would recognise native forest biomass as an eligible renewable source, subject to particular conditions.

4 Limited Banking of RECs

Under Approach 2, only limited banking of RECs would be permitted, subject to the results of modelling and analysis. This limitation would help to ensure that the incentive to install new renewable energy capacity is maintained throughout the scheme, and therefore drive investment in new renewable energy capacity

throughout its life. This increased investment would, however, necessitate higher costs for Australian electricity consumers.

C Similarities Between Approach 1 and Approach 2

1 Accelerating Increase in Annual Targets

The annual targets under both Approach 1 and Approach 2, as proposed in the NRET Green Paper, increase gradually the early stages of the scheme, in order to promote initial investment in new renewable energy capacity, and increase more rapidly during the scheme's later stages, as new technologies become more cost competitive and economies of scale are achieved.

2 Limited Eligibility of Existing Renewable Energy Projects

Under both Approach 1 and Approach 2, pre-1997 (MRET) and pre-2007 (VRET) existing generators would only be eligible to generate RECs up until the end of 2020, in order to avoid them obtaining windfall gains for investments made on the basis of schemes scheduled to end in 2020.

3 Shortfall Charge Set Above the Projected Maximum REC Price

Both Approach 1 and Approach 2 include a shortfall charge for failure to submit RECs, to be set at a level higher than the projected maximum REC price, to encourage compliance throughout the duration of the scheme (meaning that the charge would not need to be indexed to the Consumer Price Index in order to remain above REC prices and encourage such compliance).

4 Scheme Review in 2015

The NRET Green Paper indicates that whichever design is ultimately adopted, the scheme will be subject to review in 2015 to determine its effectiveness and whether any refinements in the design will be necessary in order to reach the scheme target.

Finally, during the election campaign the ALP announced a raft of other policy measures focussed around funding climate initiatives and offering various rebates, including rebates and low interest loans for solar power, solar hot water systems, grey water piping, rainwater tanks and insulation, a \$15 million Clean Energy Export Strategy, a \$20 million Clean Energy Innovation Centre, a Green Car Innovation Fund to develop and build green cars in Australia, a \$500 million Renewable Energy Fund to develop, commercialise and deploy renewable energy in Australia, a \$240 million Clean Business Fund to help business and industry deliver energy and water efficiency projects, a \$150 million Energy Innovation Fund to keep our world leading scientists and researchers in Australia, rather than losing them overseas and a \$500 million Clean Coal Fund to fund the deployment of clean coal technologies.

VII THE VOLUNTARY CARBON MARKET

The trade in carbon rights and carbon permits will, in Australia, be dominated by the Australian emissions trading scheme once established. However, for those many companies not covered by the scheme, the increasing corporate objective of becoming environmentally responsible or carbon neutral has seen a continued growth in the voluntary carbon market over the last year. Currently, the primary source of voluntary carbon credits in the Australian market is the Greenhouse Friendly program, implemented by the previous Liberal Government under John Howard.¹⁷

A An Australian Offset Standard

The Department of Climate Change is examining the potential for developing an Australian Offset Standard, to replace Greenhouse Friendly accreditation and cover both voluntary and compliance offset credits. Further details on the standard, including the eligibility of offshore projects and projects undertaken at sub-threshold facilities in covered sectors are likely to be revealed later this year.

The announcement by Prime Minister Rudd on 6 June 2007, when he was Opposition Leader, that a Federal Labor Government would introduce a national standard for carbon offsets, may give some clues as to the nature of the Australian Offset Standard. Prime Minister Rudd said that an Australian Offset Standard would be implemented that would:

- require all products on the market to be accredited;
- build on existing standards to avoid duplication;
- provide a nationally consistent approach to offsetting, but take account of international developments;
- set minimum standards for offsets and include verification and validation protocols;
- require ongoing management where necessary to ensure integrity; and
- incorporate a standard means for calculating carbon neutrality and require credits to be cancelled when used to provide an offset.

This announcement followed a joint communiqué from the Council for the Australian Federation, comprising all Australian Premiers and Chief Ministers, on 9 February 2007, calling for strengthened standards and accreditation in the carbon offset industry, including a possible registry of offset products.

¹⁷ Greenhouse Friendly provides two different services – certifying abatement certificate providers and certifying carbon neutral products and services. Once certified for a particular sector, abatement certificate providers may carry out projects which can generate Greenhouse Friendly voluntary carbon credits, which can then be sold to companies to offset the embodied emissions in their products and services. Such products and services can then be sold as 'carbon neutral' with a Greenhouse Friendly certification.

B Australian Competition and Consumer Protection Investigation into 'Green' Claims

The Australian Offset Standard may assist in overcoming one of the difficulties that has faced consumers in Australia's largely unregulated voluntary market – that is, how to determine whether an emissions offset scheme will deliver its claimed benefits. This issue is the subject of a current investigation by Australia's competition watchdog, the ACCC.

The ACCC recently announced that it would be examining carbon neutrality claims more closely. Commissioner John Martin said that a steadily increasing number of inquiries and complaints around 'green' marketing (promoting, for example, 'green flights', 'green cars' or 'green toilet paper') had led the ACCC to examine how the consumer protection provisions of the *Trade Practices Act* 1974 (Cth) might apply.

The basis for the investigation is the confusion in the market as to the nature and credibility of different offset products and the basis for claims of 'carbon neutrality' in relation to products and services. For example, some carbon offset schemes rely on forestry programs, whereby additional trees are planted to offset a specified quantity of carbon dioxide emissions, while other offset schemes rely on emissions reductions as a result of energy efficiency or utilising energy from a source that causes fewer emissions (like wind farms or natural gas). The effectiveness of a program used to offset emissions depends heavily on the effectiveness of the methodologies used to measure the emissions reductions or captured carbon and the reliability of the arrangements that the offset provider has put in place to implement and monitor the emissions reductions or ensure the captured carbon will be maintained.

Different forestry schemes may use different methodologies to calculate the amount of carbon dioxide that trees are capable of absorbing and the amount of time for which it will be stored. Likewise, projects that reduce emissions from electricity generation, industrial processes or waste may also use different methodologies to determine the emissions avoided or reduced. More generally, different schemes utilise different methods for determining the amount of emissions generated by certain practices, such as air travel, leading to significant variations in the number of carbon offsets required to neutralise similar activities. This can create confusion for consumers.

Further, there are a range of subtle differences in the offset products offered, their price in terms of the timing and source of the emissions reductions, other environmental benefits achieved from the underlying projects, and the period over which the emissions reduction will be maintained. For example, some offset products comprise a promise to carry out a project to reduce emissions (for example, to plant trees or reduce energy consumption in the future), whereas others represent emissions reductions that have already been achieved (because the project has already been undertaken and the captured carbon or reduced emissions have already been measured and verified). In some cases the captured carbon underlying the offset product might be retained and monitored over the long-term, whereas in other cases it might not be clear how permanent the emissions sequestrations or how constant the reductions will be.

VIII CONCLUSION

Since the late November 2007 election of the Rudd Labor Government, climate change policy in Australia has undergone a significant reversal. Internationally, Australia's ratification of the *Kyoto Protocol* sees Australia playing a lead role in international negotiations and domestically, its aggressive policy agenda will see a domestic emissions trading regime in place by 2010. How the scheme is beginning to emerge will be critical to the long-term value and stability of the domestic carbon market.