

Carbon rights - development of the legal framework for a trading market*

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Australia does not have a regulated market for trading in carbon rights. However, some Australian companies have been involved in significant international trades involving carbon rights in recent years⁵ fuelling speculation about the market's potential. Australian Government policy encourages these developments and other greenhouse gas abatement initiatives,⁶ although there is no National trading scheme proposed at this stage. In the interim, individual States have implemented legislation that provides for recognition of carbon rights. Western Australia is the most recent State to take steps towards the development of a trading market with the coming into force of carbon rights legislation.⁷

This article overviews developments in international law relating to carbon rights; the Australian Government's position and reviews the development of legislation by the States, particularly Western Australia. The article is an introduction for those contemplating an investment in carbon rights.

International Context

The international context of carbon rights is a major consideration for companies considering entering the emissions trading market in its current form. The development of carbon rights dates back to the *United Nations Framework Convention on Climate Change (UNFCCC)*,⁸ which is a framework convention that Australia has ratified. It documents broad agreement among all of the parties on the need to address climate change and is an overarching statement of strategic aims and methods for dealing with climate change.

Article 2 contains the objective of the UNFCCC, requiring Parties to achieve 'stabilisation of GHG concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system.'

Article 4(1) places certain information and data collecting requirements on all parties. Article 4(2) of the UNFCCC subjects Annex I⁹ countries to new requirements, including most notably the obligation to adopt national policies and take corresponding measures to mitigate climate change, by limiting anthropogenic (made by human) emissions of greenhouse gases and protecting and enhancing greenhouse gas sinks and reservoirs. This requirement to adopt a national policy is not tied legally to any specific target, but Article 4(2)(d) requires that developed countries (such as Australia) provide detailed information on their policies as well as on their emissions 'with the aim of returning individually or jointly to their 1990 levels'.¹⁰

The detail of binding commitments and targets are subject to subsequent negotiations and agreement through protocols to the Convention.

* " 2004

4 Partner and Solicitor, Minter Ellison Lawyers, Perth

5 David Jones, *The Kyoto Protocol, Carbon Sinks and Integrated Environmental Regulation: an Australian Perspective* (2002) 19 EPLJ 109 at 113.

6 Australian Greenhouse Office, the National Greenhouse Strategy (1998), <http://www.greenhouse.gov.au/pubs/ngs/ngs.html> and Australian Greenhouse Office, *Australian firms and the market-based mechanisms of the Kyoto Protocol*, (2003), <http://www.greenhouse.gov.au/international/kyoto/mechanisms.html>

7 The *Carbon Rights Act 2003* was proclaimed on 23 March 2004

8 Opened for signature 4 June 1992, 31 ILM 849 (entered into force 21 March 1994)

9 Annex I to the UNFCCC includes all industrialised country Parties, some of which, including the Russian Federation, Poland and Romania, are marked as 'countries that are undergoing the process of transition to a market economy. Annex II to the UNFCCC contains a list of 'industrialised country Parties except those from the former Soviet bloc in a process of economic transition.' Non-Annex I Parties, Annex I Parties such as Australia and Annex II Parties have different commitments under the UNFCCC.

10 Hunter, Salzman & Zaelke, *International Environmental Law and Policy, 2nd Edition*, Foundation Press New York, 2002 at 619.

The Kyoto Protocol

A carbon right (also known as a carbon sequestration right) is a term used to describe the rights that were created as a response to emission reduction market mechanisms referred to in the Kyoto Protocol. The Kyoto Protocol was adopted on 11 December 1997 but is not yet in force. Australia signed the Kyoto Protocol in 1998,¹¹ but this only constitutes an agreement in principle. Australia is not legally bound to ratify the Protocol.

The Kyoto Protocol will commence 90 days after 55 State Parties to the UNFCCC deposit ratification, acceptance or approval instruments (that is, implementing laws in their own countries). A further condition is that these 55 State Parties must include Annex I countries (essentially these are 'developed' or 'industrialised' countries) that accounted for at least 55% of the total reported CO₂ emitted by those parties in 1990. Recent media reports suggest that the Russian Federation has announced a decision to ratify the Kyoto Protocol, subject to approval by the Russian parliament.¹² Should this occur, it would be sufficient to bring the Protocol into force. If Australia has not ratified the Kyoto Protocol when it comes into force, Australia will not be bound by its rules. However, Australian businesses could participate in market mechanisms under the Kyoto Protocol, subject to those rules. This is discussed in more detail below.

Carbon rights rely on the concept of 'carbon sinks,' being a part of natural carbon cycles. In other words, the use of land may either be a carbon 'sink' or 'source' of greenhouse emissions. The Kyoto Protocol gives rise to commercial opportunities in the development of carbon sinks. Article 3.3 of the Kyoto Protocol states that participating countries can use 'net changes in greenhouse emissions from sources and removals by sinks' in meeting their commitments under the Protocol. Sink activities are limited to afforestation, reforestation and deforestation since 1990. The net changes must be verifiable. This is coupled with the requirement to report emissions annually to the Climate Change Secretariat, established under the UNFCCC, so that each Party's compliance with its targets and obligations may be identified.

Accounting and valuation of carbon rights

The actual emissions covered by the Kyoto Protocol extend beyond carbon dioxide (CO₂) to cover Methane (CH₄), Nitrous Oxide (N₂O), Hydrofluorocarbons (HFCs), Perfluorocarbons (PFCs) and Sulphur hexafluoride (SF₆). For reporting purposes, all emissions are converted to CO₂ equivalents (**CO₂-e**). Carbon dioxide represents by far the greatest volume of gas in terms of world emissions and is the relevant greenhouse gas when speaking of forests acting as 'carbon sinks'. However, some of the other gases are much more powerful in terms of their ability to contribute to the greenhouse effect (known as their 'global warming potential' or 'GWP').¹³

Article 5 of the Kyoto Protocol requires Parties to have emission estimation methodologies in place by 2007 at the latest. The Australian Greenhouse Office has taken up the challenge of developing a methodology for estimating carbon in forests.¹⁴ Once the methodology has been developed, the Inter-Governmental Panel on Climate Change (IPCC) must accept it.¹⁵ The IPCC has issued guidelines for national greenhouse gas inventories, which in regard to forests adopts a 'stock-change' approach. This involves measuring carbon stocks at the beginning and end of a specific time period to determine the net sequestration that has occurred over the period. For example, if Australia decides to ratify the Kyoto Protocol, net sequestration or emissions will need to be calculated for the period from 2008 to 2012, being the first Commitment Period. It may involve estimating carbon stocks at the beginning of 2008, at the end of 2012 and subtracting the 2008 stocks from the 2012 stocks.

To determine the net change in carbon stocks resulting from establishing a new forest, it is important to establish the net planted area. Also, if the purpose of the project is to sell rights to the carbon sequestered,

11 L Horn, *The Kyoto Protocol: Australia's Commitment and Compliance*, (2001) UNSW Law Journal 24(2) at 583

12 Refer ENDS Environment Daily report, Issue 1672, dated Monday 24 May 2004

13 For example, methane has around 21 times the GWP of carbon dioxide and HFCs range from 1,300 to 11,700 times carbon dioxide's GWP. One tonne of methane is equal to approximately 21 tonnes CO₂e.

14 Greenhouse Notes – Project – Level Carbon Accounting in Forests

15 The IPCC is an assembly of over 2,000 scientists that is responsible for most of the international research on climate change and is associated with many of the technical specifications developed under the UNFCCC and its protocol

then the initial condition (baseline) of the forest will need to be established. Methods for determining the net area and conducting an initial site condition assessment must be provided for in the measurement procedures for carbon accounting. In relation to carbon trades it is important to be able to estimate how much carbon will be sequestered by the forest over time.

An International Standard known as ISO 14064 is currently being developed. This is intended to provide an international standard for greenhouse gas accounting and verification that is consistent with the Kyoto Protocol and subsequent rulings by the Conferences of the Parties.

Carbon rights trading

For the holder of carbon rights, a major consideration will be the commercial opportunities for their trade. Various Articles of the Kyoto Protocol would allow for credits gained from sink activities to be earned and traded amongst Parties in seeking to reach their reduction targets.

Article 17 enables emissions trading as the least cost strategy to reduce global emissions and states that 'Parties included in Annex B may participate in emissions trading for the purposes of fulfilling their commitments under Article 3 of the Protocol.' Article 17 mandates that this trading shall be supplementary 'to domestic actions for the purpose of meeting quantified emission limitation or reduction commitments under that Article.' Each Party is to receive an initial allocation of emission permits equal to its emissions reduction target. Parties would then be allowed to buy and sell these permits according to the most cost effective way of meeting the Annex B target. Annex B to the Kyoto Protocol contains a list of emission limitation and reduction commitments for countries that are included in Annex I to the UNFCCC. Each State Party would have the option of taking abatement action at home or purchasing extra permits from State Parties that reduce their emissions below their target, which creates a surplus of permits that can be sold on the international market.

Also significant is the likely fungibility of emission units between the flexibility mechanisms under the Kyoto Protocol. In other words, emission permits under Article 17 would be interchangeable with credits earned under Clean Development Mechanisms and Joint Implementation mechanisms under Articles 6 and 12 of the Protocol. The significant difference between certain credits known as 'Removal Units,' that are created for sink credits, and other emissions permits, is that they can not be banked beyond the first commitment period in the Kyoto Protocol (2008-2012).

European Union Emissions Trading Scheme

A European Union (EU) Emissions Trading Scheme model has been proposed that should be closely monitored because it:

may prove to be an effective trial for the operation of the Kyoto Protocol mechanisms, and should be compared to other trading schemes;¹⁶ is likely to stimulate further interest by other State Parties to the UNFCCC, including Australia; and provides commercial opportunities for Australian corporations, as explained below.

The EU Emissions Trading Scheme requires that EU member state governments are required to set an emission cap for all 'installations' covered by the scheme, and issue an emissions trading permit. Each installation will be allocated allowances for the relevant Commitment Period. The number of allowances will be set down in a National Allocation Plan. The allowances equal to the total emissions must then be surrendered. These are then retired.

The Council of Ministers and European Parliament have reportedly agreed on the text for an EU Kyoto Protocol 'Linking Directive'.¹⁷ The law will set out the rules for purchase of emission credits bought abroad by corporations participating in the EU Emissions Trading Scheme.

¹⁶ Including the United States Climate Stewardship legislation which was expected to be introduced into the Congress on 30 March 2004.

¹⁷ ENDS Environment Daily - Wednesday 7 April 2004, Issue 1645 referring to the 'Proposal for a Directive of the European Parliament and of the Council amending Directive 2003/87/EC' establishing a scheme for greenhouse gas emission allowance trading within the Community, in respect of the Kyoto Protocol's 'project mechanisms.'

The Linking Directive would enable EU member states to decide whether and how to limit the number of credits that can be bought abroad by investing in the Joint Implementation and Clean Development Mechanisms under the Kyoto Protocol. These mechanisms can only be used to supplement domestic action, as under the Kyoto Protocol.

Australian businesses will be restricted in their ability to use credits from land-use projects, such as reforestation, to meet their emission targets. However, these restrictions could be removed if scientific uncertainties surrounding the sinks are resolved by 2006.

Whilst not expressly agreed, corporations participating in regional schemes in places like Australia may be able to purchase EU market credits, even though Australia has not ratified the Protocol. A condition of this participation would be that the Protocol has entered into force.¹⁸

New Zealand

New Zealand ratified the Kyoto Protocol on 19 December 2002 and has introduced a series of projects to reduce emissions.¹⁹ One interesting initiative is the public auction of four million carbon credits to support emission reducing projects in 2003. The New Zealand government has recently²⁰ announced that it will make another six million carbon credits available later this year through a similar tender process.

Australian Context

Current policy regarding ratification

The Australian Government's position, as repeatedly stated by the Prime Minister and Minister for Environment and Heritage, is that 'despite signing and agreeing to the terms of the Kyoto Protocol, Australia will not ratify the Protocol because it is not in Australia's interests to do so.'²¹ One of the key reasons given is that the Kyoto Protocol does not provide an effective framework in response to climate change. This is an internationally unpopular position. It is clear that there is a large body of international support for the Kyoto Protocol, particularly amongst developed nations in the EU.

In terms of actual emissions since 1990, an Australian trend analysis of greenhouse indicators between 1990 and 2002²² suggests that the Australian stationary energy and transport subsectors increased their emissions across the period. However, overall emissions had increased at a rate of only 0.1% per annum and emissions per capita and per dollar of GDP had declined across the period.

Domestically, the Australian Labor Party and the Australian Greens Party are actively campaigning for Australian ratification of the Kyoto Protocol. For example, a ratification bill was presented to the House of Representatives,²³ reportedly with the support of the Senate.

Opportunities for international participation by Australian corporations

There is some scope for Parties to purchase permits from 'legal entities' of non-Kyoto Protocol Parties. This is the key issue for Australian corporations that intend to participate in international trades prior to, or in the absence of, Australian ratification of the Kyoto Protocol.

Kyoto Parties may authorise legal entities, such as organisations and individuals, to participate in specific activities within the Kyoto system, although responsibility for meeting Kyoto targets rests with the State Parties, not with legal entities they have authorised.

18 Ibid

19 refer <http://www.climatechange.govt.nz/resources/info-sheets/policy-in-brief.pdf>

20 refer <http://www.energyreview.net/storyview.asp?StoryID=25311>

21 Trevor M Power, "Issues and opportunities for Australia under the Kyoto Protocol," (2003) 20 EPLJ 459 at 466. This position was confirmed in April this year by Federal Environment Minister, the Honourable David Kemp, refer <http://www.theage.com.au/articles/2004/04/13/1081838720955.html>

22 Refer <http://www.greenhouse.gov.au/inventory/2002/index.html> dated 26 May 2004.

23 Media release "Senate says 'ratify Kyoto'" for Bob Brown, Australian Greens Senator for Tasmania, 1 April 2004

There are no rules in the Marrakesh Accords²⁴ governing the nature of legal entities, or the contractual arrangements that may underlie their participation in the mechanisms. The Marrakesh Accords do not prevent Parties from authorising corporations from any foreign jurisdiction to participate as legal entities.²⁵ However, the rules are subject to modification prior to finalisation of the 'in force' Kyoto Protocol rules.

Corporations may wish to participate as legal entities, which would require the authorisation of a Kyoto Party. Alternatively, corporations may wish to become involved through a contractual arrangement with a Kyoto Party or an authorised legal entity and so may not require formal authorisation. The Australian Government considers that this alternative option arises from the lack of distinction between corporations from State Parties and non-State Parties to the Kyoto Protocol in the Marrakesh Accords. It is unclear whether this distinction can be revised by the Kyoto Parties prior to the coming into force of the Kyoto Protocol.

The Australian Government proposes that it is conceivable that corporations that did not hold an account in a registry may be able effectively to own and trade in emissions through contractual arrangements with an account-holding legal entity or Kyoto State Party.

Action by State Governments Within Australia

The State and Territory Governments have been proactive in passing legislation which establishes a system that is akin to the system in place for property rights and enables carbon rights to be traded independently of the land to which they attach.²⁶ These rights enable unregulated trading of carbon rights and are the first steps towards a regulated trading market. Relevant examples covered in this paper are New South Wales and Western Australia.

New South Wales

In New South Wales, the *Carbon Rights Legislation Amendment Act 1998* (NSW) amended the *Conveyancing Act 1919* (NSW) to include carbon sequestration rights within the definition of 'forestry rights,' being a category of legal rights known as 'profits a prendre'. Section 87A now recognises as a separate legal right, any right to the legal or commercial benefits flowing from carbon stored in existing or future trees on a piece of land, conferred after 1990.²⁷ This legislation was obviously drafted to be consistent with the Kyoto Protocol.

In a further development, New South Wales has also taken the step of introducing a Greenhouse Gas Abatement Scheme.²⁸ Abatement Certificate providers in the scheme can include those who are carrying out low-emission generation, demand side abatement (energy efficiency) programs, carbon sequestration in forests and reduction of greenhouse gas emissions from a range of non-electricity related industrial processes by large electricity users.

Western Australia

In Western Australia the *Carbon Rights Act 2003* (WA), *Tree Plantation Agreements Act 2003* (WA) and relevant amending legislation commenced on 23 March 2004. Under this new legislation, carbon right interests in land, carbon covenant interests in land and plantation interests in land are created by the registration against the land title of an instrument, in the approved form, under the *Transfer of Land Act 1893*. The relevant instruments have been created and are anticipated to be in use in the near future.

A carbon right under this legislation is intended to create legal certainty as to the nature of the right. Only one carbon right can be registered on title to land at any particular time.

²⁴ The Kyoto Protocol implementation rules were largely settled in November 2001 through the Marrakech Accords (developed out of Conference of the Parties (COP) number 7 (COP 7)). These rules are subject to modification.

²⁵ Australian Greenhouse Office, Federal Government, "Australian firms and the market-based mechanisms of the Kyoto Protocol", 2003.

²⁶ Above n8 at 472.

²⁷ Id at 473

²⁸ refer <http://www.greenhousegas.nsw.gov.au/>.

A carbon covenant under the *Carbon Rights Act* is intended to ensure continuation of the trees or other land-based resources that underlie the carbon sequestration under the registered carbon right. A carbon covenant will affect landowners and others who have an interest in that land (e.g. holders of a lease, mortgage, profit a prendre etc) who agree to give a covenant in favour of the holder of the carbon right.

A plantation interest is an ownership interest in trees that is separate from the land.

There is no current proposal for a State based trading system in Western Australia. However the State has developed the State Greenhouse Strategy (Consultation Draft) dated December 2003. One of the stated aims is to ensure that the State's industry and public would be able to contribute to reducing global greenhouse emissions and be able to effectively respond to any opportunities and challenges generated by the greenhouse effect. The Draft Strategy proposes a series of actions to promote nationally consistent carbon rights legislation and more accurate and efficient carbon accounting for plantations.

Relevantly, the Draft Strategy proposes to develop a State greenhouse gas inventory system and Government controlled Abatement Fund. One of the potential benefits of the new legislation is the ability of the State Government to use the carbon rights to report on the level of carbon sequestration on affected land.

The significance of the legislation for Western Australian businesses is that Western Australia has an economy that is highly dependent on resources and energy based industry, which contribute to greenhouse gas emissions. Some industries are particularly interested in how a greenhouse emission allocation by the Australian or State Government would be managed and the type of investment that should be made to reduce or offset their greenhouse gas emissions.