Securing Rights to Carbon Sequestration: The Western Australian Experience

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**Introduction**

Organic carbon sequestration through vegetation growth is the only realistic means of removing carbon dioxide from the atmosphere. Increasing vegetation and biomass stocks can therefore be a valuable means to limit atmospheric carbon dioxide concentrations until energy efficiency, low greenhouse gas emitting energy and agricultural options, and other emission reduction initiatives can be implemented at a scale required to limit the growth, and ultimately reduce, the amount of global greenhouse gas emissions.

For over ten years commercially-oriented tree planting interests in Australia have recognised the potential for carbon sequestration offset credits to augment the income from other plantation products. Income from the sale of offset credits could expand the geographic area over which tree and mixed species plantations could be a viable land use, contributing to the growth of the domestic plantation industry.

In addition, revegetation through plantation establishment and other means provide further environmental and social benefits in Western Australia ("WA"), such as groundwater salinity reduction, surface water production, erosion control, biodiversity protection, and regional economic diversity. Encouraging revegetation is therefore a matter of keen interest to the State Government for sustainability objectives.

While the scientific notion that increasing biomass will remove carbon dioxide from the atmosphere is conceptually simple, there are significant challenges in converting those carbon dioxide removals into commercially tradeable commodities, even with the clear recognition of Emission Reduction Units under rules established pursuant to the Kyoto Protocol.

Any emission accounting or trading program which seeks to include carbon offset credits resulting from organic sequestration must address several key issues, of which additionality, permanence, quantum, and ownership are the most fundamental.

Ownership raises some of the most complex issues associated with the creation and trading of organic carbon sequestration rights, especially where other benefits, such as harvestable timber, improved ground water quality, erosion control, or biodiversity enhancement, are created by the same actions.

This paper addresses the approach taken in WA to overcome barriers associated with ownership of carbon sequestration offset credits generated by the establishment of forest plantations (Kyoto Article 3.3), followed by a brief summary of the position in the other Australian States.

**Carbon Sequestration Rights: A New Right in Property**

Where all rights associated with the establishment of plantations are held by the same party, carbon sequestration rights are coincident with rights to other plantation products. Where carbon sequestration rights are separated from other rights, however, several issues need to be addressed. For example, how does ownership of carbon sequestration differ from ownership of sequestered carbon? What legislative guidance is required to support the commercial interests of both parties? How can carbon sequestration rights be protected from loss or injury from negligence, natural risks, or other commercial imperatives (e.g. harvesting of plantation products)?

An example will illustrate these challenges. Farmer A leases part of his farm to Corporation B for thirty years for plantation establishment. Corporation B holds all rights to the plantation, including carbon sequestration rights, and agrees to pay an annual land rent to Farmer A. Corporation B sells rights to the lease and the timber to Corporation C and rights to the benefits and risks arising from carbon sequestration to Corporation D.

Since the mid-1990s, most contractual arrangements relating to tree plantations in WA have included provisions identifying the ownership of benefits arising from carbon sequestration by the plantations. The complexity and cost of contracts for carbon sequestration rights has led all Australian State governments to legislatively create a separate carbon sequestration right. This approach, apparently unique to Australia, has increased certainty and reduced costs to land holders and traders in carbon sequestration rights.

**Western Australia’s Carbon Sequestration Legislation**

The approach taken in WA has been the broadest of the Australian jurisdictions. The forms of carbon sequestration that can give rise to carbon rights are not limited in any way, and do not require a direct link to a silvicultural project or any form of forest management. The approach reflects several important

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considerations. First, a broad enabling legislative framework was considered most appropriate to support activities that might be accountable and tradeable under international and national rules that are still emerging and are likely to be further altered over coming decades. Second, market-based instruments established by the Kyoto Protocol will be able to distinguish between differing types of carbon sequestration products. Finally, revegetation could reverse past damage to Western Australia’s land and ecosystems resulting from clearing for agriculture, urban use, infrastructure, or by vegetation destruction through range-land activities such as grazing.

Western Australia has an area of approximately 2,527,620 square kilometres. Approximately ninety-three percent of this area is held as Crown land, and the remaining seven percent is held as freehold land. There are two types of freehold land in Western Australia. The dominant system is Torrens title land, which comprises almost all of the freehold land in WA. The Torrens system is a system of title by registration of dealings in land in the Register held at the land registry office. The system is established under the Transfer of Land Act 1893 (WA) ("TLA"). One of the fundamental principles underlying the Torrens system is the concept of indefeasibility of title. Essentially, the registered proprietor’s title is paramount (except in the case of fraud) and held only subject to the interests registered in the Register and certain specified exceptions. The State in effect guarantees the title to land, and interests registered in respect of the land, by providing for a right to claim against the State if a person is deprived of his or her land due to a number of circumstances.

The other type of freehold land is old system title land, which comprises 0.1 percent of the seven percent of freehold land in Western Australia. This system of title relates to Crown grants of freehold that were made prior to the introduction of the Torrens system, and which have not since been converted to Torrens system land. Under this system, title to land is established by an unbroken documentary chain of title for at least thirty years prior to the agreement to sell.

The administration of Crown land in WA is governed by the Land Administration Act 1997 (WA) ("LAA"). "Crown land" is all land that is not freehold land. It is land held by the Crown, or the State.

However, all dealings in Crown land are registered under the single registration system provided for in the TLA. Consequently, the holder of an interest registered in respect of Crown land has the same indefeasible title as a freehold land owner, subject to the exceptions contained in section 68 TLA and certain other exceptions arising from its nature as Crown land as set out in section 81T of TLA.

**Carbon Rights Act 2003 (WA)**

The Western Australian Carbon Rights Act 2003 ("CRA") establishes a new, separate interest in land known as a "carbon right."

A carbon right comes into existence once it is registered on the title to the land. The person registered as the proprietor, or owner, of the carbon right on the title to the land has security of title to the carbon right, via the benefits of the indefeasibility and other provisions under the TLA. A carbon right can be registered in respect of any Torrens title freehold land and any Crown land. The only land in Western Australia in respect of which a carbon right cannot be registered, and therefore cannot be created, is old system title land. Generally, it can be dealt with in the same way as any other interest in land.

The intention of the CRA is to establish the legal certainty and security of a carbon right as an interest in respect of certain identified land. A carbon right gives the owner “the legal and commercial benefits and risks arising from changes to the atmosphere that are caused by carbon sequestration and carbon release occurring in or on land in respect of which the carbon right is registered.”

The CRA does not operate to determine or set the value of the carbon right. Its commercial value, and therefore tradability, is left to the market to determine, in the same way that the value and tradability of any other interest in land is determined by the market. This is evident from the Second Reading Speech for the CRA when it was introduced into the Legislative Assembly by the Honourable Francis Logan MLA when he said:

> The Carbon Rights Bill will provide security for the owner of the carbon right in land by enabling a carbon right to be registered on the land title . . . Issues such as measuring the carbon that has been sequestered and stays there, provisions for disease and fire protection and whether a particular type of sequestered carbon can be traded and so on are left to the market to determine.

This intention was reiterated later in the Second Reading Speech in the following terms: “Registration will clarify the ownership of the right . . . but it gives no guarantee as to how much carbon is there, whether it will remain there or what value it may have.”

The owner of the carbon right does not need to be the same person who is the owner of the land to which it relates. However, if they are not the same person, the carbon right can only be created with the land owner’s consent.

The definitions of “carbon sequestration” and “carbon release” in section 3 of the CRA make it clear that the changes relate to anything stored in or on the land. Consequently, it relates to changes in carbon storage in any form—in the soil of the land, or in the trees or other forms of vegetation on the land.

The owner of the carbon right, however, does not own the carbon itself stored in or on the land. That interest remains with whoever owns the matter in which it is stored—for example the land owner, or the holder of a plantation interest under section 7(1) of the Tree Plantation Agreements Act 2003 (WA) (“TPA”). A plantation interest is a separate interest in land (again registered on the title to the land under the TLA), in which the ownership of trees on the land is separated from ownership of the land itself (contrary to normal common law principles).

As a consequence of the separation of the ownership of the carbon right from the carbon itself, the owner of the carbon right must have a mechanism by which carbon changes in or
on the relevant land can be controlled, in order for the carbon right to have some continuing certainty of its commercial value. This is done, in a legal sense, by providing for the creation of a concomitant, separate interest in land known as a “carbon covenant.” The carbon covenant is also registered on the title to the land, allowing the land owner, or others with an interest in the same or other land, to agree with the owner of the carbon right (who must also be the owner of the carbon covenant) to do, or not to do, certain things on the land. This will have the effect of encouraging carbon sequestration on the land, and mitigating carbon release from the land, as much as possible.

For example, the carbon covenant may include provisions as to how the land will be used or managed to decrease the risk of fire or pests, thereby reducing the risk of carbon release and increasing carbon sequestration in the trees or vegetation on the land. Similarly, altered grazing patterns of livestock may increase the chance of carbon sequestration.

The carbon covenant runs with, and binds, the land so that future owners of the land will be bound to comply with them, and any future owner of the carbon right (and therefore the carbon covenant) will have the benefit of the covenants.

The carbon covenants are enforceable through legal proceedings in the same way that any other interest in land is enforced at common law. Any failure to comply with the carbon covenant is a civil matter between the relevant parties, which will be adjudicated by the courts.

**UPTAKE OF CARBON RIGHTS**

The development of the CRA was a government initiative to promote the development of the forest plantation industry to expand regional economic opportunities, provide domestic wood products, support woodchip exports, replace logging of old growth forest, and gain the broader environmental benefits of revegetation, by reducing transaction costs and increasing certainty associated with establishing and trading carbon sequestration rights.

Australia’s plantation and timber industries have included carbon rights considerations in their contractual arrangements for at least fifteen years and Australia’s financial industry developed emission trading frameworks during the mid-1990s. Yet, because Australia’s national government until recently refused to ratify the Kyoto Protocol and has not established domestic sectoral or other emission limits or taxes, there exists no basis for either international or domestic commercial trading of carbon sequestration or any other emission reduction units. Therefore, there has been virtually no incentive for parties to undertake the costs of establishing carbon sequestration right ownership through registration under the CRA, and consequently, the uptake on registering carbon rights has been relatively slow.

As of October 2007, only twenty-four carbon rights had been registered since the CRA’s proclamation on March 24, 2004. Of these, only ten have had accompanying carbon covenants registered. There are only three instances where a carbon right, a carbon covenant and a plantation interest under the TPA have been registered. Four plantation interests have been registered without an accompanying carbon right.

The number of dealings registered does not provide an indication as to the size or number of properties involved, however, as one dealing may affect more than one area of land, if the same person owns more than one property.

Similarly, it is not possible to draw any conclusion as to the relationship between the uptake of carbon rights and the forest plantation industry. This is because tree plantation companies have in the past secured their interests in the land by a variety of means including timber share-farming agreements under section 34B of the Conservation and Land Management Act 1984 (WA) or a lease, and these remain available along with the more recently enacted plantation interest. One of the reasons for the slow uptake of registration of carbon rights is the number of requirements that need to be met before they can be registered.

The area of the land over which the carbon right is being registered must be clearly identifiable. If the carbon right is over the whole of the land in a property, then the description is simply the same as the current land description for the property. If the carbon right is only over part of the land in the property, then a suitable diagram needs to be prepared with co-ordinates. If the area over which the carbon rights are to be registered has not already been surveyed for other purposes (such as the registration of a plantation interest), a considerable cost burden is imposed. In most cases this would be borne by the carbon right holder.

The carbon rights are required to be registered separately on the title to each property. Any dealings with the carbon right will require the consent of any person having an interest in the carbon right itself and in many cases, the owner of the underlying land and any person having an interest in that land. This is likely to act as a disincentive to the development of a trading market in carbon rights per se, as the conveyancing costs and other administrative requirements will be too costly, intensive, and time consuming. However, it may lead to the development of a wholesale market, where brokers accumulate and hold the individual carbon rights from land owners and aggregate them for on-sale to industrial or other companies seeking credits in a carbon trading system.

**CARBON SEQUESTRATION RIGHTS IN OTHER AUSTRALIAN STATES**

The following table sets out a comparison of the forms of legal recognition of carbon sequestration rights, and the limits on that recognition, that have been enacted in legislation in the other Australian States.

Almost all of the other Australian State jurisdictions have limited their recognition of carbon rights to carbon sequestration in trees or forest vegetation. New South Wales is most restrictive in that it is limited to trees or forest on the land after 1990. However, the approach in Queensland is more liberal as the carbon sequestration right is one of several potential forest products and can also relate to vegetation more generally.

All jurisdictions allow for ownership or the benefits of a carbon right to be separated from the ownership or benefits of the trees or vegetation. In addition, the rights can run with, and bind the future owners of, the land over which the rights exist.
Neither the Northern Territory nor the Australian Capital Territory have enacted any legislation, so any relevant common law principles apply in these jurisdictions.

**Conclusion**

The new Australian government elected on November 24, 2007 has ratified the Kyoto Protocol, potentially leading to the capacity to export carbon sequestration rights (using the Joint Initiative mechanism) and to a domestic emissions market. Internationally, a greenhouse gas limitation regime is being negotiated for the period following the first Kyoto Protocol reporting period.

As the CRA covers all types of carbon sequestration on all but less than 0.1 percent of land in Western Australia and focuses on creating certainty of ownership, the Western Australian Carbon Rights Act will be able to support initiatives under any future national or international emission regime that includes organic carbon sequestration as an option to generate offset credits.

**Table: Summary of Carbon Sequestration Legislation in Australia, other than Western Australia**

<table>
<thead>
<tr>
<th>Jurisdiction</th>
<th>Definition of the Right</th>
<th>Nature of the Right</th>
<th>Limitations on the Right</th>
</tr>
</thead>
<tbody>
<tr>
<td>VICTORIA</td>
<td>“Carbon sequestration right” means a right to commercially exploit carbon sequestered by trees (§3) Created under a “carbon rights agreement” (§12)</td>
<td>Deemed not to be an interest in land (§14(2))</td>
<td>Limited to carbon sequestered by trees (§3) Can be separated from ownership of trees (§12) Applies to freehold land only (§4)</td>
</tr>
<tr>
<td>NEW SOUTH WALES</td>
<td>“Carbon sequestration right” means a right conferred on a person by agreement or otherwise to the legal, commercial, or other benefit (whether present or future) of carbon sequestration by any existing or future tree or forest on the land after 1990 (§87A) Carbon sequestration right included in a “forestry right” (§87A)</td>
<td>Forestry right deemed a profit a prendre (§88AB) Forestry covenant is an interest in land (§88EA(5))</td>
<td>Limited to carbon sequestered by trees on land after 1990 (§87A) Can be granted separately from forestry right in respect of crop of trees on land (§87A)</td>
</tr>
<tr>
<td>SOUTH AUSTRALIA</td>
<td>“Carbon right” is the capacity of forest vegetation to absorb carbon from the atmosphere (§3A(1)) Created under “forest property (carbon rights) agreement” (§5(3))</td>
<td>Form of property, in the nature of a chose in action (§3A(1)) Attaches to the forest vegetation to which it relates (§3A(2))</td>
<td>Limited to absorption of carbon in “forest vegetation” (trees or other forms of forest vegetation) (§§3 &amp; 3A) Can be separated from ownership of forest vegetation (§3A(2))</td>
</tr>
<tr>
<td>QUEENSLAND</td>
<td>“Natural resource product” includes carbon stored in a tree or vegetation and carbon sequestration by a tree or vegetation (Schedule 3) Owner of land may enter into an agreement about a natural resource product on the land (§61J(1))</td>
<td>Does not create an interest in land (§61J(4)) Rights are a profit a prendre (§61J(5))</td>
<td>Limited to absorption of carbon by, or storage of carbon in, trees or vegetation (Schedule 3) Agreement can be limited to these natural resource products relating to carbon sequestration and/or storage of carbon (§61J(3) &amp; Schedule 3) Note the effect of these provisions is that ownership of carbon stored in trees or vegetation, and the ownership of the carbon sequestration right in respect of them, can also be separated</td>
</tr>
<tr>
<td>TASMANIA</td>
<td>“Carbon sequestration right” means a right conferred on a person (by agreement or otherwise) to the legal, commercial or other benefit (whether present or future) of carbon sequestration by any existing or future tree or forest on the land (§3) Carbon sequestration right included in a forestry right (§3)</td>
<td>Deemed to be a profit a prendre (§5(1))</td>
<td>Limited to carbon sequestration by a tree or forest (§3) Can be separated from ownership of trees (§3)</td>
</tr>
</tbody>
</table>

Endnotes: Securing Rights to Carbon Sequestration continued on page 85
32 Articles III and XX of the GATT are part of the original GATT agreement reached in 1947. The WTO Agreements, which entered into effect in 1995, incorporate the 1947 GATT agreement.

33 The ongoing WTO Doha Round negotiations may culminate in substantial revisions to the current WTO Agreements. However, with the exception of the negotiations toward a possible Agreement on Trade in Environmental Goods and Services, discussed below, the Doha Round negotiations are unlikely to lead to any new agreement that would clarify the operation of GATT III and XX as to import restrictions linked to efforts to reduce greenhouse gas emissions. At any rate, it remains unclear whether the Doha Round will result in any revisions to the WTO Agreements currently in effect.

34 WTO Members could conceivably attack ACSA’s import restrictions on other WTO grounds. For example, a complaining WTO Member might allege that ACSA’s import provisions are inconsistent with GATT Article II, which does not permit WTO Members to impose “duties or charges of any kind imposed on or in connection with the importation in excess of” bound tariff rates. GATT art. II(1(b).


36 CLIMATE CHANGE WHITE PAPER, supra note 18, at 13.

37 A particularly well-known example is the retaliatory measures against the United States approved under the WTO dispute settlement process in the case of United States – Tax Treatment for “Foreign Sales Corporations.” In that case, an arbitrator convened under Article 22.6 of the DSU determined that the European Communities could impose “countermeasures” against the United States in the form of a hundred percent ad valorem duties amounting to over $4 billion per year. See, e.g., Decision by the Arbitrator, United States – Tax Treatment for “Foreign Sales Corporations,” WT/DS108/ARB (Aug. 30, 2002), available at http://doscinline.wto.org/DFFDocuments/t/WT/DS/108/ARB.dec (last visited Mar. 12, 2008).


42 Schwab Letter id. at 2.


45 WTO Declaration, id. para. 31(ii).

46 Schwab Letter, supra note 41, at 1.


51 See ASCA, supra note 11, § 6001.


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ENDNOTES: SECURING RIGHTS TO CARBON SEQUESTRATION continued from page 33