

Carbon Rights as New Property: The benefits of statutory verification

SAMANTHA HEPBURN*

Abstract

This paper examines the different ways in which carbon rights have been verified as property interests. A carbon right is a new and unique form of land interest that confers upon the holder a right to the incorporeal benefit of carbon sequestration on a piece of forested land. Carbon sequestration refers to the absorption from the atmosphere of carbon dioxide by vegetation and soils and the storage of carbon in vegetation and soils. Innovative legislation has been introduced in each state seeking to separate the incorporeal benefit of carbon sequestration from the natural rights flowing from land ownership. The fragmentation of land ownership in this way is a constituent of broader climate change strategies and is particularly important for an Australian emissions trading scheme where carbon rights will acquire value as tradable offsets. This paper will explore the different legislative responses of each state to the proprietary characterisation of the carbon right as a land interest. It will argue that verifying the carbon right as a new statutory property interest, in line with the approach set out in the *Carbon Rights Act 2003* (WA), is preferable to aligning it with preconceived categories of common law servitude. By articulating the carbon right as a new form of statutory interest, unique in status and form, its *sui generis* character is more accurately reflected. Further, statutory validation of the carbon right as a new land interest is more efficient as legislative rules are more visible and therefore come to the attention of other market participants more quickly and at a lower cost without the burden and complexity associated with expressing the right through the prism of preconceived and non-responsive common law forms.

1. Introduction

[T]here is no debating the growing importance of new property as a phenomenon, but there is much room for debate as to the appropriate legal treatment.¹

Climate change is a diabolical policy problem.²

* Associate Professor, Faculty of Business and Law, Deakin University. This article is based on a seminar given by the author, 'Carbon Rights as Property Interests: Categorization, Creation and Emissions Trading' (Australian National University College of Law Seminar, Canberra, 21 August 2008).

¹ Charles Reich, 'The New Property After 25 Years' (1990) 24 *University of San Francisco Law Review* 223 at 225.

Most jurisdictions support an institutionalised framework of property interests that conform to standardised categories.³ When alterations to our systems of property are regarded as necessary, courts or legislatures may affect changes within the constraints and limits on their powers. This process has not always been streamlined and is rarely confluent. As Sir Frederick Pollock has stated, '[t]he history of our land laws, it cannot be too often repeated, is a history of legal fictions and evasions, with which the Legislature vainly endeavored to keep pace'.⁴

Structural change in established property systems is not a prevailing theme. Property systems are inherently conservative, seeking continuity in their basic internal framework.⁵ The shift from a static agrarian conception of property, whereby an owner was essentially entitled to undisturbed enjoyment, to a more dynamic, instrumental, and abstract view of property in the 19th century, emphasising newly paramount virtues of productive use and land development, encouraged greater awareness of the utility of title fragmentation.⁶ During this time land came to be viewed as a productive asset and the 'destruction of older forms of property by newer agents of economic development' was increasingly permitted.⁷ This established a foundation for an increased acceptance that new forms of land interest may evolve in response to shifting social and economic priorities.⁸

Incorporating new property interests into the basic common law framework and responding to the consequential impact can, however, be difficult.⁹ Any systemic modification necessarily involves a 'constellation of highly complex adjustments of entitlements and expectations'.¹⁰ Under common law, such change is approached cautiously, with judicious circumspection.¹¹ Common law courts

2 Ross Garnaut, *Climate Change Review: Draft Report* (2008) at 2.

3 See Michael Heller, 'The Boundaries of Private Property' (1999) 108 *Yale Law Journal* 1163 at 1166 where the author notes that '[w]ith too many owners of property fragments, resources become prone to waste ... through overuse ... In well-functioning property regimes, legislatures and courts prevent such waste by drawing boundaries that constrain owners' choices about fragmentation. Outside the boundaries are commons and anticommons property; inside are forms of private property.' See also Jeremy Waldron, 'What is Private Property?' (1985) 5 *Oxford Journal of Legal Studies* 313.

4 Frederick Pollock, *The Land Laws* (1883) at 62.

5 Heller, above n 3 at 1167–8.

6 See Morton Horwitz, 'The Transformation in the Conception of Property Law in American Law, 1780–1860' (1973) 40 *University of Chicago Law Review* 248 where the author notes that it was not until the 19th century that it became clear that the conception of absolute dominion over land ownership necessarily circumscribed the rights of others to develop the land and its natural resources.

7 *Id* at 290.

8 For a discussion of the evolving character of property interests see Francis Philbrick, 'Changing Conceptions of Property in Law' (1938) 86 *University of Pennsylvania Law Review* 691; Thomas Grey, 'The Disintegration of Property' in J Roland Pennock and John Chapman (eds) *Property: Nomos XXII* (1980) 69 at 177–8.

9 Structural and economic limitations involved in incorporating new property into an existing framework are discussed by Heller, above n 3 at 1165, who notes that diverse property doctrines have evolved to 'prevent and abolish excessive fragmentation and keep resources well-scaled for productive use'.

are not indulgent in the recognition of new or novel land interests and before a right or interest can be accepted as property it must display identifiable characteristics.¹² Unlike contractual relationships, where parties are generally at liberty to develop the form and character of their particular rights, common law property interests are framed within fixed and immutable categories and courts are often reluctant to develop new forms of interest beyond these categories.¹³ This disinclination is apparent in both common law and civil code jurisdictions where the property categories are pre-established and therefore *numerus clausus*.¹⁴ The *numerus clausus* principle has been described as a ‘cluster of inner convictions’ and a ‘norm of self-governance’ that functions as a ‘meta-principle’ informing the propositional structure of English land law.¹⁵

New forms of property interest may be recognised by statute; however, the legislature is increasingly cognisant of the structural and socioeconomic concerns that underpin such creations.¹⁶ This has meant that new statutory interests are infrequently established, particularly where their form and character may adversely affect the schematic framework of the common law.¹⁷ Where statute *has* validated a right, the endorsement is often implemented by reference to antecedent common law forms and does not operate as a pure statutory expression.¹⁸ This outcome is more a product of legislative inertia, than reasoned assessment, particularly in circumstances where the internal characteristics of the right do not correspond with the endorsed common law form.¹⁹ This approach to the statutory validation of rights can result in the creation of an anomalous, patchwork scheme of interests.²⁰ Common law forms compliant with common law requirements may exist alongside common law forms mandated by specific statutory edicts that are

10 Donald Carmichael, ‘Fee Simple Absolute as a Variable Research Concept’ (1975) 15 *Natural Resources Journal* 749 at 751.

11 Craig Arnold, ‘The Reconstitution of Property: Property as a web of interests’ (2002) 26 *Harvard Environmental Law Review* 281 at 283. See also *ibid*.

12 In *National Provincial Bank Ltd v Ainsworth* [1965] AC 1175 at 1247–8, Lord Wilberforce said: ‘Before a right or an interest can be admitted into the category of property, or of a right affecting property, it must be definable, identifiable by third parties, capable in its nature of assumption by third parties, and have some degree of permanence or stability.’ The approach of Lord Wilberforce was adopted by Mason J in *R v Toohey; Ex parte Meneling Station Pty Ltd* (1982) 158 CLR 327 at 342. In *Western Mining Corporation Ltd v Commonwealth* (1994) 50 FCR 305 at 329, Ryan J, before referring to the comments of Lord Wilberforce in *National Provincial Bank Ltd v Ainsworth*, noted that ‘property is not entirely an indefinable notion to be applied intuitively case by case. Clearly there must be some demarcation between what is and what is not property.’

13 See Henry Hansmann and Reinier Kraakman, ‘Property, Contract, and Verification: The numerus clausus problem and the divisibility of rights’ (2002) 31 *Journal of Legal Studies* S373.

14 Meaning literally ‘closed in number’. For a discussion of the nature and justification underlying the *numerus clausus* principle see Thomas Merrill and Henry Smith, ‘Optimal Standardization in the Law of Property: The Numerus Clausus Principle’ (2000) 110 *Yale Law Journal* 1; Bernard Rudden, ‘Economic Theory v Property Law: The numerus clausus problem’ in John Eekelaar and John Bell (eds), *Oxford Essays in Jurisprudence: Third series* (1987) 239. For a discussion of the application of *numerus clausus* to the Australian context see Brendan Edgeworth, ‘The Numerus Clausus Principle in Contemporary Australian Property Law’ (2006) 32 *Monash University Law Review* 387.

non-compliant with common law rules.²¹ The difficulty with such an interspersed approach to the verification of property is that there is no clear basis for articulating which rights should apply to which form. Verification and categorisation become arbitrary and capricious.

The purpose of this article is to examine critically the innovative and unique legislation validating forestry carbon sequestration rights as property. This legislation has been introduced in every Australian State, each State taking a different approach to the verification process. Some States have verified the forestry carbon sequestration rights as a common law profit à prendre, while others have shown a preference for articulating the right as a pure statutory interest.²² A pure statutory interest, for the purposes of this article, refers to a property interest which is not aligned with any common law form.²³ The primary contention of this article is that the verification of forestry carbon sequestration rights as new property is best achieved through a new and unaligned statutory expression. The reasoning underlying this argument is twofold.

First, carbon sequestration interests are fundamentally different to existing common law forms of real property and therefore any attempt to express such interests through the prism of the common law framework is problematic.²⁴ The essential difficulty underlying the existing legislative provisions articulating the carbon right as a profit is that it is simply not a right of taking. The common law profit à prendre confers a right upon the holder to take natural produce from the land; on the other hand, the carbon sequestration right confers no right of removal

15 Kevin Gray and Susan Gray, 'The Rhetoric of Realty', in Joshua Getzler (ed), *Rationalizing Property, Equity and Trusts: Essays in honour of Edward Burn* (2003) 204 at 235–7. This is also discussed by Edgeworth, above n 14 at 391 where the author considers the jural status of *numerus clausus* as a meta-principle which 'pervades the wide landscape of legal discourse in property law.'

16 See generally Anthony Scott, 'Property Rights and Property Wrongs' (1983) 16 *Canadian Journal of Economics* 555 discussing the merits of statute and common law in the evolution of property interests.

17 Statutory land interests have been described as 'entitlements of a new kind': *Harper v Minister for Sea Fisheries* (1989) 168 CLR 314 at 325 (Mason CJ, Deane and Gaudron JJ). This is discussed by Scott, *id* at 558.

18 This point is raised by Merrill and Smith, above n 14 at 66.

19 See Scott, above n 16. See also Anthony Scott, 'Does Government Create Real Property Rights?: Private Interests in Natural Resources' in University of British Columbia Department of Economics, *Discussion Paper No 84–26* (Vancouver, 1984).

20 See for example, the categories outlined by Mathew Storey, 'Not of this Earth: The Extraterrestrial Nature of Statutory Property in the 21st Century' (2006) 25 *Australian Resources and Energy Law Journal* 51 at 54. The author sets out four different categories: (1) Defeasible statutory replication of a common law title; (2) Statutory property bearing no common law parallel; (3) Statutory licence; and (4) A public right created by statute.

21 The later category has been endorsed in New South Wales, Tasmania and Queensland which have all deemed carbon sequestration rights to constitute 'profit à prendre' interests. See also Scott, 'Does Government Create Real Property Rights?', above n 19, where the author suggests that statutory property is generally a legislative response to social and economic development. For a discussion of the specific development of statutory rights see further, Anthony Scott, 'Conceptual Origins of Rights Based Fishing' in Philip Neher, Ragnar Arnason and Nina Mollett (eds), *Rights Based Fishing* (1988) 11.

upon the holder at all.²⁵ Rather, the carbon sequestration right confers upon the holder all of the intangible commercial and economic benefits that may flow from the sequestration process.²⁶ The sequestration process refers to the natural absorption from the atmosphere of carbon dioxide by vegetation and soils and the storage of carbon in vegetation and soils.²⁷ In this respect, the primary focus of the carbon sequestration right is upon storage rather than removal and the interest confers rights upon the holder to the benefits that may flow from such storage and storage potential. There is no ‘taking’ from the land which is consistent with the sequestration process other than in a highly theoretical sense whereby the holder is treated as ‘removing’ the intangible sequestration benefit.

Second, if carbon sequestration rights are to be included as tradable offsets within the proposed Carbon Pollution Reduction Scheme in Australia, their statutory expression will ensure greater visibility and clarity in the development of an offset market.²⁸ Legislative rules are, as Merrill and Smith have suggested, ‘more visible than decisional rules’ and therefore come to the attention of other market participants more quickly and at a lower cost.²⁹ Cost and visibility are particularly important requirements underpinning the efficient management of carbon rights as offset credit mechanisms. The proposed scheme is to commence in 2010. The underlying aim of the scheme is to introduce annual quantity caps for overall emissions which would extend to 2020. Emitters covered under the scheme would need to acquire permits equivalent to their annual emissions or, where they produce more emissions than covered by their permits, pay an emissions fee (which would be higher than the market cost of permits). Annual permits would be

22 Western Australia and South Australia have endorsed the carbon sequestration right as a pure statutory form. See *Forestry Property Act 2000* (SA) s 3A; *Carbon Rights Act 2003* (WA) s 3.

23 A clear example of this form of interest is an exploration permit under the former *Petroleum (Submerged Lands) Act 1967* (Cth) (repealed by *Offshore Petroleum (Repeals and Consequential Amendments) Act 2006* (Cth)), which conferred a right to the grant of a petroleum licence but only a limited right to the petroleum itself. See the discussion on the vexed proprietary status of this ‘pure’ statutory form by Gummow J in *Commonwealth v WMC Resources Ltd* (1998) 194 CLR 1 at [194] where his Honour noted that the statutory interest was property despite the fact that its ‘defeasance’ did not equate with an acquisition of property in a constitutional sense.

24 The carbon right has been described as a ‘novel’ right with a complexity that has made it difficult to characterise. See Steven Kennett, Arlene Kwasniak and Alastair Lucas, ‘Property Rights and the Legal Framework for Carbon Sequestration on Agricultural Land’ (2005–06) 37 *Ottawa Law Review* 171 at 179.

25 It might be possible, or at least more accurate, to align the interest with the profit à rendre. The profit à rendre was described by Santow JA (Mason P and Beazley JA agreeing) in *Clos Farming Estates v Easton* (2002) 11 BPR 20,605 at [59] (referring to Peter Butt, *Land Law* (4th ed, 2001)), as ‘a right or obligation to enter land to put there something of benefit’. See also *Permanent Trustee Australia Ltd v Shand* (1992) 27 NSWLR 426 (‘*Permanent Trustee*’), at 431 (Young J), where a profit à rendre was described as an incorporeal hereditament being ‘a right to go onto the land and to put on it something of benefit to it’. The character and scope of the profit à rendre was discussed by Brendan Edgeworth, ‘Profits à Rendre: A Reincarnation?’ (2006) 12 *Australian Property Law Journal* 200.

26 This specific definition has been adopted in NSW and Tasmania. See *Conveyancing Act 1919* (NSW) s 87A; *Forests Rights Registration Act 1990* (Tas) s 5(4).

issued each year free of charge. Residual permits would be progressively auctioned. Small numbers of future-dated permits, dating beyond 2020, may be issued to promote liquid forward markets.³⁰

The probability of tighter emission constraints in the future will inevitably result in an increase in the cost of carbon over time. Markets and businesses may use the expected future price of carbon to make investment, technology and abatement decisions.³¹ Companies with a high cost of abatement will have a number of options. They may trade permits with firms having a lower cost of abatement.³² Alternatively, they may purchase carbon forestry rights to offset their emission caps. In the absence of a permit or an abatement offset, an emissions fee, that is, a pre-set fee for every tonne by which emissions exceed the permits held, will be chargeable. Within this scheme, carbon interests, combined with policies avoiding deforestation such as forestry stewardship, represent important abatement mechanisms.

Reducing deforestation and reinforcing the value of existing carbon sequestration through the articulation of carbon rights as tradable land interests has been accepted as an 'immediate priority' both in Australia and internationally.³³ The *Garnaut Climate Change Review: Final Report* specifically endorsed the unlimited use of domestic forestry carbon offset credits before and during coverage in the scheme in order to assist parties to meet their emission targets.³⁴ A more expansive approach to domestic offsets from carbon sequestration in agriculture is also anticipated.³⁵

The verification of carbon sequestration rights as common law profits will generate unnecessary confusion, hindering the progression of a transparent and efficient domestic carbon offset market.³⁶ The introduction of a clear and consistent statutory framework for the articulation of carbon rights is more

27 The effectiveness of carbon sequestration rights or carbon 'sinks' is discussed by Daniel Lashof and Bill Hare, 'The Role of Biotic Carbon Stocks in Stabilizing Greenhouse Gas Concentrations at Safe Levels' (1999) 2 *Environmental Science and Policy* 101.

28 The *United Nations Framework Convention on Climate Change*, opened for signature 9 May 1992, 1771 UNTS 107 (entered into force 21 March 1994) recognised that Annex 1 countries pursuant to the *Kyoto Protocol to the United Nations Framework Convention on Climate Change*, opened for signature 11 December 1994, [2008] ATS 2 (entered into force 16 February 2005) could include carbon sequestered on agricultural land in the process of calculating their net greenhouse gas emissions.

29 Merrill and Smith, above n 14 at 62.

30 See Department of Prime Minister and Cabinet, *Prime Ministerial Task Group on Emissions Trading: Final Report* (2007) at para 6.2.

31 See Ross Garnaut, *The Garnaut Climate Change Review: Final Report* (2008) at 2. See also, Andrew Thompson and Rob Campbell-Watt, 'Australia and an Emissions Trading Market: Opportunities, Costs and Legal Frameworks' (2005) 24 *Australian Resources & Energy Law Journal* 151.

32 See Garnaut, above n 31 at 2.

33 See Department of Prime Minister and Cabinet, above n 30 at 83.

34 Garnaut, above n 31 at 330–4 where the 'Overview of the Proposed Emissions Trading Scheme' proposes unlimited offset credits for net sequestration from forestry.

35 See generally, Garnaut, above n 2 at 360 (Table 15.1).

consistent with the underlying objectives of the proposed Carbon Pollution Reduction Scheme in Australia. Statutory expression will provide a firmer basis for investment and therefore increased incentives for the acceleration to a low-carbon economy.³⁷ Statutory carbon rights are better suited because the legislature has a greater capacity to set up a directed and responsive framework, equipped to respond to any exogenous factors that may emerge as the scheme progresses.³⁸

As the impact of climate change progresses, the importance and value of sequestration benefits will be further enhanced. In this context, the importance of endorsing a clear and responsive proprietary expression of the carbon sequestration interest is imperative. Framing carbon rights within the confines of a common law servitude, whose origins are derivative of feudal England and the law of the commons, is a retrograde act.³⁹ The process distorts the core characteristics of the sequestration interest. This, in turn, impedes the capacity of owners, third parties, and even the courts to respond effectively to the true nature and scope of the carbon interest.

Misapprehension and confusion as to the nature of the core carbon interest may affect carbon trading markets, land development projects and future conflict resolution procedures because the 'bundle of rights' associated with the common law profit does not correspond with the rights that are incidental to the carbon interest. It has been said that 'labeling something as property, does not determine what rights an owner does or does not have'.⁴⁰ Labelling the carbon interest as a profit tells us little about the incidental rights associated with the ownership of such an interest. That void cannot be filled by reference to common law principles responsive to a right of taking. Similarly, 'labelling' the carbon interest as a statutory form is also, in itself, insufficient. The most effective way of formalising *and* responding to the carbon interest as a property right is through the implementation of specific regulatory provisions detailing the form, content and scope of this unique and important natural resource interest.⁴¹

Section Two of the article overviews the various legislative provisions dealing with carbon sequestration rights in each State. Section Three examines the substantive difficulties associated with the categorisation of the carbon right as a

36 See the discussion by Andrew Thompson and Rob Campbell-Watt, 'Carbon Rights: Development of the Legal Framework for a Trading Market' (2004) 22 *Journal of Energy and Natural Resources* 465 at 471 and more generally, Thompson and Campbell-Watt, above n 31.

37 See also, Nicholas Stern, *The Economics of Climate Change: The Stern Review* (2007).

38 The importance of setting up a scheme responsive to exogenous factors, so as to promote a judicious and calibrated 'linkage' with other international schemes was outlined as a key point in Garnaut, above n 31 at 2.

39 The term originated in France, but was frequently utilised in feudal England, where the 'waste,' or uncultivated land, of a lord's manor could be used for pasture and firewood by his tenants. For centuries this 'right of commons' conflicted with the lord's right to 'approve' (ie, appropriate for his own use) any of his waste. For a discussion about the feudal origins of the profit à prendre see generally Frederick Pollock, *The Land Laws* (3rd ed, 1896) at 18–21.

40 Joan Williams, 'The Rhetoric of Property' (1998) 83 *Iowa Law Review* 277 at 297. See also Carol Rose, *Property and Persuasion: Essays on the History, Theory and Rhetoric of Ownership* (1994) at 25.

common law *profit à prendre*. Section four considers the utility of the statutory expression and evaluates the importance of this framework for emerging natural resource interests. The article concludes by reinforcing the importance of sustaining a dynamic and creative property framework where the legislature is responsive to the unique demands of modern environmental imperatives. Ultimately, if the *sui generis* character of the carbon right is to be properly captured and its trade potential effectively harnessed, uniform carbon sequestration legislation, validating carbon sequestration rights as statutory interests following their registration under the Torrens framework, is vital.

2. *The Existing Legislative Regime*

Legislation in New South Wales, Queensland, and Tasmania deems forestry carbon rights to constitute common law *profit à prendre* interests.⁴² By contrast, legislation in Western Australia and South Australia articulates the carbon right as a new property interest, constructed around the specific statutory provisions outlined within the legislation.⁴³ In Western Australia, the proprietary validation of this new carbon right is contingent upon registration of the underlying carbon agreement.⁴⁴

Neither the Australian Capital Territory nor the Northern Territory has specific legislative provisions recognising the proprietary status of carbon sequestration rights.

In Victoria, carbon rights are not validated as separate land interests but exist as components of the underlying forest property agreement and therefore are characterised as *choses in action*.⁴⁵

The legislative scheme introduced by the States has been held to have ‘led the way in the development of forestry carbon rights legislation’.⁴⁶

This claim is derived from the fact that the legislative scheme in Australia is one of the first specifically to formalise the separate proprietary existence of carbon rights within the context of the forestry legislation. In other countries, such as Canada, no legislative scheme has been introduced and it is becoming increasingly apparent that the existing framework is inadequate as it has failed to effectively articulate the proprietary status of carbon rights.⁴⁷

41 The connection between governance and private ownership is particularly important for natural resource interests and the capacity to regulate valuable resources via State legislation is an additional incentive underlying this type of formalisation. See generally Gregory S Alexander, *Commodity and Propriety: Competing Visions of Property in American Legal Thought 1776–1970* (1997).

42 *Conveyancing Act 1919* (NSW) ss 87A, 88AB(1), 88EA; *Forestry Act 1959* (Qld) s 61J(5); *Forestry Rights Registration Act 1990* (Tas) s 5.

43 *Forest Property Act 2000* (SA) s 7; *Carbon Rights Act 2003* (WA) s 6.

44 *Carbon Rights Act 2003* (WA) s 6.

45 *Forests Rights Act 1996* (Vic) ss 3, 4.

46 See Kennett, Kwasiak and Lucas, above n 23 at 205. See also David Brand, ‘Current Status of Forest-Based Carbon Sinks’ [2004] *Australasian Emissions Trading Forum Review* 6.

The primary feature of the carbon rights legislation in each State in Australia is the validation of the carbon right as a land interest separate from the land upon which it is situated.⁴⁸ In this respect, the legislative provisions have amended the established common law presumption that trees growing upon the land and the carbon contained within those trees are a natural part of the land and therefore belong to the landowner.⁴⁹ The separation of carbon sequestration from the natural rights flowing from ownership of the underlying estate represents the first stage in the overall process of effecting independent proprietary validation for carbon sequestration interests. Carbon rights which are verified as separate property interests, enforceable against or over the land, are more readily tradable; they are not encumbered by the management and conveyancing burdens associated with the transfer of full corporeal ownership of the land.⁵⁰

An independent discussion and analysis of the legislative framework underpinning the different approaches to the proprietary validation of carbon rights in New South Wales and Western Australia is instructive because it highlights the fundamental dichotomy between the 'common law validation' approach on the one hand and the 'statutory verification' approach on the other. The approach of Queensland and Tasmania is broadly similar to that of New South Wales and the relevant provisions are briefly overviewed within the New South Wales discussion. By contrast, the approach of South Australia is broadly similar to that of Western Australia and is briefly overviewed within the Western Australian discussion. Victoria has taken a non-proprietary approach to the recognition of carbon sequestration interests and the legislative provisions in that State are considered separately. No equivalent legislation exists in either the Northern Territory or the Australian Capital Territory.

47 See Kennett, Kwasniak and Lucas, above n 24 at 210 where the authors suggest that it is 'remarkable how little effort Canadian governments have devoted thus far to developing the required legal framework.' The only legislative action to date has been Alberta's *Climate Change and Emissions Management Act*, SA 2003, c C-16.7 which only deals with the issues in a rudimentary manner.

48 See Parliament of Western Australia, *Parliamentary Debates*, Legislative Council, 24 October 2002, at 2340 (Nick Griffiths) where it was noted that the purpose of the Carbon Rights Bill 2002 (WA) was to 'provide security for the owner of the carbon right in land by enabling a carbon right to be registered on the land title under the Transfer of Lands Act as a separate interest in that land'. See also Peter Butt, 'Carbon Sequestration Rights: A New Interest in Land' (1999) 73 *Australian Law Journal* 235.

49 This principle is encapsulated within the Latin maxim: '*cuius est solum eius est usque ad coelum et usque ad inferos*' meaning literally 'ownership of land extends up to heaven and down to the centre of the earth'. This has been refined by the courts. See *Wandsworth Board of Works v United Telephone Co* (1884) 13 QBD 904 at 915 (Brett MR) who described the principle as a 'fanciful phrase'. For a discussion of the scope and meaning of natural rights held by a landowner see generally *Dalton v Angus* (1881) 6 App Cas 740. See also Janice Gray and Brendan Edgeworth, *Property Law in New South Wales* (2003) at [2.6].

50 See Butt, above n 47.

A. *New South Wales*

New South Wales was the first Australian State to develop a legislative scheme for the proprietary validation of forestry carbon sequestration rights. The *Conveyancing Act 1919* (NSW) s 87A sets out that a carbon sequestration right is:

... 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.

A carbon sequestration right is included within the definition of a forestry right. The *Conveyancing Act 1919* (NSW) defines a forestry right as a right to enter the land and establish a crop of trees or a right to carbon sequestration or both.⁵¹ A forestry covenant is defined within the same provision as a right that is incidental to a forestry right and which imposes obligations requiring access to or maintenance of trees and forests that are the subject of any carbon sequestration. Forestry covenants are treated as purely incidental to forestry rights and are therefore characterised as general maintenance obligations rather than constituents of the underlying land encumbrance.

The framework of the New South Wales legislation is centred on the idea that carbon rights are a component of the broader umbrella of forestry rights. Carbon sequestration rights have generally been dealt with through the New South Wales Forestry Commission. The *Forestry Act 1916* (NSW) specifically entitles the Forestry Commission to acquire, hold, deal or trade in carbon sequestration rights.⁵²

The *Conveyancing Act 1919* (NSW) deems all forestry rights, including carbon sequestration rights, to constitute profit à prendre land interests.⁵³ The profit à prendre is not specifically defined by the legislation, other than to indicate that the legal, commercial or other benefit of carbon sequestration is 'deemed' to constitute a 'profit'.⁵⁴ The effect of the deeming provision is the validation of the forestry carbon sequestration right as a substantive common law profit à prendre.

The legislation makes it clear that a forestry profit à prendre may arise over either freehold or leasehold land and restrictive covenants may be recorded against such profits.⁵⁵ The profit may be registered under the *Real Property Act 1900* (NSW) in the same way as any other profit, however, registration of the carbon 'profit' is not made compulsory by the *Conveyancing Act 1919* (NSW) because validation of the carbon sequestration as a common law profit à prendre is not dependent upon registration.

Forestry carbon sequestration rights in New South Wales have already been utilised as carbon offsets within the existing New South Wales Greenhouse Gas Abatement Scheme, which was first introduced in 2003.⁵⁶ This scheme imposed

51 *Conveyancing Act 1919* (NSW) s 87A.

52 *Forestry Act 1916* (NSW) s 33C.

53 *Conveyancing Act 1919* (NSW) s 88AB(1).

54 *Conveyancing Act 1919* (NSW) s 88AB(2).

55 *Conveyancing Act 1919* (NSW) s 88EA.

mandatory emission benchmarks on all New South Wales electricity retailers and is set to continue until 2020 or, until a national emissions trading scheme is introduced.⁵⁷

The legislative scheme in Tasmania is substantially similar to that in New South Wales. The *Forestry Rights Registration Act 1990* (Tas) sets out that a carbon right comes within the umbrella of a forestry right. Under the Tasmanian legislation, a forestry right includes ownership of trees, ownership of a carbon sequestration right or ownership of a right to harvest or maintain trees.⁵⁸ As in New South Wales, the Tasmanian legislation deems forestry rights, which includes carbon sequestration rights, to constitute profit à prendre interests. No statutory definition of the profit is provided other than to state, as is the case in New South Wales, that the profit arises out of the legal, commercial or other benefit, whether present or future, of carbon sequestration.⁵⁹ Further, the *Forestry Rights Registration Act 1990* (Tas), as in New South Wales, does not make registration compulsory as the validation of the carbon sequestration interest as a profit à prendre is not dependent upon it.⁶⁰ The only provision in the Tasmanian legislation that does not have an equivalent in the New South Wales framework is that in Tasmania, when a forestry right is executed, it is deemed to have the same effect as if it were executed by way of a deed.⁶¹

The legislative scheme in Queensland is also broadly similar to the New South Wales and Tasmanian frameworks. Unlike New South Wales and Tasmania however, in Queensland the carbon sequestration right is incorporated under what is known as a 'natural resource product' rather than a forestry right. The *Forestry Act 1959* (Qld) entitles a registered proprietor of freehold land to enter into an agreement with another party over a 'natural resource product' on the land.⁶² The *Forestry Act 1959* (Qld) defines a natural resource product to include trees, vegetation and roots, carbon stored in a tree or vegetation and carbon sequestration by a tree or vegetation.⁶³ The natural resource product agreement may vest all or a part of the natural resource product in another party, grant another party the right to enter the land and maintain or harvest the natural resource product, or grant another person the right to deal with the natural resource product.⁶⁴

56 The *Electricity Supply Act 1995* (NSW) sets a 'State Greenhouse Gas Benchmark'. Benchmark participants achieve their individual benchmark by surrendering abatement certificates created from project-based emission reduction activities. The surrender of these certificates effectively offsets a portion of the greenhouse gas emissions associated with their electricity sales or purchases. See NSW Department of Energy, Utilities and Sustainability, *Extending the NSW Greenhouse Gas Abatement Scheme*, Policy Paper (2006).

57 See NSW Department of Energy, Utilities and Sustainability, above n 56.

58 *Forestry Rights Registration Act 1990* (Tas) s 3.

59 *Forestry Rights Registration Act 1990* (Tas) s 5(1), (4).

60 *Forestry Rights Registration Act 1990* (Tas) s 5(2).

61 *Forestry Rights Registration Act 1990* (Tas) s 5(3).

62 *Forestry Act 1959* (Qld) s 61J(1).

63 *Forestry Act 1959* (Qld) Sch 3.

64 *Forestry Act 1959* (Qld) s 61J(3).

The rights of the other party to the natural resource product which arises from the natural resource agreement are, as in New South Wales, deemed to constitute a profit à prendre interest. This raises one clear variation between the Queensland and the New South Wales legislative schemes. The Queensland legislation expressly states that the carbon profit arises out of the rights which are specifically and expressly agreed upon to vest, maintain or harvest the natural resource product.⁶⁵ By contrast, the New South Wales legislation sets out that a carbon profit may arise out of the rights that are specifically and expressly agreed upon in the forestry agreement *or otherwise*. In this respect, the New South Wales definition appears to be significantly broader. The creation of carbon rights in New South Wales is not restricted to rights arising out of a specific agreement and may include implied or prescriptive carbon rights.

As in the New South Wales framework, the *Forestry Act 1959* (Qld) does not define a profit à prendre. Unlike the New South Wales and Tasmanian legislation, the Queensland legislation does not deem the legal, commercial and other benefit of carbon sequestration to constitute a profit, but rather deems the contractual right to the natural resource product to constitute a profit *for the purpose* of the *Land Act 1994* (Qld) or the *Land Title Act 1994* (Qld).⁶⁶ The wording of the Queensland legislation suggests that a carbon right is only to be characterised as a profit à prendre for the purpose of registration under the Torrens system. Arguably, an unregistered natural resource agreement will not constitute a profit à prendre pursuant to the express provisions of the legislation until registration but this interpretation is far from clear. As in New South Wales, there is no provision in the Queensland legislation that specifically makes registration compulsory. A carbon sequestration interest constitutes registrable property in Queensland;⁶⁷ however, as in New South Wales, there is no provision making registration under the Torrens framework a precondition for the validation of carbon sequestration rights as profit à prendre interests.⁶⁸

B. Western Australia

The *Carbon Rights Act 2003* (WA), sets out that a carbon right in land will be validated where an approved carbon rights form is registered over freehold or Crown land.⁶⁹ Unlike the New South Wales legislative framework, the Western Australian legislation does not specifically deem the carbon right to constitute a profit à prendre. Rather, the Western Australian legislation treats the registered carbon right as a separate statutory land interest, unaligned with any pre-existing common law form.

Division 2A of Pt 4 of the *Transfer of Land Act 1893* (WA) deals with the registration of carbon rights and carbon covenants, setting out that a carbon right cannot be registered without the written consent of each person holding a

⁶⁵ *Forestry Act 1959* (Qld) s 61J(5).

⁶⁶ *Forestry Act 1959* (Qld) s 61J(5).

⁶⁷ *Forestry Act 1959* (Qld) s 61J(5).

⁶⁸ *Land Title Act 1994* (Qld) s 97E.

⁶⁹ *Carbon Rights Act 2003* (WA) s 5.

registered interest in the relevant land.⁷⁰ Further, a carbon covenant cannot be registered without the written consent of the registered landowner and the registered carbon right holder.⁷¹ This provision means that any registered mortgage or other encumbrance existing on the land title to which the carbon covenant and/or carbon right relates necessarily takes subject to those rights. The reason for this is that the parties holding existing interests in the land have expressly consented to the creation of the carbon right.⁷²

Registration is achieved through the proper completion of an approved form that is then lodged and registered at the Department of Land Information. The form must clearly identify the area of land that is subject to the carbon sequestration interest.⁷³ The West Australian legislation allows for caveats to be lodged prior to the registration of the carbon interest that notify relevant and interested parties of the impending registration.⁷⁴

Once the carbon rights form is registered, the carbon right becomes a separate interest in the land.⁷⁵ The owner of the carbon right acquires the legal and commercial benefits and risks arising from carbon sequestration over the specific land.⁷⁶ Registration in this context functions as a formal prerequisite to the recognition of the carbon right as a statutory encumbrance. Registration does not guarantee the quality or scope of the carbon right. Hence, the quantity of carbon which may be stored on the particular land, and the issue of whether any stored carbon will continue to remain on that land, continue to be unpredictable factors unaltered by the registration process.⁷⁷

Compulsory registration for the purposes of proprietary validation is also extended to carbon covenants. A carbon covenant differs from the underlying carbon right in that it amounts to a contractual agreement detailing the specific terms, conditions, rights and entitlements regulating the carbon right. For example, a carbon covenant may outline land management responsibilities including any maintenance obligations over the forest vegetation to which the sequestration right relates as well as any protective entitlements that a carbon interest holder may acquire in the forest vegetation.⁷⁸

As with the underlying carbon right, the carbon covenant may be registered on the title of the land. Once registered, the carbon covenant becomes a valid land encumbrance because it is treated as a constituent of the underlying carbon sequestration right.⁷⁹ The Western Australian legislation does not, however, give all registered carbon covenants a proprietary status. A carbon covenant cannot

⁷⁰ *Transfer of Land Act 1893* (WA) s 104B.

⁷¹ *Transfer of Land Act 1893* (WA) s 104G.

⁷² *Transfer of Land Act 1893* (WA) s 129A(1).

⁷³ *Carbon Rights Act 2003* (WA) s 11.

⁷⁴ *Transfer of Land Act 1893* (WA) s 137.

⁷⁵ *Carbon Rights Act 2003* (WA) s 6(1).

⁷⁶ *Carbon Rights Act 2003* (WA) s 8.

⁷⁷ See generally Lashof and Hare, above n 27.

⁷⁸ *Carbon Rights Act 2003* (WA) s 10.

⁷⁹ *Carbon Rights Act 2003* (WA) s 12.

exist where it is not connected to an associated carbon right. Hence, it is possible to have a carbon right without a carbon covenant; however, it is not possible for a carbon covenant to exist in the absence of a carbon right. Carbon covenants presuppose the existence of carbon rights.⁸⁰ Further, the Western Australian legislation makes it clear that a carbon right and a carbon covenant relating to the same land must be owned by the same person.⁸¹

In effecting these provisions, the Western Australian legislation impliedly accepts that the statutory carbon right is holistically comprised of the underlying interest as well as any associated contractual agreements that may regulate rights and entitlements.⁸²

The proprietary character of the registered carbon right and carbon covenant is not specifically defined within the Western Australian legislative framework, although it is described as both an encumbrance and a hereditament.⁸³ A hereditament is a type of property interest that is inheritable. An encumbrance is a form of security or limiting interest which, when arising over land, constrains the rights that a freehold owner of the land may exercise.

The *Carbon Rights Act 2003* (WA) further sets out that the holder of a carbon right may enter into a carbon covenant with another person having an interest in the land.⁸⁴

The South Australian legislation is broadly similar to the Western Australian framework, although it retains some notable differences. The *Forest Property Act 2000* (SA) was amended in 2007 by the *Forest Property (Carbon Rights) Amendment Act 2006* (SA). The newly amended *Forest Property Act 2000* (SA) defines the capacity of forest vegetation to absorb carbon from the atmosphere as a chose in action.⁸⁵ Ownership of the chose in action automatically passes with ownership of the forest vegetation unless ownership of the chose is specifically separated from ownership of the forest vegetation pursuant to a forest property agreement.⁸⁶

Hence, a forest property agreement may be entered into that has the effect of separating the carbon sequestration chose in action from ownership of the underlying vegetation to which that carbon right relates.⁸⁷ A forest property agreement can only be entered into where the owner of the land and the owner of the vegetation agree. Forest property agreements will only be valid and effective

80 *Carbon Rights Act 2003* (WA) s 10.

81 *Carbon Rights Act 2003* (WA) s 11(2)(g).

82 See, Parliament of Western Australia, *Parliamentary Debates*, Legislative Council, 24 October 2002, at 2340 (Nick Griffiths) where the importance of registering a carbon right and carbon covenant are reinforced to 'remove the risk that a court might find, in the event of dispute between the parties, that despite that person's investment in the right or covenant, the right to the carbon sequestration benefits belongs to the land-holder'.

83 *Carbon Rights Act 2003* (WA) s 6(3).

84 *Carbon Rights Act 2003* (WA) s 10.

85 *Forest Property Act 2000* (SA) s 3A.

86 *Forest Property Act 2000* (SA) s 3A(2).

87 *Forest Property Act 2000* (SA) s 5(3).

where they are in writing and include consent from all parties with an interest in the relevant land.⁸⁸

The proprietary character of the forest property agreement differs from that of the bare carbon sequestration interest. If the forest property agreement remains unregistered, the South Australian legislation specifically sets out that the agreement will constitute an equitable interest in land (and not a chose in action) and may be defeated by a purchaser acquiring the land in good faith, for value and without notice.⁸⁹ If, however, the forest property agreement is registered, the interest holder acquires priority against other interest holders who have consented to the registration of that agreement, as well as other unregistered or later registered interest holders.⁹⁰

The *Forest Property Act 2000* (SA) acknowledges the capacity of the forest property agreement to be registered; however unlike the Western Australian framework, its proprietary validation is not dependent upon it.⁹¹ Hence, as in the New South Wales framework, registration of a forest property agreement separating carbon sequestration from the ownership of vegetation is not, under South Australian legislation, a precondition for proprietary validation. However, like the Western Australian legislation, the proprietary validation of the forest property agreement in South Australia is not aligned with the common law profit à prendre.

C. *Victoria*

The Victorian legislation takes a different approach to the separate recognition of carbon rights than the legislative framework adopted by the other States. Carbon sequestration rights in the *Forestry Rights Act 1996* (Vic) are included as a sub-category of forest property. This category includes the trees and their roots as well as the products of the trees and the carbon sequestered by the trees.⁹² Carbon rights are themselves specifically defined within the legislation as rights to exploit commercially carbon sequestered by trees.⁹³

The *Forestry Rights Act 1996* (Vic) further sets out that an owner of land may enter into a forest property agreement with a forest property owner concerning forest property. The forest property agreement may involve granting the forest property owner a right to plant, harvest and maintain forest property planted on the land, granting the forest property owner a carbon sequestration right in relation to the forest property or vesting the ownership of the forest property in the forest property owner.⁹⁴ Once a forest property owner has entered into a forest property agreement granting that forest property owner a carbon sequestration right in relation to the forest, the forest property owner may then enter into a further

⁸⁸ *Forest Property Act 2000* (SA) s 6.

⁸⁹ *Forest Property Act 2000* (SA) s 7(2).

⁹⁰ *Forest Property Act 2000* (SA) s 7(3).

⁹¹ *Forest Property Act 2000* (SA) s 7.

⁹² *Forestry Rights Act 1996* (Vic) s 3.

⁹³ *Forestry Rights Act 1996* (Vic) s 3.

⁹⁴ *Forestry Rights Act 1996* (Vic) s 5.

agreement, with a third party, which is known as a 'carbon rights agreement'. The carbon rights agreement is enforceable between the forest property owner and the third party who has entered into the agreement.⁹⁵ The objective of the carbon rights agreement is to grant the third party the benefit of the carbon sequestration right which the forest property owner received pursuant to the initial forest property agreement.⁹⁶

The Victorian legislation sets out that a forest property owner who has entered into a carbon rights agreement may register that agreement on the title of the land where the forest property is situated.⁹⁷ Registration of carbon rights agreements is not compulsory under the Victorian legislation; however, where registration occurs, the burden of any covenant will be taken to run with the affected land allowing a forest property owner to enforce the covenant against any person who has derived title from the covenantor, as if that covenant were a restrictive covenant.⁹⁸

Unlike other States, the Victorian legislation does not validate the carbon sequestration right that arises under either the forest property agreement or the carbon rights agreement as a land encumbrance. This means that the carbon right remains contractual; the right that either a forest property owner or a third party acquires stems from the agreement and the status of the agreement is not altered by the legislation. Recording the agreement on the title of the land does not alter this. Recording may elevate the carbon right into a restrictive covenant, burdening successors in title,⁹⁹ however, the character of the right remains contractual.

The Victorian legislative framework may prove difficult within the proposed emission trading scheme where carbon rights are intended to function as tradable land interests. Within such a scheme, carbon sequestration rights will often need to endure against forested land for significant periods of time so that sequestration benefits may arise and acquire value within an offset market.¹⁰⁰ Articulating the carbon right as an incorporeal land interest rather than an annexed contractual right vests the holder with a stronger, more durable right, registrable against title and not subject to the burdens associated with enforcing a restrictive covenant against a successor in title.¹⁰¹ In this respect, the managerial and economic objectives underlying the separate articulation of carbon sequestration rights are more effectively reinforced within a framework where such rights are validated as land interests.

95 *Forestry Rights Act 1996* (Vic) s 12.

96 *Forestry Rights Act 1996* (Vic) s 8.

97 *Forestry Rights Act 1996* (Vic) s 8.

98 *Forestry Rights Act 1996* (Vic) s 9.

99 *Forestry Rights Act 1996* (Vic) s 9.

100 Gregg Marland, Kristy Fruit and Roger Sedjo, 'Accounting for Sequestered Carbon: The Question of Permanence' (2001) 4 *Environmental Science & Policy* 259.

101 This issue is raised in Kennett, Kwasniak and Lucas, above n 24 at 190 where the authors note that 'contractual rights that are binding only to the parties to sequestration transactions can limit flexibility and increase risk'.

3. *Categorising the Carbon Right as a Profit à Prendre*

The legislative categorisation of the forestry carbon sequestration right as a profit à prendre in New South Wales, Queensland, and Tasmania does not sit easily with the substantive common law principles that inform these rights. The underlying conservatism of a land system steeped in institutionalised assumptions has meant that Australia has developed a highly circumscribed approach to the recognition of new, natural resource, servitude interests.¹⁰² The closed category approach to the recognition of common law property interests is based on the assumption that limited and defined property rights promote unitary ownership and therefore avoid the difficulties associated with dispersed fragmentation and the creation of partialised rights over an asset.¹⁰³ In accordance with the *numerus clausus* principle, the law will enforce rights as property only where those rights conform to a limited range of standard forms and new interests are sharply restricted in their capacity to be verified as proprietary under the common law.¹⁰⁴

The rationale underlying the restrictive approach of *numerus clausus* was articulated by Merrill and Smith as the ‘optimal-standardization’ assessment.¹⁰⁵ Merrill and Smith argued that the categorisation of new interests into pre-established and standardised forms reduces the ‘information processing costs’ because parties need only concern themselves with acknowledged property categories.¹⁰⁶ The justification for ensuring that new interests do not extend beyond pre-established categories is therefore founded upon a cost-benefit analysis. Rights that are facilitated for the sake of a new or developing concept should not be verified as property where the system costs involved in adopting such interests combined with the likelihood that they will be infrequently utilised makes recognition inefficient.¹⁰⁷ The assessment process was outlined by Hansmann and Kraakman:

102 The circumscription which has characterised the common law approach to new forms of servitude is inconsistent with the increasing need for flexibility in the recognition and governance of natural resource interests. See Richard Epstein, ‘Notice and Freedom of Contract in the Law of Servitudes’ (1982) 55 *Southern California Law Review* 1353. For an example of the rigidity of the Australian approach see *Permanent Trustee* (1992) 27 NSWLR 426. In that case, the right in issue was a ‘licence to plant, grow, tend, harvest and prepare for sale macadamia nut trees’ on a parcel of land (at 429). Young J held that this type of right did not qualify as a profit à prendre because the subject matter taken from the land was not natural produce and a profit is confined to the *fructus naturales* and does not include artificially constructed products. Hence, because the nut trees needed cultivation after planting they could not amount to profits (at 432). See also Edgeworth, above n 14 at 415.

103 The ‘restricted list of entitlements’ is outlined by Rudden, above n 14. See also Hansmann and Kraakman, above n 13 at S375. See also John Merryman, ‘Ownership and Estate: Variations on a theme by lawson’ (1974) 48 *Tulane Law Review* 916.

104 Merrill and Smith, above n 14 at 3. Heller, above n 3 at 1176 states: ‘At a basic level, property law sharply restricts the allowable forms of property ownership — including, for example, the fee simple, fee tail, and servitude. One can break a fee simple into smaller fee simples, even into defeasible fee simples, but not into a fee complicated.’

105 Merrill and Smith, above n 14.

106 Id at 24–42. See also Rudden, above n 14, who outlines the economic argument.

107 Merrill and Smith, above n 14 at 42.

[I]t is efficient to alter a property rights regime to provide more accommodating verification rules for a particular type of property right only if the resulting reduction in user costs, plus the increase in the aggregate value of assets that results from more extensive use of the right in question, exceeds the concomitant increase in the sum of nonuser costs and system costs.¹⁰⁸

The *numerus clausus* principle does not prohibit recognition of new property interests; however, it demands a careful appraisal of the consequential economic impact. Where changes are made to the property framework, and what counts as property is altered, the minimal calculus of costs and benefits must be effectively assessed otherwise we may not ‘even think about establishing or modifying property regimes at all’.¹⁰⁹

The *numerus clausus* precept has meant that the common law has generally insisted upon strict standardisation in the legal dimensions of its property framework.¹¹⁰ New or novel forms of property are only catered for where they are compliant with the economic principles underlying market-based commercial activity.¹¹¹

The legislation deeming carbon rights to constitute profits ignores this tradition. Its motivation is primarily derived from the desire to connect carbon interests to the institutional common law framework. However, common law orthodoxy is not automatically avoided by legislative mandate.¹¹² The problem of how the characteristics of the carbon right are to be incorporated into the basal common law form will be an enduring one for those states that have adopted this verification process.

In an attempt to assist the integration process, the New South Wales and Tasmanian legislation expressly articulate the legal or commercial benefit arising from carbon sequestration to constitute the ‘profit’. The need for such provisions highlights the non-standard character of the carbon right and a legislative cognisance of this ‘uneasy fit’. Indeed, the problem of classifying the carbon right as a profit was specifically raised in the Tasmanian debates where the fundamental differences between the carbon right and the profit à prendre prompted the conclusion that they were incompatible.¹¹³

108 Hansmann and Kraakman, above n 13 at S397.

109 Carol Rose, ‘The Several Futures of Property: Of cyberspace and folk tales, emissions trades and ecosystems’ (1998) 83 *Minnesota Law Review* 129 at 134.

110 Merrill and Smith above n 14 at 3. See also Thomas Merrill and Henry Smith, ‘What Happened To Property in Law and Economics?’ (2001) 111 *Yale Law Journal* 357 at 385. Judicial reluctance does not equate to an absolute prohibition. The capacity of the courts to overcome this ‘discernible conservatism’ is explored by Edgeworth, above n 14 at 394. See also, William Swadling, ‘Opening the Numerus Clausus’ (2000) 116 *Law Quarterly Review* 354.

111 See Crawford Macpherson, ‘The Meaning of Property’ in Crawford Macpherson (ed), *Property: Mainstream and Critical Positions* (1978) 1.

112 See Susan French, ‘Toward a Modern Law of Servitudes: Reweaving the Ancient Strands’ (1982) 55 *Southern California Law Review* 1261 at 1304 where the author suggests that the ‘task of creating a modern law of servitudes is ... not to change its functions, but to modernize its approach’ and this is best achieved through doctrinal simplification rather than forced legislative endorsements.

Before examining the difficulties associated with applying substantive common law profit à prendre principles to the articulation of carbon rights, a brief outline of the nature and incidents of the common law profit à prendre and associated incorporeal hereditaments follows.

A. Easements, Covenants and the Profit à Prendre

According to orthodox common law categorisation, three doctrinally separate forms of incorporeal land interests exist: the easement, the profit à prendre and the covenant. Each form accomplishes similar yet overlapping functions, although their differences have been described as a ‘matter of history rather than of logic or necessity’.¹¹⁴ The critical characteristic underlying each form is durability. The burdens and benefits of each arrangement run with the land to successive owners and occupiers. The easement and the profit à prendre are both incorporeal interests in the land in that they are rights arising out of the benefited and burdened land that remain separate to the land itself. By contrast, the covenant is a contractual right that may burden or benefit the land to which it relates. The covenant constitutes a separate chose in action which is only enforceable against the land in circumstances where a court is prepared to accept that a party shall not be permitted to use the land in a manner inconsistent with the contract.¹¹⁵

The profit à prendre and the easement both arise from the conferral of a right or privilege over a servient tenement that inures for the benefit of a dominant tenement.¹¹⁶ While both interests are similar in form, and both run with the dominant tenement, there is a fundamental difference between the two. The profit is an interest arising out of the ‘element of the participation in the soil and its produce’.¹¹⁷ The focus of the profit is upon the acquisition of the physical substance located upon a servient tenement through the exercise of legal privileges associated with its physical severance.¹¹⁸ By contrast, the focus of an easement is upon the right which runs with the burdened land. The right must form the subject matter of a grant and cannot be too unclear but is not restricted in form to the extraction of natural products: easements can incorporate a range of definable rights each being imposed over the servient tenement for the improved use or enjoyment of the dominant tenement.¹¹⁹

113 In the debates for amendments to the Tasmanian legislation it was expressly recognised that the ‘concept of a carbon sequestration right does not fit within the meaning of a profit à prendre, as it is impossible to enter and take carbon sequestered from trees on another’s land, separately from taking the timber on that land.’ Tasmania, *Parliamentary Debates*, House of Assembly, 23 April 2002, at 43–103 (Paul Lennon). This is also discussed by Kennett, Kwasniak and Lucas, above n 24 at 206.

114 French, above n 109 at 1264.

115 *Tulk v Moxhay* (1848) 41 ER 1143 at 1144. See also the discussion in Adrian Bradbrook and Marcia Neave, *Easements and Restrictive Covenants in Australia* (1981) at 1–29.

116 See generally Paul Jackson, *The Law of Easements and Profits* (1978) at 1–27. See also Spencer Maurice, *Gale on Easements* (15th ed, 1986).

117 Herman H Hahner, ‘An Analysis of Profits à Prendre’ (1946) 25 *Oregon Law Review* 217 at 218. See also K Kagan, ‘Servitudes in Comparison with Easements of English Law’ [1951] 25 *Tulane Law Review* 336.

118 See also Kagan, above n 114.

A profit is generally appurtenant to the land and in this respect is similar to an easement in that it burdens servient land, thereby limiting the scope of the ownership rights of the servient landowner.¹²⁰ The profit, however, is a right that arises out of the land. Unlike the easement, a profit is not a right exercisable against the land.¹²¹ This means that it is possible for a profit to exist in gross where there is no separate dominant land benefiting from the profit. By contrast, easements in gross do not exist under common law although they have been created in limited circumstances by statute.¹²²

B. The Requirements for Proving Profit à Prendre

The term profit à prendre is derived from the French phrase meaning literally, a right of taking. The profit à prendre confers upon the holder a right literally to 'profit' from the natural produce taken from the land.¹²³ This was confirmed by Mason J in *Australian Softwood Forests Pty Ltd v Attorney-General (NSW)* ('*Softwood Forests*') who noted that 'all the instances given in the text books and legal dictionaries of profit à prendre are of "rights" to take something off the land of another'.¹²⁴ If the resource is not removed or removable from the land, then according to common law orthodoxy, the right is best categorised as a different incorporeal servitude. A profit can *only* exist where the holder is entitled not only to enter the land, but also to take possession of its natural produce. As outlined by Mason J in *Softwood Forests*, where a person holds 'an interest in the land and a licence to enter the land in order to take possession of the fruits of his interest, what he has is something in the nature of a profit à prendre'.¹²⁵

The rights that make up the profit are confined to rights of taking and rights which support or complement that right of taking. The right of taking will extend

119 See Kagan, above n 114. The distinction was outlined by *Halsbury's Laws of England* (3rd ed, 1955) vol 12 at 522 in the following way: 'an easement only confers a right to utilise the servient tenement in a particular manner, or to prevent the commission of some act on that tenement, whereas a profit à prendre confers a right to take from the servient tenement some part of the soil of that tenement or minerals under it or some of its natural produce, or the animals *ferae naturae* existing upon it'.

120 It has been held that the word 'appurtenant' is the appropriate term to describe the relationship between corporeal land and incorporeal rights which accommodate it because land cannot be appurtenant to other land: *Lister v Pickford* (1865) 55 ER 757 at 759 (Romilly MR).

121 Jackson, above n 113 at 1–27.

122 See generally *R v The Registrar of Titles; Ex Parte Waddington* [1917] VLR 603. For a critical evaluation of this area see Albert J McClean, 'The Nature of an Easement' (1966) 5 *Western Law Review* 32 at 36–42; Michael Sturley, 'Easements in Gross' (1980) 96 *Law Quarterly Review* 557. Easements in gross are well-established interests in the United States. Easements in gross are often created in favour of local councils or State authorities in order to assist with the provision of public services.

123 *Duke of Sutherland v Heathcote* [1892] 1 Ch 475 ('*Duke of Sutherland*'); see also *Mills v Stokman* (1967) 116 CLR 61 at 77; *Re Refund of Dues Under Timber Regulations* [1935] AC 184 at 193; *Reid v Moreland Timber Co Pty Ltd* (1946) 73 CLR 1 at 16; *Australian Softwood Forests Pty Ltd v Attorney-General (NSW)*; *Ex rel Corporate Affairs Commission* (1981) 148 CLR 121 ('*Softwood Forests*') at 132.

124 *Softwood Forests* (1981) 148 CLR 121 at 132.

125 *Softwood Forests* (1981) 148 CLR 121 at 132.

to both the taking of the resource as well as the taking of any relevant portion of the soil.¹²⁶ Other rights ordinarily supporting the right of taking include rights of surface entry and any associated rights necessary for the extraction of the produce.¹²⁷ For example, in *Vanstone v Malura Pty Ltd*, an oral agreement under which holders were licensed to enter land to gather and burn mallee roots was held to constitute a profit à prendre.¹²⁸ The rights which made up that profit included the right to take the mallee root as well as the right to bring onto the land equipment, such as charcoal burners in order to facilitate the extraction of the mallee roots.¹²⁹

The types of produce that a profit ordinarily entitles a holder to take from the land are those which grow or occur naturally on the land, such as timber, minerals or wild game. The primary requirement is that the produce to which the profit relates grow or occur naturally on the land and the right to take that produce be passed to a holder prior to its severance from the soil.¹³⁰ The core of the profit à prendre is, therefore, a right to participate in the soil and its natural produce, that is, the right to remove the *fructus naturales* of the land rather than any cultivated *fructus industriales*.¹³¹ As outlined by Bryson J in *Clos Farming Estates Pty Ltd v Easton*:

A profit à prendre cannot go beyond a right to go on another's land and take part of the land which is naturally there or which naturally grew on it, or animals ferae naturae. A right to go onto servient land, cultivate it, produce some crop and remove it is outside the concept.¹³²

The corporeal nature of the common law profit à prendre is an important aspect of its core character. It confers upon the holder possession over something which the owner of the land would otherwise have exclusive power to appropriate. The types of physical substances that the holder of a profit may remove include solids, liquids (oil or water) and gases.¹³³ Incorporeal rights are not included in this category because the whole purpose of the profit is to confer a right to sever or

126 *National Executors & Trustees Co of Tasmania Ltd v Edwards* [1957] Tas SR 182 at 187 (Morris CJ); *Race v Ward* (1855) 119 ER 259 at 262 (Lord Campbell CJ).

127 The right to enter another persons land and take away part of the soil or natural produce was outlined in *Duke of Sutherland* [1892] 1 Ch 545.

128 *Vanstone v Malura Pty Ltd* (1988) 50 SASR 110.

129 *Vanstone v Malura Pty Ltd* (1988) 50 SASR 110 at 128.

130 *Corporate Affairs Commission v ASC Timber Pty Ltd* (1989) 18 NSWLR 577 at 586–92 (Powell J). See also *Permanent Trustee* (1992) 27 NSWLR 426 at 434–5.

131 See *Lowe (Inspector of Taxes) v JW Ashmore Ltd* [1971] 1 Ch 545 at 557 (Megarry J): ‘To be a profit, the right must be a right to take part of the land or the creatures on it; what is taken must, when taken, be susceptible of ownership; and the right must be created by a transaction capable of creating an interest in land. A profit in the soil, giving the right to take sand, gravel and so on, is a well-known form of profit, and so is a profit of turbary, giving the right to dig and take turf or peat for fuel.’ On the distinction between *fructus naturales* and *fructus industriales* see *Softwood Forests* (1981) 148 CLR 121 at 132–3 (Mason J). See also Young J in *Ellison v Vukicevic* (1986) 7 NSWLR 104 at 113.

132 *Clos Farming Estates v Easton* (2002) 11 BPR 20,605 at [59].

133 See the discussion by Young J in *Ellison v Vukicevic* (1986) 7 NSWLR 104.

remove existing natural produce so that it may be taken out of the possession of the owner of the land. The existence of this right differentiates the profit from personal ownership of the produce itself.

In temporal dimensions, the profit à prendre may exist in perpetuity, for a fixed period or for a reasonable duration of time, depending upon the terms of its creation.¹³⁴ Ordinarily, an appurtenant profit will be perpetual in nature however this may depend upon the form of words used. In *Reid v Moreland Timber Co Pty Ltd*, Dixon J concluded that an ‘interminable’ profit should be understood as a right to do the things permitted to be done within a reasonable time frame and that it is usual to imply such a time frame in the absence of any indication to the contrary.¹³⁵

The profit à prendre should be distinguished from the underlying land interest to which it is attached. The relationship between incorporeal hereditaments and their corporeal partner has always been somewhat obscure given that incorporeal hereditaments are, as Blackstone has noted, rooted in ‘idea and abstracted contemplation’.¹³⁶ Ownership of land refers to the corporeal interest in the land itself, conferring upon the owner a right to exclusive possession over the entirety of the land. By contrast, the profit à prendre refers to ownership of the incorporeal right to take the natural produce which arises out of that land.¹³⁷

In summary, there are four substantive common law requirements that must exist in order for an interest in land to be recognised as a profit à prendre under common law:

1. The existence of a right to enter land and take, by severance or removal, natural produce and/or soil from the land (a right of taking);
2. The right of taking must be enforceable against the servient land and must be intended to run with the land;
3. The produce which the holder of a profit may take must be naturally occurring rather than cultivated or produced; and
4. The right of taking must be non-possessory, involving rights of entry to access and remove natural produce but not the conferral of any exclusive possession over the land.

¹³⁴ Jackson, above n 113 at 1–27.

¹³⁵ *Reid v Moreland Timber Co Pty Ltd* (1946) 73 CLR 1 at 13.

¹³⁶ William Blackstone, *Commentaries on the Laws of England*, vol 2 (rev ed, 1825) at 20. Blackstone went on: ‘Corporeal hereditaments are the substance, which may be always seen, always handled: incorporeal hereditaments are but a sort of accidents, which inhere in and are supported by that substance; and may belong, or not belong to it, without any visible alteration therein. Their existence is merely in idea and abstracted contemplation; though their effects and profits may be frequently objects of our bodily senses. And indeed, if we would fix a clear notion of an incorporeal hereditament, we must be careful not to confound together the profits produced, and the thing, or hereditament, which produces them.’

¹³⁷ The distinction between ownership of the underlying land and ownership of an appurtenant profit was discussed in *Ellison v Vukicevic* (1986) 7 NSWLR 104 at 115 where the court noted that a profit does not confer exclusive possession and may arise over a piece of land where the location of the right is to be determined at a future date by the grantee.

C. *The Carbon Right as a Profit à Prendre*

The underlying purpose of the profit, like all servitude rights, is to respond to the exigencies of human intercourses where those exchanges are incapable of being permanently satisfied by land ownership alone. In this sense, servitudes support the presumption, articulated by Professor Cheshire, that it must be possible for a person, 'in a manner authorised by law, to deal with things which belong to others'.¹³⁸ The creation of a servitude that confers upon the holder a right to the benefit of carbon sequestration is, in essence, a response to the evolving social and environmental need to separate sequestration benefits from the underlying ownership of the land. The capacity of the profit à prendre form to respond to this need is far from clear. In *Clos Farming Estates v Easton*, Santow JA indicated that the profit could adapt to changing social demands and should not 'sterilise and neutralise the servient owner's rights'.¹³⁹ His Honour suggested that new forms could be recognised where those rights were no 'greater than any rights contemplated in the traditional concept of a profit à prendre'.¹⁴⁰ These comments do not bode well for forestry carbon sequestration rights. Carbon sequestration rights are not rights 'contemplated in the traditional concept' because they are not rights of taking. Carbon rights are rights of storage and, in an economic framework, rights to the commercial benefits that may flow from such storage.

In many respects, there *are* rudimentary similarities between the carbon right and the profit à prendre. Both are incorporeal interests that relate to the land that they burden, both are interests that exist in gross and both exist or are intended to exist as interests which are separate from the underlying land. The carbon right confers upon the holder the storage benefits flowing from sequestration which is a naturally occurring process and the profit confers upon the holder a right to take naturally occurring produce from the land. There are clear and correlating links between each form. Further, it is well established that the profit does not require what is taken from the land actually to be a part of the soil or its produce.¹⁴¹ The right to shoot wild game is, for example, regarded as a profit à prendre even though wild game is not a direct product of the soil. The rationale is that where the land is the natural habitat of the produce, the link between the land and what is taken from it is sufficiently close to warrant the characterisation of the interest as a profit.¹⁴²

The 'natural rights' similarity underlying each interest is not insignificant. In a fundamental sense carbon sequestration has always existed as a natural and appurtenant right to land ownership. Separating out this natural ownership interest and validating it as an independent interest is arguably best achieved by aligning the interest with pre-defined servitude forms.¹⁴³

138 Geoffrey Cheshire, *The Modern Law of Real Property* (6th ed, 1949) at 256.

139 *Clos Farming Estates v Easton* (2002) 11 BPR 20,605 at [57].

140 *Clos Farming Estates v Easton* (2002) 11 BPR 20,605 at [58].

141 In *Alfred F Beckett Ltd v Lyons* [1967] Ch 449 at 482, Winn LJ described the profit à prendre as a right to take 'from the servient tenement some part of the soil of that tenement or minerals under it or some of its natural produce, or the animals *ferae naturae* existing upon it.'

142 See the discussion by Robert Walker LJ in *Bettison v Langton* [2000] Ch 54 at 60–1.

Given these connective associations, combined with the statutory deeming provisions in New South Wales, Queensland and Tasmania, it is arguable that it is incumbent upon the common law to develop the framework underlying the profit à prendre to respond better to evolving social and environmental imperatives. This may be supported by the fact that the profit is often described as a ‘*peculiar*’ interest in which the ‘*familiar*’ rules of property may not apply and in which ‘*all sorts of interests may exist*’.¹⁴⁴ In this respect, the profit is probably the most flexible and accommodating common law servitude, and therefore *if* common law validation is to be endorsed, it arguably has the greatest potential to evolve in response to the carbon right.

That said, significant impediments to the characterisation of the carbon right as a profit à prendre remain. The primary and most enduring difficulty is that the carbon right does not involve the taking of any naturally occurring produce. The holder of a carbon right takes only the incorporeal benefit, whether legal or commercial, of carbon sequestration from the land and nothing more. Carbon sequestration is a process connected with the storage of carbon in the soil and the tree root system and embraces both existing stored carbon as well as potential carbon storage. The fundamental feature underlying both ‘stored’ and ‘potential’ carbon storage is its continued presence *within* the soil.¹⁴⁵ Carbon right holders do not remove any produce from the land, although the stored carbon and potential carbon storage may create exogenous legal and economic benefits in the hands of the interest holder.

The statutory provisions deeming carbon interests to constitute profits distort the orthodox character of the profit. They skim over the nucleus of this common law interest and in so doing blur the demarcation between proprietary right and proprietary effect. Many property interests confer legal and commercial benefits upon the holder; however, the acquisition of a benefit does not define its proprietary form. Deeming the legal and commercial benefit of carbon sequestration to constitute a ‘profit’ does not properly explicate the basis for its common law categorisation.¹⁴⁶

The statutory provisions in New South Wales, Tasmania and Queensland, leave some important issues unresolved. For example, if a carbon right is a profit, what is the physical scope of this right, what are its incidental rights and how does it affect the rights of the underlying landowner? A right of taking would ordinarily include any associated rights necessary to support the act of physically removing natural produce from the land. A right to the intangible benefit flowing from carbon storage does not, however, have any identifiable physical boundaries making the nature and scope of associated rights obscure in the absence of express

143 See the discussion by Rose, above n 106 at 135 where the author notes that ‘under conditions of scarcity, it is much more likely that the resource will respond to what the institution of property can do — that is, encourage investment and contain strife’.

144 See *Ellison v Vukicevic* (1986) 7 NSWLR 104 at 113. (Emphases added.)

145 This is discussed by Lashof and Hare, above n 27.

146 The deeming provisions are: *Conveyancing Act 1919* (NSW) s 87AB; *Forestry Rights Registration Act 1990* (Tas) s 5(4).

articulation.¹⁴⁷ These concerns represent significant impediments to the proprietary validation of carbon rights and have not been adequately addressed within the legislation.

Classifying carbon rights as profit à prendre interests has the ‘*the appeal of familiarity*’,¹⁴⁸ in that it ensures carbon rights are incorporated into pre-existing property categories and therefore avoids the need to implement wide scale reform. The difficulty, however, of assessing exactly how a right to the legal and commercial benefits that may flow from carbon storage can function as a profit and how such a profit will fit into the existing common law framework remains unclear. The complexities that these issues raise will inevitably impede the development of an efficient, productive and seamless carbon offset market.¹⁴⁹

4. Carbon Right as a Conservation Easement

In some respects, if carbon rights are to be aligned with pre-established common law forms, it may be better to categorise them as easements rather than profits. Internationally, the easement has often been utilised in recognising new forms of natural resource interests. In Canada and the United States, authorising legislation permits the creation of what are known as ‘conservation easements in gross’, in order to facilitate increased conservation rights.¹⁵⁰ These easements will arise, in conformity with the regulatory provisions, where a landowner grants rights to another person and, in return, assumes specific obligations over the land. The mutual rights and obligations underlying the conservation easement are grounded in underlying conservation objectives. For example, the *Alberta Environmental Protection and Enhancement Act* RSA 2000 sets out that conservation easements may be granted for the primary purpose of protecting, conserving and enhancing the environment.¹⁵¹

As an easement, the carbon right may be articulated as an incorporeal interest which is attached to the land but separate from it.¹⁵² The rights which make up the

147 The comments of Lord Wilberforce in *National Provincial Bank Ltd v Ainsworth* [1965] AC 1175, outlined in n 12 above, setting out that before any right or interest can be classified as proprietary it must be ‘identifiable ... and have some degree of permanence and stability’ are relevant in this context.

148 Kennett, Kwasniak and Lucas, above n 24 at 209. (Emphasis added.)

149 It has been argued that a carbon right would not constitute property in the absence of statutory classification. See John Taberner, ‘Climate Change and the Kyoto Protocol: Practical Domestic Legal Issues’ [1998] *Australian Mining and Petroleum Law Association Yearbook* 479 at 490. See also Kennett, Kwasniak and Lucas, above n 24 at 187.

150 This utility of the conservation easement in the context of Canada is discussed by Kennett, Kwasniak and Lucas, above n 24 at 198. See also Paul Thomassin, ‘Canadian Agriculture and the Development of a Carbon Trading and Offset System’ (2003) 85 *American Journal of Agricultural Economics* 1171.

151 *Alberta Environmental Protection and Enhancement Act* RSA 2000, c E-12 ss 2–24 specifically authorise the creation of conservation easements. This is discussed by Kennett, Kwasniak and Lucas, above n 24 at 198–202. The authors at 199 note that conservation easement legislation which already exists in Canada could ‘serve as a model for sequestration legislation in that it enables agreements to specify required land use controls and sets out who is responsible for the controls and how monitoring and enforcement will secure land use obligations’.

easement are not rigidly characterised as rights of taking although it must still be established that the right is identifiable, burdens the servient tenement and benefits the dominant tenement.¹⁵³ This latter requirement creates problems because the carbon right is essentially a right in gross; it burdens the land to which it applies but does not provide an identifiable benefit to any other land. Hence, if carbon rights were to be articulated as easements, specific legislative endorsement authorising the validity of 'in gross' carbon easements would be necessary. This approach has not been endorsed in any of the Australian legislative frameworks to date.

5. Carbon Rights and Carbon Covenants as Registrable, Statutory Land Encumbrances

Recognition of statute-based property interests in natural resources, with particularised governmental entitlements and permits, is an increasing phenomenon.¹⁵⁴ The statutory validation of carbon sequestration rights corresponds broadly with this phenomenon and, more generally, the de-physicalisation and partialisation of land interests.¹⁵⁵ The characterisation of a new statutory land interest is necessarily achieved through a number of stages. First, the statutory personality of the interest is articulated; second, the preconditions for its existence are prescribed; and third, the means by which the interest is to be managed and protected are defined.¹⁵⁶ In many instances, the statutory rights which are expressed are not new, their articulation being firmly grounded within the established boundaries of the traditional common law paradigm.¹⁵⁷ The approach that the New South Wales, Tasmania and Queensland legislative provisions adopt, deeming the carbon right to constitute a profit à

152 See the comments by Young J in *Finlayson v Campbell* (1997) 8 BPR 15,703 at 15,706–7.

153 The need for an easement right to be clear and identifiable was outlined by Evershed MR in *Re Ellenborough Park* [1956] Ch 131.

154 See generally Philbrick, above n 8. See also Michael Blumm, 'Liberty, the New Property, and Environmental Law' (1990) 24 *University of San Francisco Law Review* 385 where the author notes the proliferation of governmental regulation, particularly in the area of environmental entitlements. Harold Demsetz has stated that 'property rights develop to internalize externalities when the gains of internalization become larger than the cost of internalization'. See Harold Demsetz, 'Towards a Theory of Property Rights' (1967) 57 *American Economic Review* 347 at 350.

155 See Horwitz, above n 6; Kenneth Vandavelde, 'The New Property of the Nineteenth Century: The development of the modern concept of property' (1980) 29 *Buffalo Law Review* 325; Donald Large, 'This Land is Whose Land? Changing concepts of land as property' [1973] *Wisconsin Law Review* 1039 at 1082 notes that: 'Our property concepts were developed in a time when exploitation of the land's bounty was seen as a social good to be encouraged. While these concepts may have made sense in such a milieu, we are beginning to run out of land to waste. Although many land uses will of course continue, potential uses must now be weighed against the needs of the ecosystem as a whole.'

156 Charles Reich, 'The New Property' (1964) 73 *Yale Law Journal* 733. While Reich had in mind welfare interests created by the State, it is conceivable that carbon rights are interests founded upon public welfare and their proprietary acknowledgement is dependent upon government largesse. See a further articulation in Reich, above n 1.

prendre, provides a clear example of statutory articulation by reference to common law form. This approach straddles legislative innovation and common law categorisation; the interest is recognised by statute, but it is nevertheless articulated as a component of the 'organic and encompassing unity' of the common law framework.¹⁵⁸

This is an inexpedient verification process because it binds the statutory interest to an unyielding common law framework, producing a form of a 'conceptual severance' between the statutory interest and its related nomenclature, the common law profit à prendre.¹⁵⁹ Carbon rights that are deemed to constitute common law profits are not profits in a substantive sense. Strands from the carbon 'bundle' may overlap with the 'profit' bundle, but conceptually the two interests remain fundamentally different in form and scope. The statutory disjuncture effected by the deeming provisions, between 'statutory' and 'common law' profits, provides little analytical traction for a court in 'formali[sing] its intuitions' and 'differentiat[ing] protected property from unprotected fragments'.¹⁶⁰

Statutory carbon rights articulated without reference to underlying common law forms provide a more responsive proprietary endorsement, better equipped to support the essential character of the interest and to connect with internal governance mechanisms.¹⁶¹ In this respect, the legislative provisions in Western Australia and South Australia, validating the carbon right as a new form of statutory encumbrance, provide a more accommodating framework. The Western Australian legislation describes the statutory interest as, upon registration, an encumbrance over the land. The South Australian legislation defines the unregistered form as an equitable interest. In both states the existence of the statutory form is dependent upon specific legislative provisions: no connection or reference is drawn between the statutory carbon right and the profit à prendre or any other common law form.¹⁶²

157 The fact that new property is often a variation of old property is discussed by André van der Walt, 'The Fragmentation of Land Rights' (1992) 8 *South African Journal on Human Rights* 431 at 439.

158 The cohesive foundation of all property is examined by Alan Brudner, 'The Unity of Property Law' (1991) 4 *Canadian Journal of Law and Jurisprudence* 3 at 6–8.

159 See Margaret Jane Radin, 'The Liberal Conception of Property: Cross Currents in the Jurisprudence of Takings' (1988) 88 *Columbia Law Review* 1667 at 1676 where the author describes 'conceptual severance' as a 'strategy' whereby strands are taken from the bundle of rights and conceptually construed as a 'separate whole thing'. This process is also discussed by Heller, above n 3 at 1207.

160 Heller, above n 3 at 1207.

161 The distinction between common law and statutory land interests is considered by van der Walt, above n 154 at 437. See also Heller, above n 3 at 1201, where the author notes that '[a]nti-fragmentation mechanisms respond to predictable bargaining failures that lead owners to waste jointly controlled resources'. Hence, '[t]o be efficient as an economic institution and useful as a theoretical construct', fragmentation of private property resources must be regulated by practical, regulatory mechanisms as well as formal boundary rules.

162 See *Carbon Rights Act 2003* (WA) s 5 which sets out that a person may lodge an approved form for registration to create a carbon right over freehold or Crown land.

An important aspect of the statutory verification process endorsed by the Western Australian framework lies in the acceptance that contractual rights, interconnected to the carbon interest, acquire the same statutory 'proprietary' status as the underlying carbon right. This process recognises the importance of articulating fundamental natural resource interests through the prism of interconnected agreements. A legislative framework specifically incorporating associated 'explanatory' covenants and agreements into underlying land interests is, however, innovative. Under common law, the burden of a restrictive covenant over land may not be enforced against a successor in title although the equitable jurisdiction may enforce the restriction in certain situations where it would be unfair not to do so.¹⁶³ The Torrens legislation in each State allows for common law restrictive land covenants to be recorded on the title of burdened land; however, this recording process does not alter the contractual status of the covenant.¹⁶⁴

In order to accommodate the registration requirements underpinning new statutory carbon rights, the provisions of the *Transfer of Land Act 1893* (WA) required amendment. The definition of an 'instrument' and the definition of a 'proprietor' under the *Transfer of Land Act 1893* (WA) were altered to take account of the registrability of both the carbon right and the carbon covenant. The definition of an instrument, for the purpose of the Torrens system in Western Australia, now includes a document for the transfer, mortgage or charge of a carbon right or a carbon covenant or a document for the extension, variation or surrender of a carbon right or carbon covenant.¹⁶⁵ Previously, the definition was not as embracing, referring only to a document outlining a dealing or alienation in land such as a conveyance, assignment, transfer, lease, sublease, mortgage, easement or profit à prendre.¹⁶⁶ Courts had held that extrinsic documents that did not, in themselves, create or deal with land interests, did not come within the scope of the definition of an instrument.¹⁶⁷

The revisions to the definition of 'instrument' in the *Transfer of Land Act 1893* (WA) allow for the registration of carbon rights which, prior to such registration, had no previous existence. These amendments must, however, be interpreted contextually. The definition of an instrument within one piece of legislation is not necessarily transferable to another.¹⁶⁸

163 *Tulk v Moxhay* (1848) 41 ER 1143.

164 See, for example, *Real Property Act 1900* (NSW) s 13G(a) which set out that particulars of a covenant may be recorded on the title as the Registrar-General considers appropriate and the Registrar-General may remove that recording at his or her discretion.

165 *Transfer of Land Act 1893* (WA) s 4.

166 Section 4 of the reprint of the *Transfer of Land Act 1893* (WA) as at 9 February 2001; see also *Acts Amendment (Carbon Rights and Tree Plantation Agreements) Act 2003* (WA) s 11(3).

167 See *Mulwala & District Services Club Ltd v Owners Strata Plan 37724* (2000) 50 NSWLR 458. See also *Perpetual Trustees & Executors Association of Australia Ltd v Hoskin* (1912) 14 CLR 286 at 294 where Isaacs J held that an extrinsic document was no more an instrument than a 'verse of "Omar Khayam," or a copy of an Egyptian hieroglyphic'.

168 See *Jessica Estates v Lennard* (2007) 156 LGERA 266 at [21] where the New South Wales Supreme Court concluded that the definition of instrument in the *Interpretation Act 1987* (NSW) s 3(1) was not for the interpretation of other Acts.

The explanatory memoranda issued in the *Carbon Rights Act 2003* (WA) provides a number of clarification principles aimed at outlining the proprietary nature and scope of the registered statutory carbon sequestration interest. These may be outlined as follows:

- A carbon right is a separate interest in the affected land and can be dealt with as such;¹⁶⁹
- The carbon right runs with the affected land;
- The carbon right does not confer a right to possess the specified land;¹⁷⁰
- The creation of a carbon right is not a subdivision;
- The carbon covenant runs with the burdened land;
- Dealings in carbon covenants are constrained by the requirement that at all times the proprietor of a carbon covenant must be the proprietor of the carbon right to which it relates; and
- The proprietor of a carbon covenant does not have a right to possess the specified land, but may be given a licence to enter, to inspect or to remedy a default.

The introduction of compulsory registration, achieved by making registration a precondition to proprietary validation, is also an important aspect of the proprietary articulation of carbon rights and carbon covenants in the Western Australian legislative framework. Compulsory registration prevents the enforcement of unregistered, invisible carbon sequestration rights against third parties dealing with registered land interests. Many holders of carbon sequestration interests may register their interest without legislative encouragement. However, it is likely that proprietary validation will provide sufficient incentive to avoid the unsettling problem associated with the enforcement of unregistered carbon rights against unknowing and unsuspecting third parties. The potential for such a situation clearly undermines the integrity and objectives of Torrens registration generally.¹⁷¹ The virtues of registration, as Professor Epstein has outlined, are particularly cogent in regard to incorporeal interests:

The genius of the recordation system is that it allows a purchaser to determine with whom he must deal, without restricting the richness and variety of possible transactions ... And while it imposes upon prospective purchasers the affirmative duty of search, it channels the search so required, and thereby protects those who make the search with a completeness that the common-law rules could not provide.¹⁷²

169 This is set out in *Carbon Rights Act 2003* (WA) s 6.

170 This is set out in *Carbon Rights Act 2003* (WA) s 8.

171 See generally Ronald Sackville, 'The Torrens System: Some Thoughts on Indefeasibility and Priorities' (1973) 47 *Australian Law Journal* 526 at 528.

172 Epstein, above n 100 at 1355–6.

Utilising institutional resources like the Torrens system to support the proprietary expression of carbon rights and covenants represents a creative and functional expansion of State governance. It guarantees the public visibility of carbon sequestration interests and encourages a shift in the behavioural responses of third parties dealing with land encumbered by statutory carbon encumbrances.¹⁷³

The introduction of compulsory registration for the validation of carbon rights as statutory land interests represents a significant extension of the powers of the Land Registrar.¹⁷⁴ Registered title under a Torrens framework has never been regarded as historical or derivative because the registration process creates a new title. However, newly registered titles are always sourced in a transaction or dealing that relates to a pre-existing interest.¹⁷⁵ The registration of the subsequent transaction or dealing confers a new, indefeasible title upon the holder that is enforceable against the pre-existing interest. This, in turn, promotes a conclusive register and precludes the retrospective investigation of title.¹⁷⁶

The registration of carbon rights and carbon agreements does not follow this protocol. Registration of the carbon right and/or carbon covenant results in the conferral of a new, indefeasible title upon the holder *and* it results in the conferral of a new property interest. Until registration, the carbon right and the carbon covenant have no proprietary existence. In this respect, the registration process acquires a fundamentally creative role: registration validates not only the new title of the holder, but the very existence of the carbon right. The benefits of incorporating Torrens registration into the propertisation process are not available where the carbon right is verified as a common law *profit à prendre*.

Ultimately, statutory articulation of the carbon right has the advantage of ‘clarity, universality, comprehensiveness, stability, prospectivity, and implicit compensation’, all enormously important requirements underpinning the proprietary and economic future of carbon sequestration rights.¹⁷⁷ Common law interests are consistently curtailed by defined categories and closed definitional concepts. This constraint has meant that common law categories are far less amenable to the introduction of emerging and highly fungible natural resource

173 See generally Robert Stein, ‘The “Principles, Aims and Hopes” of Title by Registration’ (1983) 9 *Adelaide Law Review* 267 at 277 noting that the title should reflect the ‘location, proprietorship and area together with a clear expression of encumbrances (in this respect there may be a need to incorporate complex transactions by reference to the instrument which creates them, for example, registered easements, rent charges and profits)’. This provides a plain and detailed statement of the title, facilitating greater protection.

174 See Alain Pottage, ‘The Originality of Registration’ (1995) 15 *Oxford Journal of Legal Studies* 371 at 400 where the author notes that the process of title completion and registration have ‘drifted further and further apart’.

175 *Breskvar v Wall* (1971) 126 CLR 376 at [15].

176 See generally Sackville, above n 168; *Frazer v Walker* [1967] 1 AC 569 at 580–1 (Lord Wilberforce).

177 See Merrill and Smith, above n 14 at 61. The authors note that the consequence of such statutory articulation and clarity is a reduction in costs to third parties in identifying the legal dimensions of property rights.

interests.¹⁷⁸ New interests with core connections to the land, promoting social, economic and environmental wellbeing, should be verified as property through a statutory framework.¹⁷⁹ Statutory validation is better able to provide a structured framework, responsive to the institutional and perceptual needs that often underlie the validation of new land interests with strong public interest dimensions.¹⁸⁰

This is not to suggest that the statutory verification process is problem-free. Statutory interests have been held to be inherently susceptible to change and legislative whim, and have therefore acquired a diminished proprietary status by comparison with their institutionalised common law counterparts.¹⁸¹ The Australian High Court has suggested that statutory property interests are not capable of being compensated pursuant to s 51(xxxi) of the *Commonwealth Constitution* because modification or extinguishment of such rights does not amount to an acquisition of property.¹⁸² The Australian High Court in *Georgiadis v Australian and Overseas Telecommunication Corporation* clearly articulated this position. Mason CJ, Deane and Gaudron JJ noted:

... a right which has no existence apart from statute is one that, of its nature, is susceptible to modification or extinguishment. There is no acquisition of property involved in the modification or extinguishment of a right which has no basis in the general law and which, of its nature, is susceptible to that course.¹⁸³

178 This is so despite the emerging ‘obsolescence’ of the *numerus clausus* assumptions. See, for example, the discussion by Edgeworth, above n 14 at 388–9.

179 Daphna Lewinsohn-Zamir, ‘The Objectivity of Well-Being and The Objectives of Property Law’ (2003) 78 *New York University Law Review* 1669 at 1673 where the author suggests that novel forms of servitude may be justified in accordance with what she describes as an ‘objective theory of well-being’.

180 For a discussion on the importance of ‘public interest’ in the privatisation of environmental interests see generally Alan Friedman, ‘The Economics of the Common Pool: Property Rights in Exhaustible Resources’ (1971) 18 *University of California Los Angeles Law Review* 855.

181 See *Health Insurance Commission v Peverill* (1994) 179 CLR 226 at [10] (Mason CJ, Deane and Gaudron JJ) talking about the status of statutory ‘property’ rights as ‘inherently susceptible of variation’.

182 *Georgiadis v Australian and Overseas Telecommunication Corporation* (1994) 179 CLR 297 (‘*Georgiadis*’) at 306 (Mason CJ, Deane and Gaudron JJ). See also *Commonwealth v WMC Resources Pty Ltd* (1998) 194 CLR 1; *Minister for Primary Industries v Davey* (1993) 47 FCR 151. States may acquire property without providing compensation because there is no constitutional requirement. This is discussed in *PG Magennis Pty Ltd v Commonwealth* (1949) 80 CLR 382 where the court concluded that States may acquire property pursuant to statute on whatever terms they choose, even where such terms are unjust.

183 *Georgiadis* (1994) 179 CLR 297 at 306 (Mason CJ, Deane and Gaudron JJ). Their Honours continue, ‘[a] law which effected the modification or extinguishment of a right of that kind would not have the character of a law with respect to the acquisition of property within s 51(xxxi) of the Constitution’. See also the conclusions of Dixon CJ in *Burton v Honan* (1952) 86 CLR 169 at 180; *Commonwealth v WMC Resources Pty Ltd* (1998) 194 CLR 1; *Minister for Primary Industries v Davey* (1993) 47 FCR 151. States may acquire property without providing compensation because there is no constitutional requirement: see *PG Magennis Pty Ltd v Commonwealth* (1949) 80 CLR 382.

This determination reflects an inherent bias in the perceived legitimacy and strength of statutory property. The non-connection of statutory property with the common law framework and the perception that some statutory rights may be susceptible to administrative process, has contributed to a sense of proprietary estrangement. Pure statutory interests are often treated as functional legislative responses to changing social expectations rather than predictable property institutions.¹⁸⁴ This perceptual bias has resulted in ‘statutory’ natural resource interests being treated as environmental rights rather than institutional land interests.¹⁸⁵

While these status and perception issues can be difficult to avoid, on balance, the structural advantages associated with statutory validation far outweigh the concerns. The flexibility and focus underpinning statutory verification encourages particularisation and detail in the formalisation of carbon rights and also allows for the utilisation of institutional resources such as title registration, a vital process in promoting visibility and awareness of the carbon right. Statutory verification is also better equipped to respond to the intrinsic diversity of carbon rights. The type of rights and conditions that may be relevant to one carbon grant may not be relevant to another and a statutory system that verifies particularised carbon covenants is more responsive to this issue. For example, the time that may be necessary for the carbon sequestration process to develop may be far longer over one piece of forested land than it is against another. The importation of temporal requirements, allowing one carbon right to endure for a specific period of time and another to endure indefinitely, analogous to the sequential aspects of the common law estate, are better implemented through individualised, registrable arrangements.

Ultimately, legislative validation of the carbon right as a new statutory land interest ensures that the unique and specific character of the carbon interest, shaped by the quality of the land to which it is attached and the needs and expectations of other ‘connecting’ interest-holders, is not destroyed.

6. Conclusion

Historically, many natural resources such as air, water, space and oceans were considered incapable of private ownership coming as they often did within the application of the public trust doctrine.¹⁸⁶ In contemporary society there are, however, very few identifiable resources beyond the embrace of technological advances aimed at harnessing a resource for exclusive use. A century ago, it would have been difficult to imagine that the carbon sequestration process, an ineluctable constituent of natural progression, would constitute a verifiable property resource distinctive from the underlying land ownership. Property has shown itself to be, if

184 This is discussed by Scott, above n 16.

185 This tendency is outlined by Blumm, above n 151 at 389.

186 For a discussion of the public trust doctrine see Joseph Sax, ‘The Public Trust Doctrine in Natural Resources Law: Effective Judicial Intervention’ (1970) 68 *Michigan Law Review* 471. See also Philbrick, above n 8; Friedman, above n 177.

nothing else, distinctive in its evolutionary capacity. Proprietary verification has become an important aspect of social, economic and environmental progression; to treat property rights in the same way as other rights therefore 'impoverishes' the property right. Property, particularly land, must be verified in order to be protected.¹⁸⁷ Rights that create distinctive relationships with objects should be categorised as property in order to protect their core 'object' focus.¹⁸⁸

The determination of how a particular entitlement should be protected by a property rule, whether statutory or otherwise, involves a range of factors, based broadly upon considerations involving economic efficiency, distributional preference and general justice.¹⁸⁹ The proprietary validation of carbon sequestration interests has been effected at a stage when prompt and focused legal strategies for dealing with climate change have become environmentally, socially and economically imperative. The dissection of the carbon sequestration process from the natural rights associated with land ownership is a vital constituent in a more fundamental strategic approach to climate change.

The difference in approach taken by each State to the articulation of carbon rights is reflective of the tension between common law categorisation, which mandates the carbon interest as a preconceived property form and statutory validation, which expresses the carbon right as a new, non-aligned, land interest, dependent for its existence upon legislative approval. The statutory recognition of carbon rights and carbon covenants as new land interests is a more intuitive strategy for the proprietary verification of a crucial, natural process. Articulating forestry carbon sequestration rights as common law profits is a distortion of traditional and orthodox land fragmentation principles. The distortion may have been perceived to be a necessary one, given the imperatives underlying climate change strategies; however, it is one to which a steadfast, and in many ways obdurate common law framework will be slow to respond. Carbon rights confer a right to an intangible carbon benefit, the scope and character of such a benefit being difficult to conceptualise. The enormous potential of such rights to trade as offsets within a national carbon trading scheme provides a firm imperative for clear and consistent statutory verification and articulation.¹⁹⁰

187 This point is raised in Arnold, above n 11 at 332 where the author argues that the value of property is diminished if it is overloaded with too many functions and given too many rights to fulfil.

188 The importance of protecting 'objects', particularly natural objects was discussed by Christopher Stone, 'Should Trees Have Standing?: Toward legal rights for natural objects' (1972) 45 *Southern California Law Review* 450.

189 Guido Calabresi and A Douglas Melamed, 'Property Rules, Liability Rules, and Inalienability: One View of the Cathedral' (1972) 85 *Harvard Law Review* 1089 at 1093.

190 See generally Robert H Nelson, 'Private Rights to Government Actions: How Modern Property Rights Evolve' [1986] *University of Illinois Law Review* 361.