Chapter 2

Major issues raised during the inquiry

Introduction

2.1 A number of broad issues relating to the impact of taxation incentives for the establishment carbon sink forests were examined during the committee's consideration of this legislation. These included

(a) the impact on prime agricultural land;

(b) the impact on rural communities and industries;

(c) enforceability of carbon sequestration property rights over consecutive landowners;

(d) the permanency of new plantings;

(e) the requirement that plantings be contiguous;

(f) incentives for biodiverse planting;

(g) the potential for undesirable taxation outcomes;

(h) the need for the tax incentives;

(i) Managed Investment Schemes; and

(j) recognition of other forms of carbon stores.

2.2 These issues are discussed in the following chapter. Issues relating to the *Environmental and Natural Resource Management Guidelines* are discussed in Chapter 3.

Impact on prime agricultural land

2.3 Submissions expressed concerns at the potential for the permanent loss of large tracts of prime productive agricultural land to carbon sink forests. This could occur either by a landowner ceasing production and planting a forest or by an investment group buying prime agricultural land and planting a carbon sink forest on that property.

2.4 The Queensland Farmers' Federation stated that:

> …we would have to be worried about any scheme that saw arable land which was being farmed productively for food and fibre being taken out of production. Climate change and increasing climate variability have the potential to limit Australia's capacity to produce food and fibre for both domestic and export consumption. Food security and food pricing should be seen as part of a national food policy. The removal of 85 000 Ha of land from agricultural production by 2011 is not good policy unless there is a requirement to assess the social, economic and environmental impacts of

> these tree plantings. This becomes even more significant when most of these plantings are likely to be in the higher rainfall areas.[1]

2.5 However some submissions questioned the extent to which prime agricultural land will be threatened. The Department of Climate Change (DCC) stated that carbon sink forests are generally established as small plantings integrated within existing agricultural land uses in less productive regions and on low productivity land units in the landscape.[2]

2.6 DCC commissioned the Australian Bureau of Agricultural and Resource Economics (ABARE) to conduct a study to assess the circumstances in which it may be financially attractive to replace agricultural land uses with carbon sink forests. The study analysed the threshold carbon prices required to equate the net present value of returns from carbon sink forests with a range of representative land values. The analysis covered a range of agricultural land uses and different rainfall zones, including examples representing highly productive agricultural regions. The methodology allowed assessment of the potential for replacement of a current agricultural land use with carbon sink forests, rather than the common practice of establishing carbon sink forests on smaller areas within existing land uses.

2.7 The study found that for all scenarios, carbon prices in excess of $100 per tonne of carbon dioxide equivalent would be required to make it attractive to replace agriculture with carbon sink forests. These findings apply across the different study regions. While carbon sequestration rates (and therefore returns) will generally rise with land productivity, highly productive land also has a high value for agricultural production.[3]

2.8 DCC stated the findings align with the evidence of current practice, where carbon sink forests are being established in regions that are marginal for agriculture, or in low productivity sites.[4]

2.9 The National Association of Forest Industries (NAFI) also noted that:

> Existing carbon sink projects are typically sited in areas with access to affordable land and low to medium rainfall such as the wheat-belts of Western Australia and Central- West New South Wales...
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> When a mature market for carbon is established it is likely that the area suitable for carbon sink forests could expand. However, it is unlikely that

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1 *Submission* 51, p. 2. See also *Submission* 23, p.1; *Submission* 39, p.1; *Submission* 24, p. 1; *Submission* 49, p. 2.

2 *Submission* 45, pp 6 - 8.

3 ABARE, *Estimated Threshold Carbon Prices for Investment in Carbon Sink Forests*, August 2008, pp 1-9.

4 DCC, Additional Information, dated 5 September 2008. See also *Committee Hansard*, Mr Ken Matthews, National Water Commission, 11 September 2008, p. 41; *Committee Hansard*, Mr Paul Ryan, DCC, p. 56.

> under a Carbon Pollution Reduction Scheme the price of carbon would rise to a level where the economic returns from carbon sink forests would exceed returns from agricultural activities on high value land.[5]

2.10 NAFI stated that the legislation facilitates the integration of carbon sinks forests with existing land uses.

> This legislation sets up arrangements for farmers, landowners and investors from other sectors to invest in rural and regional Australia in order to increase the sequestration capability of our landscape through the establishment of carbon sink forests. But it does this in a way that recognises the fact that increasing trees in our landscape needs to be achieved in a way that integrates carbon sink forests with existing land uses, and it recognises the economic, social and environmental benefits in doing so.[6]

2.11 Carbon Conscious Ltd provided an example of a successful venture. The company identifies optimal sites within the wheat belt areas and integrates planting of trees with existing agricultural activities.

> Farmers are rewarded for the use of their land, with cash consideration and, at their option, a share of the carbon credits generated from the plantings. In addition, farmers will reap significant environmental benefit from the surrounding land due to the presence of the native trees. Carbon Conscious believe there is no net loss of food production from the plantings, due to the environmental benefits associated with the trees. The capital cost associated with the use of the land and the planting of the trees will, in the majority, be met by third-party carbon emitters.[7]

Committee view

2.12 The committee questions the extent to which prime agricultural land will be threatened by the establishment of carbon sink forests. It notes that the ABARE study found that carbon prices in excess of $100 per tonne of carbon dioxide equivalent would be required to make it attractive to replace agriculture with carbon sink forests.

2.13 The committee further notes that carbon sink forests do not appear to be activities that offer high returns over a short period of time. The committee therefore believes that it is unlikely that the availability of a tax deduction for a limited range of expenses would be sufficient incentive to cause the large scale planting of these forests. The requirement that these forests meet natural resource guidelines and not interfere with existing patterns of water use, together with the likely increasing price of water, suggest that the planting of these forests will most likely be limited to less productive or marginal land.

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5 *Submission* 50, pp 1-2.

6 *Committee Hansard,* 24 July 2008, p. 2.

7 *Committee Hansard*, 24 July 2008, p. 90.

2.14 The committee also notes that, importantly, unlike other forestry tax deductions, not all the costs involved in the establishment and management of a forest carbon sink are tax deductible. The land component, for example, which represents a significant proportion of the total cost of establishing a carbon sink, is not tax deductible under the legislation.

Impact on rural communities and industries

2.15 The inquiry received differing views on the impact on rural communities and industries of the establishment of carbon sink forests. It was argued that if enough rural properties in a particular area are diverted to use for a carbon sink forest then the critical mass of an industry will be lost. This may lead to the closure of the remaining farms in that area. It was also argued that the disturbance of established patterns of rural production may destroy the social make-up of the area and eventually lead to its de-population over time.

2.16 Some potential negative impact on rural businesses and communities was noted by industry, farming and environmental groups.[8] The Environment Association noted the undesirable impacts in rural Tasmania.

> Australia's attempts to sequester carbon to mitigate global climate warming are likely to promote a mass expansion of artificial plantations in Tasmania. A great social concern for Tasmania is that farming activity is being replaced by artificial plantations which employ very few. The reduction in farming activity, the local production of food and associated employment is a long-term loss that may well have severe impacts for the viability of our community.[9]

2.17 The Victorian Farmers' Federation (VFF) stated that the change of land use from production agriculture to carbon sink forestry will result in a transfer of economic activity from rural areas to businesses requiring the carbon offset. The VFF noted that rural areas are already facing considerable economic and social challenges from changes in climate and reductions in water availability.[10]

2.18 However, a number of submissions argued that the encouragement of carbon sinks projects will provide benefits to regional areas, including large increases in regional employment and direct investment in regional communities and services.[11]

2.19 NAFI stated that:

> The recognition and encouragement of carbon sink forest establishment is another positive step towards regional job creation and enhanced

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8 *Submission* 39, p.2; *Submission* 59, p.5; *Submission* 52, p. 2; *Submission* 33, p. 4.

9 *Submission* 56, p. 10.

10 *Submission* 46, p. 3. See also *Submission* 44, pp 6-7.

11 *Submission* 10, p. 4; *Submission* 36, p.1.

> community prosperity through the investment of city-based capital spent on agribusiness investment in rural Australia.
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> Combined with the environmental benefits of carbon abatement, salinity and erosion control as well as increased biodiversity, carbon sink forests are a good investment for those parts of rural and regional Australia that are mainly reliant on agriculture.[12]

2.20 Mr Cosier of the Wentworth Group also noted benefits for rural communities:

> At $70 a tonne you are looking at a massive injection of money into farming systems that would not otherwise be injected. It also brings with it some risks if there is not a sensibly planned transition to this significant economic change.[13]

Committee view

2.21 The committee notes the concerns expressed in relation to carbon sink projects on rural communities and industries. It also recognises that the development of carbon sinks will provide benefits to many rural communities, including investments and job opportunities.

2.22 The committee notes that if the relative returns from land given over to carbon sink forests are relatively low, as has been suggested in evidence, then the disruption to rural communities will be minimised. If the returns from carbon sink forestry are higher than exiting uses of such land, this will provide an opportunity for existing landholders to convert land use to carbon sink forestry. Alternatively, if the returns from carbon sink forestry are high enough, this activity may provide an alternative activity for those in rural communities whose current farming activities are no longer viable.

Land title

2.23 Some submissions raised issues related to state government legislation providing for establishment of property rights for carbon sequestered in forests, including the specific issue of registering rights on title. Registering such rights on title may, depending on the nature of the legislation, allow enforceability of carbon sequestration property rights over consecutive landowners, as well as helping to inform property purchasers of the existence of rights over the land.

2.24 Mr Curnow, Partner, Baker and McKenzie outlined the situation in the states and territories in respect of carbon sequestration rights legislation.

> ….all states and territories, except the Northern Territory and the Australian Capital Territory, have some form of carbon sequestration rights legislation in place. Those different pieces of legislation confer different rights. In New

12 *Submission* 50, p. 4. See also *Committee Hansard*, 24 July 2008, pp 2-3.

13 *Committee Hansard*, 18 August 2008, p. 28.

> South Wales, Western Australia and South Australia, they confer an interest in land. In the other states, on our analysis, they confer only a personal right and have some restrictions with respect to being able to register an interest on title. If we look at those states where there is, in fact, the ability to register a CSR on title, in our experience from having been involved in a number of these projects, the reality is that it is very difficult to get the commercial backing for these projects without holding a carbon sequestration right. In practice, the reality is that all of these sorts of projects that may take benefit from the deduction that is allowed under the Income Tax Assessment Act would seek to have some form of carbon sequestration right registered on title. I think, in that sense, it is important to remember that, practically, what we see as being likely to happen in most instances is that people developing these projects would get the carbon sequestration right registered on title.
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> …at the moment not all states and territories have the same approach. I think there is a need to make the nature of that carbon sequestration right and the way in which it can be registered on title uniform across the states and territories. At the moment, in some states and territories, you do not get the ability to register an interest on title. So, if there is a change in ownership of the land, that carbon sequestration right does not run with the land, because you have a mere personal right as opposed to something that is registrable on title. There is definitely an issue at the state and territory level about the nature of carbon sequestration rights and what protection they confer when there is a change of ownership of the land.[14]

2.25 Mr Curnow indicated, however, that despite the carbon right issue being unclear, it has not presented an impediment to people engaging in the process.

> In our experience, notwithstanding those restrictions, the reality has been that a lot of projects are still happening in those states and territories. So I think it is not so much a case of things which are preventing or discouraging investment but more about how we can improve the overall system and make it more robust, particularly in the context of potentially a lot of these projects opting into an emissions trading scheme down the track.[15]

2.26 DCC stated that the state governments (Victoria, New South Wales, South Australia, Tasmania, Western Australia and Queensland) have enacted specific legislation to recognise ownership of carbon sequestration property rights from forest sink projects separately to ownership of vegetation and land. The legislation allows parties to register on title a legally binding agreement stipulating arrangements such as the particular land unit to which the agreement applies (e.g. through land surveys), and the rights and duties of each party. In most states the legislation includes provisions

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14 *Committee Hansard*, 24 July 2008, p. 106. See also Mr Gilbert, NAFI, *Committee Hansard*, 24 July 2008, p. 12; Mr Cosier, Director, Wentworth Group, *Committee Hansard*, 18 August 2008, p. 33.

15 *Committee Hansard*, 24 July 2008, p. 107.

protecting carbon sequestration property rights in the event of a change in land ownership.[16]

2.27 DCC noted that there is a range of other differences in carbon property rights legislation between states. Furthermore, the practical application of the legislation in some states has been limited to date.[17]

2.28 Mr Balsarini, Executive Director, Carbon Conscious Ltd, indicated that the state legislation would provide sufficient surety that the registration on the property title is secure.

> I guess it would be fair to say that that state legislation has been in for a few years over here but it has not necessarily been tested because it is a fairly fledgling industry, as I guess you would appreciate...And I guess if we could get some further clarification about how the carbon reduction scheme will operate that would help us. But at the moment I am relatively comfortable with the way the WA title system works—albeit that it will obviously need to be tested over the next few years.[18]

2.29 Carbon Conscious Ltd also operates a carbon covenant.

> In addition to the carbon right that we lodge on title, we also take what is called a carbon covenant. The carbon covenant is a registered document. It outlines the relationship between the landowner and the carbon rights holder, particularly in relation to the permanency of the trees and the things they need to do on an annual basis, such as to certify that the trees are there and are growing and that they are getting managed. We have a management protocol, so a number of the farmers actually provide management services and get a cash return for that. It is a little bit wait-and-see.[19]

2.30 The committee notes that the issue of the transfer of land title was raised as a potential problem during the inquiry. The committee notes, however, the advice of DCC which indicated that in most states the relevant legislation includes provisions protecting carbon sequestration property rights in the event of a change in land ownership. The committee further notes that a number of companies currently operating in the carbon sink market have adopted best practice in relation to property rights.

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16 *Submission* 45, p. 5. See also DCC, Additional Information, dated 5 September 2008; DCC, *Committee Hansard*, 11 September 2008, p. xx [6.17 pm].

17 DCC, Additional Information, dated 5 September 2008.

18 *Committee Hansard*, 24 July 2008, p. 96.

19 *Committee Hansard*, 24 July 2008, p. 96.

Permanency of new plantings

2.31 Concerns were expressed in relation to the permanency of the new plantations, and whether the carbon is sequestered permanently. The Australian Network of Environmental Defender's Offices (ANEDO) stated that:

> Neither the Bill, the Explanatory Memorandum, nor the Guidelines provide that any trees planted under the scheme are to remain a 'carbon sink forest' for any sustained period of time. There is no requirement that the trees planted to establish a carbon sink forest reach an age (ie, at least 10-20 years) to significantly contribute to the purpose for which they were supposedly planted – to provide a carbon store.
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> The "establishment expenditure will be immediately deductible for trees established in carbon sink forests in the 2007-08 to 2011-12 income years (inclusive)". It is therefore currently possible for an entity to plant trees, immediately obtain the tax deduction and not be concerned whether they succeed in growing or not. Additionally, there are no provisions preventing the land set aside for carbon sink forests to be sold on at a later stage and cleared.[20]

2.32 Some witnesses questioned the usefulness of the concept of 'permanence' in relation to forests. Dr Polglase, Research Program Leader with the Commonwealth Scientific and Industrial Research Organisation (CSIRO), argued that:

> …when we talk about permanence and we say, about a forest, that you must have it for 100 years, that is a nonsense at a tree level. Every tree cannot live for 100 years. So what you get is an average.[21]

2.33 Evidence suggested that certain factors will ensure that sinks are maintained for the long-term. The CO2 Group Ltd argued that given the level of expenditure involved in establishing and maintaining a forest carbon sink, investments will not be made in forest carbon sinks for the sole purpose of realising a tax deduction.

> …it would make no commercial sense to incur a large expenditure and realise only a part of that expenditure as a tax deduction. It beggars belief that a corporate, or private investor, would establish a carbon sink in order to realise only a 20-25% tax deduction for every dollar invested. Instead, investors will inevitably seek to recoup investment expenditure through realising revenue from the forest carbon sinks through, for example, trade of carbon permits generated from the forest carbon sink under an emissions trading scheme, or reducing costs through acquittal of such permits.[22]

2.34 The CO2 Group argued, however, that accreditation of forest carbon sinks under a recognised emissions reduction scheme might be a sensible pre-requisite to

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20 *Submission* 48, pp 4-5. See also *Submission* 32, p. 2; *Submission* 35, p. 3; Mr Williams, Greening Australia, *Committee Hansard*, 24 July 2008, p. 40.

21 *Committee Hansard*, 24 July 2008, p. 15.

22 *Submission* 9, p. 2.

tax deductibility. Such an approach would ensure the retention of forest carbon sinks in the long-term since such schemes institute stringent eligibility requirements around permanence of a forest carbon sink.[23]

2.35 The CO2 Group is accredited both under the New South Wales Greenhouse Gas Abatement Scheme and the Commonwealth Government's Greenhouse Friendly scheme.

> So one of the accreditation requirements is that you have to demonstrate and address the question of permanence. Under the New South Wales scheme, we do that by undertaking a forestry right and a carbon sequestration right which is registered on title, runs with the land, cannot be removed and is for 150 years.
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> Furthermore, under that scheme the trees are protected by a restriction on use which is administered by the Crown. If those trees are damaged or removed or you have not fulfilled your accreditation responsibilities, there is civil liability as a director of a company. So the responsibilities are incredibly onerous and significant. To meet them it is critical that you have substantive legal documentation and points of proof that are maintained.[24]

2.36 Two other submitters to this inquiry are similarly accredited. AusCarbon Pty Ltd is accredited under the Greenhouse Friendly Certification Program as an abatement provider.[25] Carbon Conscious Ltd has an application for accreditation with DCC under the same program.[26]

2.37 Mr Grant of the CO2 Group indicated that accreditation should be within the Guidelines and ideally be under the Commonwealth scheme.

> …now that we know the green paper is out, the Carbon Pollution Reduction Scheme would be the most appropriate measure because it will be a national scheme and it will supplant any existing initiatives. The New South Wales government has stated that it will fold the Greenhouse Gas Reduction Scheme into the federal scheme. It is arguable whether the Greenhouse Friendly scheme will prevail, whether it needs to prevail, when it could be overtaken by the Carbon Pollution Reduction Scheme.[27]

2.38 The committee considers that, while permanency of new plantings is not specifically addressed in the legislation, certain factors such as the level of expenditure involved in establishing a forest carbon sink would mitigate against short-term plantings. In addition, if trees, in respect of which a carbon sink forest deduction had been claimed, were later removed, this may be grounds for the Commissioner of

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23 *Submission* 9, p. 3.

24 *Committee Hansard*, 24 July 2008, p.68.

25 *Submission* 10, p. 1.

26 *Submission* 20, p. 4.

27 *Committee Hansard*, 24 July 2008, p. 74.

Taxation to review the taxpayer's eligibility for that deduction. The concept of 'permanence' in relation to trees is also open to question. The committee also notes the possible benefits of the accreditation scheme as outlined by the CO2 Group Ltd above.

Contiguous plantings

2.39 Concerns were also raised that the proposed arrangements would not allow a landholder to make a claim on the capital expenditure on non-contiguous plantings.

2.40 The NFF argued that this condition places a limitation on primary producers claiming the tax provisions for on-farm forestry practices that deliver carbon sink benefits. The NFF stated that on-farm forestry practices by agricultural producers will often involve multiple patches of small lots of trees in order to optimise the broader environmental and productivity benefits of such practices.[28]

2.41 The NFF also argued that this same condition may instead lead to the perverse outcome of providing an incentive to farmers to plant trees in areas which deliver a poor environmental outcome, purely in order to maximise the potential claim. Continuous areas may not suit particular landscape planning and may therefore lead to inappropriate land use decisions on-farm.[29]

2.42 The committee, while noting the concerns expressed in relation to the requirement to have in place contiguous plantings, believes that extending the tax deduction to non-contiguous plantings would add to the administrative complexity of the scheme.

Incentives for biodiversity/environmental planting

2.43 Concerns were raised that the legislation does not require that plantations be biodiverse plantings. Some submissions also argued there is a lack of incentives for environmental planting.

2.44 Mr David Williams of Greening Australia stated that:

> Whilst the environment and natural resource management guidelines in relation to the establishment of trees for the purposes of carbon sequestration do go some way to delivering a balanced mixed land use, they fall short of driving biodiverse plantings as the guidelines rely on ambiguous regional natural resource plans.[30]

2.45 Mr Williams also noted that it costs approximately twice as much to plant a 40-odd species biodiverse planting than a single-species planting – 'therefore investors seeking lowest cost abatement will direct their funds towards monoculture plantings.

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28 *Submission* 44, p. 4.

29 *Submission* 44, pp 4-5. See also *Submission* 46, p. 2; *Submission* 52, p. 1.

30 *Committee Hansard*, 24 July 2008, p. 34.

To see the first ecosystem service market fail to maximise environmental benefits would be a perverse outcome'.[31]

2.46 Mr Paul Ryan, Director, Land Sector Policy in DCC stated that biodiversity considerations were considered in the development of the Guidelines which were the subject of wide consultation.

> In terms of biodiversity considerations specifically, the guidelines were developed within the Australian government and in consultation with our colleagues in Environment. There was also consultation conducted consistent with all tax measures with interested parties, including organisations like Greening Australia, which obviously have a close interest in biodiversity.[32]

2.47 Evidence indicated that companies involved in the carbon market are focussing on the need to facilitate biodiversity. AusCarbon Pty Ltd noted that the company is building biodiversity through its plantings.

> …we are planting a variety of locally-sourced, endemic, mixed species, which is helping to build biodiversity back into the region. Our vision statement is: 'Building the community carbon cycle.' By this, we mean that, by increasing the vegetative biomass and thus increasing the amount of carbon stored, there will be a significant flow-on of benefits, economically, environmentally and socially, and this gives a win-win-win result for the community…
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> All our plantings are biodiverse. Our particular economic modelling only allows for these marginal areas. The way we do our biodiversity projects will not allow us to encroach into the higher rainfall areas…. That is part of our vision statement: to rebuild these communities from which…people have been moving to the cities because they have just become unviable.[33]

2.48 Mr Balsarini of Carbon Conscious Ltd stated that:

> Our business proposition is the creation of stakeholder value through the sequestration of carbon from the atmosphere by the planting of native mallee eucalyptus trees in the wheat belt areas of Australia. The business identifies optimal sites within wheat belt farms of Australia and integrates planting of these trees with existing agricultural activities. This integration involves working in conjunction with farmers to ensure that plantings can coexist within existing cropping rotations.[34]

2.49 Mr Cosier of the Wentworth Group cautioned against direct intervention in the market, noting that many farmers are already planting biodiverse forests.

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31 *Committee Hansard*, 24 July 2008, p. 34.

32 *Committee Hansard*, 11 September 2008, p. 58. See also, Dr Charlie Zammit, DEWHA, *Committee Hansard*, 11 September 2008, p. 37.

33 *Committee Hansard*, 24 July 2008, pp 84-85.

34 *Committee Hansard*, 24 July 2008, p. 90.

> Plantation forestry is a market asset like any other agricultural commodity. …we would not seek to intervene into that market. So if the market was operating fairly and transparently we would say that is fine. If a farmer wants to grow plantation forests against, say, grazing sheep, and all the other externalities are addressed, it would not concern us from a conservation perspective—if you have land clearing legislation still in place, and that is pretty well secured on the mainland of Australia. What we are saying about the biodiverse forests is that they are a public good. Certainly many farmers in Australia are voluntarily planting biodiverse forests for their own self-benefit and for the public good and we would be very pleased to see them rewarded with the price of carbon for doing so. But whichever it is, if it is plantation or conservation forestry, and someone is to secure a financial benefit from the carbon market, it has to be absolutely locked in as a guaranteed secure source of carbon.[35]

2.50 Some submissions raised the issue of environmental planting. The Green Institute argued that:

> Environmental planting will benefit minimally from the tax deductions. Only businesses are eligible, not voluntary or tax exempt organisations. The deductions are confined to expenditure on establishing 'trees': natural regeneration costs little and will benefit little (fencing costs are excluded for example); and non-trees do not qualify.[36]

2.51 Witnesses noted however that tax incentives already exist to assist with environmental issues, such as regeneration of degraded vegetation. Mr Andrew Grant of CO2 Australia stated that:

> …section 40 of the tax act, which deals with the environmental provisions, particularly environmental improvement by a primary producer, is a more effective section of the tax act for that. There already are taxation incentives detailed in there and, if it were your view that they were incomplete or inadequate, that would be a more appropriate place. For example, if a farmer undertakes fencing to keep stock off degraded vegetation so you can let the natural restoration processes occur, those costs are totally deductible in the year of expenditure.[37]

Committee view

2.52 The committee notes that the Environmental and Natural Resource Guidelines provided for under subsection 40-1010(3) of the ITAA reinforce that carbon sink forests are to be established in a manner that is consistent with existing good practice environmental and natural resource management frameworks. The committee also notes that while the tax deduction is for the primary purpose of carbon sequestration

35 *Committee Hansard*, 18 August 2008, pp 29-30.

36 *Submission* 38, p.1. See also *Submission* 31, p. 2; *Submission* 27, p. 2.

37 *Committee Hansard*, 24 July 2008, p. 81.

this does not prevent the taxpayer from having a secondary purpose in planting of trees, such as improving the biodiversity of the property in question.

Taxation outcomes

2.53 Some submissions argued that forest carbon sinks may lead to undesirable taxation or investment outcomes.[38]

2.54 The CO2 Group argued however that the establishment of forest carbon sinks requires significant up-front, and often trailing, investment and that realisation of a tax deduction is unlikely to act as a primary driver for forest carbon sink establishment.

> … not all of the costs involved in the establishment and management of a forest carbon sink are tax deductible. The land component, for example, which represents a significant proportion of the total cost of establishing a carbon sink, is not tax deductible under the Bill. Furthermore, deductions for the establishment of forest carbon sinks post 2012 will be delivered over a 14 year period and not during the first year of project establishment.[39]

2.55 While forest carbon sinks will not be established purely for tax avoidance reasons, the CO2 Group argued that the tax deduction will be helpful in defraying some of the significant costs involved in investing in long-term forest carbon sink projects and, therefore, is an important policy instrument with respect to providing some support for private investment into projects addressing climate change issues.[40]

Managed Investment Schemes

2.56 A number of submissions drew upon the negative impact of Managed Investment Schemes (MIS) in diverting significant areas of agricultural land into forestry arguing that similar impacts may occur under the tax concessions for carbon sink forests.[41] The Treefarm Investment Managers Association however refuted these assertions noting that MIS forestry is specifically excluded from the scope of the legislation.[42]

2.57 The committee notes that under the legislation, in order to claim a tax deduction for costs associated with establishing a carbon sink forest, taxpayers must meet certain conditions including that they did not incur the expenditure under a MIS or a forestry managed investment scheme.

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38 *Submission* 35, p. 1-2; *Submission* 60, pp 1-3.

39 *Submission* 9, p. 1.

40 *Submission* 9, p. 1.

41 *Submission* 52, p. 2. See also Mr Bernard Milford, Canegrowers Australia, *Committee Hansard*, 18 August 208, pp 1-2.

42 *Submission* 62, p. 1.

2.58 Submissions also emphasised key differences in the operation of the different schemes. NAFI stated that:

> This legislation prohibits the provision of a tax deduction if the investment is made through an MIS or if there is an intention to fell the trees or use them for commercial horticulture. Carbon sink forests and forestry MIS are unrelated and should be treated as such by this inquiry.[43]

2.59 Given the concerns raised in relation to MIS schemes, the committee sought clarification of the relationship between this scheme and MIS, particularly in terms of the way investors could become involved and make use of the upfront deduction at least for the first three years. The Treasury advised that:

> An indirect investor in a carbon sink forest cannot claim a deduction under this measure. The taxpayer claiming this deduction must have incurred the capital expenditure and must have met the other conditions for deductibility. Therefore a shareholder of a company cannot claim a deduction if the company establishes a carbon sink forest. Furthermore, under paragraph 40-1010(1)(f) of the legislation a deduction cannot be claimed if the taxpayer incurred the expenditure under a managed investment scheme (MIS) or a forestry MIS.[44]

2.60 Mr Matthew Flavel, Acting General Manager, Business Tax Division, Treasury, told the committee that MIS investment and investment in carbon sink forests are based on fundamentally different structures. He said

> I think it is important because the concern in MISs was essentially raised in some quarters about the fees going to third parties-planners and those involved in the process of raising capital that was then ultimately fed through to MIS investment. This tax deduction goes directly to a business which is in the business of carbon sequestration, so it is a fundamentally different structure-[45]

2.61 The Treasury also clarified for the committee how investors get involved in agricultural investments:

> Under a company structure, an investor purchases a share in the company. As a shareholder, this investor becomes an owner of the company and receives returns via dividends and capital gains from the share's increase in value. The shareholder is unable to claim a tax deduction for expenditure incurred by the company to establish an agricultural plant. The company retains ownership of that planting.

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43 *Submission* 50, p. 2. See also *Submission* 9, p. 1.

44 Department of Climate Change, answer to question on notice, 11 September 2008, (received 19 September 2008).

45 *Committee Hansard*, 24 July 2008, p. 47.

> Under a MIS there are two entities which need to be considered (an investor and a manager). Generally, the investor contributes money and receives a bundle of rights in relation to a parcel of land.[46]

2.62 Some submissions, while acknowledging that the deductions under the forest carbon sink legislation would not be available to MIS operators, expressed concerns about the impact of MIS in regional areas.[47] This is however outside the committee's terms of reference.

Emissions trading scheme

2.63 The committee raised the issue of why it was necessary to provide tax deductions given that the Government has included plantation establishments under the Carbon Pollution Reduction Scheme.

2.64 Mr Curnow, Partner, Baker and McKenzie stated the need for complementary measures to operate in the early years of an emissions trading scheme.

> …it is important to remember that the emissions trading scheme—
>
> —is one policy, although it is going to have broad coverage—at least as far as what the green paper proposes—covering most sectors, including a voluntary, opt-in arrangement for the forestry sector. The reality is that, in our view, there will be a reasonably low carbon price in the early years, because you are going to have a transition arrangement from having no scheme to introducing the scheme and then ratcheting the caps down over time. So I think, in that context, complementary measures in the early years of introducing the emissions trading scheme will still be very important. We have seen, for example, that renewable energy projects will not get up purely on the basis of the introduction of a carbon price because it is likely to be too low in the early years. So you need a complementary measure like the national renewable energy target. I think this really falls into a similar category, because with forestry you have very long lead times before you get substantial levels of sequestration...you need complementary measures, like the ability to claim tax deductions on aspects of that, to help in that transition period.[48]

Recognition of other forms of carbon stores

2.65 The committee heard evidence from a number of witnesses that the government should examine options for recognising all forms of carbon sinks in terrestrial ecosystems, including carbon stores in existing native forests. [49] Submitters

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46 Department of Climate Change, answer to question on notice, 11 September 2008, (received 19 September 2008).

47 *Submission* 44, p. 7.

48 *Committee Hansard*, 24 July 2008, pp 110-11.

49 See for example *Submissions* 22, 29 and 48.

stressed that environmental stewardship over remnant vegetation should also be recognised.[50] The committee heard that a higher value should be placed on the carbon sequestration contribution of natural systems as these provide more resilient and long term carbon stores.[51]

2.66 The committee received evidence regarding the potential capacity of perennial pasture to sequester carbon. Submitters noted the wider benefits in farm productivity, soil erosion and weed management, as well as soil carbon sequestration that could be achieved by encouraging the conversion of annual pasture to perennial pasture.[52]

2.67 Dr Christine Jones, Founder of the Australian Soil Carbon Scheme (ASCAS) outlined for the committee the approach adopted by the ASCAS to combine the benefits of perennial pasture systems with the benefits of direct drilling to achieve grassland carbon sinks.[53] The ASCAS is a stand alone voluntary incentive scheme. Through the scheme annual payments are made to landholders based on annual measured increases in soil carbon above baseline levels.[54] Dr Jones stated that the intention of the scheme is to act as a stepping stone for farmers to move into the carbon market.

2.68 Dr Jones told the committee that it would require only a 0.5% increase in soil carbon on two percent of agricultural land to sequester all Australia's annual carbon dioxide emissions.[55] Dr Jones also outlined a range of additional advantages of the establishment of grasses as carbon sinks. These include the ability of grasses to sequester carbon more quickly, particularly in the initial stages of establishment, compared to trees and the long term resilience of perennial pastures if managed correctly. Dr Jones claimed that as ninety percent of the biomass of a perennial pasture is below ground there was less risk to the carbon store in the event of fire as grass has the potential to regenerate from the crown.[56]

2.69 Through its inquiry into Climate Change in the Australian Agricultural Sector the committee is aware of similar perennial pasture trials in the Northern Agriculture Region of Western Australia which have compared the soil carbon under perennial pasture with that under tradition annual crops and pastures. Such trials have suggested 'sequestration rates of between 5 to 10 tonnes of carbon dioxide equivalents per hectare per year' for soil under perennial pasture.[57] The committee notes that the trial

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50 See *Submissions* 23 and 27.

51 See *Submissions* 32 and 47.

52 See *Submissions* 24 and 58.

53 *Committee Hansard*, 11 September 2008, p. 4.

54 *Submission* 42 to RRAT Inquiry into Climate Change in the Australian Agricultural Sector.

55 *Submission* 58, p. 9.

56 *Committee Hansard*, 11 September 2008, p.6

57 *Submission* 41, Rural and Regional Affairs and Transport Committee Inquiry into Climate Change in the Australian Agricultural Sector, p. 14

samples are small and that more rigorous scientific examination of the results is required.

2.70 In her submission to the committee Dr Jones recommended that the 0-110 centimetre soil profile beneath appropriately managed perennial grasslands be included as an eligible carbon sink under paragraphs 40-1010(2)(a) to (c) of Division 40 of the ITAA. Dr Jones states that the granting of equal status for carbon sink perennial grasslands would enable landholders to designate areas of their land for soil carbon sequestration purposes. Farmers could then choose to abate their own greenhouse gas emissions and/or generate tradeable offset credits.[58]

2.71 Both Dr Jones and Mr David Sykes advocated the establishment of a project-based soil carbon offsets scheme, similar to that currently operating for agricultural soils in the northern hemisphere through the Chicago Climate Exchange (CCX) to expand the range of financial incentives for farmers to adopt improved land management systems. The CCX is an international rules-based greenhouse gas emission reduction audit, registry and trading program based in the United States. Under the CCX landholders have access to a range of qualifying projects for offsetting green house gas emissions.[59]

2.72 DCC explained to the committee that this legislation is targeted specifically at activities that directly contribute to Australia's current Kyoto protocol targets, which include the establishment of new forests since 1990. DCC explained that grassland activities do not contribute to these targets.[60]

2.73 However, DCC told the committee that the government has an interest in soil carbon sequestration and is supporting work in this area. Through its investment in a new measure called Australia's Farming Future, the government is starting to look at other ways in which the agriculture and land sectors can contribute to Australia's overall greenhouse objectives. DCC noted that while the benefits of forests as carbon stores and the ability to account for their growth and carbon sequestration is well established, similar knowledge regarding grassland systems is still emerging.[61] Mr Ryan told the committee:

> The government has done some work to inform some of the decisions already taken in accordance with the Kyoto protocol rules about the potential benefits in grassland systems but also the potential risks in terms of losses. With our variable climate, as well as particular aspects of the accounting rules, there are risk issues in terms of loss as well as gains that need to be taken into account. [62]

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58 *Submission* 58, p. 2.

59 *Committee Hansard*, 11 September 2008, pp. 17 – 18.

60 *Committee Hansard*, 11 September 2008, p. 54

61 *Committee Hansard*, 11 September 2008, p. 53.

62 *Committee Hansard*, 11 September 2008, p. 53.

2.74 The committee's attention was drawn to statements by CSIRO and the Grains Research and Development Corporation (GRDC) that are more cautious about the viability of trading soil carbon. GRDC has said that while carbon inputs can be influenced by management and land use, there are constraints to the amounts of carbon that can be fixed by photosynthesis. GRDC considers that as 40-80% of carbon in plant residues and stubble is lost as carbon dioxide it may take decades to achieve a significant change in soil carbon. GRDC also believes that it is difficult to quantify change in soil carbon.[63]

2.75 CSIRO has stated that carbon credits from carbon stored in the soil on farms may not be as valuable as to farmers as hoped. In its Spring Plant Industry Newsletter CSIOR states

> Carbon trading will generate extra costs for agriculture, including increased fuel and fertiliser costs. Soil carbon credits have been seen as a possible way to offset these costs.
>
> Carbon is locked up in soil in humus, a stable form of organic matter. However humus also locks up nitrogen (N), phosphorus (P) and sulphur (S) – elements essential for healthy plant growth.
>
> Using relevant research done over 50 years ago Dr Mark Peoples and other CSIRO scientists determined the value of N, P and S locked up in humus.
>
> They estimate that to replace nutrients stored in a tonne of humus farmers would have to add about 60kg of N, 12kg of P and 9kg of S – about $200 worth of fertiliser.
>
> If an estimated 2.2 tonnes of carbon dioxide is stored in each tonne of humus and if carbon dioxide is valued at $20 a tonne, the value of carbon dioxide stored in a tonne of humus is therefore about $44.
>
> Thus the overall cost of additional fertiliser, $200, will outweigh the value of the soil carbon credits, $44.[64]

2.76 However, the committee notes that CSIRO is undertaking work to improve soil productivity through the development of conservation farming systems. CSIRO is also studying plant roots and their association with soil and plant productivity to boost sustainable crop and pasture production.[65]

Committee view

2.77 The committee notes that soil carbon is not currently recognised in the Kyoto Protocol arrangements for carbon sinks. However, the committee notes that soil

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63 Dr Christine Jones, Answer to Question on Notice

64 CSIRO Plant Industry Newsletter, Issue 23, Spring 2008, http://www.pi.csiro.au/enewsletter/previousEditions/023story4.htm , accessed 16 September 2008.

65 CSIRO Plant Industry, Farming: roots and soil, CSIRO website, http://www.csiro.au/science/RootSoil.html accessed 16 September 2008

carbon may be recognised in future treaties. Therefore, improving soil carbon through the establishment of perennial pasture is a 'no regrets' policy, particularly given its potential to improve soil productivity in the face of climate change and more extreme drought. The adoption of such management practices now will improve Australia's readiness for future agreements.

2.78 The committee notes the apparent disconnect between the claims of the Soil Carbon Accreditation Scheme and recent statements by CSIRO regarding the value of soil carbon credits. The committee considers that the government should request CSIRO to assess the data being accumulated by the Soil Carbon Accreditation Scheme.