



Australian Government

Department of Climate Change

Ms Jeanette Radcliffe
Committee Secretary
Senate Rural and Regional Affairs and Transport Committee
Department of the Senate
PO Box 6100
Parliament House
CANBERRA ACT 2600

Dear Ms Radcliffe

Senate Rural and Regional Affairs and Transport Committee Inquiry into the implementation, operation and administration of the legislation underpinning carbon sink forests, and any related matter.

Please find enclosed a submission by the Department of Climate Change which addresses the Terms of Reference for the Committee's Inquiry.

Yours sincerely

A handwritten signature in blue ink, appearing to read "Ian Carruthers".

Ian Carruthers
First Assistant Secretary
Adaptation and Land Management Division
31 July 2008



Australian Government

Department of Climate Change

**Submission to the Senate Standing Committee on Rural and
Regional Affairs and Transport Inquiry into the Implementation,
Operation and Administration of the Legislation Underpinning
Carbon Sink Forests, and any Related Matter.**

31 July 2008

Preamble

This submission addresses the terms of reference for the Inquiry: the implementation, operation and administration of the legislation underpinning carbon sink forests, and any related matter.

The Department of Climate Change (DCC) within the Prime Minister's portfolio, leads the development of Australia's climate change policy. DCC advises on emission reduction policies (including carriage of Australia's international climate change negotiations and design and implementation of the Carbon Pollution Reduction Scheme) and policies on adaptation to the impacts of climate change.

1. Background

The *Tax Laws Amendment (2008 Measures No. 2) Bill 2008*, which included a schedule providing for tax deductibility for the cost of establishing carbon sink forests, received Royal Assent on 24 June 2008, with amendments to the *Income Tax Assessment Act 1997* (ITAA) inserted in Subdivision 40-J.

On 26 June 2008, the Senate agreed that the Standing Committee on Rural and Regional Affairs and Transport would hold an Inquiry into the implementation, operation and administration of the legislation underpinning Carbon Sink Forests, and any related matter.

2. Policy context

In 2004 the Australian Taxation Office (ATO) withdrew a non-binding Interpretive Decision which had indicated that year-of-expense deductibility of costs for establishing forests for the purpose of carbon sequestration would be allowed. As a consequence of that action carbon sink forests became treated as capital items, with no deductions available for establishment costs¹, and created an unequal taxation treatment of carbon sink forests

¹ Under the tax law, a business is able to claim a deduction for any loss or outgoing that is necessarily incurred in carrying on a business for the purpose of gaining or producing assessable income. However a deduction cannot be claimed for any loss or outgoing that is capital in nature.

In general, capital expenditure is treated for tax purposes in two ways. If an asset can reasonably be expected to decline in value over time, it is a depreciating asset and is depreciated under the uniform capital allowances (UCA) regime over the asset's effective life. Alternatively, an asset may be a capital gains tax (CGT) asset and is treated for tax purposes under the CGT provisions.

In the case of carbon sink forests, prior to the amendment of the tax law, the trees were considered to form part of the land and therefore were not considered depreciating assets. Land is a CGT asset.

compared with other planted forests (see Attachment A for further detail on the taxation treatment of different forest types).

Other forms of greenhouse gas emissions reduction activities by industries are tax deductible. For example, capital expenditure on depreciating assets that reduce emissions from oil and gas production may be written off over the effective life of the assets.

These considerations provided a case for addressing a change in the tax treatment of carbon sink forests.

Amendments to the taxation legislation were first proposed in the May 2007 budget by the previous government. They were introduced into Parliament in September 2007 but were not passed prior to the election. The Government reintroduced the amendments in February 2008.

The new tax arrangements provide a short-term (until 2012) incentive to encourage early establishment of carbon sink forests that will contribute to a medium-term emissions target, while other options for delivering significant emissions reductions are further developed. Carbon sink forests also contribute to the achievement of national policy objectives for sustainable natural resource management.

3. Legislation Overview

Subdivision 40-J of the ITAA describes 'carbon sink forests' as forests which are established for the primary and principal purpose of sequestering carbon from the atmosphere. The forests cannot be used for harvest or for commercial horticulture.

The legislation allows carbon sink forest operators to depreciate the costs of establishing a qualifying carbon sink forest under the horticultural plant provisions, with effect from 1 July 2007. This treatment was applied to recognise that a tree planted as part of a carbon sink forest has the characteristics of a depreciating asset, in that it has a limited 'effective life' and can reasonably be expected to decline in value over time.

The legislation is structured in two phases. The first phase allows deductibility in the year of expense of eligible establishment costs. This provides an incentive for the establishment of carbon sink forests as a climate change measure for a period of five years from 1 July 2007 and is similar to the tax treatment applied to other classes of tree growing.

The second phase, commencing from 1 July 2012, applies a low rate of deductibility of 7 per cent per annum over 14 years and 105 days which is equivalent to the terms for long lived horticultural plantings².

In order to claim a tax deduction for costs associated with establishing a carbon sink forest taxpayers must meet certain conditions including:

- they must be carrying on a business,
- the primary and principal purpose of establishing the trees is carbon sequestration by the trees,
- they did not incur the expenditure under a managed investment scheme or a forestry managed investment scheme, and
- the trees in the carbon sink forest meet certain forest characteristics and adhere to environmental and natural resource management guidelines.

As a general approach the ITAA does not lay down specific conditions for deductible activities, for example, regarding species selection or planting location. However the requirement to meet certain forest characteristics and adhere to environmental and natural resource management guidelines have been specifically introduced for carbon sink forest establishment.

The forest characteristic conditions provided in the legislation align with the criteria for carbon sink forest activities that can contribute to Australia's greenhouse gas target under the Kyoto Protocol. These conditions are described at Attachment B.

The environmental and natural resource management guidelines, as set out in a legislative instrument made by the Minister for Climate Change and Water, are designed to achieve conformity with national objectives on natural resource management, as well as climate change. The guidelines align with relevant established good practice environmental and natural resource management frameworks and regulations which operate in areas in which any carbon sink forests are established.

Taxpayers that meet the conditions for a carbon sink forest may only deduct 'eligible' establishment costs. These include the costs of acquiring and planting the trees or seeds, the costs incurred in preparing to plant the trees or seeds and surveying costs. However, taxpayers cannot claim expenditure on land, fencing, water facilities and accessing carbon

² Under the horticultural provisions of the Tax Law, the maximum write off period is 14 years and 105 days for plants with an effective life of 30 years or more.

rights (see Attachment C for further detail on eligible costs). There is no tax deduction available under Subdivision 40-J of the ITAA for on-going maintenance costs.

Under the legislation, a landholder who grows a forest for carbon sequestration purposes could claim a tax deduction. Landholders can also offer land to businesses that grow carbon sink forests, in return for payment for use of the land. In this situation the business would obtain the tax deduction.

4. Markets for sequestered carbon

Carbon sequestered in Australian forests may be maintained by forest owners to offset their own emissions, or sold to companies or individuals seeking to offset their greenhouse gas emissions.

Market potential for carbon sequestered in forests is currently limited to voluntary carbon markets (such as the Australian Government's Greenhouse Friendly initiative), as well as the mandatory Greenhouse Gas Reduction Scheme (GGAS) in New South Wales. (The Australian Government's proposed Carbon Pollution Reduction Scheme would offer future market potential for carbon sink forests.) Existing government schemes apply specific rules that determine eligibility of forest activities and allow for different types to be eligible (e.g. carbon sink forests, environmental plantings and plantation forestry). The rules for each scheme are separate to the requirements for the carbon sink forest tax deduction. Attachment D outlines key features of each of these schemes.

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

5. Type and extent of carbon sink forest activity

The growing of carbon sink forests is an infant activity. It responds to emerging demand from greenhouse gas emitters for cost-effective emissions offsets that also produce other identifiable environmental benefits. The industry currently comprises a small number of

enterprises, including small and medium businesses established primarily to supply carbon rights to greenhouse gas emitters, and environmental organisations adding carbon sequestration to their provision of environmental services. Box 1 outlines the operations of two market participants.

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. As well as carbon sequestration, they provide for farm sustainability, natural resource management benefits such as salinity mitigation, and income diversification for farmers. The types of trees commonly grown as carbon sink forests include mallee belts and mixed species native plantings.

Carbon sequestration is primarily influenced by site productivity characteristics such as climate and soils. Growers can achieve optimum carbon sequestration by establishing tree species that are suited to the environmental conditions of a site and applying good management approaches, e.g. weed control.

Box 1 – Examples of carbon sink forest market participants

CO2 Australia Limited

CO2 Australia Limited grows eucalypts on Kyoto compliant land (clear of forest at 1990) for the purpose of generating carbon offsets, or other tradeable emissions units. The company establishes carbon property rights over the title to the land which prevents landowners from removing the forest for a period of 100 years or more. After this time the land management rights revert to the landowner.

The company supports a range of partnership models with landowners. Often, the company pays the landowner an up-front sum to secure ongoing use of the land and carbon rights to the land. The company also incurs costs associated with establishment and maintenance of the forest including site evaluation, site preparation, planting, seeds and seedlings, weed and pest management, and costs associated with emissions reduction market arrangements, such as carbon accounting.

Landcare CarbonSMART

Landcare CarbonSMART is a carbon pooling project initiated by Landcare Australia Limited. The project operates in all states and territories and offers landholders an ongoing income in return for growing and maintaining biodiverse stands of native vegetation on their land. Landcare CarbonSMART charges landholders a fee on the sale of carbon from

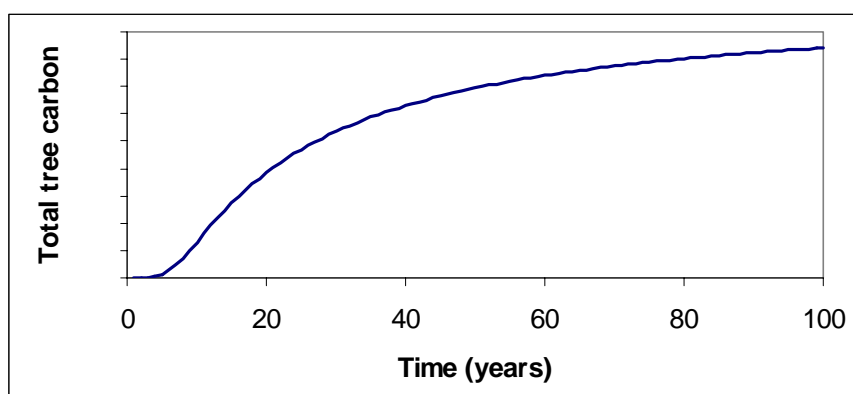
the pool to cover a reserve fund (in case of depletion event) and to cover the management and operation of the pool (e.g. registration with offset schemes, monitoring and verification).

To be eligible for Landcare CarbonSMART, landholders need to demonstrate ownership of the rights to the carbon, agree to maintain the carbon for a period at least 100 years from the date of last trade and have an eligible forest that has been established on Kyoto compliant land (established since 1990). Landholders may either establish the forests themselves or seek third party establishment funds and provide services such as fire and weed management.

Like other types of forest activities, there are significant costs in establishing carbon sink forests, with a time lag before income is generated. For a typical carbon sink forest, growth tends to be slow in the early years as the trees establish themselves. In many areas sequestration rates peak when trees are about 10 to 20 years old (earlier in faster growing species), and then gradually slacken (see Figure 1).

Carbon sequestration in carbon sink forests can be estimated through free public access to the Australian Government's National Carbon Accounting Toolbox (NCAT). The NCAT can be used by forest growers to estimate carbon stock change (emissions and sequestration) in forests using the same modelling system (the National Carbon Accounting System) and data that the Australian Government uses to develop its national greenhouse gas accounts for land based activities.

Figure 1 – Indicative example of total tree carbon change in a carbon sink forest³



³ This example has been developed using the National Carbon Accounting Toolbox for a mixed species environmental planting.

6. Potential future activity

The extent of potential future carbon sink forest activity will depend on a range of drivers including the current and expected future carbon price, commodity prices, climatic conditions and policy objectives for regional Australia including in water and natural resource management.

In 2007 the former Department of the Environment and Water Resources and The Treasury estimated that, under the new tax arrangements, carbon sink forest establishment rates for the first five years, out to July 2012, would total 81,500 hectares. This analysis was based on assumptions of a progressive increase in annual establishment rates from existing very low rates, under previous policy settings including the Australian Government's voluntary Greenhouse Friendly initiative and the mandatory Greenhouse Gas Reduction Scheme in NSW. This estimate compares to the projected establishment of 236,000 hectares of plantation forests for commercial harvesting and 60,000 hectares of environmental plantings between 2007 and 2012⁴.

Analysis provided by the Australian Bureau of Agricultural and Resource Economics (ABARE) for DCC indicates that a carbon price well in excess of \$100/tonne CO₂-e will be required before returns to carbon sink forests are competitive with existing productive agricultural land uses (see Attachment E for further information). These findings suggest that investment in carbon sink forests is likely to be most attractive where returns from traditional agricultural practices are low, for example, in less productive regions or on low productivity land units in the landscape. Hence carbon sink forests could represent an additional source of income for farmers in circumstances where farms are typically less profitable.

7. Legislation implementation issues

7.1 Securing long term carbon sequestration

It is commonly asserted that the climate change benefits of carbon sink forests are greatest where the forests are maintained so that sequestered carbon is removed from the atmosphere for a long period. This principle is reflected in the legislation, which stipulates that a tax deduction will only apply to forests which are established for the primary and principal purpose of sequestering carbon from the atmosphere.

⁴ Projections of plantation forest establishment rates from industry data compiled by National Plantation Industry. Projections of environmental planting establishment rates from Department of Climate Change data used to prepare the Forestry Sector Greenhouse Gas Emissions Projections 2007.

Under the ITAA, the ATO may review a taxpayer's expenditure for which tax deductions have been claimed, within standard review periods following tax deductions. Separately, market frameworks are well placed to ensure the long term maintenance of sequestered carbon, for example:

- under the Greenhouse Friendly initiative forest sink project proponents need to demonstrate that the underlying intention is to maintain the abatement in the form of a forest sink for a period of at least 70 years. As a part of program requirements the abatement provider must enter into a legal agreement that allows for restoration of any losses (to be commenced within 12 months of a loss) over a period of at least 70 years, and
- under the Carbon Pollution Reduction Scheme it is proposed that forest owners, who opt into the scheme, would be liable for emissions from harvest or a depletion event.

In the situation where a forest grower has plans to harvest forests for wood production, there are incentives to do so under the plantation forestry tax provisions rather than proceeding through the tax provisions for carbon sink forests. Disincentives to claiming a deduction under the carbon sink forest provisions include prohibitions on harvest, requirements to meet the environmental and natural resource management guidelines and less favourable post-30 June 2012 tax deductions.

Any potential for future decisions to harvest carbon sink forests is also likely to be limited. Carbon sink forests are generally not established using silvicultural practices suitable for harvestable commodities, are not situated close to suitable harvesting infrastructure and are typically grown in small dispersed belts across the landscape. In addition, as described above, robust carbon market schemes require make good of the forest or penalise the carbon seller if the forest carbon is lost or depleted. These factors will all mitigate against future harvest for commercial gain.

7.2 Consistency with natural resource & sustainability objectives

To be eligible for the carbon sink forest tax deduction, taxpayers are required to adhere to a set of environmental and natural resource management guidelines (the guidelines). The guidelines reinforce that carbon sink forests are established in a manner that is consistent with existing good practice environmental and natural resource management frameworks and regulations applicable to carbon sink forest establishment. The guidelines do not apply any new regulatory arrangement by any level of government. They have been developed

to avoid negative environmental outcomes, and provide realistic compliance and administration costs for government and taxpayers.

The guidelines require applicants to focus upon three areas of environmental and natural resource management: (1) best practice approaches for achieving multiple land and water environmental benefits, (2) conforming with regional natural resource management plans and considering water catchment scale environmental impacts, and (3) compliance with Commonwealth, state and territory legislation, and local and regional regulations. Given the variation in environmental issues and practices between states and regions, the guidelines are necessarily broad.

The guidelines also require forest growers to progressively adopt approaches to carbon sink forest establishment (e.g. choice of appropriate species) that incorporate future advances in available science and policy development. For example regional natural resource management plans are periodically updated, with community input, to incorporate these advances.

The guidelines specifically address water resource impacts, consistent with the National Water Initiative commitment relating to interception that poses a significant risk to water resources. Governments have agreed to assess the significance of water interceptions on catchments and aquifers by no later than 2011 and to apply appropriate planning management and regulatory measures where necessary. Governments have recently agreed to accelerate this work in areas where interception poses a significant risk to the success of water resource plans. Carbon sink forests are commonly established as small dispersed plantings in less productive regions, and are not considered likely to pose a significant risk to water resources. Even so, carbon sink forests will be subject to whatever requirements apply to other potential water interception activities in the landscape.

The guidelines are available on the Federal Register of Legislative Instruments website or through a link from the DCC website (see <http://www.climatechange.gov.au/land/tax-deduction.html>). Carbon sink forest growers can seek advice on complying with the frameworks referred to in the guidelines from government agencies, natural resource management groups and industry organisations. These organisations have experience in providing advice on revegetation issues such as weed and fire management plans or complying with native vegetation management legislation.

To receive the carbon sink forest tax deduction, tax payers must complete the *Notice of establishment of trees in a carbon sink forest* form available on the ATO website (see <http://www.ato.gov.au/content/downloads/atp00103282carbonsink.pdf>). In this document taxpayers must provide, and declare to be true, information on locations where the trees have been established, the species planted and that the trees meet the forest characteristic requirements and comply with the environmental and natural resource management guidelines. DCC will assess claims referred by the ATO, taking into account the information submitted by the taxpayer.

TAXATION ARRANGEMENTS FOR PLANTED FORESTS

Activity	Deductibility of establishment costs	Who can claim the tax deduction
Plantation forestry for wood products harvesting – direct investment	Fully deductible in year of expense, as an expense incurred in gaining or producing assessable income	Growers of trees for harvest
Plantation forestry for wood products harvesting – MIS investment	Fully deductible in year of expense provided at least 70% of expenditure is directly related to developing forestry	Managed Investment Schemes
Landcare plantings on land used by rural land users or by primary producers	Fully deductible in the year of expense	Primary producers
Plantings by not for profit organisations	Fully deductible in year of expense	Donors
Carbon sink forests	Fully deductible in year of expense for eligible establishment costs from 1 July 2007 to 30 June 2012. Capital expenditure written off (over 14 years) at 7 per cent per year from July 2012	Tax payers carrying on a business – landholder or other business

CHARACTERISTICS OF CARBON SINK FORESTS

The trees, when established, must satisfy the following conditions:

- at the end of the income year, the trees occupy a continuous land area in Australia of 0.2 hectares or more;
- at the time the trees are established, it is more likely than not that they will:
 - attain a crown cover of 20 per cent or more; and
 - reach a height of at least 2 metres;
- on 1 January 1990, the area occupied by the trees was clear of other trees that:
 - attained, or were more likely than not to attain, a crown cover of 20 per cent or more; and
 - reached, or were more likely than not to reach, a height of 2 metres or more.

DEDUCTIBLE CARBON SINK FOREST ESTABLISHMENT COSTS

Costs that growers are able to deduct under this tax provision may include:

- the costs of acquiring the trees or seeds
- the costs of planting the trees or seeds
- the costs of pots and potting mixtures where the potted plants are being nurtured prior to being established in their long-term growing medium, in the ground, in a permanent way
- the costs incurred in grafting trees and germinating seedlings
- the costs of allowing seeds to germinate (whether by broadcasting, deliberate regeneration or planting seeds directly)
- the costs incurred on preparing to plant the trees or seeds, and
- the costs incurred in surveying the planted area

Costs which are **not** eligible for deduction under this tax provision include:

- the costs incurred on other plants (e.g. trees for harvesting or horticultural plants). However where the trees or plants are used for associated purposes, such as companion planting for the purpose of carbon sequestration, you can deduct the costs.
- the costs incurred on assets separate from the trees such as fencing, water facilities for the trees, roads within the carbon sink forest and fire breaks
- the costs incurred to drain swamps or low lying land, or on clearing land
- the costs incurred on rights that allows you access to the land to establish the carbon sink forest or for carbon credits to be traded in the future, and
- costs of purchasing the land to be used for establishing the trees, and costs attributable to the land rather than to the establishment of the trees

MARKETS FOR CARBON SEQUESTERED IN CARBON SINK FORESTS

Greenhouse Friendly

Greenhouse Friendly™ approved abatement projects must occur in Australia, and must generate additional, permanent and verifiable greenhouse gas emissions reductions or sequestration.

Carbon sequestered in forests which meets Greenhouse Friendly requirements may be eligible to generate offset credits and approved abatement may be sold to Greenhouse Friendly certified product and service providers or outside this framework in the voluntary carbon market. To be accepted under Greenhouse Friendly, forest projects are required to meet certain eligibility requirements including Australia's definition of a forest for Kyoto Protocol reporting, permanence, applying appropriate risk management practices, demonstrating secure ownership of the sequestered carbon, and financial additionality.

As part of Greenhouse Friendly approval forest sink project proponents are required to enter into a legal agreement that allows for restoration of any losses over a period of at least 70 years. Restoration is enforceable through the legal agreement and must be commenced within 12 months of the loss of the abatement. Restoration could take the form of a commitment to replant or the purchase of alternative offsets.

Further details on eligibility requirements for Greenhouse Friendly are available at <http://www.greenhouse.gov.au/greenhousefriendly/publications/gf-guidelines.html>

Five forest sink projects have been approved under Greenhouse Friendly to date.

NSW Greenhouse Gas Reduction Scheme (GGAS)

The mandatory GGAS aims to reduce greenhouse gas emissions associated with the production and use of electricity in NSW and the ACT. It achieves this by using project-based activities to offset the production of greenhouse gas emissions. GGAS also includes recognition for carbon sequestered from growing trees.

To be eligible under GGAS a forestry project must meet certain eligibility requirements including Australia's definition of a forest for Kyoto Protocol reporting, permanence, applying appropriate risk management practices, registering carbon sequestration rights on the title of the land and regulatory additionality.

Carbon Pollution Reduction Scheme (CPRS)

The Government's preferred position, as outlined in the CPRS Green Paper, is that all eligible reforestation activities⁵ would be included in national emissions trading on a voluntary basis, from 2010.

The Green Paper notes that benefits of scheme participation would be greatest for owners of new forests who intend to maintain them (for harvest or non-harvest purposes), as those forests can provide ongoing carbon sequestration. Landholders would not be able to opt out of the scheme without surrendering permits for all potential obligations.

⁵ The Kyoto Protocol rules define 'reforestation' activities as the establishment of forest since 1990 on land that was previously clear of forest. The Australian definition of a forest for the purposes of Kyoto Protocol accounting specifies a minimum area of 0.2 hectares, tree crown cover of at least 20 per cent and a tree height of at least 2 metres.

SUMMARY OF RESULTS FROM ABARE ANALYSIS FOR DCC

The threshold carbon prices for investment in carbon sink forests – under alternative cost and productivity assumptions for selected representative farms.

ABARE estimated the threshold carbon price at which the net present value of returns from carbon sink forests would equal existing agricultural land values for different land use scenarios in certain regions across Australia.

ABARE examined the following land use scenarios:

Low to Medium rainfall zone 350 – 700mm	High rainfall zone >700mm
Grazing	Grazing
Broadacre cropping	Dairy
	Sugar
	Vegetables

Key assumptions:

Timeframe – Carbon revenues were assumed to be generated up to year 30, reflecting the decreasing growth rates of typical carbon sink forests after this time, however, some costs were assumed to continue for an additional 70 years to reflect the typical maintenance obligations of current emission reduction schemes.

Discount rate – annual real discount rate of 7 per cent over a 100 year time frame.

Carbon sequestration rates were derived from DCC datasets.

Land use costs for each scenario were derived from the 2006-07 ABARE surveys including the 2006-07 Australian Agriculture Grazing Industries Survey.

Carbon Sink Forest establishment and maintenance costs (\$/ha)

Fencing costs (non tax deductible)	0
Other Establishment costs (tax deductible)	2 250
Annual management expenses first 30 years of forest establishment (tax deductible)	150
Annual management expenses after the first 30 years of forest establishment (tax deductible)	50

Results

Land use scenario	Rainfall zone	Threshold carbon price (\$/t CO ₂ -e)
Grazing	Low to Medium rainfall	162 – 314
Broadacre Cropping		162 – 314
Grazing	High rainfall	141
Dairy		352 – 379
Sugar		199
Vegetables		283

The results are based on specific cost, productivity and agricultural land value assumptions, and actual returns may vary between locations and with carbon sink forest establishment and management practices.