



Submission Template

Carbon Credits (Carbon Farming Initiative) Amendment (Additionality Test and Other Measures) Regulation 2013

Overview

This submission template should be used to provide comments on the new positive list activities and Kyoto Offsets Projects for the Carbon Farming Initiative.

Contact Details

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Do you want this submission to be treated as confidential? Yes No

Submission Instructions

Submissions should be made by **3 July 2013**. The Department reserves the right not to consider late submissions.

Where possible, submissions should be lodged electronically, preferably in Microsoft Word or other text based formats, via the email address – CFI@climatechange.gov.au.

Submissions may alternatively be sent to the postal address below to arrive by the due date.

Department of Industry, Innovation, Climate Change, Science, Research and Tertiary Education
GPO Box 854
CANBERRA ACT 2601

New positive list activity – feeding of fats or oils to livestock that are pasture grazed all year round

No comment

New positive list activity – feeding of nitrate supplements to any livestock

No comment

New positive list activity – the pyrolysis of livestock manure

No comment

New positive list activity – the use of selective breeding to improve livestock feed use efficiency

No comment

New positive list activity – increasing long rotation hardwood plantations

The Institute of Foresters of Australia (IFA) is a professional organization of over 1100 forestry professionals, both public and private practitioners engaged in many aspects of forestry, resource and land management, nature conservation, research, administration and education. IFA membership holds substantial knowledge of plantation management and carbon sequestration.

The IFA submits the following comments with respect to the justifications for the proposed regulatory amendment for the inclusion of long-rotation hardwood plantation under the Carbon Farming Initiative.

16. New paragraph 3.28(1)(q) under item [6] provides for the inclusion of an increase in long-rotation hardwood forestry through the establishment of new long rotation hardwood forestry plantations after 1 July 2010 as an eligible activity under the CFI.

The inclusion of longer-rotation hardwood forestry plantations as an eligible activity under the CFI is strongly supported by the IFA.

The start date of 1 July 2010 is supported providing that provisions are made for the pioneers of longer-rotation carbon plantations, including those that were registered under the NSW Greenhouse Gas Abatement Scheme (NSW GGAS), Greenhouse Friendly and any other schemes recognised under the Carbon Farming Initiative.

17. With the same growing conditions, over multiple harvest rotations, long-rotation hardwood plantations sequester more carbon than short-rotation plantations. Harvest cycles of at least 25 years are considered to be long rotation.

and

18. Hardwood plantations are established as both long and short rotation plantations and comprise any of the generally broadleaved flowering trees (angiosperms), including Eucalyptus species. Short rotation plantations are usually established to produce pulp for paper products, whilst long rotation plantations generally produce timber products including veneer, plywood or sawn timber. Innovation and new technologies are reducing this distinction with increasing capacity to produce veneer or sawn timber from hardwoods grown over shorter (<15 year) rotations.

Explanatory statement 17 is confusing in the context of the proposed amendment which is for the establishment of “a new long rotation hardwood plantation on land that has not previously used for long rotation hardwood forestry plantations”. Over multiple harvests, and therefore multiple rotations, longer-rotation hardwood plantations do not necessarily sequester more carbon than shorter-rotation plantations.

Regulatory amendment 4 (the proposed amendment to regulation 3.27 (2)) specifies that “a forest is a long-rotation forest if the harvest cycle of the forest is 25 years or more”. However the explanatory statement provides no justification for this proposed time period. Rather than applying what appears to be an arbitrary time period the IFA would like the determination of the rotation length to take into account:

- Growth rates: the average growth rate of a plantation over the first 15 years of its life (the immature phase), and hence the associated carbon sequestration, is usually higher than its average growth rate between age 16 and age 40 (maturing phase);
- Species selection: species selected for shorter-rotation plantations tend to be faster growers. Species grown in longer-rotation plantation are selected for both their growth performance and their wood properties and tend to be slower growing;
- Timber density: slower growing species may sometimes have higher wood densities and hence, store more carbon per cubic metre;
- Periods of fallow: increasing the frequency of clearfall harvest can increase the amount of time that the land is not growing trees (and thus sequestering carbon).
- Markets for wood products: solid-wood and reconstituted wood products can store more carbon for longer periods than pulp and paper products, although this is not always the case.

- Markets for bioenergy: growing plantations for bioenergy avoids emissions arising from burning fossil fuels. A shorter-rotation plantation grown specifically for bioenergy could have much greater GHG mitigation benefits than a longer-rotation plantation that is grown for wood and paper products.

The legislation should be based around the additional carbon stored by the forest management action – here encouraging longer rotation lengths - and not have arbitrary cut-off points. Carbon changes over time in trees in continuous curves, not fixed threshold points. Figure 16.6 from Kirschbaum (2001), reproduced in Figure 2 below, is one example that shows that changing from 15 to 20 year rotation has clear carbon storage benefits because both the mean annual growth rate and the mean carbon storage increase. Beyond year 20 however the carbon storage benefits diminish as the current annual growth increment drops below the mean annual increment. What this means is that plantation forests have a threshold point beyond after which it is more beneficial for carbon storage to undertake a final harvest and reset the plantation. This threshold point will vary according to the site, species and silvicultural practice that are employed.

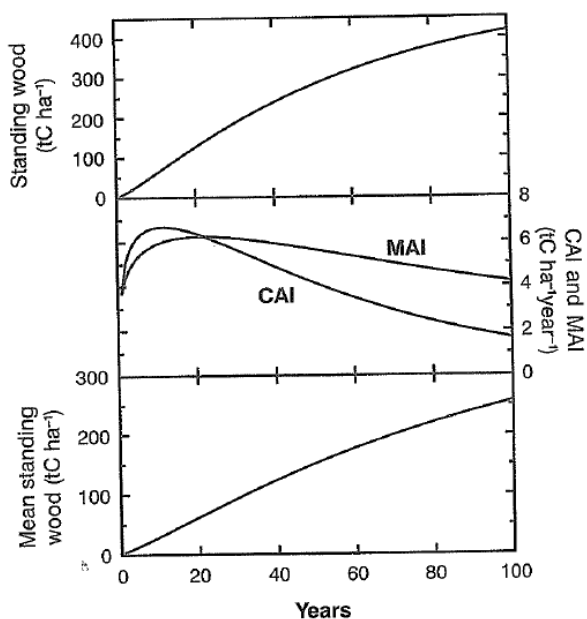


Figure 1: Notional plantation, showing standing wood overtime, current (CAI) and mean (MAI) annual increments and mean standing wood for different periods up to a 100 year period (Kirschbaum 2001, Fi 16.5)

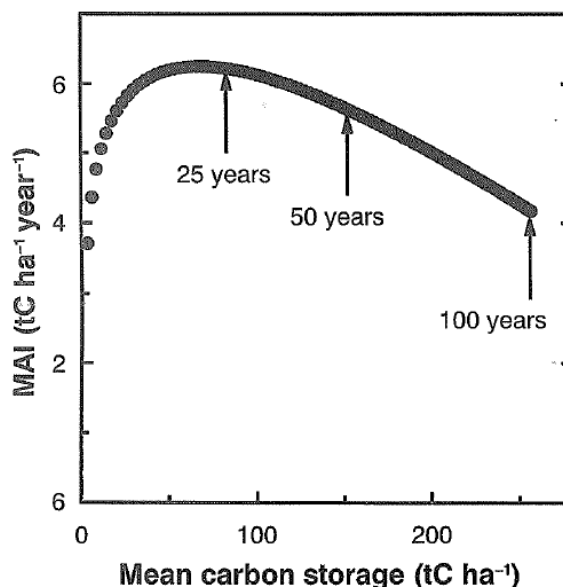


Figure 2: Mean annual increment (MAI) plotted against mean amount of carbon storage in wood over time (after Kirschbaum 2001, Fig 16.6)

Rather than being set in legislation, a flexible rotation length should be allowed and appropriate methodologies developed through which project proponents should provide justification for why the activity (e.g. a change from 15 to 20 year rotation, or 25 to 30 year rotation), will have carbon storage benefits.

The legislation should avoid defining the activities using product outputs. There are many examples around the world of products such as veneer and sawn timber being produced from short rotations (<15 years) of eucalypts and other species (e.g. teak) with new technologies and sawing and drying techniques. These are likely to become more widely adopted in Australia and present new opportunities for industrial growers and processors and for farm foresters.

Reference: M. Kirschbaum, (2001) "The role of forests in the global carbon cycle," in Criteria and indicators for sustainable forest management, R. Raison, A. Brown, and D. Flinn, Eds., ed Wallingford, UK: CAB International Publishing, 2000, pp. 311–339.

19. The positive list activity proposed for regulations has been defined to provide an incentive for forestry enterprises to contribute to a national increase in the area of hardwood plantations that are managed for long rotation forestry. This increase would deliver additional carbon sequestration where the increase is greater than would have occurred in the business as usual scenario.

and

20. The activity is only eligible on land not previously used for long rotation forestry and so does not include the re-establishment of an existing long rotation plantation after harvest. The activity also does not include simply swapping the locations of long and short rotation plantations following harvest as this would not achieve an increase in the total area of long rotation plantations.

The proposed positive list activity has been defined in a way that is intended to provide an incentive for forestry enterprises to contribute to a national increase in the area of hardwood plantations that are managed for longer-rotation forestry. The assumption is that this would deliver additional carbon sequestration where the increase is greater than would have occurred in the business as usual scenario.

However, the definition of 'new long-rotation hardwood plantation' as proposed in the amendment is "a plantation of long-rotation hardwood forest grown from seed or seedlings on land that has not previously been used for long-rotation hardwood forestry". It is not clear from this whether the aim of the amendment is to specifically provide for the replacement of shorter-rotation plantations with longer-rotation plantations and/or to allow the establishment of longer-rotation hardwood plantations as an afforestation activity on land that was previously not forest. The former could be considered an 'activity' under the general forest management category for the second commitment period of the Kyoto Protocol.

The IFA supports **both** types of activities as long as they can both demonstrate increased carbon stocks over the longer run compared with a recent historical baseline.

The explanation that "[T]he activity also does not include simply swapping the locations of long and short rotation plantations following harvest as this would not achieve an increase in the total area of long rotation plantations" is ambiguous. The amendment appears to specifically encourage the establishment of longer-rotation plantation on land previously used for shorter-rotation plantations. However this explanatory statement suggests that land that has seen a completed longer-rotation cycle cannot subsequently be planted under a shorter-rotation crop. This may provide a disincentive for plantation reestablishment, resulting in extended periods of fallow.

If the Australian government genuinely seeks to increase the area of plantations that are managed for longer-rotation forestry, careful consideration must be made with respect to the eligibility requirements for project areas as defined in any methodologies that are developed for longer-rotation plantations.

21. Farm forestry is already on the positive list and is not included as part of this activity. Establishing softwood long-rotation plantations is not covered by this activity.

The legislation should not separate the eligibility of an activity based on the species grown, and especially not on a simple softwood / hardwood basis. The eligibility should be based on the proposed activity having additional carbon storage. In fact most softwood species in Australia are usually grown on longer rotations than hardwoods and often reach higher carbon storage values. The GHG benefits of establishing new softwood plantations are directly comparable to establishing new hardwood plantations – both have the potential to provide additional abatement. The IFA therefore believes that establishing softwood longer-rotation plantations should also be covered by this activity or included as a separate addition to the positive list.

22. Consistent with the negative list, a long rotation hardwood forestry plantation cannot be or have been established under a forestry managed investment scheme for Division 394 of Part 3–45 of the Income Tax Assessment Act 1997 (existing subregulation 3.36(c)). The negative list also specifies that projects cannot be established on land that has been cleared of native forest within the past seven years, or five years if ownership of the property has changed hands (existing subregulation 3.36(f)). Where projects will occur in areas of more than 600mm rainfall, they must be undertaken in accordance with the specified tree planting provisions described in the negative

list.

Longer-rotation plantations should be exempt from the specified tree planting provisions which apply to areas that receive more than 600mm rainfall. These provisions are unnecessarily onerous.

To grow logs to enable the production of more 'traditional' wood products, longer-rotation plantations may need to be established in areas that receive more than 600mm of rainfall and preferably, more than 800mm of rainfall. Even with the incentive that may be provided by carbon revenue, such plantations are unlikely to be viable in areas receiving less than 600mm rainfall.

The requirement that longer-rotation forestry plantations will be ineligible if they are established under a forestry managed investment scheme is an arbitrary regulation that should be removed. Clause 22 excluding plantations established under MIS schemes should be removed because it would miss the biggest opportunity to increase the carbon stored in the quickest way by encouraging longer rotations of some of the existing million hectares of hardwood plantations. With the changes in the MIS industry, this could be just the kind of action that could stimulate some reinvestment and management activity on those plantations. Properly constructed managed investment schemes are a legitimate source of investment in plantation forestry.

Expansion of the scope of Kyoto offsets projects

The IFA supports, in principle, the expansion of the scope of Kyoto offsets projects and will provide specific comments on further regulatory amendments as they arise.

Any additional comments

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