Australian Government

Submission Template

Design of the Carbon Farming Initiative

Overview

Established in 1935, the Institute of Foresters of Australia [IFA] is the peak professional body for forest scientists, forest educators and managers of forested land in Australia. We are a non-profit organization with 1350 members who are committed to the principles of sustainable forest management and the processes and practices that translate these principles into outcomes.

The IFA applauds policies, such as the Carbon Farming Initiative, that encourage restoration of some tree cover to cleared agricultural land, whether for biodiversity, catchment and soil protection, wood production, carbon sequestration or other values. The comments below are aimed at helping the Department of Climate Change and Energy Efficiency develop and implement that initiative. These comments are assembled from input from IFA members who have practical and research experience in a range of areas relevant to the initiative.

Contact Details

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Confidentiality

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

Submission Instructions

Submissions should be made by **close of business 21 January 2011**. 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.

Emerging Policy Section, Land Division
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Scheme design principles

Additional important principles for eligible carbon farming projects include:

- The aim to maximise potential participation should be balanced by the practical need to ensure that projects must be of sufficient scale to justify the administrative costs.
- It must be practical to develop projects and measure the carbon credits with minimal specialist training.
- Audit or verification procedures must be applied by people with adequate specialist training and accreditation.
- Procedures must be approved by people with relevant, adequate expertise in the field relevant to the activity for which the procedure is being developed.
- Approval processes must be consistent with international protocols.

Although the need for such principles is inferred or mentioned elsewhere in the discussion paper, such as in the context of "Methodology", the IFA considers that they warrant more emphasis.

We appreciate that one aim is for the scheme to be accessible to a wide range of landholders. Minimising administrative costs will help achieve that. However, the scheme could be inundated with small projects with administrative costs that outweigh the benefits. For reforestation, revegetation, forest management and avoided deforestation projects, the IFA therefore recommends that a suitable area threshold, perhaps of the order of an aggregate [that is, not necessarily contiguous] 10 to 40 hectares, depending on climate zone, be required for a project to be eligible. Allowing a number of small sites to be aggregated into single projects may enable wider participation while minimising administrative costs.

Landholders may find that inexperience in reforestation and revegetation are impediments to participation in the Carbon Farming Initiative. Few will have experience in carbon accounting. We understand that a number of organisations provide training in use of the FullCAM carbon accounting model and National Carbon Accounting Toolbox Programs. Those needing training in reforestation and revegetation projects as well may find the "Master Tree Growers" program useful [refer http://www.mastertreegrower.org.au/]. That program was developed by the University of Melbourne and aims to help landholders who want to incorporate tree growing on their land. The program includes an inventory component that could be expanded to provide training in use of the FullCAM carbon accounting model and the National Carbon Accounting Toolbox.

A system, such as the NSW Greenhouse Gas Abatement Scheme, that rewards project managers for accurate inventory by allowing higher proportions of the carbon estimated to be claimed if more reliable systems are used would encourage improved accountability and management.

Ensuring investor confidence also requires audit or verification procedures applied by suitably trained and accredited specialists in accordance with accredited standards and procedures. The Association of Consulting Foresters of Australia [which is a division of IFA] has developed an Australian Standard for Valuation of Commercial Forests based on the Australian Accounting Standards Board's accounting standard AASB 141. That standard, together with Standards Australia's '*Australian Standard 4978.1 (Int) Carbon accounting for greenhouse sinks*' may provide a sound platform for accrediting reforestation, revegetation, forest management and avoided deforestation projects.

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Scheme coverage

Reforestation and revegetation – effects on regional communities, water and biodiversity

The IFA applauds initiatives that encourage restoration of some tree cover to cleared agricultural land. There is ample evidence that rates of soil erosion and salinisation and loss of biodiversity are far higher on land used for grazing and cropping than on forest land and that restoration of tree cover to a proportion of farmland reduces erosion, helps stabilise water tables, increases wildlife habitat *and* increases agricultural productivity. The agricultural productivity gains from farm forestry or agroforestry have been demonstrated in a wide range of farming systems [refer for example Cleugh, H., 2007, *Design Principles for Farm Forestry*, Rural Industries Research and Development Corporation].

Some commentators have raised concerns about the potential effects of reforestation on runoff and downstream stream flow. These concerns are sometimes assumed to apply generally whereas they arose from issues in highly regulated catchments where water resources are over-committed to irrigated agriculture. That is not the case in all catchments, and is generally not the case in northern Australia. In fact, there are situations, for example, streams carrying nutrients discharging into the Great Barrier Reef environment, where it would be beneficial to target reforestation for maximum hydrological effect.

Even where water resources are heavily committed, experts in catchment hydrology have demonstrated that it is statistically difficult to detect reliably the effects on runoff and downstream stream flow if the proportion of the catchment area reforested is below 15–20% of smaller catchments [Zhang, L., Vertessy, R. Walker, G. Gilfedder, M. and Hairsine, P., *Afforestation in a catchment context – understanding the impacts on water yield and salinity*. CSIRO Land and Water Science Report 55/2006].

Where there is a legitimate reason for concern about hydrological effects of reforestation, those effects can be managed in a number of ways.

Despite the evident benefits, some commentary over the Carbon Farming Initiative has claimed that reforestation will inevitably reduce agricultural production and have other adverse effects. To counterbalance that erroneous commentary, the IFA recommends that, as part of the Carbon Farming Initiative, the Department of Climate Change develops a program with state and national farmer organisations to disseminate factually based information on the benefits of trees on farms to their members.

Reduced emissions or increased sequestration in soils

Measuring soil carbon reliably is very difficult due to the inherent variability of Australian soils and difficulty of cost-effective measurement methods. It is suggested that soil carbon be introduced in a second phase after more predictable sinks have been explored.

Forest management

The National Carbon Accounting Standard included ‘enhanced forest management’ as an eligible activity, however it has not been explicitly included in the CFI. Forest management activities, including silvicultural practices to improve forest health and biodiversity and increase productivity, are internationally recognised as a means to reduce emissions and increase or maintain carbon in native forests. The CFI guidelines should therefore be amended to include forest management.

There are numerous potential offset project opportunities arising from native forests. For example, silvicultural thinning of dense regrowth forest can improve sequestration rates, forest health and wildlife habitat value. Use of thinnings and waste wood for bioenergy products or biochar can avoid emissions through substitution of fossil fuels. No restrictions should be imposed on crediting activities that can demonstrate reduced emissions through improved use of harvested timber.

The Rural Industries Research and Development Corporation has undertaken considerable research into developing management principles and guidelines for sustainable management and assessing

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biodiversity of privately-managed native forests. That research would provide a sound basis for developing suitable CFI projects.

Including forest management in the CFI may also provide opportunities for economic development for Indigenous communities, who manage large forest areas, particularly in northern Australia. That would be consistent with the aims of the Government's Indigenous Forestry Strategy. Legal uncertainties about eligibility for participation by Indigenous landholders, as mentioned in the discussion paper, should be resolved as a matter of high priority.

Avoided deforestation

There are large areas of native vegetation in northern Australia that are currently regarded by many in southern Australia as a massive conservation pool. This view is not shared by many of the landowners, who view it as land they have managed for future development. We should support an economic incentive such as the CFI, which recognises the conservation benefits of maintaining this vegetation and pays landholders for their forgone opportunities.

Avoided deforestation should include dedication of forests to conservation reserves for multiple benefits including maintaining or increasing their contribution to global carbon cycles.

It is important that weed control be considered in the context of avoided deforestation. Avoided deforestation could involve keeping exotic and environmental woody weeds in heavily disturbed vegetation types (for example, post-cyclonic regrowth), which would be a net loss from a biodiversity perspective. Exemptions are required for woody weeds in native vegetation to encourage their control and removal.

Savanna fire management

Fire management is a complex area where a perverse incentive might arise to reduce fire frequency to gain carbon, leading to the build up of dangerously high fuel loads and suppressing regeneration of fire-dependent plant species.

Demand for Carbon Farming Initiative credits

The financial viability of a CFI project is directly tied to the value of its CFI units. The value of non-Kyoto CFI units is likely to be well below the value of Kyoto CFI units. Non-Kyoto CFI units have a low value as they are dependent on demand arising from buyers in the voluntary market. Relative to the market for international units, the market for voluntary units is small and volatile.

The idea that participants will be willing to bring forward CFI projects, without first knowing whether their project's abatement will be eligible for Kyoto units or non-Kyoto CFI units does not accord with sound business practice. The proposal to jointly administer Kyoto and Non-Kyoto projects under the CFI is understandable, however clear guidelines are required to allow participants to readily determine the type of units that their project is eligible to create. This information will help proponents assess the business case for their CFI project before making a major financial commitment to it.

Market uncertainty is a major shortcoming of the CFI. For CFI Kyoto units there is no certainty that a market will exist beyond 2012.

CFI projects will typically require a large amount of capital to effect the proposed land-use change and a preparedness to make a long-term commitment to carbon storage. In the case of a reforestation project, 100 years has been proposed as an appropriate carbon maintenance period. It is hard to imagine why a farmer or investor would directly take on such an encumbrance while the market for CFI units remains so uncertain.

The CFI is likely to attract managed investment companies aiming to use the CFI as a vehicle for attracting fee-paying investors. These companies can be expected to structure their projects to ensure

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that market risks for CFI units are borne wholly by the third party investors. Given the long timeframes involved in CFI projects, there is a major risk that companies who manage CFI projects become insolvent. The likelihood of a company managing a reforestation project staying solvent over a 100 year maintenance period is low. The recent failure of six major forestry managed investment scheme companies in Australia has highlighted the inherent risks associated with long-term land use change projects.

Third party investors in CFI projects may not be appropriately informed of the risks of their project and may overlook or downplay them on the basis that they are operating within a government endorsed scheme. This may not be of such significance if the projects were short term or if the obligations and encumbrances were not so significant.

As the Government is committed to administering the CFI and enabling broad participation, it is recommended that it carefully consider how the market and management risks can be better addressed. Management of these risks will ensure the CFI is sustainable and help protect its reputation and integrity.

Integrity standards

Additionality

There are many potential CFI projects within the agriculture and forestry sectors that will be recognised as normal business activities that may not at first appear to meet the additionality principle. Long-rotation tree cropping systems that aim to produce wood products on a cycle of harvesting and replanting, so that average stored carbon levels are higher than the prior land use, are a good example. Deep-rooted perennials are another. It is not until a detailed examination of the costs and returns of the activity are made that an activity's financial viability can be accurately judged. This is potentially complex and time consuming but is necessary for a full understanding.

It is commonly difficult to demonstrate that long-rotation tree cropping systems are commercially viable due to the high initial capital costs and long periods required to generate a commercial return. They may, however, have considerable carbon sequestration, environmental and other benefits that do not currently provide cash returns. Including carbon values in such projects has the potential to make them commercially viable.

A major strategic benefit of using long-rotation tree cropping systems for carbon farming is that there is an in-built incentive for the carbon pool to be protected and maintained for the long term. When managed on a sustainable cycle of harvesting and replanting, they can provide landholders a cash return while maintaining a carbon sink. Landholders who depend on cash flow have more incentive to maintain such projects than is the case for not-for-harvest sinks.

Permanence

The IFA recognises that permanence needs to be considered in order to achieve fungibility between credits from emissions reduction projects and sequestration projects. However, we have some concern about the specific implementation of the carbon maintenance obligation as currently drafted, which indicates that the 100 year liability period would recommence if the project was altered. Refinements and changes to projects are more likely than not in such a long period. A liability to recommence the 100 year period would therefore be an unacceptably onerous condition. We believe that the obligation to relinquish credits at any point in the future should take into account the atmospheric benefit that has been provided by the project up to that time, and that the obligation should not be extended as a result of reasonable variations to approved projects.

A 5% buffer for carbon losses is reasonable in the absence of a method to readily quantify the risks, as is the 20 year stewardship-type payments for avoided deforestation. It may be prudent to increase the 5% to 10% initially until the program can be assessed after the first crediting period. Landholders will choose to take insurance for their carbon plantations and in this case there should be provisions to waiver the 5% buffer. For example the American Carbon Registry has moved toward private insurance for forest

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projects.

Leakage

Experience from IFA members indicates that the determination of project boundaries and estimation of leakage outside those boundaries is complex and often requires considerable subjective judgement. This is likely to make it difficult to achieve consistency between projects, and may provide an undue administrative burden on project developers. The IFA would support the development of clear and straightforward rules for estimating leakage that can be applied by project developers.

Scheme processes

Project approval

The project approval process is inadequately explained and needs to be clarified. A simple and straightforward process that minimises the costs associated with this step is to be encouraged, and a set of minimum criteria needs to be established to ensure consistency between projects.

The costs associated with the development of the documentation to support projects can be extensive and in the cases of other Standards [such as the Voluntary Carbon Standard or the Climate community and biodiversity (alliance) standard] may require an additional level of verification by a third party auditor. Similarly, a period of public consultation is typically required. These requirements have the potential to add considerable time as well as cost to the project development phase, which may be beyond the means of many landholders.

Crediting periods

- The consultation paper states “projects could not be credited for a further period if the activity becomes mandatory, which is unlikely for most land sector activities”. Restrictions on clearing native vegetation and native forest management have become mandatory in most States. The discussion paper position may therefore pre-empt options for avoided deforestation and native forest management projects.

- Numerous bona fide carbon sequestration forestry schemes that started prior to 1 July 2010 should be eligible for accreditation. Managers of some of these have gone to considerable efforts to certify their projects under the Kyoto Protocol.

- Reforestation takes a long time and requires considerable capital outlay at establishment, irrespective of whether it is for commercial (harvested) stands or carbon-only projects. Developers of reforestation projects therefore need some level of certainty over a relatively long timeframe (at least the current rotation) in order to be able to make informed decisions about investing in projects. The proposal that crediting periods (and therefore project eligibility) could be as short as 3 years does not provide any reasonable level of certainty for reforestation project developers, particularly when compared with the timeframe over which investments are made.

Transfer or termination of projects

It will be very difficult to impose civil penalties on projects that have terminated because of insolvency. The 5% buffer may not cover this in all circumstances. For example, we are currently seeing deforestation following the collapse of managed investment scheme blue gum plantation managers.

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Other matters

As mentioned above in the context of forest management, we recommend that legal uncertainties about eligibility for participation by Indigenous landholders be resolved as a matter of high priority. There are similar issues regarding eligibility of projects on other land tenures, most importantly on leasehold Crown land. There are considerable areas in this category in northern and central Australia.

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