



SUBMISSION

Carbon Pollution Reduction Scheme Stakeholder Consultation

Department of Climate Change (DCC)

*Discussion Paper: Design issues relating to reforestation
Overview of the National Carbon Accounting Toolbox and reforestation reporting
requirements*

October 2009

Introduction

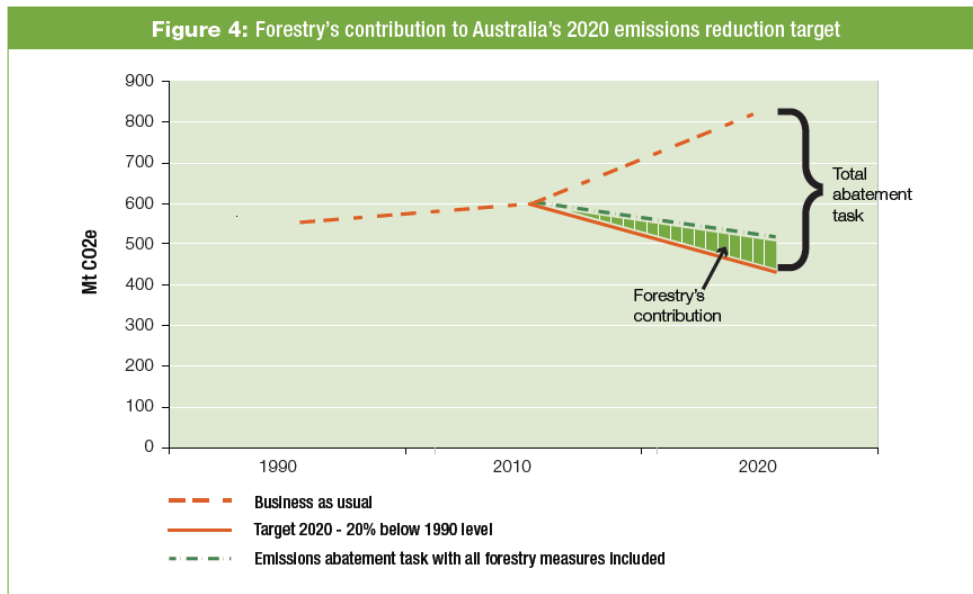
The National Association of Forest Industries (NAFI) welcomes the opportunity to provide comment on the DCC consultation papers on a) design issues related to reforestation in the Carbon Pollution Reduction Scheme (CPRS) and b) the National Carbon Accounting Toolbox and reforestation reporting requirements.

The National Association of Forest Industries (NAFI) is the peak representative body for Australia's forestry and forest based industry and represents the industry's interests to the public, governments and authorities on matters relating to the national development and sustainable use of Australia's forests and wood products.

Forestry potential to contribute to climate policy

From an economy-wide perspective, forestry is recognised as Australia's only carbon positive industry, and with the right legislative framework, could contribute as much as 20 per cent of Australia's emission reduction targets by 2020 (refer figure).

In formulating CPRS and related climate change policies, it is important that design rules and policies take a holistic approach across the forest sector by taking into account the carbon sequestration of trees, the carbon stored in wood products, the renewable, green energy produced from wood waste and the substitution of emission intensive building materials with lower emission wood products.



Source: National Association of Forest Industries, 2008. *Playing a Greater Role in Australia's Future: A strategy for the development of Australia's sustainable forest industries*, page 15.

However, there presently exist a number of regulatory barriers to fully realising this carbon abatement potential, including various design aspects of the CPRS and renewable energy policies. Recommendations to address these impediments include:

- amending specific provisions of the CPRS Bill, so as to provide sufficient commercial incentive for the domestic forest industry to fully 'opt in' under the scheme. These include allowing the hosting of joint implementation reforestation projects and reducing the lengthy permanence requirements from 100 years to 70 years for scheme compliant forests;
- amending the definitions of 'wood waste' in the renewable energy legislation regulations, so as to allow full commercial utilisation of wood waste from all sustainably managed forests and plantations for bioenergy; and
- amending the CPRS (CPRS Fuel Credits) Bill to include forestry consistent with agricultural and fisheries 'off-road' activities, so as to provide equity across the primary industries sector and promote renewable forestry activities.

These issues have been raised in more detail by NAFI in previous submissions to the Australian Government and Australian Parliament on the CPRS and broader climate policies.^{1 2 3 4}

¹ NAFI 2008. Submission on the DCC Discussion Paper: Detailed design issues relating to coverage of reforestation, September.

² NAFI 2009. Submission on the exposure draft of the Carbon Pollution Reduction Scheme legislation, April.

³ NAFI 2009. Supplementary submission to the Senate Select Committee on Climate Policy: inquiry into policies relating to climate change, May.

⁴ NAFI 2009. Submission on the exposure draft of the CPRS (CPRS Fuel Credits) legislation, April.

Design issues on reforestation and NCAT

The most recent DCC consultation papers on CPRS design issues for reforestation and the proposed use of the National Carbon Accounting Toolbox (NCAT) reflect the policy position of the Australian Government outlined in the White Paper.

In doing so, the CPRS goes some way in recognising reforestation but contain a number of impediments in scheme design that restrict the potential for the full participation of voluntary reforestation activities.

As a starting point, the crediting approach for reforestation adopts the average crediting approach. The NAFI position would be to allow for the two broad approaches identified in the 2008 DCC discussion paper on reforestation design issues: full annual crediting and average crediting based on projected net removals. This would allow the flexibility for reforestation entities to make a choice between approaches to meet their own risk and forest management profiles. While the averaging approach may suit small scale growers with limited ability to manage inter-year fluctuations, larger scale growers or projects based on carbon pooling arrangements may prefer full crediting to balance growth and removals according to their own risk profiles and the marginal costs and benefits of carbon prices. For either crediting approach, the relinquishment provisions and forest maintenance obligations of the scheme would adequately address issues of non-compliance or risks from forests removed by fire or other natural disturbances (see further comments below).

General principles

Design rules for reforestation need to be structured in such a way as to deliver low compliance and reporting costs for reforestation entities while at the same time ensuring verifiable carbon pool measures to promote market transparency and tradability. Given the significant potential for forestry activities to remove greenhouse gases and reduce the overall costs to the economy of an emissions target, it is imperative that reforestation compliance and transaction costs are kept to a minimum. This will facilitate greater voluntary participation of reforestation activities from small forest growers through to larger forest entities.

Specific design issues

Four main issues discussed in the consultation paper include:

- definitions of forest and non-forest areas;
- coverage of carbon pools;
- treatment of risk; and
- the use of a new NCAT prototype for estimating the unit limit for reforestation projects.

Forest definitions

NAFI acknowledges that in terms of ensuring consistency with domestic and international reporting standards and definitions, it is useful to adopt a forest definition that meets these criteria (i.e. minimum area of 0.2 hectares with a potential height of at least 2 metres and crown cover of 20%). However, the proposed forest definition of 20% cover and rules for dealing with forest and non-forest areas between

stands (i.e. to qualify as a single stand non-forest areas must be less than 0.5 hectares and less than 15 metres in width) may require further assessment to ensure that reporting requirements are not onerous for larger estates (with firebreaks, access trails etc) or that certain tree configurations meet the intended scope for reforestation land use (e.g. tree alley systems such as oil mallee plantings incorporated with agricultural crops).

Coverage of carbon pools

It is proposed that the unit limit (i.e. permits issued for carbon sequestration) would include emissions and removals from the following carbon pools: above-ground biomass; below ground biomass; litter and dead wood. It is proposed that soil carbon would not be initially included in the CPRS, given current measurement uncertainties and accounting complexity.

NAFI would support the exclusion of soil carbon until more complete measuring and monitoring systems are developed. The assessment of soil carbon pools from reforestation activities may be particularly important in the future, given the potential for long term rehabilitation of degraded lands and increases in soil organic carbon through reforestation activities.

Dealing with risk

The DCC consultation paper proposes that not-for-harvest forests would be subject to a risk reversal buffer, while harvested forests would not be subject to such a buffer but that emissions from natural disturbances would be included in the ‘average’ of net cumulative removals over the project horizon.

The risk reversal buffer is described as a mechanism:

‘to help protect forest entities against the exposure posed by emissions from natural events such as fire, insect attack, storm or severe drought. The risk of reversal buffer would be in the form of a small deduction each time permits are issued’.⁵

The proposed use of a risk reversal buffer for not-for-harvest forests and an average net removals approach (including emissions from natural disturbances) for harvested forests raises the important issue of the most appropriate choice of mechanism (or mechanisms) for effectively managing the risks associated with variable events such as natural disturbances for reforestation projects.

⁵ Australian Government 2008. Carbon Pollution Reduction Scheme: Australia’s Low Pollution Future, White Paper Volume 1, December, page 6-56.

NAFI has significant concerns that under the proposed design rules the regulator assumes scheme wide responsibility for assessing individual project risks in the calculation of the buffer and assignment of net removals. Such a structure leads to a number of significant distortions whereby:

- the regulator is effectively acting as sole insurer for carbon losses from natural disturbances; crowding out private insurance markets and any potential benefits (lower costs) from the operation of a more competitive model for the treatment of risk across projects and sites; and
- wide potential variability in matching the buffer to project level risks, given that the risk reversal buffer is to be:

‘set at a national level based on an assessment to determine the likely risk of emissions from natural disturbance in reforestation’.

NAFI therefore considers it essential for more information to be provided on proposed risk assessment methods under the scheme and how such a ‘national level assessment’ could effectively be applied across the range of forest types and management regimes across the country. If the risk reversal buffer is set too conservatively across projects, for example, this will reduce the amount of net removals recognised from reforestation and may inhibit commercial participation in the scheme.

Furthermore, NAFI recommends that further consultation with stakeholders is needed on the general treatment of risk in the scheme, given the implications of current design rules on the calculation of net removals and potential role of private insurance markets to reduce costs and deal more specifically with project level risks.

Within this context, it is important to recognise that other provisions provide general safeguards to the overall integrity of the scheme. These provisions include the registration of suitable reforestation entities, relinquishment provisions and related forest maintenance obligations, designed to address issues of non-compliance and unplanned emissions from natural disturbances such as fires.

As outlined in various submissions to the 2008 DCC discussion paper on reforestation design issues, forest managers will typically adopt a range of risk management strategies, such as:

- selection of appropriate species and provenances that can better cope with climatic stress and fire;
- geographic spread of plantings and areas;
- pooling of different forest types and age classes; and
- management planning for fire prevention and suppression (e.g. fuel reduction, firebreaks, equipment maintenance).

A combination of site specific and management factors would be taken into account in risk assessments and premiums by insurers. Furthermore, it is expected that more developed insurance markets would emerge over time in response to the specific types of carbon sequestration and reforestation projects under the scheme.

Given these factors, it may be prudent to allow reforestation entities the choice to elect private insurance as a legitimate risk management strategy rather than have to accept a mandatory ‘one size fits all’ risk reversal buffer for reforestation projects.

National Carbon Accounting Toolbox (NCAT)

NAFI acknowledges the efforts of the Australian Government in developing the National Carbon Accounting System (NCAS) as a national system for land and forest based carbon accounting, and the related development of NCAT as a tool to assist local project planning.

The DCC consultation paper outlines current NCAT capabilities and states that:

‘the current prototype NCAT, released in 2005, has strong capability for estimating emissions and removals in hardwood and softwood plantations, across all the major commercial tree species and regions and including typical management regimes.’

Given the central importance being placed on the use of NCAT for the estimation of net removals from reforestation projects under the scheme (and hence the number of permits issued over time), NAFI has argued that the use of NCAT and/or other allowable methods will need to meet a number of important criteria, including:

- scientifically robust estimation;
- ease of application across the range of reforestation project types;
- low compliance and/or transaction costs for eligible reforestation entities;
- flexibility to incorporate more accurate and reliable forest site and stand level data; and
- protection of any intellectual property provided by forest entities.

With regard to scientifically robust estimation, it is critical that more detailed public information be provided as to the reliability and validation of NCAT as a predictor of carbon pools for the various forest types and regions, drawing on peer reviewed scientific papers and other technical sources that reveal the statistical reliability of the model.

As discussed in the consultation paper, it is generally acknowledged that NCAT does not adequately cover some management regimes or species such as oil mallees or other low rainfall species. It is therefore important that proposed technical work to expand the range of species and enhance the NCAT model be undertaken as soon as possible. This includes the financial resources necessary to ensure the ongoing technical development of the NCAT model and improvements for existing default settings such as ‘mixed environmental plantings’ that presently have conservative estimates. These technical impediments such as conservative under-estimates for mixed plantings have significant implications for commercial opportunities for reforestation projects.

Finally, NAFI supports the in-built flexibility being proposed to incorporate new inclusions within the NCAT model, such as new species and management regimes

and any future changes to international accounting rules such as allowing the inclusion of carbon stored in wood products.

The assessment process for inclusions of new species and management regimes appears to seek a balance between scientific transparency and minimising compliance costs. Such a process should allow entities the opportunity to have improved carbon estimates for particular projects where they can be scientifically supported (e.g. using inventory data, verifiable models). However, further attention needs to be given as to whether such assessments will be used to:

- a) better calibrate the NCAT model at regional and local scales that are more reliable for individual reforestation projects; and/or
- b) accredit other carbon estimation models that are better predictors for individual reforestation projects, taking into account the need to recognise any intellectual property interests.

Furthermore, the capacity of the scheme and NCAT model to accommodate cases where the 'default settings' for existing species and management regimes are considered inaccurate is uncertain. This is particularly important given initial feedback from stakeholders at the consultation session that the NCAT model underestimated carbon sequestration in many cases.

Concluding comments

With respect to reforestation design rules being proposed as part of the DCC consultation papers, NAFI would like to highlight two broad issues:

- the treatment of risk: the scheme appears to adopt a very risk averse approach through the risk reversal buffer and consideration should be given to promoting private insurance to promote more market flexibility and project level assessments more suited to commercial reforestation entity and project needs; and
- the degree of accuracy of the NCAT model: including the need for it to (a) be improved to cover a range of species and management regimes that are presently not well represented and (b) accommodate enhanced estimates from scientifically validated models and data provided by entities for reforestation projects that also protect any intellectual property interests.

NAFI is committed to working constructively with the Australian Government and other stakeholders to maximise the significant contribution that Australia's renewable and sustainable forest industry can play with respect to climate change policy.

If there are any queries in relation to this submission, please contact NAFI Deputy Chief Executive Officer, Mick Stephens on (02) 6285 3833.