Submission by the Forest Industries Association of Tasmania

to

Tasmanian Climate Change Office
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on the

Climate Change (State Action) Bill 2008

16 June 2008

Forest Industries Association of Tasmania

Contents

1. Overview

FIAT congratulates the Tasmanian Government and the Climate Change Office on the development of the Climate Change (State Action) Bill 2008.

FIAT considers the target of 60% below 1990 levels by 2050 to be achievable, although clearly the significance of the target is dependent upon the method by which emissions and the 1990 baseline are calculated.

FIAT holds concerns that some of the proposed measures to reduce Tasmanian Government emissions described on the Tasmanian Climate Change Office web site (www.climatechange.tas.gov.au) need to be carefully considered before they find their way into regulations interpreting the Climate Change (State Action) Bill. FIAT is particularly concerned that:

- Investment in carbon offsets should stay in Tasmania and be of benefit to both Tasmanians and the planet.
- The proposed Tasmanian carbon offset scheme should encourage the maintenance of Tasmania's sustainable forest estate and a greater use of wood, and that carbon offsets should reflect either actual carbon captured and stored or an actual reduction in carbon released.
- Any suggestion that the Tasmanian Government will employ the Green Building Council of Australia's green star environmental rating system should be removed from any Tasmanian Government documentation whilst the GBCA's green star system discriminates against the use of Tasmanian timber.

The Tasmanian Government should, as a matter of urgency, undertake an analysis to estimate the carbon sequestration position of forests outside State Forest, to expand on the analysis undertaken for Forestry Tasmania by MBAC (2007).

2. About FIAT

The Forest Industries Association of Tasmania (FIAT) is an industry association formed in 1983 to represent the interests of processors of Tasmanian forest products. FIAT was formed out of a predecessor Association, the Tasmanian Timber Association (TTA). FIAT and TTA collectively have provided representational services to the Tasmanian timber industry for in excess of 60 years. Our members' activities are diverse and include:

- the production of veneers, hardwood and softwood timber, pulp and paper;
- woodchip production and export; and
- plantation and native forest management.

FIAT's 18 member businesses include all of the State's larger processors of forest products. They utilise a significant proportion of the crown sawlog output as well as all of the high quality decorative veneer produced in the State. FIAT Members' activities account for more than 75% of the gross value of production in the forest and wood products industry in Tasmania.

Included within the FIAT membership are the State's largest industrial forestry Companies that account for the vast bulk of plantation development and management enterprises on private land in Tasmania and the largest native forest management enterprises in the private sector in this State.

As such FIAT and its members have a significant interest in the development and implementation of a sensible strategy for reducing and offsetting Tasmania's greenhouse gas emissions including the establishment of real carbon offset programs such as the growing of trees and the greater use of wood-based products including bioenergy.

FIAT's objectives and role are described in our Annual Report as follows: -

Objectives:

1. Provide a focus for the formulation of forest industry policy and to present an industry perspective to community decision-makers and to the public; and

2. Develop and co-ordinate "industry service function," notably training and education, timber marketing, research and industrial relations, and other matters which need to be addressed on an industry-wide basis.

Role:

In addressing its first objective, FIAT's role is characterised by helping to create the right external environment within which industry has to operate. This has two main dimensions - the policy environment and the public image of the industry in the eyes of the community.

The policy environment centres on government legislation and regulations which determine the limits to what industry can do. The policy environment must be tackled at both the Federal and State Level.

Industry's public image rests on public opinion and the various factors which influence that opinion. This is important because public opinion has a strong bearing on the development of Government policy.

In addressing its second objective, FIAT's role is to facilitate discussion and joint action among its membership, to project the membership position in wider forums as appropriate and to encourage other bodies to participate positively in the public debate to ensure that the industry retains a public license to operate.

3. FIAT comments

3.1 General comments

Whilst not certain, there is a general scientific consensus that mankind-induced release of carbon dioxide, methane and other “greenhouse gases” is resulting in an increase in the temperature of the earth’s biosphere.

The bulk of current greenhouse gas emissions are the result of burning fossil fuels with the subsequent release of carbon which has been stored outside the biosphere (underground) for between 50 and 200 million years (Canadella et al. 2007).

Trees and all plant matter are composed of carbon derived from captured atmospheric carbon dioxide through the action of photosynthesis - trees are thus stored atmospheric carbon held together with stored solar energy. Deforestation - harvesting or clearing forests without then regenerating or reforesting the land - releases the carbon stored in forests (in the wood, bark, branches, leaves, roots and soil) back into the atmosphere from where it came.

When a forest is grown, either after harvesting or on ground previously non-forested, atmospheric carbon dioxide is captured from the air and the carbon atoms used as the basic building blocks of plant material, thus the grown forest becomes a store of atmospheric carbon.

There are two fundamental forms of forests from which wood is harvested:

- natural or native forest - regeneration after harvesting is via re-establishment of essentially the same forest structure as existed naturally, generally via techniques which mimic the natural regeneration processes of these forests; and

- plantation forests - established via planting of nursery-grown seedlings as monocultures, usually with intensive management to control competing plants - plantations generally produce around three times as much harvestable wood per hectare per year as native forests on the same site.

Whilst growing trees capture and store atmospheric carbon, even restoring all the forests cleared by mankind will not compensate for the carbon introduced to the biosphere from the burning of fossil fuel - it will only remove the carbon from the atmosphere that was contained in the forests prior to them being cleared. By far the greatest proportion of human-induced greenhouse gas emissions have been the result of burning fossil fuels (Canadella et al. 2007).

When forests are harvested to produce wood products, the products thereby produced continue to store atmospheric carbon whilst in use - the stored carbon is only released back into the atmosphere when the wood products are burned or decay.

The sensible and sustainable management of Australia's forests provides the only proven method of capturing and storing atmospheric carbon that we have at our disposal. We must encourage greater and more prolonged use of wood products which will have the dual abatement advantages of storing more atmospheric carbon whilst replacing the use of alternative, more-emissions-intensive products such as metals, masonry and plastics. When wood-products reach the end of their serviceable life they should be segregated, collected and burned as biofuel to recover their inherent stored carbon-neutral solar-energy.

3.2 General comments regarding the draft bill

FIAT believes that the draft bill contains three significant components:

- a target, being "*to reduce, by 31 December 2050, greenhouse gas emissions in Tasmania by at least 60% of 1990 levels*" (Section 5);
- statements that the State will determine the method by which emissions are accounted for the purposes of setting the 1990 baseline and for estimating reductions against the baseline (Section 7(1)(a and b)); and
- the arrangements for the Tasmanian Climate Action Council (Divisions 3 and 4).

3.3 The method of accounting for greenhouse emissions

Various accounting standards for greenhouse gas emissions (and sequestrations) already exist. The federal Department of Climate Change (previously the Australian Greenhouse Office) compiles and reports internationally under two greenhouse gas accounting standards:

3.3.1 Kyoto reporting framework

- Accounts reported by state
- Tasmanian 1990 baseline emissions under Kyoto were 14.3 million tonnes of CO_2e
- Australia does not report under the "Forest Management" category of the Kyoto Protocol having opted for the assumption of net zero (i.e. that forests established prior to 1990, whether managed as reserves or for wood production, are assumed to be absorbing carbon dioxide at the same rate as they are releasing it). Thus any changes in the carbon stocks of Tasmania's forests are not counted unless either the forest is cleared (*deforestation*) or new forest is established where there was not forest in 1990 (*forestation*). The vast bulk of Tasmania's forests, including state forest and forests in reserves outside state forest (National Parks, World Heritage Areas, other reserves) do not contribute to Tasmania's Kyoto emissions estimates.

- Greenhouse gas emissions resulting from wild-fires are not counted if the forest is allowed to regrow.
- http://www.greenhouse.gov.au/inventory/stateinv/index.html

3.3.2 UN FCCC reporting framework

- Accounts are not reported by state, only national totals.
- The changes in the stock of carbon stored in Australia's forest are reported - reported to be a net sequestration of 51.5 million tonnes of CO_2e for the 2005 year.
- Carbon dioxide emissions resulting from wild-fires are not counted if the forest is allowed to regrow - only estimated wild-fire emissions of non-CO_2 greenhouse gases are reported.
- http://www.greenhouse.gov.au/inventory/2005/national-report.html

3.3.3 The contribution of Tasmania's forests

As estimated recently for Forestry Tasmania by MBAC Consulting Group (2007), Tasmania's State Forest estate is expected to **lose around 2.5 million tonnes of CO_2e per year until around 2025**, after which the estate will **accumulate carbon at a rate of around 5.9 million tonnes of CO_2e per year through 2050** (5.9 million tonnes is equivalent to more than half of Tasmania's 2005 Kyoto reported emissions of 11.0 million tonnes).

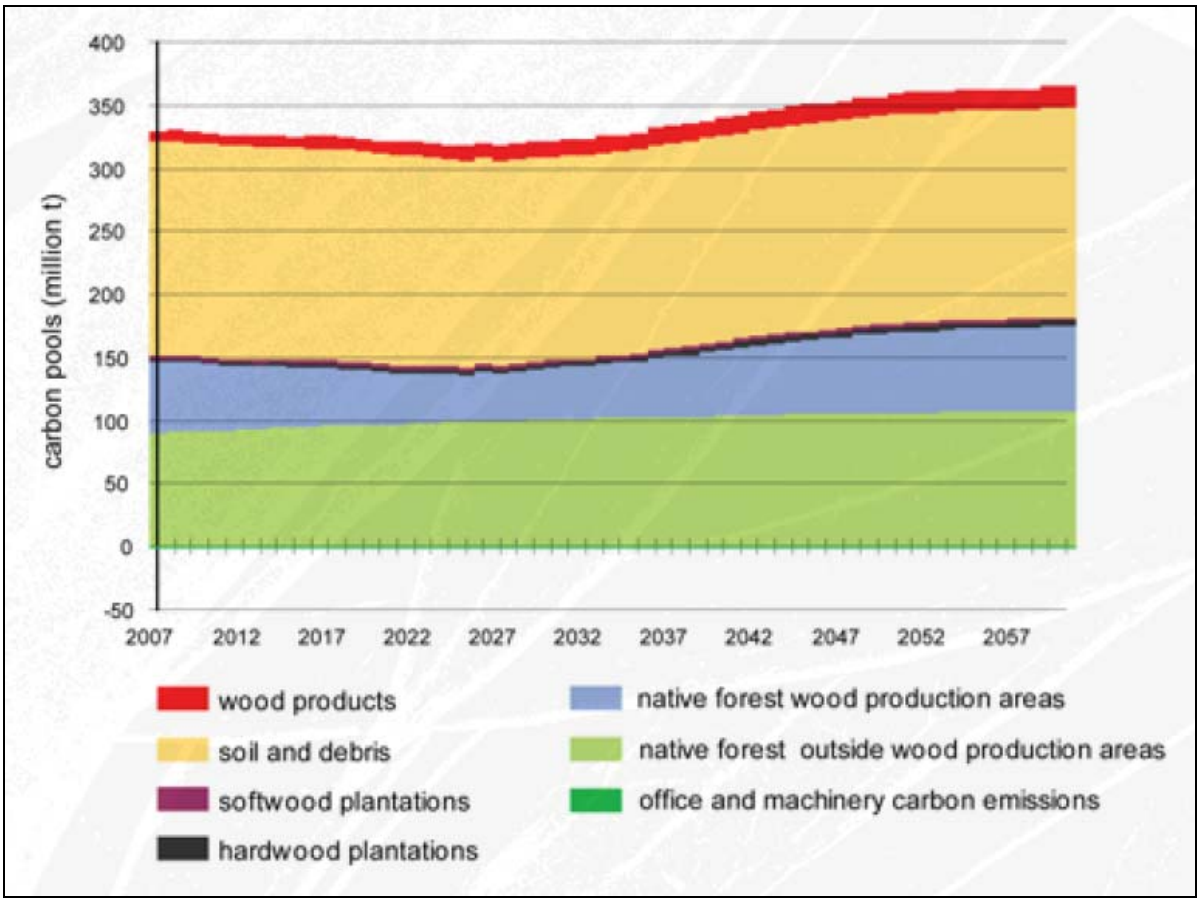

Figure 1: - Estimated carbon stock on State forest (note that depicted stocks are in millions of tonnes of carbon not carbon dioxide, one tonne of carbon equates to 3.67 tonnes of carbon dioxide) - reproduced from Forestry Tasmania's Sustainable Forest Management 2007 Report, Figure 18.

As the 1.5 million hectares of forest on State Forest represents only 45% of Tasmania's 3.35 million hectares of forest (Tasmanian and Australian Governments, 2007), it is possible that the overall Tasmanian position might show an even greater net sequestration. As a matter of urgency the analysis undertaken for Forestry Tasmania (MBAC Consulting Group, 2007) should be expanded to include the remaining forested lands in Tasmania.

3.4 The achievability of the target

FIAT has undertaken a simple analysis to determine the achievability of the 60%-reduction target. The analysis examined the target assuming two methods of estimating emissions and the emissions baseline (Table 1 below):

- the Kyoto Protocol accounting framework; and
- the Kyoto framework with the addition of the estimated carbon stock change of Tasmania's State Forest estate.

Table 1: Estimating the achievability of the 60% reduction in emissions below 1990 levels - Kyoto emissions estimates for 1990 and 2005 after AGO (2007).

		1990	2005	2050
population Tasmania		464,520	485,263	453,000
kyoto framework emissions categories	Stationary Energy	2.3	2.4	1.7
	transport	1.6	1.8	1.3
	fugitive	0	0	0.0
	industrial processes	1	1.1	0.8
	Livestock	1.8	1.6	1.2
	Other Agriculture	0.5	0.6	0.4
	forestation	0	-2.1	0
	deforestation	6.7	5.1	0
	waste	0.4	0.4	0.3
kyoto	**total**	**14.3**	**10.9**	**5.8**
	below 1990	**0%**	**24%**	**60%**
state forest		1.5	2.5	-5.5
kyoto + forest	**total**	**15.8**	**13.4**	**0.3**
	below 1990	**0%**	**15%**	**98%**

notes :	
	per-capita reduction 22%
	deforestation and reforestation estate size stablised
ABS (2006). 3222.0 - Population Projections, Australia, 2004 to 2101 - median position	
MBAC (2007). Forestry Tasmania's Carbon Sequestration Position	
	no data - assumed value

As depicted in Table 1 above, FIAT estimates that Tasmania can achieve a 60% reduction in emissions in 2050 relative to 1990 levels, calculated according to the Kyoto Protocol accounting framework if:

- Tasmania's population in 2050 is 453,000 (as predicted by the ABS, 2006 - median position); and
- Net emissions resulting from land-clearing and forestation (Kyoto Article 3.3) are zero on the expectation that the area of the Tasmanian forest estate will have stabilised well before 2050 and sequestration will be in balance with emissions for the deforestation-reforestation estate; and
- Per-capita emissions associated with all other Kyoto emissions categories are reduced by 22% (the estimated reduction to achieve 60% overall considering other assumptions).

If Tasmania's State Forest is included in the estimation of emissions, both in the baseline and in 2050, and with the assumptions as described above, Tasmania's emission in 2050 could be 98% below 1990 levels (Table 1).

3.5 The Immediate Action Program to reduce Government emissions

Whilst not specifically described in the draft Bill, the *Immediate Action Program to reduce Government emissions* is described on the Tasmanian Government's Climate Change Office web-site (www.climatechange.tas.gov.au) and FIAT considers it appropriate to comment on some aspects of the *Immediate Action Program* before they become too entrenched or appear in regulations stemming from the new bill.

FIAT applauds the Tasmanian Government on its endorsement of Dr Kate Crowley's *Framework for Reducing the Tasmanian Government's Greenhouse Gas Emissions*.

3.5.1 Carbon neutral Government air travel

There is a current inquiry being undertaken by the Australian Competition and Consumer Commission around the issue of The Trade Practices Act and carbon offset claims.

FIAT has some serious reservations regarding the appropriateness of investing in carbon-offsets which are currently offered as an optional extra charge on the purchase of airline tickets. FIAT believes the purchase of the current airline offsets are not beneficial for Tasmania and Tasmanians and arguably of little value to the planet.

An existing supplier of carbon offsets for airline travel sells carbon offsets at a price of around $16 per tonne of carbon dioxide sequestered. This scheme functions by promising to sequester the purchased credits over the subsequent 30 or 50 years, then to guarantee the sequestered carbon remains stored for a further 100 years.

FIAT strongly believes that a carbon offset credit should represent carbon actually sequestered and stored, not carbon that is expected to be sequestered in the future. This would require a modification of the scheme mentioned to allow annual sales of credits equal to the actual amount of carbon sequestered in the growing trees during the preceding 12 months. The purchase of promised future carbon sequestered is rife with potential difficulties including the risks of tree death by wildfire or disease.

Further, a guarantee to keep the carbon stored for 100 years should not be considered permanent, particularly given the problem of a build up of atmospheric carbon dioxide is due to the release of carbon that has been stored outside the atmosphere/biosphere as coal or oil for the last 50 to 200 million years. Further, the concept of offsetting the carbon dioxide released today by "locking up" land for the next 130+ years is contrary to the accepted philosophy of sustainable development, being "*development that meets the needs of the present without compromising the ability of future generations to meet their own needs*" (WECD 1987).

It is much more sensible to grow trees which can be utilised to make useful products or to use as fuel, than to grow trees which are to be locked up as standing stores. For a start, there simply is not enough land on the planet for us all to compensate for our emissions by locking up land under trees. Further, recent decisions by Government to prohibit the

growing of trees on certain agricultural land could be seen to be in conflict with the need to grow more trees.

The real and verifiable use of forest and wood-based emissions offsets will make a significant contribution, not only to Tasmania, but also to the national and global greenhouse amelioration effort.

3.5.2 Tasmanian carbon offsets scheme

FIAT applauds the Tasmanian Government on the commitment to establish a Tasmanian carbon off-set scheme.

FIAT supports a carbon offset scheme that recognises the true credentials of forestry, wood and wood-based products including biomass-based energy systems, and welcomes the development of such a scheme. As such FIAT strongly urges the Tasmanian Government to make the scheme real, credible and useful - that it involves the growing of trees for utilisation for useful wood products that can continue to store carbon whilst in service, and which can be burned at end-of-life in purpose-built energy plants.

3.5.3 Energy efficiency in Government buildings

FIAT applauds the Tasmanian Government on the commitment to improve energy efficiency in government buildings. However, the wording on the web-site describing the Governments measures is dangerous - the following point (from the web-site) refers to building environmental rating via “green star”.

> • All new Government office buildings, including education and healthcare facilities, must meet minimum green star ratings.

Green star is a specific rating tool of the Green Building Council of Australia (GBCA - www.gbca.org.au). Whilst the web-site wording (reproduced above) does not specifically refer to the GBCA's "green star" rating system, and was probably intended to refer to environmental rating tools generally, FIAT has been advised that the words "green star" would only be interpreted as referring to the GBCA green star rating system. Under the existing rules of GBCA's "green star" rating, no Tasmanian timber would achieve the "sustainable timber" points in the rating (see current criteria in Appendix 1) - this is patently ridiculous.

The bulk of Tasmanian timber, and all timber from Tasmanian State Forest, comes from forests certified as being sustainable under the internationally recognised Australian Forestry Standard. The timber industry nationwide is currently trying to change the GBCA criteria for sustainable timber, but whilst the criteria remain discriminatory towards Tasmanian timber the Tasmanian Government should ensure that there is not even a suggestion that the GBCA's "green star" rating system will be applied to new Government buildings.

FIAT suggests the wording on the web (reproduced above) should be altered to read:

- All new Government office buildings, including education and healthcare facilities, must meet minimum environmental ratings.

This does not alter the intent, but avoids introducing the suggestion that GBCA's green star environmental rating system will be used.

3.6 The demand for carbon offsets

The "feel-good" factor

To date the majority of carbon offsets have been purchased either for personal "*feel-good*" reasons or corporate "*be-seen-to-be-good*" reasons.

For example, an individual flying between Australian capital cities pays a bit more for an airline ticket to include the purchase of offsets to account for the greenhouse gas emissions calculated by the airline to be attributable to the passenger making the flight. The passenger feels good for this.

As a further example, a multinational corporation with an estimated annual emissions load of 100 million tonnes of carbon-dioxide equivalents buys forest-based offsets equivalent to 0.2% of its total emissions. The corporation is "being seen to be good" for this.

Thus carbon offsets have thus far been predominantly for wealthy individuals and corporations, and have arguably done little if anything to reduce net emissions.

As a component of an Australian Emissions Trading Scheme

Australia is proposing to introduce an Emission Trading Scheme in 2010 as a mechanism to limit and reduce greenhouse gas emissions - a component of the scheme will be the use of carbon offsets to compensate for emissions. Forestry and the use of forest products provide a real and verifiable avenue for both reducing net emissions and storing atmospheric carbon.

As identified in a recent report by McKinsey and Company (2008), forestry can provide one of the cheapest ways for Australia to offset its greenhouse emissions. McKinsey and Company (2008) estimated forestry could provide abatement equivalent to around 110 million tones of carbon dioxide equivalents per year by 2020 (equivalent to around 20% of Australia's current greenhouse gas emissions load).

In contrast with feel-good motivations for purchasing carbon offsets, the real and verifiable use of forest and wood-based emissions offsets will make a significant contribution to the national and global greenhouse amelioration effort.

4. Further information

FIAT thanks the Tasmanian Government and the Tasmanian Climate Change Office for the opportunity to submit comments on the carbon offsets issues paper and we look forward to further constructive dialogue in the future. Please do not hesitate to contact FIAT for clarification or further information at:

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Appendix 1: Criteria for "sustainable timber" GBCA "green star" credits

Credit Criteria

One point is awarded where 60% of the timber used is either post-consumer re-used timber or complies with 3 of the sustainability criteria below; the remainder of the timber used in the project must not have come from old-growth forests:
Two points are awarded where 95% of the timber used is either post-consumer re-used timber or complies with **3** of the sustainability criteria below; the remainder of the timber used in the project must not have come from old-growth forests:

- **Conversion of native forest to plantation**. Plantation timber must not have come from a plantation located on a site which was developed from native forest after November 1994 [in line with FSC and will allow FSC timber to automatically comply]. Timber from plantations established after this date will still comply if the plantation was located on land cleared prior to this date. For example, a plantation established in 2000, on farmland that was cleared in 1960, will comply. Timber sourced from a plantation established on a site from which native forest was cleared after 1994 will not comply with this credit.
- **Chain of custody**. Evidence of a chain of custody is required to demonstrate that the product delivered was produced at a certified sustainably managed forest. Chain of custody ensures that only wood that has come from a certified sustainably managed forest is sold/labelled as such. Compliance with this credit can be demonstrated by provision of proof of chain of custody from a recognised forest certification scheme (such as FSC, AFS, PEFC, etc). Timber that does not have a chain of custody from a forest certification scheme will not comply with this credit.
- **Protection of old-growth forests**. Timber must not have come from the logging of old-growth forests. The GBCA recognises old-growth forests as insert definition. Wood demonstrated to have come from a plantation forest will automatically comply, however note that plantation timber must also comply with the 'Conversion of native forest to plantation' sustainability criteria. Timber that has been sourced from an old-growth forest will not comply with this credit.
- **Protection and maintenance of biodiversity and threatened species.** Native forests must be managed to maintain and protect biodiversity, and forests containing threatened, vulnerable and/or endangered species must be managed to protect and conserve the habitat and life-cycles of those species. Issues to be addressed include:
  - Prevent fragmentation of habitats and ecosystems;
  - Protect from invasion by exotic species. For a plantation this will include measures to prevent plantation, biological agents and pest species (such as opportunistic weeds) spreading into native forest areas;
  - Where possible, minimise the creation and impact of the 'edge effect'
  - Protect succession;

    - Protection of habitat;
      - Protection of breeding spaces;
      - Protection of food resources; and
      - Protection of travel routes.

If the material cost of the timber represents less than 0.1% of the project's total contract value then this credit is 'Not Applicable' and is excluded from the points available used to calculate the Materials Category Score; type "NA" in the appropriate 'No. of Points Achieved' column of the rating tool.