



Submission by the
Forest Industries Association of Tasmania

to

Climate Change Group
Department of the Prime Minister and Cabinet
emissionstrading@pmc.gov.au

on the

Discussion paper on
Abatement Incentives Prior to the
Commencement of the Australian Emissions
Trading Scheme

1 December 2007



Forest Industries Association
of Tasmania



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Overview

The Forest Industries Association of Tasmania (FIAT) welcomes the opportunity to provide feedback on the discussion paper on Abatement Incentives Prior to the Commencement of the Australian Emissions Trading Scheme.

FIAT endorses and supports the comments made on the Abatement Incentives Prior to the Commencement of the Australian Emissions Trading Scheme by:

- The National Association of Forest Industries; and
- Forest Enterprises Australia Limited.

Wood is stored atmospheric carbon and solar energy, and wood and wood-based materials are the only materials that our society has at its disposal which are truly renewable, and the alternatives (plastic, metals, masonry, glass, and animal products) all require a great deal more energy to make with resultant greater emissions. FIAT supports an Australian Emissions Trading Scheme that recognises the true credentials of wood and wood-based products including biomass-based energy systems, and welcomes the development of such a scheme.

FIAT congratulates the Climate Change Group of the Department of Prime Minister and Cabinet on their work to develop the foundations of the AETS thus far, however we have two principal concerns with the Abatement Incentives discussion paper, being:

(1) That the stated requirement that for abatement projects to be eligible for inclusion in an Australian Emissions Trading Scheme is that they must demonstrate financial- and business-as-usual additionality.

(2) FIAT strongly believes that Forestry (reforestation and afforestation) and Forest management should be covered sectors.





FIAT strongly oppose the requirement that for an abatement project to be eligible it must be established post 3 June 2007: FIAT submits that all Kyoto-compliant plantations established after 1990 should be eligible to be considered as abatement projects under an Australian Emissions Trading Scheme.

FIAT is very concerned that the structure of the Australian Emissions Trading Scheme should represent the true credentials of forestry and wood products. We look forward to the inclusion in the AETS of the now recognised value of wood products as a store of atmospheric carbon (Report of the Prime Ministerial Task Group on Emissions Trading, 2007).





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 an Australian Emissions Trading Scheme and welcome the opportunity to comment on the Discussion paper on Abatement Incentives Prior to the commencement of the Australian Emissions Trading Scheme.

FIAT's role is described in our Annual Report as follows: -



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.





Forestry and land use should be included as covered sectors

It is proposed that forest management will be initially excluded from an emissions trading scheme:

“Emissions from agricultural production, forestry and land use are referred to as ‘uncovered’ activities because they will not be included within the scheme initially.” (p.3, section 1, Abatement Incentives discussion paper)

and

Agriculture, forestry and land use (sectors) were defined as being: “Not suitable for initial inclusion. Improved and more cost effective measurement methodologies to be developed” (p.185, PMC 2007).

FIAT believes that forestry, including native forest management must be covered activities under an Australian emissions trading scheme.

FIAT understands that Australia opted not to report on Forest Management under Article 3.4 of Kyoto Protocol, the principal reason being concern that there is *“an unlimited potential debit (in emissions) from risk of extreme fire events etc. as may occur in 2008-2012”* (p.20, DEH - see references). This is a reporting concern, and not reflective of the global issue of greenhouse gas emissions.

FIAT strongly believes that rational, sensible and transparent coverage of all sectors is in the long term benefit of Australia and the planet. Forestry and forest products sectors are greenhouse positive: the emissions associated with wood are so much less than the emissions associated with other products (see Table 1 below) and wood/plant based energy systems are renewable and sustainable (as long as the sun continues to shine). In the words of the IPCC:



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“Mitigation options by the forestry sector include extending carbon retention in harvested wood products, product substitution, and producing biomass for bio-energy.” (p.543, IPCC (2007)).

That is:

- we should be using more wood products, particularly if they can be substituted for products such as steel, aluminium, plastic and concrete;
- we should be cleverer about how we use wood - developing ways to do more with less, for example through development of engineered wood products; and
- we should be using wood-based residues, both from wood processing and from the forest, for renewable biomass-based energy production.

Table 1: Embodied greenhouse emissions by construction option for a single storey house in Sydney - in tonnes CO₂ equivalents for the house (source: CRC for Greenhouse Accounting - see references).

Construction component	Option 1	Greenhouse gas emissions (CO ₂ e)	Option 2	Greenhouse gas emissions (CO ₂ e)
Floor structure	Timber sub-frame	1.9	Concrete slab	12
Floor covering	Hardwood T&G laid on particleboard	0.4	Ceramic tiles	5.2
Wall frame	Timber	0.4	Brick	6.8
Roof frame	Timber	1.2	Steel	5.3
Windows	Timber	0.8	Aluminium	2.2
	Total	4.7	Total	31.5

Whilst there is incomplete coverage of emissions accounting, reporting and trading there remain possibilities for undertaking activities, endorsed and/or encouraged by distorted emissions reporting structures, that are not just ineffectual but can be detrimental and result in net increases in emissions. For example, the existing 5-Star requirements within the Building Code of Australia which, whilst having the “Energy Efficiency” objective being: “... to reduce greenhouse gas emissions by efficiently using energy.” (p.73, Volume Two, BCA 2007 - (ABCB 2007)) do not consider **embodied emissions** or



embodied energy, yet make rules regarding construction methods based upon the estimated **operational energy** usage of resulting structures. The Australian Building Code currently deems a concrete-slab-on-ground floor system to meet 5-Star operational energy requirements, whilst a raised timber floor/sub-floor does not. Yet the embodied emissions associated with the concrete are estimated to be more than six times that of the wooden floor (Table 1 above): for a generic house in Western Sydney the embodied greenhouse gas emissions in the concrete floor as compared to the timber floor would be paid back through operational energy savings in approximately 62 years (AGO 1999) - in Hobart the payback period is around 150 years (FIAT estimate). The requirements of the Australian Building Code are encouraging a shift away from timber floor construction towards concrete, resulting in a net national increase in overall greenhouse emissions, all under the ideology of reducing emissions.

In the Report of the Task Group on Emissions Trading (PMC 2007), Agriculture, forestry and land use (sectors) were defined as being: "*Not suitable for initial inclusion. Improved and more cost effective measurement methodologies to be developed*" (p.185, PMC 2007). FIAT acknowledges that defining the structure of an Australian Emissions Trading Scheme will be complex and demanding, and that the necessary methods for accounting for emissions associated with forestry, forest management, both in production forests and in reserves, and wood products (including the benefits of carbon stored in wood products) is a significant task, but we say not an insurmountable one.

FIAT strongly believes that whilst forest management, including native forest management both in production forests and reserves, and carbon stored in wood and wood products, are not included in emissions accounting, reporting and trading, that there is the significant potential that the resulting distortions between sectors will discourage the use of wood and wood products in favour of much more emissions-intensive products (steel, aluminium, plastic and concrete). This will have the detrimental net result of an increase in national emissions.



Coverage of emissions accounting, reporting and trading must include all sectors in which emissions and sequestration are significant. Forests are essentially stored emissions, as are wood products. Appropriate management of forests can significantly influence emissions levels, through management to optimise growth rates, management to minimise unwanted wildfires, and sensible use emissions-storing wood and wood products. It is imperative that emissions accounting, reporting and trading sends the right market signals to truly promote a net reduction in greenhouse gas emissions.

In simplistic terms FIAT contends that Australia's carbon accounting must be an accurate and comprehensive analysis of emissions and sequestration of greenhouse gases unsullied by arbitrary judgements that some issues are "too hard" or may produce a political outcome that is unpalatable.





Standards for abatement recognised by the scheme (Section 3.1)

Issues for stakeholder consideration

It is proposed that credits only be provided for activities that represent abatement that has actually occurred, is additional, permanent, measurable, and verifiable.

FIAT endorses the five core requirements for abatement activities, as we believe these requirements to be crucial in allowing for the creation of offsets that are credible and tradeable both within Australia and internationally.

FIAT has serious concerns, however, regarding the drafted definition of “additional”.

On the requirement for additionality

FIAT considers “environmental” additionality (being that greenhouse gas emissions reductions would not have occurred if the project had not been implemented) is an appropriate additionality criteria for abatement projects and recognises the actual reduction of greenhouse gasses.

FIAT strongly believes that the drafted requirements for financial and business-as-usual additionality are inappropriate in the context of forestry and re/afforestation projects.

Documented arguments for the requirements of financial and business-as-usual additionality are:

- to meet internationally recognised standards; and
- why should someone purchasing offsets be paying for greenhouse savings from projects that would have happened anyway?

These arguments are discussed below.





Additionality and need to have internationally recognised abatement

“To meet internationally recognised standards for environmental integrity, offsets should represent abatement that is additional, has actually occurred, and is permanent, measurable, and verifiable.” (section 3.1, p.8, Abatement Incentives discussion paper).

Whilst some “internationally recognised” standards require additionality (e.g. the Clean Development Mechanism under the Kyoto Protocol (CDM - see references)), others do not - the following schemes and standards do not require either financial or business-as-usual additionality:

New Zealand Emission Trading Scheme

New Zealand has begun the process of design and implementation of a national emissions trading scheme which will be internationally compatible. New Zealand is signatory to, and has ratified, the Kyoto Protocol, and has the expectation that New Zealand Units traded within New Zealand will be “fully comparable with, and backed by, Kyoto units” (p.16, New Zealand Government (2007)).

There is no requirement for financial additionality for forest sequestration projects within the proposed New Zealand scheme.

National Emission Trading Taskforce (2006)

The proposed National Emissions Trading Scheme requires environmental additionality, but does not require financial additionality:





It is proposed that an offsets project under the NETS must be able to demonstrate that it reduces emissions beyond a plausible baseline and that it meets specific project eligibility tests, including the regulatory and legal requirements of the relevant jurisdiction. If this is possible, then the project would be deemed to be additional.

It is not proposed to specifically require the demonstration of financial/investment additionality on a project-by-project basis. Further input from stakeholders is sought on this issue.

Reproduced from page 68, National Emission Trading Taskforce (2006).

ISO 14064-2:2006

International standard for greenhouse gas abatement projects: ISO 14064-2:2006: “Greenhouse gases -- Part 2: Specification with guidance at the project level for quantification, monitoring and reporting of greenhouse gas emission reductions or removal enhancements.”

There is no requirement under ISO 14064-2:2006 for financial or business-as-usual additionality.

NSW GGAS

There is no requirement under the internationally recognised NSW GGAS scheme (GGAS 2003) for financial or business-as-usual additionality for projects.

Additionality for Greenhouse gas abatement projects in the USA

FIAT understands that in the United States of America “environmental” additionality is a necessary criteria for greenhouse gas abatement projects, and that “financial” additionality is considered to be inappropriate in a free trading market and not an accepted requirement.



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The above comparison with other schemes demonstrates that the inclusion of financial and business-as-usual additionality is not a requirement for international recognition and compatibility.

Additionality and the requirement that abatement projects are not business-as-usual

“Additionality makes intuitive sense - why should someone purchasing offsets be paying for greenhouse savings from projects that would have happened anyway?” (AGO 2007).

With respect to the AGO we say this observation entirely misses the key point that the project, whether meeting “financial” additionality requirements or not will be offsetting carbon emissions, in fact, and will therefore be contributing to a reduction in greenhouse gasses in the atmosphere. As a country Australia recognises this through including such sequestration in its international reporting but then intends, inexplicably, to remove such sequestration from domestic emissions trading.

The forest industries generally and FIAT membership specifically have long understood the role of forestry and wood products in sequestering and storing atmospheric carbon. To deny forest growers the right to claim the carbon sequestered through their efforts is unreasonable, particularly given the country will be counting the sequestered carbon as an offset for emissions in the internationally reported emissions accounts.

FIAT also believe the “financial” additionality criteria will act to the detriment of industry participants whose normal business pursuits are the growing of trees, as they may be unable to trade credits whilst competitor growers for whom tree planting is not business-as-usual will be able to claim and trade credits. We regard this as an entirely unfair and





unreasonable competitive disadvantage to FIAT members ordinarily engaged in tree planting.

This disadvantage does not appear to be rational and is not reflective in any way of the actual capture of carbon through sequestration, as that sequestration will occur no matter which corporation undertakes the planting and regardless of whether or not the test of “financial” additionality is met.

FIAT believe that Australia’s carbon accounts and any resultant emissions trading scheme must be based on actual emissions and actual sequestration else they will be little more than a politically doctored version of the factual situation.

On the economics of financial and business-as-usual additionality

Under a Social Cost-Benefit Analysis greenhouse gas abatement flowing from business-as-usual activities would be demonstrated to be *Pareto Optimal*¹ and should be recognised.

In the considering the question:

“Additionality makes intuitive sense - why should someone purchasing offsets be paying for greenhouse savings from projects that would have happened anyway?” (AGO 2007),

the answer is to be found in the economic principles underpinning Social Cost Benefit Analysis (SCBA) which is the economists standard toolkit for evaluating the welfare effects of a planned project.

A social cost benefit analysis matches the benefits of a particular project in each period (*i*) with the costs (C_i) in each period. The difference between benefits and costs

¹ A Pareto optimal outcome is one such that no-one could be made better off without making someone else worse off (<http://moneyterms.co.uk/p/>)



constitutes the net benefit stream in each period and the discounted sum of these net benefits constitutes the Net Present Value (*NPV*) of the project over a planning horizon (*n*) usually commensurate with the life of the project. The SCBA calculation reads as follows:

$$NPV = \sum_{i=0}^n \frac{(B_i - C_i)}{(1+r)^n}$$

The discount rate (*r*) is either a social marginal rate of time preference of the cost of capital and its selected value is occasionally controversial. The project is neither viable, in the public interest or *Pareto Optimal* if the NPV is negative and is generally only undertaken if the NPV is positive. Note that benefits include social benefits and also private benefits usually in the form of income streams and costs include both private (to the developer) and social costs such as pollution of the environment. On the other hand a negative social cost such as a reduction of pollution levels is a social benefit.

By way of relevant example, suppose a timber growing and processing company decides to extend its plantations then in the nominal Social Cost-Benefit Analysis process the reduction it engenders in greenhouse gas emissions abatement as a result should be included in the NPV calculation. Its omission will understate the public benefit of the project. It does not matter that the benefit was created in the normal course of business and it is important to recognise that the *Pareto Optimality* condition is met regardless of the source of the abatement. The *Pareto Optimality* condition states that a project must make someone better off in terms of their welfare while not making anyone else worse off. Thus greenhouse gas abatement flowing from normal or business-as-usual activities is *Pareto Optimal* and should be recognised.





Eligible activities (Section 3.2)

Issues for stakeholder consideration

To be eligible, it is proposed that projects would need to be established after 3 June 2007.

FIAT consider this requirement to be inappropriate for forestry and re/afforestation projects.

The forest industries generally and FIAT membership specifically have been investing in reforestation projects for many years, with a significant underlying principal to the investment being that an (unquantified) additional benefit would be derived from the value of sequestered atmospheric carbon. FIAT members have remarked that they had every expectation that the reality of carbon sequestration would be a driving force underpinning any trading scheme.

Whilst FIAT accepts that only abatement occurring after 3 June 2007 will be eligible for inclusion in an emission trading scheme, FIAT considers that restricting eligible abatement to projects established after 3 June 2007 to be quite unreasonable and counter-intuitive.

Given that the quantity of atmospheric carbon sequestered by Kyoto-compliant plantations established after 1990 (re/afforestations) is included as an offset in Australia's internationally reported emissions estimates, it seems only reasonable that any such Kyoto compliant plantations should be includable in an Australian emissions trading scheme.

FIAT submits that all Kyoto-compliant plantations established after 1990 should be eligible to be considered abatement projects under an Australian Emissions Trading Scheme as these plantations do, in fact, sequester carbon and thereby reduce greenhouse gasses in the atmosphere.



Further information

FIAT thanks the Climate Change Group of the Department of the Prime Minister and Cabinet for the opportunity to submit comments on the discussion 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:

Forest Industries Association of Tasmania
GPO Box 1682, Hobart, Tasmania, 7001
Telephone (03) 6224 1033, Fax (03) 6224 1030
Email fiat@fiatas.com.au

Terry Edwards
CEO - Forest Industries Association of Tasmania



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