

BEDP ENVIRONMENT DESIGN GUIDE

TIMBER AND WOOD PRODUCTS FROM ENVIRONMENTALLY CERTIFIED FORESTS AND PLANTATIONS

Andrew Walker-Morison

The note PRO 3 was originally published in November 2004, and was reviewed and expanded by Andrew Walker-Morison to form 3 papers:
 PRO 33: Timber and Wood Products from Environmentally Certified Forests and Plantations – Overview
 PRO 34: Timber and Wood Products from Environmentally Certified Forests and Plantations – Background
 PRO 35: Timber and Wood Products from Environmentally Certified Forests and Plantations – in Australia
This summary is the same for all 3 papers, although the papers themselves contain varying useful appendices and tables.

Summary of

Actions Towards Sustainable Outcomes

Environmental Issues/Principal Impacts

- Deforestation of high quality forest habitats continues and is a major cause of global biodiversity pressures.
- Many wood products, particularly imported wood products, continue to be sourced from areas where there is insufficient regulation or control in place to give confidence in sustainable forest management.
- In Australia there is evidence that native forest and plantation management has significant room for improvement, and that current practices may have an adverse effect on environmental sustainability.
- Plantation management is also a concern for some stakeholders, particularly through the clearing of forests for plantation establishment and the use of some chemicals.

Basic Strategies

In many design situations, boundaries and constraints limit the application of cutting EDGE actions. In these circumstances, designers should at least consider the following:

- Specify and demand wood products accredited by broadly-supported third-party environmental certification systems where possible. The range of such timbers available is expanding quickly, with increasing demand from specifiers being the most important driver of reform.
- Avoid timbers known to be at risk of coming from poorly regulated or illegally logged forests (refer Table 2 in PRO 34)
- Favour the use of locally grown (Australian and New Zealand) timbers and wood products where possible. Credible certified wood products should be the primary priority as the specification in Australia of certified products drives global demand for improved management, and lower-impact practices locally and globally.
- Utilise the decision-making tree in the note *PRO 30: Timber and Wood Products – Applications and ESD Decision Making*

Cutting EDGE Strategies

- Not all certification systems are third-party certified with chain-of-custody verification. Consider environmental claims against who is making the claim, and whether the claim is first party (self certification) second party (e.g. industry association certification) or genuinely independent third-party.
- Not all third-party certification schemes have equal credibility. There are a range of useful resources including this note to assess the differences between schemes. There is evidence that the best third-party schemes globally are delivering improved social and environmental outcomes.
- What constitutes 'sustainable forest management' is still poorly understood and the subject of intensive research. There is ample evidence that existing management practices, even in certified areas, will need to be improved to deliver environmental sustainability in the longer term. Striving for best possible practice now is crucial.
- When comparing schemes, consider in particular the breadth of stakeholder input, the degree of transparency and accountability, and the recommendations of key stakeholders in informing your approach. Most stakeholders have important perspectives in the protection and management of forests, which are a crucial component of global climate and biodiversity protection. No stakeholders' interests should be discounted. Standards that have multi-stakeholder support are likely to be more durable and deliver better outcomes for environmental management.

continued

Synergies and References

- Refer to the appendices in the companion papers mentioned above.
- There are a range of further useful resources at the end of this note. This note does not recommend any one reference at the time of writing as definitive.
- For information about the conservation status of global forests refer to the UN-WCMC site <http://www.unep-wcmc.org> and FAO's <http://www.fao.org/forestry/index>
- *BEDP Environment Design Guide: PRO 30: Timber and Wood Products – Applications and ESD Decision Making*

BEDP ENVIRONMENT DESIGN GUIDE

TIMBER AND WOOD PRODUCTS FROM ENVIRONMENTALLY CERTIFIED FORESTS AND PLANTATIONS – BACKGROUND

Andrew Walker-Morison

Rapid advancement and change within Australia's predominant timber certification schemes has led to the revision of the original November 2004 paper PRO 33: Timber and Wood Products from Environmentally Certified Forests and Plantations. That paper now forms the summary for the extended content contained within the paper PRO 35: Timber and Wood Products from Environmentally Certified Forests and Plantations – in Australia, and this paper.

The note finds that certification appears to be generally leading to improvements in forestry practices in Australia and internationally. Whether certification is yet leading to truly 'sustainable' forestry is less clear. Specifiers are encouraged to use certified timber over uncertified timber, but to be aware that certification standards differ, to understand these differences, and to make an informed choice accordingly

Keywords

Australian Forest Standard (AFS), certification schemes, chain of custody, forest management, Forest Stewardship Council (FSC), timber, stakeholder participation

1.0 INTRODUCTION

Environmental certification in this paper refers to the process of verifying compliance with a standard of management for forests and plantations. Reputable forest certification is offered in conjunction with a chain of custody¹ and labelling program that allows customers to distinguish between different product offers. The overall goal of certification has been described as 'adoption of standards that will ensure forest management is environmentally sensitive, socially aware, and economically viable' (Upton and Bass, 1995). Internationally there are now a number of certification schemes.

This paper seeks to:

- introduce the concept of forest certification to practitioners
- overview stakeholder interests and perceptions of the schemes in Australia
- discuss trends
- provide a list of information resources

2.0 IMPORTANCE OF FOREST ENVIRONMENTAL CERTIFICATION

Forests constitute some of the most species-rich environments on earth, and globally support the vast majority of land-based species. Forests are crucial to global water, carbon and oxygen cycles, play a crucial role as carbon 'sinks', and provide economic and social infrastructure for hundreds of millions of people (UNEP, 2007).

About half of all ancient forests have been cleared, mostly in the last 30 years (UNEP/DEWA/Earthwatch, 2007). According to the United Nations Environment Programme the result is that many remaining forests are "small, disturbed, and unable to sustain themselves". However, 40 per cent of the total forest area remaining can still be found as large, relatively intact and undisturbed natural forests, referred to as **frontier forests**. These play an essential role in maintaining biodiversity, especially protecting indigenous species, and sequestering carbon, with forest clearing and biomass burning in 2006 accounted for 23 per cent of global greenhouse emissions (Commonwealth of Australia, 2007a). Unfortunately, these forests are under increasing threat as a consequence of the world's growing economies, increasing consumption, and population with demands for new land (UNEP/DEWA/Earthwatch, 2007). The United Nations Environment Programme identifies logging as a significant pressure on critical frontier forests, along with energy development and agriculture. Preventing illegal logging is a growing global concern (Globe International 2007). Governments including Denmark, Norway, Germany, UK, Belgium, the Netherlands, Japan, New Zealand and Australia have been developing and implementing legal and/or sustainable wood procurement policies (Proforest 2007a, 2007b). The Australian Government in October 2007 released a policy targeting illegal logging imports and supporting certification as a mechanism to assist in this, after finding that illegally-logged timbers were being used in Australia to the value of \$400 million per annum in furniture, paper and paperboard, plywood, sawn wood and miscellaneous items such as doors and mouldings (Commonwealth of Australia, 2007b).

¹ The mechanism designed to verify claims and ensure that products are accurately tracked through the supply chain. Refer section 4.0.

In Australia over 40 per cent of total pre-1750 forests and woodlands have been cleared, with some types and ecologies greatly reduced in their range. Thirteen per cent of Australia's remaining forests are environmental conservation reserves with approximately 70 per cent of this being 'old growth', and approximately 60 per cent of the total forest estate under private ownership or long-term lease arrangements (Keenan, 2005).

Approximately 10 per cent of the world's remaining forests occur inside formal protected areas, raising the question of how to ensure the sustainability of the balance. Forest certification, which now covers 8-9 per cent globally of all forests managed for wood production, has been described as being "potentially one of, if not the major influence on forest biodiversity in the foreseeable future" (Wintle and Lindenmayer, 2007). Plantations, an important and growing source of timber and wood fibre internationally, can also have significant environmental impacts and benefits. An important question is therefore what constitutes 'demonstrated environmental performance' for forests and plantations, and whether existing schemes are delivering this performance?

As a result of these drivers a number of certification standards have been established internationally.

2.1 Wood Product Use in the Construction Sector in Australia

The construction sector is a major consumer of domestic and imported wood products, particularly

sawn timbers, and many of these products, as noted in Table below, raise concerns about environmental sustainability of reserve planning, management and harvesting. There is growing demand for improved environmental assurance on the sustainability of wood products from domestic policy makers, clients, the users of rating tools such as Green Star, and other specifiers.

Statistics on certified timber use are recorded by the Australian Bureau of Statistics (ABS), but at the time of writing are believed to be less than one per cent of imported wood products. As of February 2008 many Australian native forests and plantations have been certified to the Australian Forestry Standard (refer companion papers), however the percentage of these wood products sold with Chain of Custody certification is not known.

3.0 CERTIFICATION INTERNATIONALLY AND IN AUSTRALIA

- As a result of pressures to prevent forest degradation and the success of the first environmental certification scheme from the Forest Stewardship Council (refer to section 5.0 below), a large number of regional and national schemes have been established. These include FSC certification in many countries including Bolivia, Brazil, Canada (British Columbia and Ontario), Estonia, Germany, Russia, Sweden, the UK, and a

Material	Australian Production	Australian Exports	Imports (selected countries)	Total
Sawn hardwood	1 200 000 m ³	13 000 m ³	27 000 m ³ (Indonesia), 28 000 m ³ (Malaysia), 16 000 m ³ (Papua New Guinea), 15 (Chile)	1, 300 000 m ³ (hence construction approx. 715 000m ³)
Sawn softwood	3 600 000 m ³	103 000 m ³	141 000 m ³ (New Zealand), 86 000 m ³ (Canada), 52 000 m ³ (Czech Rep), 25 000 m ³ (Estonia), 16 000 m ³	3 900 000 m ³
Plywood	150,000 m ³	1 500 m ³	10 000 m ³ (Chile), 42 000 m ³ (Indonesia), 22 000 m ³ (Malaysia), 35 000 m ³ (China), 74 000 m ³ (New Zealand), 20 000 m ³ (Other)	350 000 m ³
Particleboard	1 000 000 m ³	3 000 m ³	11 000 m ³ (Germany), 11 000 m ³ (New Zealand), 15 000 m ³ (other)	1 000 000 m ³
MDF	800 000 m ³	50 000 m ³	17 000 m ³ (Malaysia), 32 000 m ³ (New Zealand),	500 000 m ³
(Veneers are not disaggregated in ABS data)				
Roundwood (largely radiata pine)		363 000 m ³		
Other wood based panel		2 000 m ³		
Veneer		1 000 m ³		
Other (sleepers)		3 000 m ³		
Doors (Number)			64 000 (Indonesia), 28 000 (Malaysia), 28 000 (Other)	

Table 1. Timber consumption in Australia 2005-6

These figures include all sectors, not only construction. Construction industry use is not specifically disaggregated in Australian Bureau of Statistics data, however 55 per cent of timber use is estimated to fall to the construction sector (ABS 2003). Figures are from ABS May 2007 and have been rounded up.

Source: Australian Bureau Agriculture and Resource Economics 2007

number of non-FSC schemes including: the American Tree Farm System (ATFS), Australian Forest Certification Scheme (AFS), CERTFOR Chile, Canadian Standards Association (CAS), a range of EU national schemes including for Finland, France, Sweden, Denmark, INMETRO/CERFLOR Brazil, Lembaga Ekolabel Indonesia (LEI), Living Forest Norway, Malaysian Timber Certification Council (MTCC), the US Sustainable Forestry Initiative Program (SFI), RSFC Russia.

- Globally certification has fallen under two broad competing labels; the Forest Stewardship Council (FSC), and the Program for Endorsement of Forest Certification Schemes (PEFC) that provides an umbrella label for schemes recognised by it, including most of the non-FSC schemes above and the Australian Forestry Standard. A

current list of schemes recognised by the PEFC can be found at <http://www.pefc.org> by searching 'members'.

4.0 UNDERSTANDING CERTIFICATION SCHEME TERMINOLOGY

Specifiers seeking to understand forest certification will encounter a variety of terms which may be unfamiliar. These include the following:

- 'First', 'Second' or 'Third-party' claim:** The ISO defines three types of claim with specific definitions for each. 'First party' claims are self-certification, for example, Timber Company X says its products are sustainable. A 'Second Party' claim is certification by a linked entity, such as an

Country	Species	Origin	Conservation Risk Arguments (uncertified wood products)	Certification Schemes available**
Australia	Hardwoods: various species, predominantly Eucalypts	Almost entirely native forest. Mixture of regrowth, mixed-age and old growth forests. Public and private land.	Well managed according to State and Federal Governments, and industry associations. Concerns cited by some scientists and ENGO's including protection of environmental values.	FSC, AFS
	Softwoods: primarily Radiata pine, Hoop pine, Slash and Caribbean Pine	Almost entirely plantation.	As above for forests. ENGO concerns expressed include chemical toxicity, and exotic species out-competing natives.	FSC, AFS
New Zealand	Largely softwoods: primarily Radiata pine	Almost entirely plantation	As above for plantations.	FSC
Canada	Softwoods: Western Red Cedar, Douglas Fir (Oregon)	Native forest, old growth forests	Well managed according to regional and national Governments, industry associations broadly. Concerns cited by ENGO's and some scientists regarding over-logging, erosion of biodiversity, loss of species, and degradation of ecosystem capacity in some areas.	CSA, SFI, FSC
Czech Republic Estonia	Coniferous (softwood) species (undifferentiated in statistics)	Unknown, probably combination old growth and plantation	Not able to be identified for this paper.	FSC
United States	Softwoods: Western Red Cedar, Oregon, Hardwoods: various USA hardwoods	Generally native forest. Generally old growth forests. Public and private land.	As per Canadian native forests above	FSC, SFI
Malaysia Indonesia Cameroons Ghana PNG Solomon Is	Hardwoods: various including Teak, Meranti, Merbau, Luan.	Generally native forest. Includes old growth forests. Public and private land.	According to the WWF 73% of forests cut in Indonesia, and 80% for Brazil, have been estimated to be illegal. Demand in Australia is typically because these timbers are naturally durable, and close-grained.	FSC, MTCC

Table 2. Timber species, origin, and conservation risk commentary

** Note only a small percentage of timber from countries will be available certified, and sometimes no certified product from countries listed may be available in Australia. Standards abbreviations: CSA: Canadian Standards Association Standard FSC: Forest Stewardship Council SFI: Sustainable Forestry Initiative AFS: Australian Forestry Certification Scheme PEFC: Program for the Endorsement of Forest Certification Schemes MTCC: Malaysian Timber Certification Council; LEI Indonesian Eco-labelling Foundation. Many national schemes such as the AFS, CSA, SFI, etc, are recognised under the umbrella PEFC (refer PEFC).
(Source: Author compilation)

industry association. A 'Third Party' certification is made by an unrelated entity preferably against an independently created, widely supported standard. Third-party claims such as those discussed here were developed because first and second-party claims were often found to lack credibility.

- **Standards:** the documents which set out the requirements that must be met by the forest manager, and against which certification assessments are made such as the Australian Forestry Standard (AS 4708-2007 and supplementary guidance) and the FSC Smartwood and Woodmark Interim Standards.
- **Certification:** the process of verifying that a standard has been met, through an auditing process by accredited independent certification bodies (such as SAI Global, Smartwood). Certification may be for a forest grower (against the forest management standard) or another party in the supply chain (e.g. a sawmill or distributor) against the Chain of Custody Standard (refer below).
- **Accreditation:** the mechanism for verifying that certification bodies comply with auditing standards required. For the Australian schemes this is conducted by Accreditation Services International (ASI) for FSC, and by the Joint Accreditation System of Australia and New Zealand (JAS-ANZ), which is a member of the International Accreditation Forum (IAF) for AFCS.
- **Chain of Custody:** the mechanism designed to verify claims and ensure that products are accurately tracked through the supply chain from forest floor to final sale, and guarantee that timber alleged to be from a given certified source is, through auditable systems and processes. This process must also track content to allow percentage-based claims, as both FSC and PEFC (and therefore AFS) schemes allow different logo and claims use on products with mixed (non-certified sources) as well as certified. There are two systems for making claims about end products that do not include 100 per cent certified wood. One is a threshold system requiring a product, or product group in the case of FSC, to achieve a certain threshold of certified content (e.g. 70 per cent certified content). The other is a volume credit system that works in a similar way to the Australian green electricity market: the proportion claimed to be certified at the end of the product process must correspond to the proportion of certified product entering that production process.
- **Non-certified content controls:** Both the FSC and PEFC have controls for the inclusion of non-certified content under mixed-product claims, seeking to ensure that content does not come from controversial sources.
- **System vs. performance standards:** Systems-based schemes (such as ISO 14000) require

systems, such as management and operating procedures, to be in place. They do not specify minimum performance targets, leaving these for resolution at an organisation level. Performance approaches aim to set minimum targets, e.g. The maintenance of forests by requiring a specific balance and range of species over time. Performance requirements are essential to allowing monitoring and assessment. Today all schemes combine system and performance requirements, but the balance varies.

5.0 CHALLENGES IN CERTIFICATION

As noted, the genesis of forest and later plantation certification lay in failure of existing legal and governance structures to halt the destruction of forests globally. Social sustainability was a central driver in the establishment of the first scheme, the FSC, which also aimed to protect people living in, or dependent upon, forests and forest products, including timber workers.

Forest certification has been described as being "designed to send a market signal to buyers that the products they purchase are derived from forests that are managed to particular environmental and social standards" (Metafore, 2007). The challenges for certification are numerous, including:

- Defining what constitutes 'sustainable forest management'. A broadly agreed definition does not exist, and ecologies and management criteria vary profoundly across the world. ISO 14021 explicitly forbids the claim 'sustainable' on the basis that no definitive methods exist for measuring sustainability or confirming its achievement' (ISO 14021, 5.5).
- Balancing interests and tradeoffs is central, with variables including protecting the environment, generating economic return, protecting amenity, and preserving social and spiritual values.
- Creating a certification framework that is not too onerous as to be cost-prohibitive, yet controlled enough to be credible and transparent with suitable dispute resolution mechanisms.

The area of certification has become contentious, with competing perspectives emerging not only on certification schemes, but on methodologies to assess the effectiveness of certification schemes. Numerous approaches and studies have been undertaken, but no broadly agreed methodology has been universally agreed. The Yale School of Forestry and Environmental Studies was commissioned to provide a way forward for those "baffled by the conflicting views on the applicability and market acceptance of alternative schemes" (Nussbaum and Simula, 2004). This report charted the areas of commonality and difference over two industry methods. The **Confederation of European Paper Industry (CEPI) Matrix and International Forest Industry Roundtable (IFIR) Framework**, and two NGO-backed methods, the World Bank - WWF Alliance **Questionnaire for Assessing**

the Comprehensiveness of Certification Schemes (QACC) and the Forest and the European Resource Network (FERN) report *Footprints in the Forest*. It found many similarities, and that these were increasing in number with time. These included:

- wide involvement of stakeholders in the standard-setting process
- even stakeholder influence and consensus use in the standard-setting process
- performance-based standards
- adequate procedures for resolution of disputes
- that procedures of certification and accreditation bodies were publicly available.

However, significant differences were also found. For example, the degree to which stakeholders should be *invited* or whether they must be *involved*, the detail required with which stakeholders are identified, whether decisions could be made by voting or whether decisions must be made through consensus, and whether field visits require demonstration that performance standards are being met (Nussbaum and Simula, 2004).

6.0 PRINCIPAL INTERNATIONAL CERTIFICATION SCHEMES

6.1 Forest Stewardship Council

The FSC was founded in 1993 by a range of forest industry, retail, and environmental and social non-government organisations coming together “to discuss how they could collectively improve global forest management, in the absence of political leadership on the issue” (Mason and Jones, 2007, p.1). While environmental groups were an important part of the foundation group and assisted with funding, they did not create the initiative. At the time of writing approximately 90 million hectares of forests and plantations globally are certified under the FSC (Spencer, 2007). The FSC is characterised by:

- A claim of ‘well managed’ forests and plantations.
- An inclusive stakeholder governance and decision making process. The FSC is run at both national and international levels through a governing body made up of three equally powerful interests or ‘chambers’. The three ‘chambers’ (one each for economic, environmental and social interests) and each must reach consensus standards to be ratified.
- The FSC system uses a set of 10 principles and 56 criteria for responsible forest management.
- Forest management standards prescribe indicators for each of the FSC principles and criteria

that can be audited by accredited certification bodies. Where possible these indicators are set out in national standards developed through an inclusive stakeholder process and endorsed by the three-chamber national governance body, as well as FSC International’s accreditation body, Accreditation Services International. Where national standards are not available, accredited certification bodies can develop Interim National Standards as in use at present in Australia (e.g. the SmartWood and Woodmark standards previously referred to). These are developed from standards from countries where similar conditions exist, any national standards that may exist and some consultation with local stakeholders.

FSC has three core labels to represent different types of claims in relation to FSC certified products. These are:

- **FSC Pure:** for 100 per cent FSC certified products
- **FSC Mixed Sources:** for products that may contain a mixture of FSC certified material and ‘controlled wood’²
- **recycled material**
The use of non-certified wood content in Mixed-Sources products (e.g. a panel product or garden furniture) is complex and contentious in both FSC and PEFC schemes. For the FSC, products can be labelled as FSC ‘Mixed Sources’ where a mixture of certified and ‘controlled wood’² are used, providing the amount of the product that is labelled as FSC corresponds to the amount of FSC material that is used in the production of that product. Hence if 20 per cent of the input is FSC certified only 20 per cent of the product group can be sold as FSC. The FSC also offers a threshold system where products containing more than 70 per cent FSC certified material (and the balance controlled wood) can label 100 per cent of the product group. However it is phasing this system out due to the problem of diluting FSC content.

Internationally, the FSC has established and maintained a strong reputation. Numerous reviews and reports find the system to be generally robust and credible (Central Point of Expertise on Timber, 2006; Fern, 2001). Findings of a 2006 report co-funded by the European Commission reviewing public procurement policy and certification schemes identified the following common threads in FSC reviews:

- FSC was exceptional in having continuous support from a large range of different interest groups (some who previously had problems coming to a compromise with each other).

² ‘Controlled wood’ is the chain-of-custody mechanism used by the FSC to try to ensure non-certified wood comes from acceptable sources, e.g. illegally cleared rainforest. Controlled wood must not be from illegal sources, harvested in violation of traditional or civil rights, from high-conservation value communities, from areas being converted from forest, or from areas with genetically modified trees (FSC International 2006, *FSC Controlled Wood Standard for Forest Management Enterprises FSC-STD-30-010 (Version 2-0) EN*, Bonn, October, <http://www.fsc.org>). The FSC has established an online database to assist suppliers identify problematic sources (FSC International 2008, *Forest Stewardship Controlled Wood Toolkit*, <http://fsccontrolledwood.org/>).

- That meaningful participation is related to the balance of powers within the FSC voting system, and the transparency of report findings that support the possibility of suspension (for breaching requirements).
- The FSC operates under publicly available performance standards that are generally stricter than those of other schemes.
- FSC shows higher audit intensity than other international schemes.
- Through public reporting of Corrective Action Requests which are remedial actions required by an auditor, 'the FSC has the ability to demonstrate measurable performance, and in most cases, a significant improvement of forest management is apparent' (Mechel et al, 2006 p.9).

However the FSC has not been without its critics:

- In 2002 a Rainforest Foundation report *Certifying the Uncertifiable* listed concerns about quality assurance, certification of companies implicated in human rights abuses, vested corporate interests of certifiers, and FSC's fast-growth strategy. A follow-up report in 2004 alleged that while some steps had been taken, fundamental issues remained, particularly with certifications in Indonesia and Thailand.
- Mechel et al, note that the interim standard development process for the FSC may be leading to inconsistencies and weaknesses, and that outcomes can depend on the level of participation of stakeholders in standard development (Mechel et al, 2006).
- The FSC has also been criticised as being unable to deliver protection of forest ecology values in some forest areas for legitimising logging in environments that simply may not be able to sustain it (FSC Watch, 2007). There is an FSC-watch website produced by a range of people and individuals who describe themselves as 'concerned about the constant erosion of the FSC's reliability and therefore credibility' (FSC Watch, 2008).

6.2 Programme for the Endorsement of Forest Certification Schemes

The Programme for the Endorsement of Forest Certification Schemes (PEFC) was set up between 1998 and 1999 by forestry interest groups in several European countries, in part in reaction to the FSC and, for some stakeholders, a concern that non-government organisations (NGO's) had too much influence under the FSC system. Originally a framework for the recognition of European schemes (the Pan-European Forest Certification Scheme), it evolved into a mutual recognition framework for schemes globally. The PEFC is characterised by:

- A claim of 'From sustainably managed forests' (for 100 per cent PEFC certified content) or

'Promoting Sustainable Forest Management (for products with mixed sources including recycled content).

- Creation and management by forest grower interests. The PEFC describes itself as "an independent, non-profit, non-governmental organisation, founded in 1999 which promotes sustainably managed forests through independent third party certification."
- At the time of writing approximately 205 million hectares globally are certified under the PEFC (PEFC, 2007a) under a range of schemes including the Australian Forest Certification Scheme, Canadian Sustainable Forest Management Program, the US Sustainable Forestry Initiative, and many EU national forestry certification schemes. The Malaysian Timber Certification Council (MTCC) is a member of the PEFC but the MTCC standard is not yet recognised by the PEFC.
- The PEFC provides "an assurance mechanism to purchasers of wood and paper products that they are promoting the sustainable management of forests." PEFC recognised schemes also include plantation estates (PEFC, 2007b).
- The PEFC is not a single certification scheme with a single international standard, but a framework programme for endorsing certification schemes developed at a national level. As such it provides a framework to guide the development of new schemes and a forum for the gradual harmonisation of national schemes over time.
- The PEFC requires the use of a minimum of 70 per cent certified content in mixed products, with the balance required to be post-consumer or not from 'controversial sources'. 'Controversial sources' are defined as from 'illegal or unauthorised harvesting' (PEFC, 2005). Assurance is required through self-declaration by the supplier of the material and a risk assessment by the purchasing organisation.

There is no doubt that the PEFC has responded to criticisms and strengthened a number of systems and requirements for member schemes over time. For example, the UK Government in 2003 established a document-based (not field-based) review of certification schemes for inclusion within Government Procurement called the *Central Point of Expertise on Timber*. The final report in 2006 noted there had been a lack of detail within the PEFC as to how 'concerned interests' or 'substantive issues' were defined, but that the PEFC had moved in 2006 to clarify that concerned interests *would* include small forest owners, ENGOs or indigenous peoples' (Central Point of Expertise on Timber, 2006, p.8). The PEFC has now been recognised as 'legal' and 'sustainable' by this process, as well as a number of EU and non-EU Governments. For more details refer to (Proforest, 2007a; Proforest, 2007b).

The PEFC has however, been consistently criticised by a range of stakeholders who allege that:

- Governance structures are weighted towards economic/industry interests, and fail to engage adequately with environmental and indigenous concerns.
- There is a wide variation in transparency and accountability in endorsed standards and a lack of transparency in standards setting, monitoring and dispute resolution.
- Significant differences in forest management practices between certified areas with some regarded as setting a high benchmark (Mechel et al. 2006, and Fern, 2001).

Mechel et al. note a “persistent resistance by various international ENGOs to support or even participate in the scheme” (Mechel et al. 2006 p.10). Major international ENGOs are highly critical of the PEFC and a number of schemes recognised by the PEFC. There is a PEFC-watch website by both the Finnish Nature League and Greenpeace.

6.3 Comparing Schemes for Environmental Outcomes

There are many reviews of certification schemes now available, each with a slightly different emphasis, approach, and often, result. Reports from different stakeholders are identified at the end of this document. While extensive peer-reviewed critique is available on governance structures, independent, peer-reviewed articles assessing on-the-ground differences between the various schemes is rare and its relevance restricted by their research location. Relevant sources as identified in Section 3.0 above include:

- Confederation of European Paper Industry (CEPI) Matrix
- World Bank – WWF Alliance Questionnaire for Assessing the **Comprehensiveness of Certification Schemes** (QACC)
- FERN report ‘Footprints in the Forest’
- Yale Forestry Program reviews

For more details on these refer *Appendix – Links and Resources* at the end of the paper.

7.0 CONCLUSION

Certification has become in a relatively short period of time, a major driver for reform in forest practices. It has also proven a powerful mechanism to communicate the importance of forests for environmental, social and economic benefits in the developing world.

There are a substantial number of national initiatives and schemes in operation, which are now, traded under two competing brands, the FSC and PEFC. In other markets (e.g. in the USA, UK, EU) specific national schemes may have a much higher recognition than they do in Australia, such as North American Sustainable Forest Initiative (SFI) US SFI scheme. In Australia forest certification is a new and often poorly understood practice, and international schemes, especially other than PEFC and FSC, have very limited recognition.

While there is no doubt certification is an important driver for reform, and should be required as a minimum by specifiers whenever possible. It remains less clear whether certified forests can yet be claimed to be ‘sustainable’. It is also clear that certification continues to develop, with pressure on all major schemes to balance cost-effectiveness and standards setting. All schemes have been the subject of criticism. The FSC remains the international benchmark and only scheme widely supported by environmental, social, and economic interests.

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BIOGRAPHY

Andrew Walker-Morison B.Arch. (Hons) is a former architect, and for four years managed the Sustainable Materials Programme at RMIT's Centre for Design. Andrew was Centre for Design's manager for the commercialisation of the green specification guide – Ecospecifier, developed the Building Assembly and Materials Scorecard initiative, and is currently involved in a wide range of research and commercial activities related to sustainable materials and the built environment.

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APPENDIX

Links and Resources

Note that there are other useful tables and appendices in the companion papers mentioned in the abstract.

Specification links

International Certification Bodies

Programme for the Endorsement of Forest Certification Schemes <http://www.pefc.org>

Forest Stewardship Council <http://www.fsc.org>

Certification Assessments and Resources

International

Metafore Matrix

Metafore is a not-for-profit organisation that specialises in working with industry to improve sustainability practices with regards to wood and paper products. Metafore produced a useful overview comparison of common international schemes (with an additional USA focus): <http://www.certifiedwoodsearch.org/matrix/matrix.aspx>

Yale Program on Forest Certification

Yale Universities program on forest certification has a range of useful resources and references to the research currently being undertaken for the US Green Building Council comparing forest certification schemes.

<http://www.yale.edu/forestcertification/faq.html>

World Bank and WWF Global Forest Alliance

The World Bank/WWF Alliance founded in 1998, aims "to ensure that the quality of the world's forests are maintained and progressively improved" by focusing its efforts on a set of ambitious targets for 2010, including reducing the rate of global deforestation by 10 percent by 2010. One tool to assist this is the Forest Certification Assessment Guide (2006), formerly known as the Questionnaire for Assessing the Comprehensiveness of Certification Systems/Schemes. The Guide does not make findings on schemes, but provides a methodology for the assessment of schemes. This methodology has not been supported by the PEFC. <http://www.worldwildlife.org/alliance/pdfs/fcag.pdf>

Forests and European Resource Network (FERN)

For a conservation perspective on European wood products and the global certification reviews refer to 'Behind the Logo' and 'Footprints in the Forest': <http://www.fern.org>. It should be noted that the AFS review in 'Footprints in the Forest' was written by Tim Cadman, who at the time of writing was and remains the FSC Secretariat in Australia.

Confederation of European Paper Industry (CEPI) Matrix

The CEPI is an industry association that "is the voice and public face of the pulp and paper industry in Europe... It monitors and analyses EU legislation and initiatives in the areas of industry, environment, energy, forestry, recycling, fiscal policies and competitiveness in general" (<http://www.cepi.org>). The matrix provides a very broad overview of schemes on the basis of 12 criteria. It is based on a document review rather than on-the-ground analysis.

For more information:

http://www.pefc.org/internet/resources/5_1177_592_file.1217.pdf

Certified Wood:

Certified Wood is a site that has both industry and conservation group interests represented and provides an excellent introduction to certification as well as a powerful search tool for timbers and distributors of certified forest products globally.

<http://www.certifiedwoodsearch.org/matrix/matrix.aspx>

PEFC Watch:

EU based ENGO site:

<http://www.pefcwatch.org>

FSC Watch

A site billed as created by concerned activists:

<http://www.fsc-watch.org>

Continued

Conservation Status Resources

International

FAO: For a global UN perspective and a wealth of general forestry facts and figures:

<http://www.fao.org/forestry/index>

For a list of globally threatened tree species refer to the UN-WCMC site

<http://www.unep-wcmc.org>

Friends of the Earth UK Good Wood Guide: a global guide to forest and timber species conservation status from a leading international conservation group in this field: follow the links from <http://www.foe.co.uk> (search for 'Good Wood')

Forest Conservation Portal: perhaps the leading global compendium of articles, information access and links to forest-related conservation material:

<http://www.forests.org>

Yale Forest Certification program

<http://www.yale.edu/forestcertification/faq.html>

Region and Specific Species Conservation Resources

Baltic forests:

http://www.borealforest.org/world/rus_mgmt.htm

Alaskan Conservation Foundation

For a local perspective on forest status in Alaska where some of our Oregon comes from this excellent site has both slide shows and audio tours:

<http://www.akrain.org/rainforest/info/logging.asp>

Rainforest Information Centre Good Wood Guide (Australia)

For a domestic Conservation Group perspective and thorough resource:

http://www.rainforestinfo.org.au/good_wood/contents.htm

Information Resources:

UNEP Global Environmental Outlook

http://www.unep.org/geo/geo3/english/pdfs/chapter2-3_forests.pdf

Global Forest Watch

<http://www.globalforestwatch.org/english/index.htm>