A review of forest certification in Australia

SEPTEMBER 2006
Publication: A review of forest certification in Australia

The Forest and Wood Products Research and Development Corporation ("FWPRDC") makes no warranties or assurances with respect to this publication including merchantability, fitness for purpose or otherwise. FWPRDC and all persons associated with it exclude all liability (including liability for negligence) in relation to any opinion, advice or information contained in this publication or for any consequences arising from the use of such opinion, advice or information.

This work is copyright and protected under the Copyright Act 1968 (Cth). All material except the FWPRDC logo may be reproduced in whole or in part, provided that it is not sold or used for commercial benefit and its source (Forest and Wood Products Research and Development Corporation) is acknowledged. Reproduction or copying for other purposes, which is strictly reserved only for the owner or licensee of copyright under the Copyright Act, is prohibited without the prior written consent of the Forest and Wood Products Research and Development Corporation.

Project no: PN05.1025

Researchers:

H. Crawford
Cailum P/L
PO Box W37
Ballarat West, Vic 3350

Final report received by the FWPRDC in September 2006
A review of forest certification in Australia

Prepared for the

Forest & Wood Products
Research & Development Corporation

by

H. Crawford
Table of Contents

Executive Summary ........................................................................................................................................... 4
Introduction.................................................................................................................................................. 6
Forest certification schemes currently operating in Australia ...................................................................... 8
Current state of the market .......................................................................................................................... 10
How do the different schemes compare? ..................................................................................................... 12
Has post-certification forest management changed? ................................................................................... 25
Key benefits of certification ........................................................................................................................... 27
Competition in the certification market ......................................................................................................... 28
A REVIEW OF FOREST CERTIFICATION IN AUSTRALIA

BY

HAMISH CRAWFORD

Executive Summary

In June 2003, just three years ago, certification of sustainable forest management was an untested concept in Australia. Globally, forest certification schemes had been around for nearly a decade, and large areas of forest, mostly in the northern hemisphere had been certified, but this did not include any Australian forests. Today, over 5.7 million ha of Australian forests are certified as being sustainably managed.

Three forestry certification standards are currently operational in Australia, covering two overall schemes: the Forest Stewardship Council (FSC) - accredited Woodmark and SmartWood standards and the Australian Forestry Standard (AFS). The two FSC-accredited certification bodies’ standards are based on the same principles and criteria, with indicators which are adapted to suit local conditions to form “Interim Standards”, until a national Australian FSC standard is in place. The AFS has been developed utilising the formal Australian Standards process and has been designed specifically to suit Australian forests, legal systems and community expectations. The AFS has also been conferred mutual recognition by the international Programme for the Endorsement of Forest Certification (PEFC) schemes.

While each scheme has followed a quite different development path, from a practical point of view – that is, their coverage of forest management issues and how they are implemented to certify forest managers - they are very similar in application. Each takes a three tiered approach to assessment and, in terms of the 56 specific FSC management criteria (tier 2), an independent report found the AFS scheme compatible with 51 of the criteria (91%); only three out of the 56 criteria were not compatible. At the assessment level (tier 3), each scheme has a different approach to assessing compliance with the 1st and 2nd tier requirements, but there are also considerable similarities, as both Woodmark and SmartWood incorporated a number of indicators directly from the AFS in adapting their generic international standards to meet Australian conditions.

There are some specific differences between the FSC standards and the AFS, as would be expected, and each certification scheme has its own strengths and weaknesses. For example, brand

---

1 The author is a forest economist with over 22 years experience in forestry and natural resources management. A former policy advisor to the WA Minister for the Environment, the author is currently the director and principal of Cailum Pty Ltd, an independent consultancy firm. The author has had direct experience in a number of forest management and chain of custody certifications through both the AFS and FSC (Woodmark) in Australia and overseas, either as an assessor, or as an advisor to forest management organisations considering or preparing for certification.
identification and acceptance of FSC products in the marketplace has been a relative strength of the FSC schemes. Alternatively, the recognition given by the AFS criteria to the role of forests in carbon cycles and greenhouse gas emissions from forest management may be perceived as a relative strength. The FSC is silent on carbon cycles and greenhouse gas emissions. FSC takes a more definitive stance against the use of genetically modified organisms in forests than the AFS. Some may view this as a strength, others may see it as a weakness.

Market perception of certification schemes is extremely confused in Australia at present, and is often characterised by misconceptions and negative promotional campaigns. Commonalities are often put aside as the market focuses on points of difference. Issues of contention include differences in the treatment of stakeholder engagement and conversion of native forests to plantations; this report shows that while there are points of difference, there are also similarities in the requirements of managers expected by each scheme.

Another question often raised is “Is this simply an endorsement of existing management arrangements as sustainable, or has certification produced changes in the way forests are managed?” Experience with forest management organisations preparing or obtaining certification has shown that not one organisation has been able to step through the certification process without making changes, often significant changes, to the way it operates and/or manages its forests. That is not to say that pre-existing practices were necessarily unsuitable or insufficient, but certification standards, whether it’s AFS, Woodmark or SmartWood, require comprehensive and rigorous treatment of a wider range of forest management values than has traditionally been the focus of forest management organisations. Each of the certification standards requires measures that go well beyond legal compliance.

Advances that have occurred with certification also include: greater ownership of sustainability performance at all levels within forest management organisations; more widespread application of spatial technology in identifying and protecting environmental values; much greater integration and connectivity between forest management organisations and custodians of social and environmental data; and tighter planning systems, peer review and internal audit processes that focus on environmental and social outcomes as well as economic performance and legal compliance.

Certification also facilitates a number of long term benefits to sustainable forest management.

First, the focus on continuous improvement in all aspects of forest management provides a powerful agent for ongoing change. Creating a culture of always looking to improve offers significant opportunities for forest management into the future.

Second, certification provides an opportunity to de-politicise forestry issues. Certification schemes spell out the key criteria for sustainable forest management. If a forest manager can demonstrate compliance with these criteria, as assessed, by an independent third party, then the community can be assured that the forest is being managed to internationally accepted standards, regardless of whether it is a native forest or a plantation.

Third, certification for forestry confers significant leadership over other competing industry sectors that impact heavily on our natural environment. Forest and chain of custody certification provides a significant market competitive position in a future marketplace which favours materials and products that are sustainable – in their production, application and wider life cycle impacts.
Introduction

Forest Certification – is the voluntary process by which planning, procedures, systems and performance of on-the-ground forestry operations are audited by a qualified and independent third party against a predetermined standard. Forest operations found to be in conformance with the given standard are issued a certificate [hence certification].

Chain of Custody Certification – provides a system to track a specific wood products from a certified forest through the processing and marketing channels to the final user; this system can also be audited and certified by a third party. Certification is much more than a self-justified marketing claim. Rigorous, independent assessment by third party auditors must be carried out before forest managers can claim that they are certified, and these assessments are subject to scrutiny. Certification schemes typically require forest management practices which are significantly more stringent than regulations and laws. Certification schemes allow manufacturers and ultimately consumers to be discerning in their purchasing habits, based on scheme labelling and claims, to provide reliable information about forest management sustainability. They also provide an extra incentive for forest managers to place a greater emphasis on their sustainability credentials.

Forest management certification schemes around the world

There are a variety of forest management certification schemes in operation around the world. Each scheme constitutes a different certification ‘brand name’ and ‘label’. Forest management certification brands are sponsored by a number of national and international organisations, and producers may choose to seek multiple certifications. It should be recognised that these schemes are in competition with one another for commercial market share. The major international forest management certification schemes are set out below (see Figure 1).

International Standards Organisation (ISO)

The ISO 14001 standard is not a forest management standard as such, but a generic environmental management system standard that can apply to any industry. Three commitments must be made in the framework of ISO 14001: complying with laws and regulations, continuous improvement, and prevention of pollution.

Programme for the Endorsement of Forest Certification (PEFC) ²

The PEFC Council (Programme for the Endorsement of Forest Certification schemes) is an independent, non-profit, non-governmental organisation, founded in 1999. PEFC is a global umbrella organisation for the assessment of and mutual recognition of national forest certification schemes developed in a multi-stakeholder process. These national schemes build upon the inter-governmental processes for the promotion of sustainable forest management, a series of on-going mechanisms supported by 149 governments around the world covering 85% of the world's forest area.

PEFC has coverage of 190.8 million hectares of forests worldwide. It has 31 members, 22 of which are endorsed members and 4 members in the assessment process. Each national certification scheme within the PEFC system maintains its own standards, although they are based on or compatible with

² PEFC Web site   http://www.pefc.org
the European regional initiative (called the 'Helsinki Process') which arose from the 1992 Rio Earth Summit. PEFC confers one common label on all its recognised schemes and products.

**The Forest Stewardship Council (FSC)**

The Forest Stewardship Council (FSC) was founded in 1994, following a process of development initiated by a meeting in 1990 of "...a group of timber users, traders and representatives of environmental and human rights organisations who had identified the need for an honest and credible system for identifying well-managed forests as acceptable sources of forest products".3

The FSC defines its mission as to "promote environmentally appropriate, socially beneficial, and economically viable management of the world's forests."4

The multi-stakeholder origins of the FSC have been reflected in the formation of "chambers" covering economic, social and environmental interests that have been incorporated into FSC structures, as well as forming the basis for decision-making. At the international level, these chambers have been further divided into north and south sub-chambers. In decision-making processes, voting rights are spread evenly between the chambers, with decisions made predominantly by consensus.

When introducing FSC certification to a new country the FSC sets up a national body that then utilises a set of international FSC principles which it adapts in the development of a national FSC standard, which is then reviewed by the FSC against its rules. Certification bodies are accredited by the FSC and the certifiers train and accredit the scheme auditors. Certification bodies are also audited by Accreditation Services International - ensuring independence between standard setting and certification, in line with ISO requirements. FSC is also recognised by ISO as a standard setting body in the area of forestry.

The governance of the FSC is through an international association of members consisting of representatives from environmental and social groups, the timber trade and the forestry profession, indigenous people's organisations, corporations, community forestry groups and forest product certification organisations from around the world.

The FSC currently covers around 76.5 million ha of forest worldwide encompassing plantations and natural forest in 72 countries, across all continents. There are 53 FSC national standards either in place or in development globally.

---

3 This group developed the name Forest Stewardship Council.” – [www.fsc.org/en/about/about_fsc/history](http://www.fsc.org/en/about/about_fsc/history).

4 Source: [www.fsc.org](http://www.fsc.org)
**Other Certification Schemes**

Most countries with major forest resources have their own national forest certification schemes, many of which are endorsed under the PEFC, by example these include, amongst others:

- US – Sustainable Forestry Initiative (SFI)
- UK - UK Scheme for Sustainable Forest Management
- Canada – CSA Sustainable Forest Management Program
- Sweden – Swedish Forest Certification Scheme
- Finland – Finnish Forest Certification Scheme
- Australia – Australian Forest Certification Scheme.

**Forest certification schemes currently operating in Australia**

**Forest management**

There are three forestry certification standards currently active in Australia, covering two overall schemes: the FSC-accredited Woodmark and SmartWood standards and the Australian Forestry Standard offered by the Australian Forest Certification Scheme.

While the Woodmark and SmartWood certification programs are accredited by the FSC, it is important to recognise that they use different accredited generic standards, offered and implemented by different certification bodies (Soil Association [UK] and Rainforest Alliance [US] respectively)\(^5\). FSC has accredited each of these certification bodies’ generic standards as being consistent with the FSC principles and criteria, but the assessment indicators/requirements are different for each scheme – this is discussed in more detail below.

Where an agreed country-level FSC standard has been developed, the FSC expects accredited certification bodies to use this single standard for all certifications within that country. However, in the absence of an Australian FSC standard (as is currently the case), individual certification bodies may adapt their own international ‘generic’ standards to suit local conditions as an interim standard. The adaptation process normally takes account of existing national standards (in this case AFS), as

---

\(^5\) Soil Association Certification Ltd is a UK-based certification body. Its forest certification program, Woodmark, was in 1996 one of the first certification programs accredited by FSC. The Rainforest Alliance is a US-based certification body. Both the SmartWood and Woodmark programs pre-date the formation of the FSC.
well as other certification bodies’ generic standards, and is carried out in co-operation with local (Australian) auditors. It is also an FSC requirement that stakeholder consultation is carried out on the adapted generic standard and comments taken into consideration before that standard may be used for a certification assessment.

Country specific (and sub-national) FSC standards are developed through “national initiative” processes endorsed by the FSC. A meeting of Australian FSC stakeholders took place earlier this year, and substantial progress has now been made on the formation of FSC Australia, an organisation that will oversee in the future the development of an Australian FSC standard. Once in place, a national FSC standard would replace the modified standards currently being used for all FSC-certified forests in Australia.

The Australian Forest Certification Scheme (AFCS) has followed a different development path. It uses the Australian Forestry Standard (AFS), which has been developed specifically by Australian Forestry Standard Limited (AFS Limited), an accredited Standards Development Organisation. The AFCS is managed by AFS Limited which allows the clear separation of standard development (AFS Limited), accreditation (JAS-ANZ) and certification (independent, accredited, third-party certification bodies).

The AFS was developed through the same formal development processes used for other business and industry standards overseen by Standards Australia. Drawing heavily on the internationally developed Montreal Process Criteria and Indicators, the AFS was designed specifically to suit Australian forests, legal systems and community expectations.

While the AFS is specifically an Australian Standard, it has been given international standing through its mutual recognition by the Programme for the Endorsement of Forest Certification (PEFC) schemes conferred in October 2004.

The AFS is currently being implemented by three accredited certification bodies, DNV Certification Pty Ltd, SAI Global and NCS International Pty Ltd.

Implementation of the AFS by the three certification bodies differs from that of the two FSC schemes in that even though each certification body operates independently the AFS is a single standard, applied by each of the certification bodies using a single set of assessment requirements, overseen by JAS-ANZ. 6

Chain of custody

Whilst forest management certification deals with the management of forests and production of (wood and non-wood) forest products up to the point at which they leave the forest, chain of custody certification deals with the movement of forest products from certified forests, through the production chain and ultimately to the end consumer. Importantly, chain of custody certification does not assess the environmental credentials of the production processes that forest products go through before they reach the consumer. It simply provides a link between sustainable forest management and consumption of forest products.

Chain of custody certification is available in Australia through the AFCS and the FSC.

6 For further information on JAS-ANZ and AFS accreditation see http://www.jas-anz.com.au/showpage.php?file=web/accprog/afs.htm&PHPSESSID=81aece07e90af6ce11b032c5f0c1e46d.
Unlike the current situation with FSC forest certification, FSC chain of custody is not adapted separately by each certification body – it is a single standard, implemented uniformly throughout the country, as is the AFCS’s Chain of Custody Standard (AS 4707(Int)-2004).

The relationship between certification schemes, certification bodies and organisations seeking certification is illustrated in Figure 2.

Current state of the market

Forest management certification in Australia

Take up of forest management certification in Australia has been rapid since the first certificates were awarded in 2003.

As at June 2006, 15 forest managers had achieved certification under the available schemes (see Figure 4):

- 9 under the Australian Forestry Standard,
- 4 under the (FSC) SmartWood program (offered by the Rainforest Alliance), and
- 2 under the (FSC) Woodmark program (offered by the UK Soil Association).

The total area of forest certified in Australia is over 5.7 million hectares, 5.2 million ha under the AFS and 0.5 million ha under FSC (SmartWood and Woodmark standards - approximately two-thirds of this is plantations for fibre, and around one-third is sawlog plantation).

No forest management organisation in Australia has yet sought dual AFS and FSC certification; however, this is likely to change in the future, as organisations seek the capacity to supply different markets with differently certified products. At this point, combining the area of AFS- and FSC-certified forest does not involve double counting of areas. A breakdown of the forest areas currently certified is shown in Figure 3.
Chain of custody certification

As at June 2006, 24 companies have achieved chain of custody certification, 3 under the Australian Forest Certification Scheme and 21 under the Forest Stewardship Council scheme (see Figure 4). It should be noted that although chain of custody certification is expanding rapidly, very little certified branded timber is currently available in the Australian marketplace. Most certified product is currently sold into export markets.
How do the different schemes compare?

While each scheme has followed a quite different development path, from a practical point of view – that is, their coverage of forest management issues and how they are implemented to certify forest managers - they are very similar in application. These similarities are highlighted in Figure 5 and discussed further in the sections below.

Figure 5: Comparison of certification scheme implementation

<table>
<thead>
<tr>
<th>Aspect of certification approach</th>
<th>FSC Woodmark</th>
<th>FSC Smartwood</th>
<th>Australian Forestry Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>System is performance based</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>System has primary management values or issues</td>
<td></td>
<td></td>
<td>10 principles of forest management criteria</td>
</tr>
<tr>
<td>Secondary criteria or indicators support primary values</td>
<td></td>
<td>56</td>
<td>40 requirements</td>
</tr>
<tr>
<td>Number of specific assessment requirements</td>
<td>193</td>
<td>253</td>
<td>166</td>
</tr>
<tr>
<td>Assessment is conducted by independent 3rd party certification bodies</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Assessment involves:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Documentary review of forest management systems</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>- Inspection of field practices and conditions</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>- Interviews with management, staff, contractors and other stakeholders</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Third party stakeholder consultation (independent of field assessment)</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Certification reports undergo independent peer review</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Public summaries of certification reports produced</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes*</td>
</tr>
<tr>
<td>Major non-compliances must be corrected before certificate is awarded</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Minor non-compliances do not preclude certification</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Periodic surveillance audits are undertaken over life of certificate</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

* As from Dec 2005

Coverage of forest management values

FSC and AFS both use a ‘three tier’ approach to assessment; though their respective terminologies differ slightly (see Figure 6).

Figure 6: ‘Three tier’ approach to assessment

<table>
<thead>
<tr>
<th>Tier</th>
<th>FSC</th>
<th>AFS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Principle</td>
<td>Criteria</td>
</tr>
<tr>
<td>2</td>
<td>Management criteria</td>
<td>Management requirements</td>
</tr>
<tr>
<td>3</td>
<td>Norms or Points of Assessment</td>
<td>Basis of assessment</td>
</tr>
</tbody>
</table>

AFS is able to operate with a smaller number of assessment requirements compared to FSC because in Australia regulatory authorities already deal with many specific issues. Some prescriptive references within the FSC principles and criteria to international commitments are essentially redundant locally, in the sense that they are already enshrined within Australian legislation.
Tier 1
At the broadest level, FSC uses the term ‘principles’ while AFS uses ‘criteria’ to describe the values of sustainable forest management. There are considerable linkages between the FSC principles and the AFS criteria, as illustrated in Figure 7.

Figure 7: Comparison of FSC principles with AFS criteria

<table>
<thead>
<tr>
<th>FSC principles of forest stewardship</th>
<th>AFS criteria for sustainable management</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Compliance with laws and FSC principles</td>
<td>1 Management system</td>
</tr>
<tr>
<td>2 Tenure and use rights and responsibilities</td>
<td>2 Public participation</td>
</tr>
<tr>
<td>3 Indigenous peoples’ rights</td>
<td>3 Protect and maintain biological diversity</td>
</tr>
<tr>
<td>4 Community relations and worker's rights</td>
<td>4 Forest productive capacity</td>
</tr>
<tr>
<td>5 Benefits from the forest</td>
<td>5 Forest ecosystem health and vitality</td>
</tr>
<tr>
<td>6 Environmental impact</td>
<td>6 Protect soil and water resources</td>
</tr>
<tr>
<td>7 Management plan</td>
<td>7 Contribution to carbon cycles</td>
</tr>
<tr>
<td>8 Monitoring and assessment</td>
<td>8 Natural, cultural, social, religious &amp; spiritual values</td>
</tr>
<tr>
<td>9 Maintenance of high conservation value forests</td>
<td>9 Social and economic benefits</td>
</tr>
<tr>
<td>10 Plantations</td>
<td></td>
</tr>
</tbody>
</table>

The AFS doesn’t have a separate plantations ‘criterion’ as its nine criteria are applicable to native forest and plantation equally.

The only significant anomaly in a comparison at this level is that the FSC principles and criteria (and subsequently, both the Woodmark and SmartWood programs) are silent on the role of forests in global carbon cycles and greenhouse emissions from forest management activities (AFS criterion 7).

Tier 2
Supporting these overarching values lies a second tier of management criteria (FSC terminology) or management requirements (AFS):

- FSC has 56 criteria supporting its ten principles.
- AFS has 40 management requirements supporting its nine management criteria.

FSC and AFS are quite similar at this tier 2 level. An independent assessment8 of how AFS compared to the documentation used by the FSC for standard setting and performance

---

requirements\textsuperscript{9}, was undertaken in 2002 by the Finnish company Indufor Oy. With regard to performance requirements, this study found the AFS to be:

- ‘compatible’ with nine of the ten FSC principles and 51 of the 56 FSC criteria (91\% compatible),
- ‘partially compatible’ with one principle, Principle 10 Plantations; and two criteria, and
- ‘not compatible’ with only three FSC criteria (5.5\%): 6.8, 8.3 and 10.5 (see Figure 8).

In reaching these conclusions on compatibility, the study recognised that there were areas where the AFS did not include specific criteria or indicators equivalent to some FSC principles and criteria. Also, it should be recognised that the study did not address reverse compatibility – i.e. the degree to which the FSC principles and criteria were compatible with the AFS criteria and indicators.

Figure 8: FSC criteria where AFS is ‘not compatible’ – Indufor report

<table>
<thead>
<tr>
<th>FSC Criteria</th>
<th>Comments from Indufor Oy report (2002)</th>
<th>(authors comments in italics)</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.8 Use of biological control agents shall be documented, minimized, monitored and strictly controlled in accordance with national laws and internationally accepted scientific protocols. Use of genetically modified organisms shall be prohibited.</td>
<td>The AFS does not prohibit the use of genetically modified organisms and does not require minimizing the use of biological control agents.</td>
<td>This is discussed further later.</td>
</tr>
<tr>
<td>8.3 Documentation shall be provided by the forest manager to enable monitoring and certifying organizations to trace each forest product from its origin, a process known as the “chain of custody”.</td>
<td>The AFS does not include a specific criterion or requirement equivalent to FSC Criterion 8.3.</td>
<td>FSC Criterion 8.3 deals with chain of custody within the forest management unit, as opposed to chain of custody between the forest and downstream processing (which is dealt with under FSC and APFC by separate Chain of Custody Certification)</td>
</tr>
<tr>
<td>10.5 A proportion of the overall forest management area, appropriate to the scale of the plantation and to be determined in regional standards, shall be managed so as to restore the site to a natural forest cover.</td>
<td>The AFS does not include a specific criterion or requirement equivalent to FSC Criterion 10.5.</td>
<td>The AFS does include a requirement to rehabilitate forests degraded by damage agents (4.5.4) but does not set benchmarks for proportions of forest area to be managed to restore natural forest cover, instead focusing on overall protection and maintenance of forest values.</td>
</tr>
</tbody>
</table>

\textbf{Tier 3}

In each case, to enable certification bodies to verify compliance with these primary and secondary assessment tiers, a third tier of “auditable” requirements is needed. In AFS terminology, these are known as ‘bases of assessment’ and are described in the supplements to the AFS\textsuperscript{10}. Across the nine criteria and 40 supporting management requirements there are 166 bases of assessment described (see Figure 9).

\textsuperscript{9} Assessment of conformance with specific FSC requirements was not the intent of the study, the aim was to assess whether substantively equivalent processes and performance requirements were reflected in the AFS.

\textsuperscript{10} AS 4708 Supplement 1(Int)-2003 – Guidance for medium and large native forest ownerships (Supplement to AS 4708(Int)-2003), AS 4708 Supplement 2(Int)-2003 – Guidance for medium and large plantation ownerships (Supplement to AS 4708(Int)-2003), and AS 4708 Supplement 3(Int)-2003 – Guidance for small native forest and plantation ownerships (Supplement to AS 4708(Int)-2003).
Interpretation: For criterion 1 Management system, there are five management requirements, verifiable through 27 bases of assessment.

While it is beyond the scope of this paper to consider each of these tiers in detail, Figure 10 illustrates the relationship in the AFS system between criteria (tier 1), requirements (tier 2) and bases of assessment (tier 3).
Examining the FSC system, it is at this third tier of auditable requirements that the two FSC-accredited standards used in Australia begin to diverge in their assessment of compliance with the FSC principles and criteria.

Each program, Woodmark and SmartWood, has developed its own set of assessable requirements for use in Australia (equivalent to the link between the AFS and its supplements).

This has resulted in two different sets of assessment requirements being used for FSC-accredited certification in Australia. An example of the different approaches adopted by Woodmark and SmartWood is shown in Figure 11.

**Figure 11: Variation between Woodmark and SmartWood standards – an example**

FSC Principle 5 is supported by six criteria. For criterion 5.6, compliance is assessed under the Woodmark program using six “Norms”. SmartWood use six different points of assessment.

**FSC Principle 5 – Benefits from the forest**

*Forest management operations shall encourage the efficient use of the forest's multiple products and services to ensure economic viability and a wide range of environmental and social benefits.*

**Woodmark Norms**

1. The silvicultural system on which management is based is clearly stated.
2. The expected level of harvesting on an annual basis, and in the long term (over more than one rotation) is clearly stated.
3. The expected level of harvesting is clearly justified in terms of the permanently sustainable yield of the forest products on which the management plan is based.
4. All assumptions regarding regeneration, growth, abundance, quality and size distribution of the main commercial species are explicit, and in line with the best available data for the locality from relevant research and/or inventories.
5. The expected level of harvesting in the long term does not exceed local or regional expectations of sustainable yield, taking into account any special silvicultural treatments that have been applied.
6. The forest manager shall ensure that regeneration of native forests and establishment of plantations is effective and timely. Species composition and the density of the regeneration of native forests and the stocking rate of plantations shall be assessed and remedial action taken where necessary to ensure effective regeneration and establishment. (AFS 4.4.4)

**SmartWood**

1. An annual statement of total product volumes harvested from the forest is available (NZ 5.6.1)
2. Harvest levels (e.g. annual allowable cut or AAC) for each forest product are set and based on conservative and well-documented estimates of growth and yield ensuring that the rate of harvest does not exceed sustainable levels (SW).
3. AAC or other harvest calculations are being followed in the forest (SW).
4. FMO plans the silviculture and harvest of forest products to ensure the productive capacity of the forest is not compromised (AZ 2.2).
5. Silvicultural prescriptions (pre-, during and post-harvest) are being adhered to (SW).
6. Appropriate actions are implemented to ensure that the long term productive capacity of forested land is not compromised by wood production (AZ 2.1)

A comparison of the number of assessment requirements identified by Woodmark and SmartWood for use in Australia is shown in Figure 12. There is considerable variation in approach even between programs assessing compliance against the same set of principles and criteria. This is particularly evident in regards:

- Principle 1: Compliance with Laws and FSC Principles (12 v 22)
- Principle 3: Indigenous Peoples Rights (14 v 18)
- Principle 5: Benefits from Forests (19 v 26)
- Principle 9: High Conservation Value Forest (5 v 14)
- Principle 10: Plantations (21 v 37)
Interpretation: FSC Principle 1 deals with compliance with laws and FSC principles. It is supported by 6 FSC criteria. In evaluating compliance with this requirement under Australian conditions, Woodmark has specified 12 separate requirements that forest managers in Australia will be assessed against; SmartWood has 22 separate requirements.

In practice, at the tier 3 level there is also a great deal of similarity between the style and approach of the AFS and the two FSC schemes. This commonality is demonstrated by the fact that in adapting their generic international standards to Australian conditions, both Woodmark and SmartWood have incorporated a number of management requirements directly from the AFS:

- SmartWood’s “Interim FSC Standard for Assessing Forest Management in Australia” includes 253 separate assessable requirements; 50 of these were drawn from the Draft Australian Forestry Standard, August 2001.
- The Woodmark Standard and Checklist for Australia (February 2004) includes 193 separate assessable requirements; 26 of these were drawn from the Interim Australian Forestry Standard.

Figure 11 provides a good example of this, which shows Woodmark norms marked with AFS and SmartWood requirements marked with an AZ (indicates draft AFS).

The example shown in Figure 11 for FSC criteria 5.6 deals with the ensuring the rate of harvest of forest products does not exceed levels that can be permanently sustained. In the AFS, this issue is dealt with under Criterion 4.4 – Forest management shall maintain the productive capacity of forests. The 21 bases of assessment for criterion 4.4 are shown in Figure 13, which shows a very similar style (and hence performance expectation) to the two FSC schemes.
Differences in implementation

The two key areas of difference in implementation relate to stakeholder consultation and independent peer review of certification reports. While each scheme requires stakeholder consultation as part of the assessment process, FSC-accredited certification bodies also conduct a formal stakeholder notification and consultation process in advance of the site and field assessment. This process is undertaken directly by the certification body, independent of the field assessment team. Outcomes from this process are then provided to the field assessment team, prior to the site visit.

FSC assessment reports are also independently peer reviewed (i.e. external to the certification body) prior to certification decisions being made.

Performance based or management based?

In comparing the schemes, it has been suggested by some observers that the FSC approach is “performance-based” whereas the AFS approach is “management-based” or “process-based.”

This appears to be a carry-over from earlier comparisons between FSC and ISO 14001 environmental management systems\(^\text{11}\), but is certainly inappropriate when comparing FSC with AFS.

---

\(^{11}\) ISO 14001 describes a process for systematic environmental management. It requires users to assess their own environmental aspects and impacts and develop their own performance targets. It can accurately be described as a “process-based” standard.
Both AFS and FSC approaches highlight the importance of management planning, including
documented policies and procedures. As such they could both be considered “management-based.”
Similarly, both standards provide clear guidance on the performance expectations over the
management of a range of forest values, including biodiversity, ecosystem health, soil, water,
economic and social values, as well as stakeholder input. In this sense, they are both “performance-
based” standards.

Prescriptive approaches to assessment

There are instances where either the FSC criteria or the Woodmark/SmartWood requirements take a
more prescriptive approach than the AFS. The use of chemicals is a good example. While both
approaches require forest managers to reduce their reliance on chemicals, FSC takes the extra step
of identifying a list of ‘highly hazardous’ chemicals (from its global set of Principles and Criteria)
that cannot be used. FSC is currently reviewing aspects of its policy on pesticide use. The AFS by
comparison relies on guidance from the legally constituted regulatory authorities within Australia
regarding which chemicals can be used and under what circumstances, but within the overall
objective of progressively reducing reliance on their use.

The use of prescriptive approaches does create a degree of certainty and consistency, however it can
also have unintended consequences. In recognition of Australian conditions relating to forest re-
establishment, FSC has granted its certificate holders here a conditional exemption (known as a
derogation) allowing them a period of time to continue using two chemicals on its prohibited list,
‘simazine’ and ‘1080’ under certain circumstances. The derogation for use of “1080” is limited to
the control of foxes. “1080” has been traditionally used by forest growers to control fauna,
particularly by rabbits, grazing on planted seedlings, but this is not authorised under the derogation.
While controversial in some parts of the country (Western Australia), where the constituent
chemical in ’1080’ is present in the natural environment and native fauna have developed a natural
immunity, its use for rabbit control has been highly effective and safe for native fauna, but against
FSC criteria. Alternative products, such as Pindone, allowable under FSC rules, have been shunned
by some growers in Western Australia because they kill native (non-target) fauna, which have
natural immunity to “1080”, as well as browsing rabbits.

There are other instances where each of the schemes approaches a similar objective from a different
perspective. Often this comes from a difference in starting points. While the AFS has been
developed specifically for Australian conditions, the absence of a national FSC standard has
necessitated FSC-accredited certification bodies adopt a different approach, whereby the generic
international standards developed separately by Woodmark and SmartWood are adapted and
modified for use in Australia as an interim measure. These generic standards were originally
developed for application in a wide range of countries with often poor regulatory and policy
environments.

Stakeholder engagement

The issue of ‘stakeholder engagement’ continues to be one area identified by some as a significant
point of difference between FSC and AFS. While there are differences in the way each scheme dealt

---

12 FSC principle 7 and criteria in all other principles, AFS Criterion 1 and requirements for all other criteria.
13 AFS requirement 4.5.5, FSC criteria 6.6a, b and c.
with stakeholder engagement during their respective standards developments processes, a comparison of the relevant requirements that forest managers must meet to obtain certification shows a high degree of similarity in the expectations of both FSC and AFS.

**Standards development processes**

Under the FSC system, stakeholder participation is through involvement in one of the three chambers (economic, social and environmental), each of which are represented equally in the standards development process. Individuals are placed into chambers at the discretion of the Standards Development Group, and each chamber is assigned the same voting rights. “The Standards Development Group shall strive to reach consensus on all decisions, defined as a two-thirds majority of eligible votes in favour and no votes against, with the remaining votes being abstentions.”

Under the AFS system, a Technical Reference Committee was formed, comprised of “cross-sectoral stakeholders invited and prepared to participate in the development process” and guide the development of the technical content of the standard. The committee included:

- independent professional and scientific experts
- forest owners and processors
- community and consumer interests
- regulatory or controlling bodies.

The differences in origins of the two schemes and their respective processes for development of standards have in their own right created quite different support bases for each scheme. AFS, which originated as an initiative of government and industry, has its largest support group within those stakeholder sectors. FSC, on the other hand, originated through non-industry stakeholder interests, and it is there that it has its strongest support base.

**Stakeholder engagement at the forest level – requirements for certification**

In terms of the requirements each scheme expects of forest managers, the AFS approaches stakeholder consultation as a key management criterion (tier 1), supported by a number of requirements (tier 2) while references in the FSC principles and criteria to stakeholder engagement are more general (a comparison of the relevant criteria is provided in Figure 14). It should be noted that the independent assessment undertaken by Indufor Oy (2002), found that the AFS criteria 4.2.1 - 4.2.3 were compatible with the FSC criteria 4.4 and 4.5.

---

14 FSC Standard “Process Requirements for the Development of National and Sub-National Forest Stewardship Standards” (FSC STD-60-006 Draft 4.1, clause 11.5).


FSC approaches stakeholder engagement much more from the perspective of assessing compliance with the principles and criteria rather than from involvement in the processes of management. As indicated above, FSC-accredited certification bodies conduct formal stakeholder notification and consultation processes prior to conducting field and site assessments. References to stakeholder engagement appear in the procedural documents of the FSC-accredited certification bodies, which describe the certification process (see Figure 15).

**Figure 15: Stakeholder involvement in FSC certification – SmartWood and Woodmark**

**SmartWood’s Interim FSC Standard for Assessing Forest Management in Australia**

Team members also meet independently with stakeholders. All assessments solicit and incorporate input (confidential and/or open) from as many directly affected and/or knowledgeable stakeholders as possible, including local communities, adjoining landowners, local forest industry, environmental organizations, government agencies and scientific researchers. During these consultations, assessment team members explain the assessment process, solicit opinions, and gather impressions about the field performance of the operation being assessed. Before, during and after visits to stakeholders and actual field operations, the team constantly meets to review criteria, discuss progress in gathering information, and discuss preliminary findings.

**Woodmark’s International Forest Certification Procedures**

At least one month before the evaluation visit is due to take place we will inform stakeholders of the date of the visit. Our procedures are designed to be transparent, as we believe this is necessary for an effective evaluation, and also to ensure support for the evaluation process itself. Public consultation is also an FSC requirement.

An important part of our inspection is to contact local stakeholders (such as environmental NGOs, academics, local institutions) to inform them about the evaluation and ask them to comment on the forest or its management.
The FSC principles and criteria do, however, place more importance on forest management organisations making information available to the public, rather than just stakeholders (see Figure 16).

**Figure 16: Comparison between FSC and AFS – public information**

<table>
<thead>
<tr>
<th>FSC criteria</th>
<th>AFS management requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.4 While respecting the confidentiality of information, forest managers shall make publicly available a summary of the primary elements of the management plan, including those listed in Criterion 7.1.</td>
<td>4.2.2 The forest manager shall facilitate and encourage meaningful participation of stakeholders in the development of the forest management plans or equivalent instruments at requirement 4.1.2 of this Standard. This shall include: providing culturally appropriate opportunities for stakeholders to make their views known on important issues related to management of the defined forest area and to influence decision-making in the forest management planning process; explaining how decisions were made, including demonstrating how stakeholders' views were considered and where relevant incorporated in the plan; and making a summary of the plan and reports on its implementation available to stakeholders.</td>
</tr>
<tr>
<td>8.5 While respecting the confidentiality of information, forest managers shall make publicly available a summary of the results of monitoring indicators, including those listed in Criterion 8.2.</td>
<td>The nature of the stakeholder participation shall be appropriate to the type of forest, the scale of ownership and nature of planned operations. Note - This requirement has potential links to requirements 4.6.1—4.6.3</td>
</tr>
<tr>
<td>9.3 The management plan shall include and implement specific measures that ensure the maintenance and/or enhancement of the applicable conservation attributes consistent with the precautionary approach. These measures shall be specifically included in the publicly available management plan summary.</td>
<td></td>
</tr>
</tbody>
</table>

Again it should be noted that the assessment undertaken by Indufor Oy (2002), found that the AFS criteria 4.2.2 was compatible with the FSC criteria 7.4, 8.5 and 9.3.

**Conversion of native forests to plantations**

The other point of contention often raised between the AFS and the FSC deals with the treatment of potential conversion of native forests to plantations or non-forest uses. Whilst in practice, there are few areas in Australia where State legislation still allows conversion to take place, it remains a strong philosophical and politically charged issue with many people. Often cited as a major point of difference, comparative analysis of the relevant standards in Australia shows in fact a high degree of correlation between the schemes in their overall intent (see Figure 17); the Indufor Oy (2002) assessment also reported compatibility between these criteria.

---

The point of difference lies at the definitional level, with the FSC definition of high conservation value forests (see Figure 18) potentially including some forests that would not be captured in the AFS definition (see Figure 17) of forest types prohibited from being converted to plantation. In most Australian states, conversion is effectively prohibited by legislation, so that certification requirements for legislative compliance (a feature of all schemes) become the main assessment mechanism. This issue does, however, remain a contentious area of difference.

Figure 18: FSC definition of high conservation value forests

High Conservation Value Forests are those that possess one or more of the following attributes: a) forest areas containing globally, regionally or nationally significant concentrations of biodiversity values (e.g. endemism, endangered species, refugia); and/or large landscape level forests, contained within, or containing a the management unit, where viable populations of most if not all naturally occurring species exist in natural patterns of distribution and abundance b) forest areas that are in or contain rare, threatened or endangered ecosystems c) forest areas that provide basic service s of nature in critical situations (e.g. watershed protection, erosion control) d) forest areas fundamental to meeting basic needs of local communities (e.g. subsistence, health) and/or critical to local communities’ traditional cultural identity (areas of cultural, ecological, economic or religious significance identified in cooperation with such local communities).
**Strengths and weaknesses of each scheme**

Each certification scheme has its own strengths and weaknesses; none is perfect, nor can it be. Forest management will always be an evolving process as knowledge increases and societal expectations change. Similarly, no scheme expects perfection in forest management.\(^{18}\)

Forest certification is as much a business as it is a tool for improving forest management. In this sense, strengths and weakness are often tied to marketing and market perception. One of the market advantages of the FSC scheme has been its support by environmental NGO’s and their capacity to influence and direct markets, sometimes in advance of FSC’s capacity to supply. Brand identification and acceptance of FSC products, particularly in northern hemisphere markets where FSC has had a high profile presence for many years, is very strong. In a business sense, particularly for export producers, this is an important consideration. The AFS, on the other hand, has been disadvantaged internationally by being a uniquely Australian developed standard, and therefore relatively unknown in overseas markets. AFS Limited has sought to address this lack of international recognition of a national certification scheme by becoming a member of the Programme for Endorsement of Forest Certification (PEFC). Mutual recognition in 2004 of the AFCS by the PEFC will undoubtedly lift the profile of the AFS internationally.

A strength of the AFS is that it has been specifically designed for Australian forest conditions and to operate within Australia’s three-tiered regulatory and policy environment. In this sense, the AFS is a step ahead of the FSC which, in the absence of a national FSC standard, operates under a different assessment standard for each certification body active in the country, adapted at the discretion of those certification bodies\(^{19}\). This has enabled the AFS to operate in a less prescriptive manner on some issues, such as chemical use, recognising that specific regulatory authorities deal strongly with this issue across all industries in Australia. Similarly, prescriptive references within the FSC principles and criteria to international commitments such as CITES, ILO Conventions, ITTA, and Convention on Biological Diversity are essentially redundant in the Australian context in that they are already enshrined within national legislation and therefore captured by the certification requirement for legislative compliance.

While the AFS’s development as an Australian standard has left it relatively unknown overseas, its recognition and publication by Standards Australia as an Interim Australian Standard\(^{20}\) provides recognition and acceptance in the Australian business environment.\(^{21}\) This will be further enhanced

---

\(^{18}\) Under each of the schemes, forest managers are scored against each of the assessment requirements. Major non-conformances must be addressed prior to certification being awarded, but minor non-conformances can generally be addressed within a time-bound plan for corrective action. Also, there may be circumstances where opportunities for improvement are identified that don’t involve a non-conformance but simply a recommendation.

\(^{19}\) At present only two FSC-accredited certification bodies, Woodmark and SmartWood, are active in forest management certification in Australia. However, three additional certification bodies are active in FSC chain of custody certification in Australia (TT, SGS and SCS). If these organisations chose to offer forest management certification, it could result in five operational FSC standards being used in Australia.

\(^{20}\) The Australian Forestry Standard was first published as an Interim Australian Standard. It is due to expire on 19 February 2007. At this point it will be confirmed, withdrawn or revised in the light of public comment, or published as an Australian Standard. The review process is currently underway.

\(^{21}\) The use of formal “Standards Australia” endorsed standards impacts on almost every aspect of business and consumption in Australia. JAS-ANZ accreditation processes (which oversees implementation of the AFS) are also well understood in the Australian market.
as the AFS and the AFCS Chain of Custody Standard are progressed to full Australian Standards. By contrast, the FSC process for standard development is not well known in Australia. However, FSC has recognition within the ISO system as an international standard setting body in the area of forestry.\(^{22}\)

Where aspects of the AFS and FSC differ, as discussed above, they provide points of difference that may be perceived as strengths or weaknesses, depending on the perspective considered.

For example, the absence of reference in the FSC principles and criteria to the role of forests in carbon cycles and greenhouse gas emissions from forest management may be perceived as a weakness by some, but an unimportant issue to others.\(^{23}\) AFS management requirement 4.7.1 (tier 2) requires forest managers to “acknowledge the forests’ capacity to act as a net carbon sink and demonstrate a commitment to minimising greenhouse gas emissions.” While this requirement is not particularly onerous on forest managers, it is supported by two bases of assessment (tier 3) that expect forest managers to address the potential impact of their activities on greenhouse gas emissions.\(^{24}\)

FSC takes a more definitive stance against the use of genetically modified organisms in forests than the AFS.\(^{25}\) Again, this may be perceived a strength by some and a weakness by others.

### Has post-certification forest management changed?

Now that a number of forest management organisations have achieved certification, it is pertinent to ask the question – what changes have occurred in the way forests are managed by those organisations? Have existing management systems been comprehensive and robust enough to meet external certification requirements? Or has certification required changes to the way organisations operate and manage their forests?

Experience with forest management organisations preparing or obtaining certification has shown that not one organisation has been able to step through the certification process without making changes, often significant changes, to the way it operates and/or manages its forests.\(^{26}\) That is not to say that pre-existing practices were necessarily unsuitable, nor at the required level for certification.

---

\(^{22}\) Maillard, J. 2005. Email of 27 May 2005 from ISO Central Secretariat to FSC confirming ISO Central Secretariat verification that FSC complies with the definition of an international standardizing body, as given in ISO/IEC Guide 2:2004. This verification led to the addition of FSC to the WSSN (World Standards Services Network) database, see [www.wssn.net](http://www.wssn.net).

\(^{23}\) Note that greenhouse actions and emissions are increasingly being targeted by regulators and consumers in the Australian market.

\(^{24}\) Bases for assessment under requirement 4.7.1 are: a) That minimisation of greenhouse gas emissions is considered in planning and management of forest operations, and b) That any guidelines, procedures and prescriptions to minimise greenhouse gas emissions are documented.

\(^{25}\) Under FSC criterion 6.8, the “use of genetically modified organisms is prohibited.” Under AFS requirement 4.3.6, “Forest managers managing plantations shall ensure that all dealings with live viable organisms that have been modified by gene technology comply with the law and that any licensed release within the defined forest area is in accordance with a publicly available ecological risk management strategy. Commercial use of such organisms shall be preceded by authorised field trials which demonstrate practicality of the risk management strategy. Note - This requirement recognises community concern about use of genetically modified organisms particularly regarding environmental risk, such as from gene transfer to native populations, and also the potential environmental benefits, such as through reduced reliance on chemicals, and seeks to balance these interests.”

\(^{26}\) The author has had direct experience in a number of forest certifications through both the AFS and FSC (Woodmark), either as an assessor, or as an advisor to forest management organisations preparing for certification.
but certification standards, whether AFS, Woodmark or SmartWood, require comprehensive and rigorous treatment of all aspects of forest management, not just those linked directly to commercial and legal performance.

In many ways, this should be no surprise. Each of the standards requires measures that go well beyond legal compliance. While legislative and other regulatory measures can often deal effectively with the physical actions of forestry, it is considerably more difficult to legislate for policy positions, meaningful consultation or continuous improvement.

From an outside perspective, identifying changes, where they have occurred, can often be difficult. Often it is a case of what you don’t see, rather than what you do. A review of the requirements of the AFS or either of the FSC standards shows that a great many of the benchmarks for sustainable forestry deal with what happens before or after field operations occur. For example, native forest harvest plans can often take 12-18 months to prepare. They are complex documents that identify and collate productive, environmental and social values, set operating prescriptions to manage and protect those values, and incorporate operational protocols and contingency plans for emergencies.

The single inevitability of forestry, however, is that with or without certification, you can’t produce timber without cutting trees down. The inevitable visual changes associated with the moment of harvesting in the long production/regeneration cycle of forestry – whether its plantation or native forest - are sometimes all that is visible to the general public. So, from an outside perspective, even if major change has occurred, it may not be readily apparent.

Changes brought about by forest certification have often begun at the top of an organisation, in its fundamental operating policies, as it embraces a wider set of performance expectations and commitments – the triple bottom line. A review of policy changes over the last three years within now certified forest management organisations reveals some profound changes, particularly with respect to environmental and social outcomes.27

Business is renowned for its capacity to innovate within it operating frameworks. Managed Investment Scheme (MIS) companies are an excellent example of how innovation has been applied to the business of forestry, with new products and investment and management structures. Prior to the advent of forest certification, innovation within forest management organisations was often limited to commercial objectives and legal compliance, as these were the only areas where operating frameworks were well defined. However, as organisations sign up to the wider expectations of forest certification (expectations on which they will be held to account by certification bodies, customers, investors and other stakeholders), this capacity to innovate is now being directed far more widely. This is particularly evident with respect to the certification requirement for a reduction in chemical use within forests. Chemicals are no longer simply an issue for cost control. Certification (both AFS and FSC) focuses on reducing reliance on chemicals and finding alternative management approaches to pest and weed control. Companies have shown a willingness to try innovative approaches to pest and weed management in an effort to reduce reliance on chemicals.28 However, chemical pesticide

27 Policies are routinely public documents, often published on corporate websites.

28 This has included a number of trials of non-chemical approaches. It has also involved critical analysis of compounds used, application techniques, rates of application and frequency and timing of application in an attempt to achieve better outcomes with less chemicals.
use in plantation is a minor component of the total chemical pesticide market in Australia (Jenkin and Tomkins 2006).29

There are several other advances that have occurred within certified organisations that are often not immediately apparent on the outside, but which provide significant benefits to forest management. Examples where certification has hastened the rate of change include:

- Greater ownership of sustainability performance at all levels within forest management organisations (from those that set policy and are judged on organisational performance to those charged with implementation).
- The more widespread application of spatial technology in identifying and protecting environmental values, such as GPS technology to map and locate specific biodiversity values and greater use of digital elevation models to better identify slope and drainage systems (allowing better protection of soil and water values and protection of riparian zones).
- Much greater integration and connectivity between forest management organisations and custodians of social and environmental data (e.g. conservation and heritage agencies) allowing for more accurate and timely forest planning.
- Tighter planning systems and peer review and internal audit processes that focus on environmental and social outcomes as well as economic performance and legal compliance.
- Appointment of staff into non-production roles to manage delivery of social and environmental outcomes.

As the harvest of forest products is the first step in the chain of custody process, certified companies have also focused on implementing rigorous processes to track forest products as they leave the forest and enter the milling and manufacturing chain.

Certification, whether it’s AFS or FSC, has not been a simple endorsement of business as usual. While existing legal, planning and compliance frameworks have contributed significantly to the platform from which forest management organisations can approach third party sustainability certification, that step has been shown to be a step beyond business as usual. The most significant advances, however, are those yet to come, as the culture of continuous improvement sought by certification standards takes hold, acting as a powerful agent for change.

**Key benefits of certification**

*An opportunity to de-politicise forestry*

One of the great benefits of independent, accredited, third party certification is that it provides an opportunity to de-politicise forestry, particularly with respect to native forests, where philosophical, political and sustainability issues have been intertwined for years.

This is particularly so with the FSC scheme, which has strong NGO endorsement, and provides a globally applied framework for the sustainable management of native forests, as well as plantations, to include timber production. Internationally, FSC has certified 76.5 million ha of forest; of which

---

less than 10% is plantation-only forest. The rest is either native forest (51%) or semi-natural and mixed plantation and native forest (39%)\textsuperscript{30}.

To date, only plantation growers in Australia have sought and achieved FSC certification, primarily because export markets (the major focus of plantation growers of short rotation pulp log) have driven the impetus for certification. However, interest among native forest growers has grown considerably over the last 12 months. The presence of an NGO-endorsed framework that effectively says “timber production from native forests is sustainable, providing forests are managed in accordance with the FSC principles and criteria” provides a major opportunity to separate and re-focus philosophical and sustainability viewpoints.

**Continuous improvement – the most powerful agent for change**

One of the other great benefits of certification, and this applies particularly to the AFS, is the importance given to continuous improvement, in all aspects of forest management\textsuperscript{31}. It is one thing for an organisation to do enough to get over the line and become certified – but signing on to a commitment to continuous improvement is a significant step beyond. Creating a culture of always looking to improve offers significant opportunities for forest management into the future.

The availability of sustainability certification for forestry confers significant leadership over other industry sectors that impact on our natural environment\textsuperscript{32}, where environmental and social outcomes are not well understood or actively managed.

If certification is seen as the end in itself, and this can be a danger where the assessment framework is overly prescriptive (potentially encouraging a “tick-the-box” mentality that once benchmarks have been met, that is all that needs to be done) the long term benefits of certification could be allowed to slip from the grasp of an organisation which doesn’t seek continual improvement in sustainable forest management.

**Competition in the certification market**

As in all areas of business, a competitive marketplace for certification is a positive for both industry and consumers. At present, there are three certification standards operating in the Australian market, each in an evolving state. While the two FSC-accredited certification bodies’ standards are based on the same principles and criteria, many of which are shared with the AFS scheme, they have different assessment approaches.

Given that standards are still on a steep evolutionary path, effective competition is critically important. The AFS is still an Interim Australian Standard and there is still no national FSC standard for Australia, only interim standards. Competition not only allows for more efficient development of standards (all three schemes currently operating have learned from the others), but it forces standard developers to remain market-focused.

\begin{itemize}
\item[31] The AFS requires an explicit commitment to continuous improvement throughout the whole system of forest management (4.1.1)
\item[32] These include agricultural industries as well as the mining and manufacturing industries, such as those that produce steel, concrete, aluminium and plastic.
\end{itemize}
Market differentiation may appear confused at present due to competitor/supporter scheme promotion but the fact is each scheme fundamentally shares a common set of sustainability objectives despite vastly different development paths, and each scheme has its own strengths and weaknesses. Ultimately, a forest management organisation’s decision to seek certification is simply a commercial one where schemes, as well as certification bodies, will be compared for product and cost offerings against the potential market returns for certified products.

The great challenge for certification schemes, as well as the implementing certification bodies, is to provide a product the market wants, at a cost effective price.