

# Forest Certification – Sustainability, Governance and Risk

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## Acronyms

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Accreditation Services International	ASI
African Timber Organisation	ATO
Asia Pacific Resource International Holding Limited	APRIL
Asia Pulp and Paper	APP
Australian Forest Standard	AFS
Chain of Custody	COC
Corporate Social Responsibility	CSR
Environmental Management System	EMS
Environmental Non-Governmental Organisation	ENGO
Forest Steward Council	FSC
Genetically Modified Organism	GMO
High Conservation Value Forest	HCVF
International Accreditation Forum	IAF
International Organisation for Standardisation	ISO
International social and Environmental accreditation labelling Alliance	ISEAL
International Tropical Timber Organisations	ITTO
Ministerial Conference on the Protection of Forests in Europe	MCPFE
National Governing Body	NGB
National Standards Body	NSB
Pan European Operational Level Guidelines	PEOLG
Principle and Criteria	P&C
Programme for the Endorsement of Forest Certification	PEFC
Quality management System	QMS
Sustainable Forest Initiative	SFI
Sustainable Forest Management	SFM
World Wildlife Fund (Worldwide Fund for Nature)	WWF

## Executive Summary

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“Forest certification” is a system of voluntary standards and conformance used to demonstrate the practice of Sustainable Forest Management (SFM).

Standards typically require procedures which minimize environmental damage from tree felling and, depending on the species and forest type, limits on the amount and nature of trees that may be felled. It can include obligations to reforest. Standards also outline social and economic requirements that ensure forests are managed in a ‘responsible’ manner.

In general the concept of sustainable forestry means harvesting timber in such a way that it can be utilized as a renewable resource while maintaining forests health and characteristics such as biodiversity. There are two globally dominant certification systems for SFM: the Forest Stewardship Council (FSC) and the Programme for the Endorsement of Forest Certification Schemes (PEFC).

The United Nations estimates that 355 million hectares of forests has been certified globally, approximately nine per cent of the total global forest area.<sup>1</sup> PEFC certification covers 230 million hectares. FSC certifies around 135 million hectares.

### PEFC and FSC – Similarities

The FSC certification scheme has a core set of principles which lay down what standards are to achieve and how they are to be developed. They are managed by the deliberative bodies of FSC. PEFC also has a core set of requirements guiding the content and development of standards. PEFC is an international framework which recognizes and endorses national schemes if they set standards which meet these requirements.

On face value, these schemes appear similar. Overall PEFC and FSC define SFM in similar terms and achieve common outputs in most respects.

### PEFC and FSC - Fundamental Differences

Yet there are significant differences between the two schemes. FSC is part of WWF's global strategy to restrict commercial forestry. PEFC, on the other hand, enables forestry producers to demonstrate sustainability. Key differences are discernable across four areas:

#### 1. How they deliver sustainable forest management

- Under PEFC, operators demonstrate SFM by complying with standards which are developed through stakeholder consensus. This ensures standards reflect national interests. Standards are fixed and cannot be varied without the consensus of stakeholders. Furthermore, PEFC endorsed standards must meet specific requirements based on inter-governmental processes and scientific research.
- In the FSC system, the executive arm determines if an operator practices SFM. The Board of Directors, dominated by NGO representatives, approves SFM national standards. FSC standards have little guarantee of long term consistency and do not necessarily reflect national interests. Rather, standards are based on the deliberations of FSC members instead of scientific process or intergovernmental consensus.

#### 2. What the systems are designed to deliver

- PEFC was established to enable forestry operators to demonstrate to consumers that their product originates from sustainably managed forests.
- FSC was established by WWF to advance specific forestry objectives which Governments would not by altering the practice of forestry operators. The leading

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<sup>1</sup> UNECE/FAO, *Forest Products Annual Market Review 2009-2010*, Geneva Timber and Forest Study Paper 21, (United Nations, 2010) p. 113

objective today is to cease any further conversion of natural forest land other purposes.

### 3. How the systems are used

- PEFC is used by operators to demonstrate sustainable forestry practice.
- FSC is used by NGO groups as part of a broader political program to pressure businesses one, to demand elements at the upper end of the forest and wood products supply chain adopt the FSC system; and two, to pressure business to accept increasingly demanding standards as time passes - under threat of public criticism for not acting sustainably.

### 4. How the systems are managed

- PEFC follows the best practice standards of how to set standards and how to organize conformance as laid down by the International Organization of Standards (ISO) and the International Accreditation Forum (IAF). They require that standards be developed by consensus, allowing all material and otherwise interested stakeholders to participate. They also require that the processes of setting standards and conformance of compliance with them (including verification) be conducted and managed by organizations independent of each other.
- The FSC system cannot comply with those best practice arrangements. The organization operates by majority vote where NGOs outnumber commercial entities. Some criteria (such as those to protect High Conservation Value Forests) are not prescriptive and do not have objective indicators.

## Managing Business Risk

Businesses should understand these implications when they incorporate forestry certification requirement into their corporate sustainability or procurement policies. In many cases businesses that have done insufficient due diligence will find that they have not mitigated risk, but have instead exposed themselves to a different and greater risk.

Once in the system, forest operators and other businesses have found that:

- They face ever-increasing obligations in order to conform to FSC members' political agendas.
- Case studies show that FSC's NGO members have the ability to lobby the organisation to suspend operators regardless of their operational conformance. Certification can be suspended by FSC without regard to operational procedures.
- Environmental campaigning against industry operators often increases once a producer gains certification. NGOs gain greater leverage through FSC certification, and are in a position to intensify attacks on brands.
- They are subscribing to forestry policies that are not environmentally justified and, if implemented, can undermine national development objectives in developing countries.

By opting for the wrong certification system or exclusive approaches to forest certification, companies can inadvertently find themselves party to public campaigns on issues not directly related to their business. Businesses that surrender control of sustainability and CSR commitments to interests outside the company have been exposed to increasing pressure to engage in politically related activities. There are notable examples.<sup>2</sup>

Businesses should understand that "risk management" options come with their own risks. To avoid extraneous activities, that will ultimately become intolerable to senior management and shareholders, companies must be aware of these risks.

<sup>2</sup> Examples are numerous: In 2009 Greenpeace released a report on the Brazilian cattle industry with the intention of applying pressure on consumer goods companies such as Gucci and Kraft, (Greenpeace, *Slaughtering the Amazon* 2009); In 2010 Rainforest Action Network ran a campaign attacking Cargill and the palm oil industry (RAN, *Cargill's Problem with Palm Oil*, 2010); Greenpeace released a report in 2010 associating several companies - including Nestle, Staples, Unilever, and OfficeWorks - with large scale forest destruction and orang-utan extinction. (Greenpeace, *Pulping the Planet*, 2010)

## Introduction – Why is Forest Certification about more than Certification?

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This report analyses and assesses forest certification schemes with particular focus on the two dominant systems - the Forest Stewardship Council (FSC) and the Programme for the Endorsement of Forest Certification (PEFC).

Forest Certification has become a key issue in the flux over sustainability in the forestry, timber and paper industries.

Like most certification systems, it is complex. It is more complex than it needs to be because of the political purposes to which certification is frequently put.

Most users of forest certification systems rightly focus on its utility for facilitating business transactions. The bigger picture, if there is one, is not of much interest when the commercial interest is upper most.

However the big picture matters because it will assist business to manage the political and corporate risk in adopting certification systems. The general argument to use forest certification is to minimize the business risk of not demonstrating regard for sustainability.

The complexities of forest certification mean though that the cure can be worse than the bite. Some have found unmanaged adoption of some certification systems has created an even larger risk to the business.

There are some paradoxes about forest certification. Only nine per cent of forestry worldwide is certified as sustainably produced under voluntary certification systems.

Three things are odd about this. First, most of those certifications occur in industrialized economies where Government regulation generally already demands practice of sustainable forestry.

These regulations typically require harvesting timber in such a way that the forest will regrow and be available for harvesting once more, while maintaining the essential characteristics of the forest and its biodiversity. They also usually specify that environmental damage be limited from tree felling and, depending on the species and forest type, limit the amount and nature of trees that may be felled. They can include obligations to reforest.

These are all practices and methods that certification systems require timber producers to demonstrate. So if it is already a legal requirement to adopt these practices, why go to the expense of implementing costly assurance scheme to demonstrate this?

Two reasons are usually given. The first is that this is part of a program to contain deforestation worldwide, particularly in developing countries where it is highest and where government regulations on forestry are less stringent than in industrialised countries.

This gives rise to the second oddity. There is virtually no market for certification in forest producers in developing countries. Only one per cent of certified forestry worldwide is located in the developing world. Yet, according to the political arguments, the need for more sustainable forest practices is greater in developing countries.

The commercial reason is clear. Generally it costs more to certify in developing countries because the infrastructure is weak. And a large share of forest product exports from developing countries typically go to other developing country markets where buyers show little interest in the fact product has been sustainably produced.

So it is in markets in the industrialized economies where most forest certification is used. This gives rise to the third oddity. Consumers will not pay extra for certified product. There is little evidence that certified timber delivers a price premium, while end-consumer awareness of eco-labels on forest products is low.<sup>3</sup> Industry accounts report that an Australian survey found the two certification marks which connote compliance with the sustainability standards of two leading systems were recognized by only five and two per cent of buyers.<sup>4</sup> Similarly, studies in Europe show little evidence that certification brings immediate market benefits.<sup>5</sup>

This is not due to unfamiliarity with quality certification systems. Other certification systems like ISO9000 (which generally certifies that high management standards are applied in an organization) or ISO 14000 (which generally certifies that organizations have a high standard environmental management system in place) are recognized by buyers and consumers as adding value to the goods and services provided. They are costly to establish and run, but the cost can be passed on to the buyer.

The conclusion to draw is that forest certification systems are generally not commercially viable. Yet buyers (retail chains, luxury goods manufacturers, and processors) are pressing processors to demand product is supplied which is certified as sustainable. If the consumers - the customers at the ends of the supply chain - do not value certified product, where is the pressure on the previous link to demand this of timber and timber product suppliers coming from?

The answer to that question, and understanding the implications of forest certification systems on business risk, are the reasons this report has been prepared.

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<sup>3</sup> Patrick Durst, Philip McKenzie, Chris Brown, Simmathiri Appanah 'Challenges facing certification and eco-labelling of forest products in developing countries' *International Forestry Review* Vol.8(2), (FAO, Thailand, 2006)

<sup>4</sup> Engineered Wood Products Association of Australasia *Forest Management Schemes Gain Credit with Green Architects*, 27 April 2010, accessed at: [http://www.ewp.asn.au/newsandmedia/news\\_forrest.html](http://www.ewp.asn.au/newsandmedia/news_forrest.html)

<sup>5</sup> UNECE/FAO *Forest Products Annual Market Review 2009-2010*, Geneva Timber and Forest Study Paper 21, (United Nations, 2010)



# 1. What is Forest Certification?

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## 1.1 Terms and Definitions

Environmental Management Systems (EMS) have become mainstream business practice over the last twenty years. These systems have their origins in Quality Management Systems developed during the 1980's. The leading system - ISO 9000 - was developed by the International Standards Organization (ISO). From that the ISO 14000 Environmental Management Standards were developed during the 1990's. This was a generic standard. ISO 9000 was an outstanding commercial success and tangibly improved quality systems, particularly in manufacturing in many industries in the industrialized world.

Environmental NGOs never liked ISO 14000. The principal objection was that it set no quantifiable targets to reduce pollution. It was never intended to. Quality Management Systems prescribe outputs, not environmental targets. Efforts were made in the 1990's to develop a forestry version of ISO 14000 but environmental groups like WWF lobbied furiously against them.

Nonetheless these systems were eventually applied to the realm of forestry, leading to the development of specific tools for SFM. One such tool is forestry certification.

Forest certification is a voluntary system used to promote SFM. The mechanism is a market based approach that aims to provide the certified forest product with a third party guarantee, indicated to the consumer by the form of a label.

Forest certification ultimately serves to guarantee a consumer that a specific product has been sourced from a forest that has been managed in compliance with a management standard. Forest certification serves to promote SFM by:

- Establishing standards for processes and performance of forest management;
- Providing producers with an incentive to improve forest management practices by facilitating market signals of preferences for products from sustainably managed forests; and
- Providing information about forest management to both consumers and producers.<sup>6</sup>

Forest certification schemes are essentially voluntary systems of standards and conformance. They generally have four main elements:

- **Forest management standard** – documents that set out the forestry requirements which must be met. They should be established by consensus and approved by a recognised body.
- **Forest certification** – the process by which a qualified and independent third party establishes whether the standard has been met.
- **Accreditation of certification bodies** – the process by which an authoritative body recognises an organisation as competent to undertake forest certification.
- **A mechanism for controlling claims** – A mechanism to trace wood from the certified forest to the final product and ensure that claims are clear, credible and honest. This may include chain of custody systems, and labelling mechanisms to trace a product throughout all production stages.

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<sup>6</sup> Upton, C. and Bass, S. *The Forest Certification Handbook*, (Earthscan Publications, London, 1995) p. 42; Crossley, R., Primo Braga, C. A. and Varangis, P.N. (1997) 'Is there a Commercial Case for Tropical Timber Certification?', in Zarilli, S., Jha, V. and Vossenaar, R. *Eco-Labeling and International Trade*, United Nations, (Macmillan Press Ltd, London; St. Martin's Press Inc., New York, 1997)

## 1.2 Scope and Coverage

There are now a multitude of forest certification schemes operating globally. The United Nations estimates that 355 million hectares of forests has been certified globally, approximately nine per cent of the total global forest area.<sup>7</sup> FSC and PEFC represent the two most prominent systems of forest certification.<sup>8</sup>

PEFC is the largest system for forest certification. Forests certified under the PEFC umbrella total 226 million hectares. PEFC was established in 1999 and has currently endorsed 28 national schemes worldwide.<sup>9</sup>

PEFC is an international system for the mutual recognition of national forest certification schemes. The national schemes are independent legal entities and are developed by National Standards Bodies (NSBs) following ISO guidelines. Those standards are independently assessed for compliance with internationally developed Criteria and Indicators and then approved by the PEFC Council.

FSC was established in 1993 as an international forest certification system applicable at the forest management unit level. FSC also allows for initiatives at the national level, as well as certification against national interim standards that are yet to undergo complete stakeholder consultation. These national initiatives are governed by the FSC International framework. By September 2010, FSC had certified 135 million hectares of forest worldwide, and awarded over 18 000 CoC certificates.<sup>10</sup>

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<sup>7</sup> UNECE/FAO *Forest Products Annual Market Review 2009-2010*, Geneva Timber and Forest Study Paper 21, (United Nations, 2010)

<sup>8</sup> Tables and maps comparing the scope and coverage of PEFC and FSC are provided in Annex I.

<sup>9</sup> PEFC website, *Facts and Figures*, updated September 2010, available at <http://www.pefc.org/about-pefc/who-we-are/facts-a-figures>

<sup>10</sup> UNECE/FAO *Forest Products Annual Market Review 2009-2010*, Geneva Timber and Forest Study Paper 21, (United Nations, 2010)

## 2. Evolution of Forestry Certification

### 2.1 Origins PEFC and FSC

The origins of forest certification can be traced back to the Rio Earth Summit in 1992. During the summit, three international environmental conventions pertaining to climate change,<sup>11</sup> biodiversity<sup>12</sup> and sustainable development<sup>13</sup> were adopted.

A fourth, relating to forestry,<sup>14</sup> was opposed by developing nations on the grounds that it would be economically unsustainable. Forestry issues did however gain some momentum through the development of intergovernmental organisations such as the United Nations Forum of Forests,<sup>15</sup> the Montreal Process<sup>16</sup> and the International Tropical Timber Organisation.<sup>17</sup>

The Rio Earth Summit contributed to SFM through the production of two documents. One document - *Forest Principles* - served as a list of non-legally binding principles representing consensus between developed and developing countries. Another output - *Agenda 21* - outlined a programme to implement sustainable development, including a chapter focusing on combating deforestation.

Despite these advances, many NGOs saw the ongoing international processes, including the Rio Earth Summit, as a failure in regards to their forestry agenda. These NGOs united the following year to establish a private system of forest governance, with the aim of implementing SFM principles. This came in the form of forestry certification through a newly established institution – the Forest Stewardship Council (FSC).

FSC was founded in 1993. The World Wide Fund for Nature (WWF) played a crucial role in the establishment of FSC and continues to play a key role in its development and promotion.<sup>18</sup> Other environmental non-governmental organisations who were active on forestry policy issues were also founding members of the FSC, including Greenpeace and the Rainforest Alliance. Significant development milestones included:

- the formation of WWF 95+ group in 1991
- the interim appointment of FSC Board of Directors in 1992
- the establishment of FSC in October 1993 with 1340 participants from 26 countries

PEFC was established in 1999 as an alternative forestry certification scheme. The initial drivers behind PEFC were European small/family forest owners seeking certification under an independent umbrella organisation. European forest owners viewed FSC certification as too costly for small forest owners while PEFC's original specific focus on temperate forests was better suited to their context. Some stakeholders regarded FSC certification as less relevant to their operations given the relatively strict national legal requirements already established in Europe.<sup>19</sup> The organisation was formally established by eleven national organisations in 1999, and endorsed the first PEFC national scheme the following year.

<sup>11</sup> The United Nations Framework Convention on Climate Change

<sup>12</sup> The Convention on Biological Diversity

<sup>13</sup> Agenda 21

<sup>14</sup> Forest Principles

<sup>15</sup> Developed out of the Intergovernmental panel on forest (IPF) and Intergovernmental forum on forests (IFF)

<sup>16</sup> An inter-governmental working group established in 1994 to develop Criteria and Indicators for the conservation and sustainable management of temperate and boreal forests

<sup>17</sup> An intergovernmental organization promoting the conservation and sustainable management, use and trade of tropical forest resources

<sup>18</sup> F Gale and M Haward, *Public accountability in private regulation: contrasting models of the Forest Stewardship Council (FSC) and Marine Stewardship Council (MSC)*, (School of Government, University of Tasmania 2004)

<sup>19</sup> Presentation by Laura Secco, *PEFC and FSC Standards and Certification Procedures – a comparative analysis*, University of Padova (2009),

## 2.2 Funding

Governments and trust funds were a major source of funding for the establishment of FSC. Early preparatory meetings and consultations held between 1992 and 1993 were purportedly funded by governments and NGOs. Donors - including the Austrian, Dutch and Mexican Governments, WWF Netherlands and the Ford Foundation - assisted projects such as the establishment of the FSC head office and national consultations.<sup>20</sup>

FSC A.C. by-laws allows for funding from six sources:<sup>21</sup>

- 1) evaluation fees paid by certification bodies to cover the costs of the accreditation process
- 2) accreditation fees charged to accredited certification bodies
- 3) fees for the use of the FSC trademark
- 4) grants and donations
- 5) membership dues
- 6) returns from investments and services

The breakdown of FSC funding tends to vary on an annual basis. In 2007, one third of funding for FSC International came from foundations, government donors and business contributions. The other two thirds came from fees such as membership dues and accreditation fees.<sup>22</sup> In 2006, 51 per cent of funding arrived through the donation program.

PEFC is almost entirely funded through membership fees, although funding can also be sourced from subsidies, grants, and bequests from private or public entities or individuals.<sup>23</sup> PEFC report membership fees make up 99 per cent of funding.<sup>24</sup>

## 2.3 Governance Structures

NGOs played a key role in the establishment of FSC, reflected in a governing structure that ensures the foundation NGO members have a majority of votes and control of the organisation.

FSC holds a three chamber system of voting. The General Assembly - FSC's highest decision making body - is divided into three chambers representing i) social ii) environmental and iii) economic interests (see Fig 2.1).<sup>25</sup> Each chamber wields the same number of votes regardless of the number of members in each chamber. These chambers are further split by geographic lines (North/South).

The PEFC General Assembly distributes votes between National Governing Bodies (NGBs) and International Stakeholder Members in a system that ensures NGB votes exercise at least two thirds of all General Assembly votes (Fig 2.2).

<sup>20</sup> E. Schmidt, 'The Forest Stewardship Council: Using the Market to Promote Responsible Forestry', *Yearbook of International Co-operation and Development 1998/1999*, (1999)

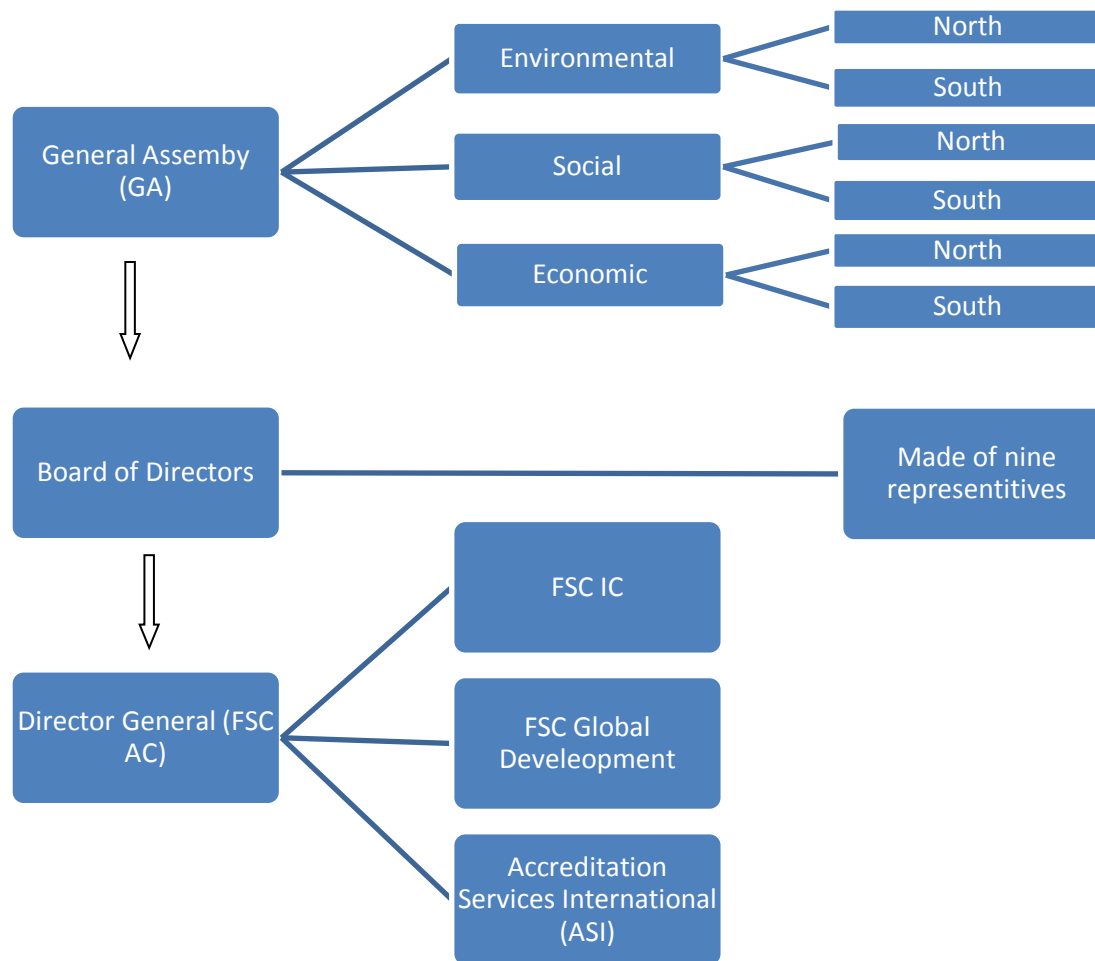
<sup>21</sup> FSC, *By-Laws*, (2009), accessed at: [http://www.fsc.org/fileadmin/web-data/public/document\\_center/institutional\\_documents/1\\_1\\_FSC\\_By-Laws\\_2009.pdf](http://www.fsc.org/fileadmin/web-data/public/document_center/institutional_documents/1_1_FSC_By-Laws_2009.pdf)

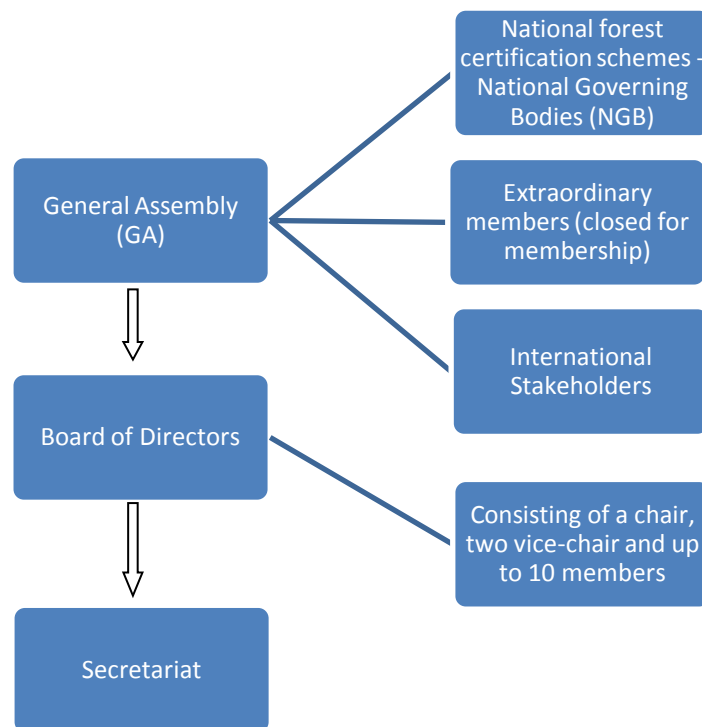
<sup>22</sup> FSC, *Annual Report* (2007), accessed at: [http://www.fsc.org/fileadmin/web-data/public/document\\_center/publications/Annual\\_Reports/Annual\\_Report\\_2007.pdf](http://www.fsc.org/fileadmin/web-data/public/document_center/publications/Annual_Reports/Annual_Report_2007.pdf)

<sup>23</sup> PEFC, *Statutes*, (2009) accessed at: <http://pefc.org/resources/organizational-documents/statutes-strategy/item/412>

<sup>24</sup> PEFC (website), *About PEFC*, accessed at: <http://pefc.org/about-pefc/governance>

<sup>25</sup> FSC, organisation diagram, available at: [http://www.fsc.org/fileadmin/web-data/public/document\\_center/membership\\_documents/FSC\\_weighting\\_of\\_chambers.pdf](http://www.fsc.org/fileadmin/web-data/public/document_center/membership_documents/FSC_weighting_of_chambers.pdf)

**Fig 2.1 – Organisational Structure of FSC****Fig 2.2 – Organisational Structure of PEFC**



### 3. Comparison of Standards

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#### 3.1 Principles, Criteria and Indicators

Environmental standards are based on Criteria and Indicators. Several inter-governmental, national and private-sector initiatives have attempted to outline good SFM practice by producing Criteria and Indicators. Criteria refer to the broad values of forest sustainability while Indicators serve to guide how Criteria can be met.

Both PEFC and FSC aim to certify forest producers against SFM, yet there is no comprehensive international agreement as to what constitutes SFM. A number of broad definitions have been developed by regional intergovernmental processes. FSC for instance, adopts a definition of SFM that was recognised by the Forest Principles:

*“Sustainable management... [of] forest resources and forest lands... to meet the social, economic, ecological, cultural; and spiritual needs of present and future generations”<sup>26</sup>*

FSC use this definition to develop a set of 10 Principles and 56 Criteria for “responsible forest management”.<sup>27</sup> The document serves as the basis for their international standard. This standard is based on the deliberations of the organisation’s General Assembly rather than inter-governmental or scientific processes. The FSC General Assembly ultimately has the ability to control the standard by amending the Principles and Criteria of SFM.

FSC also develops national standards by interpreting the Principles and Criteria of the international standard into a nationally specific document. This is done through a FSC Standards Development Group.

PEFC take a different approach to standard setting. PEFC also recognise the United Nations General Assembly definition (through processes such as the Ministerial Conference on the Protection of Forests in Europe) but require national standards to be based on internationally developed and accepted Criteria and Indicators. This approach provides operators with assurance that SFM will be based on international consensus and current scientific knowledge.

PEFC has a decentralised structure, whereby applicant schemes are developed by independent National Standards Bodies (NSBs) often recognised by the International Organisation for Standardisation (ISO). PEFC National Governing Bodies may then submit the national standard for PEFC endorsement. In order to achieve PEFC endorsement, the national standard must conform to the requirements prescribed by the Criteria and Indicators documented in PEFC’s international standard.<sup>28</sup>

These Criteria and Indicators build on internationally developed processes such as the Ministerial Conference on the Protection of Forests in Europe (MCPFE); Montreal Process (Criteria and Indicators for the Conservation and Sustainable Management of Temperate and Boreal Forests); the International Tropical Timber Organisation (ITTO) process for tropical forests; and the African Timber Organisation (ATO) and ITTO process for tropical African forests. PEFC further require compliance with fundamental ILO Conventions, as well as other international conventions relevant to forestry management.<sup>29</sup>

#### 3.2 Comparison of Principles, Criteria and Indicators

Despite arriving at Criteria and Indicators for SFM differently, both schemes deliver closely aligned sustainability *outputs*. Using the comparisons in Annex III, the consultant identified areas of commonality and differences. This comparison has been supplemented by additional

<sup>26</sup> United Nations General Assembly, *Forest Principles*, 2b (1992)

<sup>27</sup> FSC, *International Standard – FSC Principles and Criteria for Forest Stewardship*, (1996)

<sup>28</sup> PEFC Council, *Sustainable Forest Management – Requirements*, PEFC ST 1003:2010 (PEFC, 2010)

<sup>29</sup> Such as Convention on Biological Diversity, Kyoto Protocol and Carbon Sinks, Convention on International Trade in Endangered Species of Wild Fauna and Flora and Bio safety Protocol

studies, such as those undertaken by the Australian Forest Wood Products Research and Development Corporation<sup>30</sup> and the Meridian Institute.<sup>31</sup>

The consultant's analysis reveals that PEFC endorsed national standards and FSC standards are often highly compatible. Both FSC and PEFC promote standards that incorporate legal compliance; tenure and land use rights; provisions for labour and health & safety requirements; address issues pertaining to local communities and economic benefits of forest resources; requirements for environmental impacts assessments and minimisation; requirements for management planning; provisions for monitoring and assessing operations; the maintenance, conservation and protection of environmentally sensitive forest areas; and issues specific to plantation forests.

The comparison has also identified several key areas of difference:

- **Basis for Criteria and Indicators** – PEFC bases its Criteria and Indicators for SFM on international processes and the results of scientific research. FSC do not identify the basis for their Criteria and Indicators.
- **Plantation forestry** – the FSC standard addresses plantation forestry specifically, while PEFC provides an interpretation of Criteria and Indicators for the context of plantation forestry.
- **Forest conversion** - FSC prohibits plantations established in areas converted from natural forests after November 1994. PEFC also restricts forest conversion (after 31 December 2010), but with greater flexibility by allowing forest conversion to occur in “justified circumstances”. PEFC also include provisions to promote conversion of abandoned agricultural land “whenever it can add economic, ecological, social and/or cultural value”.
- **Environmentally sensitive forest areas** – FSC has provisions for the conservation and protection of High Conservation Value Forests (HCVF). FSC defines HCVF arbitrarily, using non-specific definition. PEFC similarly requires the conservation and protection of environmentally sensitive areas. However, PEFC uses international processes and normative language to define these sensitive areas.
- **Social and economic considerations** – PEFC have stronger social and economic requirements than those prescribed by FSC standards. For instance, PEFC requires compliance with fundamental ILO conventions, while FSC does not specifically require compliance.

Notwithstanding the aforementioned exceptions, the comparison shown in Annex III illustrates the overwhelming similarities between the two standards. When applied in the field, both PEFC and FSC sustainable forestry management standards are capable of delivering ‘good’ forest management.

<sup>30</sup> Australian Government Forest Wood Products Research and Development Corporation, *Benchmarking the Australian Forestry Standard*, (Prepared by Indufor OY, 2003)

<sup>31</sup> Meridian Institute, *Comparative Analysis of the Forest Stewardship Council and Sustainable Forestry Initiative Certification Programs* (2001)



## 4. Comparison of Processes

### 4.1 Principles of Good Governance

PEFC and FSC may share similarities in regards to what constitutes SFM, but they are considerably different systems. PEFC follows international best practice for standard setting, while FSC have developed an alternative system without equivalent checks and balances.

International best practice follows the guidelines of the International Organisation for Standardisation (ISO). To assist the process of converting Criteria and Indicators into a standard, the ISO produced a set of guidelines based on principles of good governance.

PEFC subscribes to these principles (thereby following international best practice). Under PEFC requirements, applicant schemes are required to set standards keeping with the requirements of ISO/IEC Guide 59:1994 Code of good practice for standardization. National standard must be developed by NSBs, and meet requirements for transparency, consultation and decision-making by consensus. These guidelines also outline processes for revising and amending standards, and provide those who utilise the standard with the security of future certainty.

PEFC standard setting procedures meet these requirements.<sup>32</sup> Standard setting arrangements in FSC do not meet ISO guidelines as standards are developed and approved by FSC instead of NSBs. As a result, FSC standard setting arrangements provide operators with little guarantee of long term consistency of the standard.

### 4.2 Arms-Length Separation

The FSC model does not comply with international best practice in other regards. ISO standards require certification bodies to be impartial, in order to ensure the standard setter has no say in whether the operator is rated as compliant or not.<sup>33</sup> The ISO model effectively establishes arms-length separation between standard setter and the body which determines compliance with the standard.<sup>34</sup> FSC however control (and influence) which bodies can verify operator compliance.<sup>35</sup>

FSC describes itself as an “integrated” system. It can be more accurately described as centrally controlled, as its executive arm controls all aspects of the system processes - the standard setting process and certifying compliance with the standard.

PEFC requires certification bodies to be accredited by a national accreditation body (itself accredited by the IAF) to demonstrate independence from the standard setting organisation. IAF is the international organisation responsible for accrediting certification bodies for compliance with ISO documents. This process is designed to “ensure that certification/registration bodies are both competent to carry out the work involved and are operated independently of businesses that are certified”.<sup>36</sup> In adopting the ISO/IAF model, PEFC demonstrates structural independence between the standard setting process, certifying compliance with the standard and governance of the scheme.

### 4.3 FSC and ISEAL – Adding ‘Credibility’

FSC does not follow international best practice as i) standards are not developed by a NSB committed to ISO guidelines for stakeholder consultation, transparency and decision making by consensus, and ii) it lacks arms-length separation between functions of standard setting and certifying compliance with the standard.

<sup>32</sup> PEFC, *Technical Document*, (2007), Annex 2

<sup>33</sup> ISO/IEC, *17021:2006 Conformity assessment -- Requirements for bodies providing audit and certification of management systems* (Geneva, 2006)

<sup>34</sup> ISO/IEC, *Guide 65 General requirements for bodies operating product certification systems*, (Geneva, 1996)

<sup>35</sup> FSC owned subsidiary Accreditation Services International (ASI) accredits certification bodies

<sup>36</sup> IAF Website, *About IAF – What is certification/registration*, accessed at: <http://www.iaf.nu/>

Notably FSC cannot gain membership to the IAF. The IAF requires that services provided by one IAF accreditation body member must be accessible to other IAF members. To gain membership, FSC would have to relinquish its monopoly on accrediting FSC certification bodies.

But there are few indications that FSC is willing to introduce greater impartiality into its processes. FSC proudly promotes an “integrated” rather than an “arms-length” system:

“FSC is the only global forest management certification system with an *integrated* accreditation program that *systematically controls* its certification bodies.”<sup>37</sup>

To add credibility to its standard setting procedure, FSC associated itself with another international body – International Social and Environmental Accreditation and Labelling (ISEAL) Alliance.<sup>38</sup> FSC helped develop and subscribed to ISEAL’s *Code of Good Practice for Setting Social and Environmental Standards*. The Code states that compliance will ensure “the process by which a standard [is developed] is credible.” However the code does not require arms-length separation between standard setting and accreditation.

ISEAL provides FSC with ‘reputable’ accreditation. In fact it gives authority to FSC to control and influence the entire standards and conformance process without the checks and balances required under ISO/IAF guidelines. In this way FSC is able to control the core elements of policy by effectively operating both the functions of standard setting and conformity assessment (including accreditation and certification).

#### 4.4 Summary of Differences<sup>39</sup>

##### Standard setting

PEFC requires national standards for forest management and chain of custody to be set by National Standards Bodies with technical committees and stakeholder consultation. The process follows ISO rules, including participation of stakeholders, public consultation, decision making by consensus and transparency. Before a national standard is adopted, it must also undergo an external conformity assessment to ensure that it meets the requirements of PEFC’s international standard.

FSC system requires that the standard be set internally, without complying with ISO guidelines and international best practice. FSC stakeholder participation requirements are weak<sup>40</sup> decisions are not necessarily made by consensus,<sup>41</sup> and there is low transparency with no requirements for external review or assessment throughout the standard setting process (see Annex II). Furthermore FSC undermines their standard setting processes by allowing certification against interim standards.<sup>42</sup>

*FSC standard setting processes do not meet international best practice*

##### Certification and accreditation

Certification of compliance with a forest management standard is undertaken by third parties for both PEFC and FSC. However, PEFC requires third party certification bodies to be verified

<sup>37</sup> FSC website, *FSC Accreditation Program*, accessed at: <http://www.fsc.org/accreditation.html>

<sup>38</sup> FSC and other ecolabelling schemes such as the Marine Stewardship Council (MSC) and the Fairtrade Labelling Organisation (FLO) established the ISEAL Alliance as an authoritative accreditation framework.

<sup>39</sup> For a detailed comparison of standard setting processes, see Annex II

<sup>40</sup> For instance only FSC members are allowed to join a Working Group (for standard development) and only members are formally invited to join the Consultative Forum - a body responsible for stakeholder participation in FSC standard setting - through an invitation in a FSC newsletter. The forum does not exclude participation of non-FSC members in the Consultative Forum; however there is nonetheless a bias in the process towards FSC members.

<sup>41</sup> In some situations (for example approval of international standards) where consensus cannot be reached, decisions are made by majority vote. The document, *FSC Procedure – the Development and Approval of FSC Social and Environmental International Standards* (2006), states that “if a vote is required, then consensus is defined as meaning that at least 66% of the members of the Working Group vote in favor of the proposal, and there are no votes against the proposal”.

<sup>42</sup> Standards that are yet to complete the entire standard setting process

independent under IAF accreditation requirements. This is to ensure arms-length separation of the standard setting and conformity assessment processes.

FSC on the other hand accredits certification bodies through a subsidiary – Accreditation Services International (ASI). The FSC accreditation program claims to be based on ISO guidelines but it does not comply with requirements for impartiality and arms-length separation. Under the FSC model, the standard setting function is “integrated” with the certification and accreditation processes. At the same time, there exists no transparent mechanism to review ASI operations to ensure impartial accreditation of certification bodies.

*FSC processes do not maintain arms-length separation nor meet international best practice*

## 5. Comparison of Governance

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### 5.1 Management and Governance

PEFC and FSC are both not-for-profit, membership organisations that share several structural similarities. In both organisations:

- the General Assembly represents the highest decision making body, being made up of organisational members
- General Assembly appoints a Board of Directors responsible for the management of General Assembly matters
- day-to-day management is the responsibility of an appointed officer (Executive Director/Secretary)

There are however major differences in their respective governance that relate to voting systems and membership requirements.

**Adoption of standards** – Both organisations must officially adopt standards before they are recognised. In the PEFC system, all key documents (including standards) are adopted by the highest body - the General Assembly - governed by strict voting and membership rules. In FSC, the highest body (also the General Assembly) adopts only the international standard outlining generic Principles, Criteria and Indicators. All other documentation, including national and other standards, are adopted by the FSC Board of Directors who do not necessarily represent General Assembly consensus.

**Voting systems** - Participators representing environmental and social interests are ensured a combined two thirds of the General Assembly votes under the FSC system. This is achieved through a three chamber voting system (outlined in fig 3.1) that ensures non-industry actors always hold the majority of power.

Despite being a structural minority, the economic chamber represents the principle stakeholders in the forest certification scheme. Under the FSC structure, business interests are outweighed by environmental and social interest.

PEFC General Assembly distributes votes between National Governing Bodies (NGBs) and International Stakeholder Members in a system that ensures NGB votes make up at least two thirds of all General Assembly votes.

**Membership** - Because PEFC is a mutual recognition body, its members are predominantly national forest certification schemes. These national schemes are in themselves multi-stakeholder organisations representing a range of interests on a national level. Additional stakeholders are offered membership under the category of International Stakeholders. Under PEFC statutes, all General Assembly members are required to commit to PEFC requirements “within their responsibilities”.<sup>43</sup>

Membership of FSC is open to organisations and individuals that subscribe to their aims. FSC has additional criteria for membership to the economic chamber, including provision of extensive corporate and financial information as well as requirements for applicants to demonstrate a commitment to become certified under FSC. Membership to the social and environmental chambers requires fewer commitments, and criterion for their membership is notably broad. Through this process, NGOs formally opposed to commercial forestry can gain membership.

FSC by-laws allow for individual members to challenge the membership of others under broad criteria. Any member (with the support of two others) can initiate a destitution process on the grounds that the member acted against the interests of FSC. The Board of Directors can decide if the evidence warrants a general assembly vote.<sup>44</sup> These provisions, in combination with

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<sup>43</sup> PEFC, *Statutes*

<sup>44</sup> FSC, *By-laws*

FSC's three chamber voting system, make it possible for campaigners to apply internal pressure on industry members.

## 5.2 Purpose and Effect

A comparison of PEFC and FSC governance structures serves to identify a clear political and ideological division of support.

FSC has the broad support of key environmental non-governmental organisations. Greenpeace, WWF and Rainforest Alliance (an FSC certification body) were founding members of FSC. WWF International is represented on the Board of Directors. WWF in particular, has been a key strategic and political supporter of FSC since its inception. There is a widespread perception that WWF controls FSC.

On the other hand national standards seeking endorsement under PEFC are driven by materially affected stakeholders, such as small and family forest owners, and other interested parties, including NGOs and business. As such they tend to have strong support from governments, forestry producers and the wider forest related community.

Forest certification schemes should be viewed within their respective political contexts. PEFC, following international best practice, provides forestry certification as an instrument for business to pursue responsible business practices and promote sustainable forest management. Business subscribe to the scheme with guarantees that the standard setting is based on international processes; that certification processes are independent with necessary checks and balance; and that standard setting is not dictated by the agenda of member organisations.

FSC governance structure allows the organisation and its members to control policy throughout all stages. Standards are developed and amended by FSC; certification is performed by bodies accredited by FSC; and membership is dominated by loosely defined environmental and social organisations. This process reflects the ideological aim of key NGO founders of FSC allowing the organisation to be used as an instrument for environmental campaigning.

## 6. Risks to Business

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These differences outlined in sections 4. and 5. are not academic. PEFC and FSC schemes may certify Sustainable Forest Management with significant alignment when applied in the field (Section 3). But differences in processes and governance pose significant risks to businesses that align to the FSC scheme.

The risk of affiliation to FSC is being embroiled in environmental campaigning. Environmental campaigners have developed a strategy of attacking enterprise through consumer focussed campaigns.<sup>45</sup> These campaigns are often highly profile with significant media coverage. They have the potential to cause considerable damage to a brand.

One example of this type of environmental campaigning is the long running Greenpeace attack against Kimberly Clark in the USA. Between 2004 and 2009, Greenpeace ran a high profile media campaign against the paper products company, whose brands include 'Kleenex' and 'Huggies'. Greenpeace attempted to exert consumer pressure on Kimberly Clark through allegations that the firm was linked with unsustainable forestry practices in Canada and the United States. Greenpeace demanded that Kimberly Clark stop purchasing wood fibre from allegedly endangered forests, increase the amount of recycled fibre that they use, and agree to purchase 'virgin' fibre only from FSC certified forests.

This was part of a Greenpeace campaign to halt logging of natural forest in Canada. Canadian law requires the practice of sustainable forestry and has a well-managed and well regarded national forestry industry. Kimberley Clark went along with Greenpeace demands in full knowledge that there is not an adequate supply of FSC certified timber available in the market to meet long term requirements.

Corporate Sustainability Managers clearly see the risk of these environmental campaigns. They may be tempted to treat environmental certification as a method for managing risk posed by them.

There exists within the CSR field a supposition that certification will provide a guarantee against such attacks. In some cases there is a further assumption that certification or membership to a certification scheme acts as an informal agreement between business and NGO. Industry may assume that compliance with environmental standards will appease ENGO campaigning.

Analysis into ENGO campaign strategy does not support this assessment. Closer investigation shows that ENGOs anticipate that businesses will look to gain certification once attacked. Once operators enter into a certification scheme under FSC they are often exposed to greater campaigning efforts.

NGOs have taken advantage of the lack of independent process and business representation within FSC. Case studies show that campaigners use the scheme as a platform to launch further attacks on operators. Businesses have blindly subscribed to FSC certification without fully understanding potential business risks. Considering the resources invested into creating and marketing a brand, businesses should be wary of association with FSC.

### 6.1 Political Agenda in FSC

*FSC allows for the political agenda of member organisations to interfere with SFM standards. These obligations, such a zero land conversion and bans on logging in natural forests, reflect political aspirations rather than scientifically-based SFM.*

FSC structure and governance allows for the certification scheme to be used for political purposes and environmental campaigning. FSC was originally established by environmental

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<sup>45</sup> Rhett Butler, 2010, 'In the Battle to Save Forests, Activists Target Corporations', Yale Environment 360, accessed at: <http://e360.yale.edu/content/feature.msp?id=2267>



campaigners and was set up with mechanisms to ensure that decision-making power is in the hands of NGO members.

Past campaigning shows that FSC has specifically been used by NGOs to advance a platform of i) zero forest conversion and ii) restricted forestry in natural/native forests. These are a political considerations rather than scientifically based methods to conserve identified forest ecosystems. Nonetheless, the FSC standard has been amended several times to reflect these 'goals'.

FSC's structural arrangements allow the scheme to certify to an agenda, instead of the SFM Principles and Criteria outlined in its standards. Skewed power structures and NGO lobbying within the organisation has produced a scheme where operator compliance is not the sole requirement for certification. Several case studies presented in the next chapter show that compliant operators can be denied certification or have certification suspended - irrespective of their operational conformance.

## 6.2 Environmental Campaign Strategy and FSC

*FSC certification is a key tool used by environmental campaigners. Attacks against industry operators usually increase when a producer is certified. NGOs have developed a strategy to coerce businesses to comply with FSC standards*

Influential ENGOs such as WWF and Greenpeace have led a campaign to restrict commercial forestry, particularly in developing countries, over the last 30 years.

Failing to convince governments or international organisations to adopt their forestry standards during the Rio Earth Summit, they employed a technique of applying external pressure on forestry businesses to comply with their standards through FSC.

Initially NGOs tried to convince industry that certification was economically rational and that the market would pay a premium for environmentally friendly forest products. The last ten years have shown little evidence that certification provides operators with significant economic benefits. For example a report prepared for the Timber Trade Federation and British Government (DFID) found forest products labelling could not be associated with price premium in Europe.<sup>46</sup>

ENGOs have subsequently changed tactics. Campaigners have aggressively threatened businesses with public attacks should they not apply for FSC certification. WWF clearly laid out this strategy in 2001 by warning companies that brands were at risk unless sustainability standards were applied.<sup>47</sup>

Several commentators have noted the high levels of NGO co-operation in environmental campaigning.<sup>48</sup> Lyon for example, points out that NGOs may be confrontational or co-operative in their dealings with businesses. The strategy is clear: an NGO (usually with a radical reputation) 'identifies' a specific sustainability problem; another NGO (usually with an industry friendly reputation) will provide the business with a 'solution'. For the forest products industry, this 'solution' is invariably FSC certification. Mathew Banks, a senior programme officer at WWF, commented:

*"The tactic of WWF is to target companies that have the greatest impact on the places and threats that are most critical to the living planet ... signs a memorandum of understanding reflecting both the company's and WWF's commitment to mutual goals ... In the uncommon case where commitments have not been met, WWF has expelled company from its programs and publically shared its concerns".<sup>49</sup>*

<sup>46</sup> Forest Industries Intelligence Limited, *EU market conditions for "verified legal" and "verified legal and sustainable" wood products*, (prepared for British Government (DFIF) and Timber Trade Federation 2009)

<sup>47</sup> WWF, *The Forest Industry in the 21 Century*, (2001)

<sup>48</sup> Thomas Lyon, *Good Cop Bad Cop - Environmental NGOs and their strategies towards business*, (Earthscan, Washington 2010)

<sup>49</sup> *Ibid.*, pp 177

Banks goes on to say that this “leveraging” has assisted WWF in achieving “its greatest successes”. Such comments provide insight into how NGOs regard FSC. Rather than providing a ‘solution’ to environmentally sustainable management, it is clear that FSC is used as tool for environmental campaigning.

By allowing the standard and organisation to be manipulated by campaigners, FSC certification has become a NGO tool for coercive campaigning as much, if not more than just a mechanism for improving environmental management.



## 7 Case Studies

The following case studies serve to demonstrate how environmental campaigners have used FSC as a mechanism to pressure industry. Several explicit risks can be drawn from their close examination:

- *Certification can be suspended by FSC without regard for operational procedures. FSC's NGO members have the ability to lobby the organisation to suspend operators regardless of their operational conformance.*
- *Certified operators need to fulfil ever-increasing obligations in order to conform to FSC members' political agendas. These obligations, such as a zero land conversion platform, are political aspirations rather than aspects of mainstream SFM.*
- *Environmental campaigning against industry operators often increases when a producer is certified. NGOs gain greater leverage through FSC certification, and are in a position to intensify attacks on brands.*

### 7.1 Standards or Politics? – APP, Indonesia

APP mills in Indonesia and China were FSC certified for several years under 'chain of custody' certification.

However in 2007, FSC withdrew from APP the right to use FSC certification of source material. According to media reports and public statements made by officials, FSC withdrew certification under pressure from key environmental members (namely WWF and RAN).<sup>50</sup>

The decision by FSC was not based on issues of non-compliance with FSC standard. Neither conformity assessments nor audit reports were produced. Rather the decision for suspension was reported by the media as a case where internal politics had the ultimate decision. In this case politics, not SFM, was the standard used to assess operator compliance.

FSC's decision to suspend certification came despite the auditor report by respected Swiss firm SGS certifying APP operations against FSC requirements.<sup>51</sup>

In reporting the developments, the *Wall Street Journal* included a warning for other forestry businesses. A representative from SGS noted that developments such as this discourage companies from pursuing FSC certification. According to the SGS representative, this type of politicking "will surely drive away most of the big players in tropical forestry."<sup>52</sup>

### 7.2 Environmental Campaigning within FSC - SCA, Sweden

Swedish company, SCA, is a member of FSC Sweden and has managed 2.5 million hectares of forestland in compliance with FSC standards since 1999.<sup>53</sup>

In 2008 SGS performed an audit report that confirmed SCA was introducing additional procedures to ensure ongoing conformity with FSC standards.<sup>54</sup> But environmental NGO Swedish Society for Nature Conservation (SSNC), also an FSC member, continued to attack the company on the grounds of unsustainable practice.<sup>55</sup>

<sup>50</sup> Tom Write, Jim Carlton, 'FSC's 'Green' Label for Wood Products Gets Growing Pains', *Wall Street Journal*, (30 October 2007).

<sup>51</sup> SGS, 'Chain of Custody Certificates', (2007), accessed at: [http://www.sgs.com/forestry\\_coc1\\_3001-4000\\_-\\_new.pdf](http://www.sgs.com/forestry_coc1_3001-4000_-_new.pdf)

<sup>52</sup> Tom Write, Jim Carlton, *Wall Street Journal*,

<sup>53</sup> SCA Press release, *Record deliveries of FSC paper*, (10 March 2010), accessed at:

<http://www.sca.com/en/Press/News-features/Archive/2010/Record-deliveries-of-FSC-paper/>

<sup>54</sup> SGS, *Report from extra follow-up audit of SCA Skog AB*, (2008), accessed at:

[http://www.forestproducts.sca.com/modules/gb/news/admin/content\\_news/08/SGS%20Sweden%20s%20%20Result%20of%20FSC%20audit.pdf](http://www.forestproducts.sca.com/modules/gb/news/admin/content_news/08/SGS%20Sweden%20s%20%20Result%20of%20FSC%20audit.pdf)

<sup>55</sup> SSNC, *Cutting the Edge*, (2010) accessed at: <http://www.naturskyddsforeningen.se/upload/press/rapport-cutting-the-edge.pdf>

Swedish forestry has been identified as a model for sustainable practice.<sup>56</sup> However SSNC called for increasing protection of Sweden's forests on a platform of general opposition to commercial forestry.

Astoundingly, SSNC was simultaneously campaigning against SCA and acting on FSC Sweden's Board of Directors (SSNC subsequently resigned from the Board of Directors, but retained FSC membership).

Business cannot assume FSC certification will provide 'protection' from environmental campaigners. In some cases, certification provides NGO's leverage to further attacks.

### 7.3 NGO Lobbying – VicForests, Australia

FSC members can call for the suspension or withdrawal of membership under broad criteria. This can be used by ENGOs to exert pressure on members to conform to ongoing environmental requirements.

VicForests is an Australian state-owned enterprise responsible for the management of over 8 million hectares of forest. It is a member of FSC Australia and publically committed to compliance with FSC's principles and certification.<sup>57</sup>

Despite supporting FSC Australia, VicForests has been attacked by several of the organisations leading members. The Wilderness Society, Friends of the Earth Melbourne, Australian Conservation Foundation, Friends of the Earth Australia, Greenpeace International and Environment East Gippsland have lobbied the FSC Australia Board to suspend VicForests' membership.<sup>58</sup>

Under internal pressure, the board agreed to a 12 month review of VicForest operations. The campaign is somewhat surreal - FSC Australia has not yet fully developed a national standard, yet members are already attacking an operator for non-compliance.

### 7.4 FSC and Risk Management – Danzer Group, Republic of Congo

In 2009 German logging company, Danzer Group, gained FSC certification for their subsidiary Industrie Forestière d'Ouessou (IFO) based in the Republic of Congo. The process started in 2006 when Danzer announced it would work with WWF to obtain FSC certification for its operation in the Congo.<sup>59</sup>

Ultimately however, being in partnership with a respected NGO did little to manage risks associated with environmental campaigning.

Greenpeace published a report in 2007 accusing the logging company of large scale environmental destruction and illegal practice.<sup>60</sup> Danzer effectively rebutted Greenpeace's accusations of illegality.<sup>61</sup> But damage to Danzers reputation was already done.

The firm continued with its intentions to gain FSC certification, finally doing so in 2009. But the cost of 'partnership' with WWF was arguably high.

<sup>56</sup> Per Angelstam, 'Forest biodiversity management—the Swedish model', in Towards Forest Sustainability (eds. David Lindenmayer Jerry Franklin), (CSIRO 2003)

<sup>57</sup> FSC Australia is in the process of producing an Australian standard. To date it has released an interim standard.

<sup>58</sup> Minutes for the meeting of the Board of Responsible Forest Management Australia Ltd Wednesday (24 June 2009), accessed at: [http://www.fscaustralia.org/sites/default/files/pdf/Minutes%2024\\_6.pdf](http://www.fscaustralia.org/sites/default/files/pdf/Minutes%2024_6.pdf)

<sup>59</sup> Danzer/WWF, press release, *Danzer Group and the WWF to co-operate*, (2006) accessed at: [http://www.danzergrupp.com/fileadmin/files\\_group/docs/press\\_11092006.pdf](http://www.danzergrupp.com/fileadmin/files_group/docs/press_11092006.pdf)

<sup>60</sup> Greenpeace, *Carving up the Congo*, (2007) accessed at: <http://www.greenpeace.org.uk/media/reports/carving-up-the-congo>

<sup>61</sup> Danzer, *Company Statement*, (2008) accessed at: [http://www.danzergrupp.com/fileadmin/files\\_group/docs/Statement\\_Danzer\\_Group\\_final.pdf](http://www.danzergrupp.com/fileadmin/files_group/docs/Statement_Danzer_Group_final.pdf)

## 7.5 ‘Third-Party’ Certification – APRIL, Indonesia

Asia Pacific Resource International Holding Limited (APRIL) is a large global pulp and paper producer. The company held FSC controlled wood certification for its operations in Indonesia since 2008.

In 2010 the auditor charged with assessing APRIL’s conformance with FSC standards, Smartwood, found “environmental and social issues that APRIL must resolve”. FSC subsequently suspended APRIL’s certification.

The assessment performed by Smartwood found incidences of non-conformity in APRIL’s operation - PT Riau Andalan Pulp and Paper. Smartwood produced a conformity assessment that found issues relating to FSC requirements for HCVA.

The report did not suggest that suspension of certification was due to a change in APRIL’s operational procedures. The audit found that the conflict was based on a “difference in definitions of HCVF between WWF and APRIL.”<sup>62</sup>

The audit report implies that FSC/Smartwood arbitrarily reframed the SFM standard. Presumably APRIL conformed to the FSC criteria for HCVF in 2008 when initially certified.

The auditing firm, Smartwood, is run by FSC member Rainforest Alliance, and accredited to certify operators under FSC subsidiary ASI. The suspension of APP’s certification is an example of FSC’s structural ability to grant, deny or suspend certification on political rather than operational grounds.

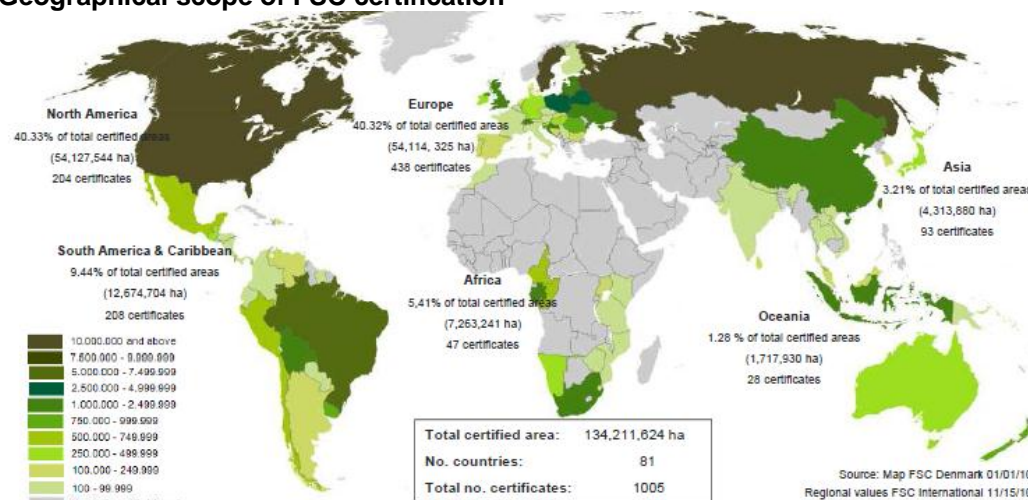
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<sup>62</sup>Smartwood, *Forest Management Controlled Wood Surveillance Audit 2009 Report for: PT. Riau Andalan Pulp and Paper Forestry Division (Riaufiber)*, (2009)

## Annex I: General Comparative Overview of PEFC and FSC

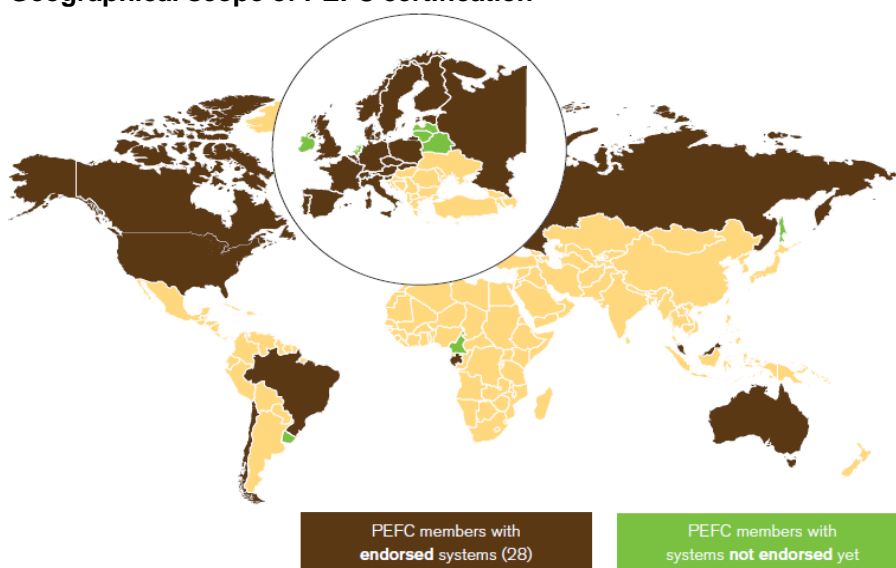
	<i>FSC</i>	<i>PEFC</i>
<b>Scope</b>	135 million ha throughout 81 countries	226 million ha throughout 28 countries
<b>Governance</b>	General Assembly made up of three chambers: social, environmental, industry	General Assembly made up of two distinct groups - National Governing Bodies and International Stakeholders
<b>Funding</b>	Varies from year to year – in 2006 approximately 50 per cent of funding was donations and the remainder from membership fees and accreditation dues	PEFC report that approximately 99 per cent of funding comes from membership fees
<b>Origins</b>	Established in 1993 with the backing of several large ENGOs	Established in 1999 with the backing of European small/family forest owners

### Geographical scope of FSC certification



Source: FSC, *Global FSC certificates: type and distribution*, (December 2010), accessed at: [http://www.fsc.org/fileadmin/web-data/public/document\\_center/powerpoints\\_graphs/facts\\_figures/-Global-FSC-Certificates-2010-11-15-EN.pdf](http://www.fsc.org/fileadmin/web-data/public/document_center/powerpoints_graphs/facts_figures/-Global-FSC-Certificates-2010-11-15-EN.pdf)

### Geographical scope of PEFC certification



Source: PEFC, *Annual Review 2009* (Geneva, 2009)

## Annex II: Comparison of Standard Setting and Certification Procedures

### FSC and PEFC compliance with best practice in standard setting and certification

	<i>FSC</i>	<i>Best Practice</i>	<i>PEFC</i>	<i>Best Practice</i>
<b>Standard setting</b>	FSC sets international standard, or adapts the international standard to a national context	Does not comply with ISO guidelines (e.g. ISO/IEC Guide 59)	NSBs set standards. In order to be eligible for endorsement under PEFC, the standard must conform with PEFC council requirements	Complies with ISO guidelines (e.g. ISO/IEC Guide 59)
<b>Endorsement of standard</b>	No requirement for an external review of the standard	N/A	Independent consultants must assess scheme against PEFC requirements, global public consultation, and Panel of Expert review	N/A
<b>Compliance with standard (certification)</b>	Certification bodies accredited by FSC subsidiary verify operator compliance with the standard	Does not comply with ISO/IAF requirements (e.g. ISO/IEC 17021, Guide 65)	Independent certification bodies (accredited through IAF) verify compliance with standard	Complies with ISO/IAF requirements (e.g. ISO/IEC 17021, Guide 65)

### Key steps in FSC and PEFC standard setting procedures

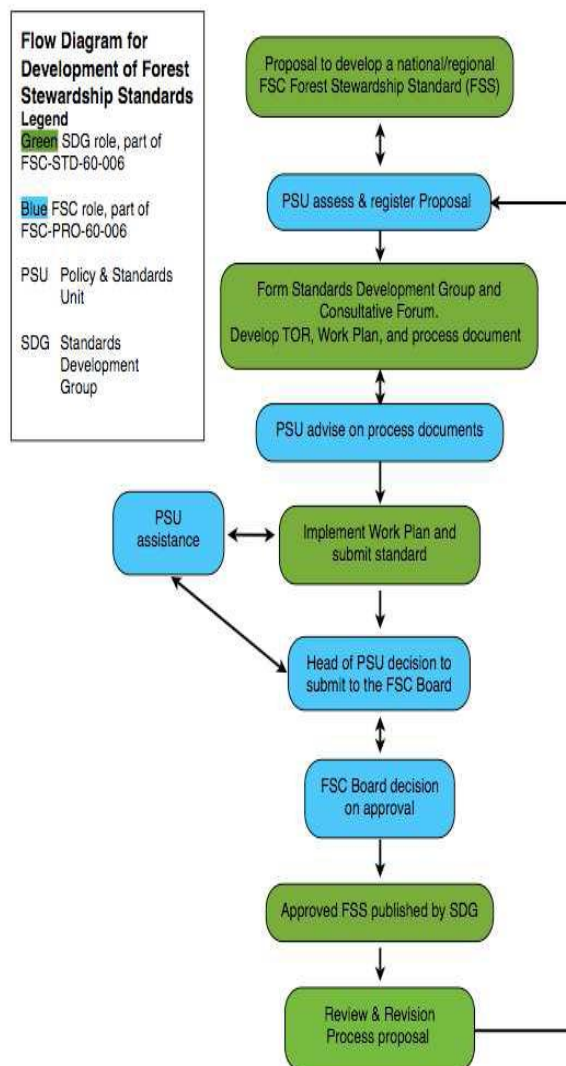
	<i>FSC</i>	<i>PEFC</i>
<b>Identification of stake holders</b>	Requires the identification of affected stakeholders	Requires the identification of relevant stakeholders including key and disadvantaged parties
<b>Consultation</b>	Requires an announcement to be sent to all key stakeholders within the territory  Requires that a Consultative Forum be set up (eligible stakeholders must present evidence of supporting the process). Final draft must be undergo period of public consultation for 60 days	Requires public announcement to signal start of standard setting process  Enquiry Draft must undergo public consultation for at least 60 days
<b>Transparency</b>	Requires record keeping, but has no provisions relating to transparency or availability of records	Working drafts are available to all members of the working group, and comments of members are to be considered in an open and transparent way
<b>Pilot testing</b>	Requires standard to be field tested before submitted for final approval	Requires new standards to be pilot tested
<b>Decision making</b>	Recommendation of final draft for approval is based on consensus. In the case where consensus cannot be reached when approving FSC international standards decisions are made by majority vote. <sup>63</sup>	Recommendation of final draft for approval is based on consensus
<b>Approval of standard</b>	National standards require approval by FSC BoD. International standards require approval of FSC GA.	All PEFC standards require approval of GA.
<b>Endorsement of national standards</b>	N/A	National standards require approval by the NSB developing the standard. The PEFC Council, following an external assessment against PEFC requirements and a Panel of Experts review, can then endorse the national standard.
<b>Revision of standards</b>	Requires a review report to be required within 3 years of standard approval. Does not require periodic review of standard	Requires review of standard at least every five years

<sup>63</sup> The document, *FSC Procedure – the Development and Approval of FSC Social and Environmental International Standards* (2006), states that “if a vote is required, then consensus is defined as meaning that at least 66% of the members of the Working Group vote in favor of the proposal, and there are no votes against the proposal”.

### PEFC stages in the development of national standards



### FSC stages in the development of national standards



#### Source:

FSC, *Process requirements for the development and maintenance of National Forest Stewardship Standards* (FSC, 2009)

PEFC Council, *Standard Setting – Requirements* (PEFC, 2010)



## Annex III: Comparison of PEFC and FSC International Standards (Criteria and Indicators)

	FSC Criteria	PEFC Indicator
General		
<b>Scope (applicable FMU)</b>	<i>Scope varies between FMU and National/regional application throughout standard</i>	<p>4.1 The requirements for sustainable forest management defined by regional, national or sub-national forest management standards shall:</p> <p>a) include management and performance requirements that are applicable at the forest management unit level, or at another level as appropriate, to ensure that the intent of all requirements is achieved at the forest management unit level;</p> <p>Note: An example of a situation where a requirement can be defined as being at other than forest management unit level (e.g. group/regional) is monitoring of forest health. Through monitoring of forest health at regional level and communicating of results at the FMU level the objective of the requirement is met without the necessity to carry out the individual monitoring of every forest management unit</p>
<b>Basis</b>	<i>Does not clarify the basis for standard within the document.</i>	<p>5.6.14 Forest management shall be based inter-alia on the results of scientific research. Forest management shall contribute to research activities and data collection needed for sustainable forest management or support relevant research activities carried out by other organisations, as appropriate.</p> <p><i>“Based on and respects” international processes such as Ministerial Conference on the Protection of Forests in Europe (MCPFE), Montreal Process (Criteria and Indicators for the Conservation and Sustainable Management of Temperate and Boreal Forests), the ITTO (International Tropical Timber Organisation) process for tropical forests or the ATO (African Timber Organisation)/ITTO process for tropical African forests, the Near East – the Lepaterique Process, the Regional Initiative of Dry Forests in Asia, the Criteria and Indicators for the Sustainable Management in Dry-zone Africa, and the Tarapoto Proposal: Criteria and Indicators for the Sustainable Management of Amazonian Forests (‘Introduction’, Sustainable Forest Management - Requirements).</i></p>
Compliance with laws		
<b>Compliance with national and local laws</b>	1.1 Forest management shall respect all national and local laws and administrative requirements.	5.7.1 Forest management shall comply with legislation applicable to forest management issues including forest management practices; nature and environmental protection; protected and endangered species; property, tenure and land-use rights for indigenous people; health, labour and safety issues; and the payment of royalties and taxes.
<b>Payment of legally required fees</b>	1.2 All applicable and legally prescribed fees, royalties, taxes and other charges shall be paid.	
<b>Compliance with relevant international conventions</b>	1.3 In signatory countries, the provisions of all binding international agreements such as CITES, ILO Conventions, ITTA, and Convention on Biological Diversity, shall be respected.	<p>5.6.13 Forest management shall comply with fundamental ILO conventions.</p> <p><i>PEFC Technical Document (2007), includes requirements to respect international agreements such as the Convention on Biological Diversity, Kyoto Protocol and CITES (4.7 – Other International Conventions)</i></p>
<b>Conflict between laws and standard</b>	1.4 Conflicts between laws, regulations and the FSC Principles and Criteria shall be evaluated for the purposes of certification, on a case by case basis, by the certifiers and the involved or affected parties.	<i>No specific corresponding provision</i>
<b>Protection of forests from unauthorised activities</b>	1.5 Forest management areas should be protected from illegal harvesting, settlement and other unauthorised activities.	5.7.2 Forest management shall provide for adequate protection of the forest from unauthorised activities such as illegal logging, illegal land use, illegally initiated fires, and other illegal activities.
Tenure and use rights		

<b>Documented property rights</b>	1.2 Clear evidence of long-term forest use rights to the land (e.g. land title, customary rights, or lease agreements) shall be demonstrated.	5.6.3 Property rights and land tenure arrangements shall be clearly defined, documented and established for the relevant forest area. Likewise, legal, customary and traditional rights related to the forest land shall be clarified, recognised and respected.
<b>Local communities</b>	2.2 Local communities with legal or customary tenure or use rights shall maintain control, to the extent necessary to protect their rights or resources, over forest operations unless they delegate control with free and informed consent to other agencies.	5.6.4 Forest management activities shall be conducted in recognition of the established framework of legal, customary and traditional rights such as outlined in ILO 169 and the UN Declaration on the Rights of Indigenous Peoples, which shall not be infringed upon without the free, prior and informed consent of the holders of the rights, including the provision of compensation where applicable. Where the extent of rights is not yet resolved or is in dispute there are processes for just and fair resolution. In such cases forest managers shall, in the interim, provide meaningful opportunities for parties to be engaged in forest management decisions whilst respecting the processes and roles and responsibilities laid out in the policies and laws where the certification takes place.
<b>Delegation of control with free, prior and informed consent</b>	3.1 Indigenous peoples shall control forest management on their lands and territories unless they delegate control with free and informed consent to other agencies.	
<b>Rights of Indigenous peoples</b>	3.2 Forest management shall not threaten or diminish, either directly or indirectly, the resources or tenure rights of indigenous peoples.	
<b>Compensation</b>	3.4 Indigenous peoples shall be compensated for the application of their traditional knowledge regarding the use of forest species or management systems in forest operations. This compensation shall be formally agreed upon with their free and informed consent before forest operations commence.	
<b>Protection of important sites</b>	3.3 Sites of special cultural, ecological, economic or religious significance to indigenous peoples shall be clearly identified in cooperation with such peoples, and recognized and protected by forest managers.	5.6.6 Sites with recognised specific historical, cultural or spiritual significance and areas fundamental to meeting the basic needs of local communities (e.g. health, subsistence) shall be protected or managed in a way that takes due regard of the significance of the site.
<b>Disputes mechanism</b>	2.3 Appropriate mechanisms shall be employed to resolve disputes over tenure claims and use rights. The circumstances and status of any outstanding disputes will be explicitly considered in the certification evaluation. Disputes of substantial magnitude involving a significant number of interests will normally disqualify an operation from being certified.	5.6.10 Forest management shall provide for effective communication and consultation with local people and other stakeholders relating to sustainable forest management and shall provide appropriate mechanisms for resolving complaints and disputes relating to forest management between forest operators and local people.
<b>Traditional and local management systems/knowledge</b>	<i>No specific corresponding provision</i>	5.4.9 Traditional management systems that have created valuable ecosystems, such as coppice, on appropriate sites shall be supported, when economically feasible.  5.6.9 Forest management practices shall make the best use of local forest-related experience and knowledge, such as those of local communities, forest owners, NGOs and local people.
<b>Community relations and labour</b>		
<b>Local community opportunities</b>	4.1 The communities within, or adjacent to, the forest management area should be given opportunities for employment, training, and other services.	5.6.2 Forest management shall promote the long-term health and well-being of communities within or adjacent to the forest management area.
<b>Health and safety</b>	4.2 Forest management should meet or exceed all applicable laws and/or regulations covering health and safety of employees and their families.	5.6.11 Forestry work shall be planned, organised and performed in a manner that enables health and accident risks to be identified and all reasonable measures to be applied to protect workers from work-related risks. Workers shall be informed about the risks involved with their work and about preventive measures. 5.6.12 Working conditions shall be safe, and guidance and training in safe working practices shall be provided to all those assigned to a task in forest operations.
<b>Right to negotiate</b>	4.3 The rights of workers to organize and voluntarily negotiate with their employers shall be guaranteed as outlined in Conventions 87 and 98 of the International Labour Organisation (ILO).	5.6.13 Forest management shall comply with fundamental ILO conventions.  <i>(includes ILO No. 87, Freedom of Association and Protection of the Right to Organise Convention, 1948)</i>
<b>Social impact</b>	4.4 Management planning and operations shall incorporate the results of evaluations of	5.1.2 Forest management shall comprise the cycle of inventory and planning, implementation, monitoring and



	social impact. Consultations shall be maintained with people and groups (both men and women) directly affected by management operations.	evaluation, and shall include an appropriate assessment of the social, environmental and economic impacts of forest management operations. This shall form a basis for a cycle of continuous improvement to minimise or avoid negative impacts.
<b>Compensation</b>	4.5 Appropriate mechanisms shall be employed for resolving grievances and for providing fair compensation in the case of loss or damage affecting the legal or customary rights, property, resources, or livelihoods of local peoples. Measures shall be taken to avoid such loss or damage.	5.6.4 Forest management activities shall be conducted in recognition of the established framework of legal, customary and traditional rights such as outlined in ILO 169 and the UN Declaration on the Rights of Indigenous Peoples, which shall not be infringed upon without the free, prior and informed consent of the holders of the rights, including the provision of compensation where applicable. Where the extent of rights is not yet resolved or is in dispute there are processes for just and fair resolution. In such cases forest managers shall, in the interim, provide meaningful opportunities for parties to be engaged in forest management decisions whilst respecting the processes and roles and responsibilities laid out in the policies and laws where the certification takes place.
<b>Benefits from the forest</b>		
<b>Economic benefits</b>	5.1 Forest management should strive toward economic viability, while taking into account the full environmental, social, and operational costs of production, and ensuring the investments necessary to maintain the ecological productivity of the forest.	5.1.1 Forest management planning shall aim to maintain or increase forests and other wooded areas and enhance the quality of the economic, ecological, cultural and social values of forest resources, including soil and water. This shall be done by making full use of related services and tools that support land-use planning and nature conservation.
<b>Local benefits</b>	5.2 Forest management and marketing operations should encourage the optimal use and local processing of the forest's diversity of products.	5.6.1 Forest management planning shall aim to respect the multiple functions of forests to society, give due regard to the role of forestry in rural development, and especially consider new opportunities for employment in connection with the socio-economic functions of forests.  Note: The stimulation of rural development could be achieved by training and employment of local people, including indigenous people, a preference for the local processing of timber and non-wood forest products, etc.
<b>Minimise waste</b>	5.3 Forest management should minimize waste associated with harvesting and on-site processing operations and avoid damage to other forest resources.	5.2.7 Appropriate forest management practices such as reforestation and afforestation with tree species and provenances that are suited to the site conditions or the use of tending, harvesting and transport techniques that minimise tree and/or soil damages shall be applied. The spillage of oil during forest management operations or the indiscriminate disposal of waste on forest land shall be strictly avoided. Non-organic waste and litter shall be avoided, collected, stored in designated areas and removed in an environmentally-responsible manner.
<b>Diversified local economy</b>	5.4 Forest management should strive to strengthen and diversify the local economy, avoiding dependence on a single forest product.	5.3.4 Forest management practices shall maintain and improve the forest resources and encourage a diversified output of goods and services over the long term.
<b>Protection of forest related resources</b>	5.5 Forest management operations shall recognize, maintain, and, where appropriate, enhance the value of forest services and resources such as watersheds and fisheries.	5.5.1 Forest management planning shall aim to maintain and enhance protective functions of forests for society, such as protection of infrastructure, protection from soil erosion, protection of water resources and from adverse impacts of water such as floods or avalanches.
<b>Sustainable rate of harvesting</b>	5.6 The rate of harvest of forest products shall not exceed levels which can be permanently sustained.	5.3.6 Harvesting levels of both wood and non-wood forest products shall not exceed a rate that can be sustained in the long term, and optimum use shall be made of the harvested forest products, with due regard to nutrient off-take.
<b>Recreational Benefits</b>	<i>No specific corresponding provision</i>	5.6.5 Adequate public access to forests for the purpose of recreation shall be provided taking into account respect for ownership rights and the rights of others, the effects on forest resources and ecosystems, as well as compatibility with other functions of the forest.  5.6.7 Forest management operations shall take into account all socio-economic functions, especially the recreational function and aesthetic values of forests by maintaining for example varied forest structures, and by encouraging attractive trees, groves and other features such as colours, flowers and fruits. This shall be done, however, in a way and

		to an extent that does not lead to serious negative effects on forest resources, and forest land.
<b>Environmental impact</b>		
<b>Environmental Impact Assessment</b>	6.1 Assessment of environmental impacts shall be completed -- appropriate to the scale, intensity of forest management and the uniqueness of the affected resources -- and adequately integrated into management systems. Assessments shall include landscape level considerations as well as the impacts of on-site processing facilities. Environmental impacts shall be assessed prior to commencement of site-disturbing operations.	5.1.2 Forest management shall comprise the cycle of inventory and planning, implementation, monitoring and evaluation, and shall include an appropriate assessment of the social, environmental and economic impacts of forest management operations. This shall form a basis for a cycle of continuous improvement to minimise or avoid negative impacts.
<b>Protected species/areas</b>	6.2 Safeguards shall exist which protect rare, threatened and endangered species and their habitats (e.g., nesting and feeding areas). Conservation zones and protection areas shall be established, appropriate to the scale and intensity of forest management and the uniqueness of the affected resources. Inappropriate hunting, fishing, trapping and collecting shall be controlled.	5.4.2 Forest management planning, inventory and mapping of forest resources shall identify, protect and/or conserve ecologically important forest areas containing significant concentrations of: a) protected, rare, sensitive or representative forest ecosystems such as riparian areas and wetland biotopes; b) areas containing endemic species and habitats of threatened species, as defined in recognised reference lists; c) endangered or protected genetic <i>in situ</i> resources; and taking into account d) globally, regionally and nationally significant large landscape areas with natural distribution and abundance of naturally occurring species. 5.4.3 Protected and endangered plant and animal species shall not be exploited for commercial purposes. Where necessary, measures shall be taken for their protection and, where relevant, to increase their population. 5.4.13 Standing and fallen dead wood, hollow trees, old groves and special rare tree species shall be left in quantities and distribution necessary to safeguard biological diversity, taking into account the potential effect on the health and stability of forests and on surrounding ecosystems.
<b>Reforestation and afforestation</b>	6.3 Ecological functions and values shall be maintained intact, enhanced, or restored, including: a) Forest regeneration and succession. b) Genetic, species, and ecosystem diversity. c) Natural cycles that affect the productivity of the forest ecosystem.	5.3.5 Regeneration, tending and harvesting operations shall be carried out in time, and in a way that does not reduce the productive capacity of the site, for example by avoiding damage to retained stands and trees as well as to the forest soil, and by using appropriate systems. 5.4.4 Forest management shall ensure successful regeneration through natural regeneration or, where not appropriate, planting that is adequate to ensure the quantity and quality of the forest resources. 5.4.6 Afforestation and reforestation activities that contribute to the improvement and restoration of ecological connectivity shall be promoted. 5.4.8 Forest management practices shall, where appropriate, promote a diversity of both horizontal and vertical structures such as uneven-aged stands and the diversity of species such as mixed stands. Where appropriate, the practices shall also aim to maintain and restore landscape diversity.
<b>Representative samples</b>	6.4 Representative samples of existing ecosystems within the landscape shall be protected in their natural state and recorded on maps, appropriate to the scale and intensity of operations and the uniqueness of the affected resources.	5.4.2 Forest management planning, inventory and mapping of forest resources shall identify, protect and/or conserve ecologically important forest areas containing significant concentrations of: a) protected, rare, sensitive or representative forest ecosystems such as riparian areas and wetland biotopes...
<b>Management planning to minimise effects</b>	6.5 Written guidelines shall be prepared and implemented to: control erosion; minimize forest damage during harvesting, road construction, and all other mechanical disturbances; and protect water resources.	5.5.1 Forest management planning shall aim to maintain and enhance protective functions of forests for society, such as protection of infrastructure, protection from soil erosion, protection of water resources and from adverse impacts of water such as floods or avalanches.
<b>Environmental impact of tending, harvesting and infrastructure</b>		5.3.8 Adequate infrastructure such as roads, skid tracks or bridges shall be planned, established and maintained to ensure efficient delivery of goods and services while minimising negative impacts on the environment. 5.4.10 Tending and harvesting operations shall be conducted

		<p>in a way that does not cause lasting damage to ecosystems. Wherever possible, practical measures shall be taken to improve or maintain biological diversity.</p> <p>5.4.11 Infrastructure shall be planned and constructed in a way that minimises damage to ecosystems, especially to rare, sensitive or representative ecosystems and genetic reserves, and that takes threatened or other key species – in particular their migration patterns – into consideration.</p> <p>5.5.5 Construction of roads, bridges and other infrastructure shall be carried out in a manner that minimises bare soil exposure, avoids the introduction of soil into watercourses and preserves the natural level and function of water courses and river beds. Proper road drainage facilities shall be installed and maintained.</p>
<b>Pest management</b>	<p>6.6 Management systems shall promote the development and adoption of environmentally friendly non-chemical methods of pest management and strive to avoid the use of chemical pesticides. World Health Organization Type 1A and 1B and chlorinated hydrocarbon pesticides; pesticides that are persistent, toxic or whose derivatives remain biologically active and accumulate in the food chain beyond their intended use; as well as any pesticides banned by international agreement, shall be prohibited. If chemicals are used, proper equipment and training shall be provided to minimize health and environmental risks.</p>	<p>5.2.8 The use of pesticides shall be minimised and appropriate silvicultural alternatives and other biological measures preferred.</p> <p>5.2.9 The WHO Type 1A and 1B pesticides and other highly toxic pesticides shall be prohibited, except where no other viable alternative is available.</p> <p>Note: Any exception to the usage of WHO Type 1A and 1B pesticides shall be defined by a specific forest management standard.</p> <p>5.2.10 Pesticides, such as chlorinated hydrocarbons whose derivatives remain biologically active and accumulate in the food chain beyond their intended use, and any pesticides banned by international agreement, shall be prohibited. Note: “pesticides banned by international agreements” are defined in the Stockholm Convention on Persistent Organic Pollutants 2001, as amended.</p> <p>5.2.11 The use of pesticides shall follow the instructions given by the pesticide producer and be implemented with proper equipment and training.</p> <p>5.2.12 Where fertilisers are used, they shall be applied in a controlled manner and with due consideration for the environment.</p>
<b>Waste management</b>	<p>6.7 Chemicals, containers, liquid and solid non-organic wastes including fuel and oil shall be disposed of in an environmentally appropriate manner at off-site locations.</p>	<p>5.2.7 Appropriate forest management practices such as reforestation and afforestation with tree species and provenances that are suited to the site conditions or the use of tending, harvesting and transport techniques that minimise tree and/or soil damages shall be applied. The spillage of oil during forest management operations or the indiscriminate disposal of waste on forest land shall be strictly avoided. Non-organic waste and litter shall be avoided, collected, stored in designated areas and removed in an environmentally-responsible manner.</p>
<b>Genetically modified species</b>	<p>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.</p>	<p>5.4.7 Genetically-modified trees shall not be used. Note: The restriction on the usage of genetically-modified trees has been adopted based on the Precautionary Principle. Until enough scientific data on genetically-modified trees indicates that impacts on human and animal health and the environment are equivalent to, or more positive than, those presented by trees genetically improved by traditional methods, no genetically-modified trees will be used.</p>
<b>Introduction of species</b>	<p>6.9 The use of exotic species shall be carefully controlled and actively monitored to avoid adverse ecological impacts.</p>	<p>5.4.5 For reforestation and afforestation, origins of native species and local provenances that are well-adapted to site conditions shall be preferred, where appropriate. Only those introduced species, provenances or varieties shall be used whose impacts on the ecosystem and on the genetic integrity of native species and local provenances have been evaluated, and if negative impacts can be avoided or minimised.</p> <p>Note: CBD (Convention on Biological Diversity) Guiding Principles for the Prevention, Introduction, and Mitigation of Impacts of Alien Species that Threaten Ecosystems, Habitats or Species are recognised as guidance for avoidance of invasive species.</p>
<b>Conversion of abandoned land</b>	<p><i>No specific corresponding provision</i></p>	<p>5.1.12 Conversion of abandoned agricultural and treeless land into forest land shall be taken into consideration, whenever it can add economic, ecological, social and/or</p>

		cultural value.
<b>Forest conversion</b>	6.10 Forest conversion to plantations or non-forest land uses shall not occur, except in circumstances where conversion: a) entails a very limited portion of the forest management unit; and b) does not occur on high conservation value forest areas; and c) will enable clear, substantial, additional, secure, long term conservation benefits across the forest management unit.	5.1.11 Conversion of forests to other types of land use, including conversion of primary forests to forest plantations, shall not occur unless in justified circumstances where the conversion: a) is in compliance with national and regional policy and legislation relevant for land use and forest management and is a result of national or regional land-use planning governed by a governmental or other official authority including consultation with materially and directly interested persons and organisations; and b) entails a small proportion of forest type; and c) does not have negative impacts on threatened (including vulnerable, rare or endangered) forest ecosystems, culturally and socially significant areas, important habitats of threatened species or other protected areas; and d) makes a contribution to long-term conservation, economic, and social benefits.
<b>Use of natural structures</b>	<i>Includes provisions relating only to the management of plantation forests (see "Layout of plantation" below)</i>	5.2.5 Forest management practices shall make best use of natural structures and processes and use preventive biological measures wherever and as far as economically feasible to maintain and enhance the health and vitality of forests. Adequate genetic, species and structural diversity shall be encouraged and/or maintained to enhance the stability, vitality and resistance capacity of the forests to adverse environmental factors and strengthen natural regulation mechanisms.
<b>Lighting of fires</b>	<i>Includes provisions relating only to the management of plantation forests (see "Pest and fire management" below)</i>	5.2.6 Lighting of fires shall be avoided and is only permitted if it is necessary for the achievement of the management goals of the forest management unit.
<b>Animal populations</b>	<i>No specific corresponding provision</i>	5.4.12 With due regard to management objectives, measures shall be taken to balance the pressure of animal populations and grazing on forest regeneration and growth as well as on biodiversity.
<b>Management Plan</b>		
<b>Requirements for management plan</b>	7.1 The management plan and supporting documents shall provide: a) Management objectives. b) Description of the forest resources to be managed, environmental limitations, land use and ownership status, socio-economic conditions, and a profile of adjacent lands. c) Description of silvicultural and/or other management system, based on the ecology of the forest in question and information gathered through resource inventories. d) Rationale for rate of annual harvest and species selection. e) Provisions for monitoring of forest growth and dynamics. f) Environmental safeguards based on environmental assessments. g) Plans for the identification and protection of rare, threatened and endangered species. h) Maps describing the forest resource base including protected areas, planned management activities and land ownership. i) Description and justification of harvesting techniques and equipment to be used.	<b>Forest resources and global carbon cycle</b> 5.1.1 Forest management planning shall aim to maintain or increase forests and other wooded areas and enhance the quality of the economic, ecological, cultural and social values of forest resources, including soil and water. This shall be done by making full use of related services and tools that support land-use planning and nature conservation. 5.1.2 Forest management shall comprise the cycle of inventory and planning, implementation, monitoring and evaluation, and shall include an appropriate assessment of the social, environmental and economic impacts of forest management operations. This shall form a basis for a cycle of continuous improvement to minimise or avoid negative impacts. 5.1.3 Inventory and mapping of forest resources shall be established and maintained, adequate to local and national conditions and in correspondence with the topics described in this document. 5.1.5 Management plans or their equivalents shall include at least a description of the current condition of the forest management unit, long-term objectives; and the average annual allowable cut, including its justification and, where relevant, the annually allowable exploitation of non-timber forest products. 5.1.9 Forest management practices shall safeguard the quantity and quality of the forest resources in the medium and long term by balancing harvesting and growth rates, and by preferring techniques that minimise direct or indirect damage to forest, soil or water resources. 5.1.10 Appropriate silvicultural measures shall be taken to maintain or reach a level of the growing stock that is economically, ecologically and socially desirable. Note: The identification of annually allowable exploitation of non-timber forest products is required where forest management covers commercial exploitation of non-timber

		<p>forest products at a level which can have an impact on the long-term sustainability of non-timber forest products.</p> <p><b>Forest ecosystem health and vitality</b></p> <p>5.2.1 Forest management planning shall aim to maintain and increase the health and vitality of forest ecosystems and to rehabilitate degraded forest ecosystems, whenever this is possible by silvicultural means.</p> <p>5.2.4 Forest management plans or their equivalents shall specify ways and means to minimise the risk of degradation of and damages to forest ecosystems. Forest management planning shall make use of those policy instruments set up to support these activities.</p> <p><b>Productive functions of forest</b></p> <p>5.3.1 Forest management planning shall aim to maintain the capability of forests to produce a range of wood and non-wood forest products and services on a sustainable basis.</p> <p>5.3.2 Forest management planning shall aim to achieve sound economic performance taking into account any available market studies and possibilities for new markets and economic activities in connection with all relevant goods and services of forests.</p> <p>5.3.3 Forest management plans or their equivalents shall take into account the different uses or functions of the managed forest area. Forest management planning shall make use of those policy instruments set up to support the production of commercial and non-commercial forest goods and services.</p> <p><b>Conservation and biological diversity</b></p> <p>5.4.1 Forest management planning shall aim to maintain, conserve and enhance biodiversity on ecosystem, species and genetic levels and, where appropriate, diversity at landscape level.</p> <p>5.4.2 Forest management planning, inventory and mapping of forest resources shall identify, protect and/or conserve ecologically important forest areas containing significant concentrations of:</p> <ul style="list-style-type: none"> <li>a) protected, rare, sensitive or representative forest ecosystems such as riparian areas and wetland biotopes;</li> <li>b) areas containing endemic species and habitats of threatened species, as defined in recognised reference lists;</li> <li>c) endangered or protected genetic <i>in situ</i> resources; and</li> <li>d) globally, regionally and nationally significant large landscape areas with natural distribution and abundance of naturally occurring species.</li> </ul> <p>Note: This does not necessarily exclude forest management activities that do not damage biodiversity values of those biotopes.</p> <p><b>Protective functions in forest management</b></p> <p>5.5.1 Forest management planning shall aim to maintain and enhance protective functions of forests for society, such as protection of infrastructure, protection from soil erosion, protection of water resources and from adverse impacts of water such as floods or avalanches.</p> <p>5.5.2 Areas that fulfil specific and recognised protective functions for society shall be registered and mapped, and forest management plans or their equivalents shall take full account of these areas.</p>
<b>Revision</b>	7.2 The management plan shall be periodically revised to incorporate the results of monitoring or new scientific and technical information, as well as to respond to changing environmental, social and economic circumstances.	5.1.4 Management plans or their equivalents, appropriate to the size and use of the forest area, shall be elaborated and periodically updated. They shall be based on legislation as well as existing land-use plans, and adequately cover the forest resources.
<b>Staff Training</b>	7.3 Forest workers shall receive adequate training and supervision to ensure proper	5.6.8 Forest managers, contractors, employees and forest owners shall be provided with sufficient information and

	implementation of the management plan.	encouraged to keep up-to-date through continuous training in relation to sustainable forest management as a precondition for all management planning and practices described in this standard.
<b>Public Availability of Management Plan</b>	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.	5.1.6 A summary of the forest management plan or its equivalent appropriate to the scope and scale of forest management, which contains information about the forest management measures to be applied, is publicly available. The summary may exclude confidential business and personal information and other information made confidential by national legislation or for the protection of cultural sites or sensitive natural resource features.
<b>Allocation of responsibility</b>	<i>No specific corresponding provision</i>	5.1.8 Responsibilities for sustainable forest management shall be clearly defined and assigned.
<b>Monitoring and assessment</b>		
<b>Frequency of monitoring</b>	8.1 The frequency and intensity of monitoring should be determined by the scale and intensity of forest management operations as well as the relative complexity and fragility of the affected environment. Monitoring procedures should be consistent and replicable over time to allow comparison of results and assessment of change.	5.1.7 Monitoring of forest resources and evaluation of their management shall be periodically performed, and results fed back into the planning process.  5.2.2 Health and vitality of forests shall be periodically monitored, especially key biotic and abiotic factors that potentially affect health and vitality of forest ecosystems, such as pests, diseases, overgrazing and overstocking, fire, and damage caused by climatic factors, air pollutants or by forest management operations.
<b>Requirements for monitoring</b>	8.2 Forest management should include the research and data collection needed to monitor, at a minimum, the following indicators: a) Yield of all forest products harvested. b) Growth rates, regeneration and condition of the forest. c) Composition and observed changes in the flora and fauna. d) Environmental and social impacts of harvesting and other operations. e) Costs, productivity, and efficiency of forest management.	5.2.2 Health and vitality of forests shall be periodically monitored, especially key biotic and abiotic factors that potentially affect health and vitality of forest ecosystems, such as pests, diseases, overgrazing and overstocking, fire, and damage caused by climatic factors, air pollutants or by forest management operations.  5.2.3 The monitoring and maintaining of health and vitality of forest ecosystems shall take into consideration the effects of naturally occurring fire, pests and other disturbances.  5.3.7 Where it is the responsibility of the forest owner/manager and included in forest management, the exploitation of non-timber forest products, including hunting and fishing, shall be regulated, monitored and controlled.
<b>CoC</b>	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."	Requirements for CoC specified in <i>PEFC International Standard: Chain of Custody of Forest Based Products – Requirements</i> , (2010)
<b>Results used for planning</b>	8.4 The results of monitoring shall be incorporated into the implementation and revision of the management plan.	5.1.7 Monitoring of forest resources and evaluation of their management shall be periodically performed, and results fed back into the planning process.
<b>Public availability of results</b>	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.	<i>No specific corresponding provision</i>
<b>Maintenance of environmentally sensitive forest areas</b>		
<b>Identifying sensitive areas</b>	9.1 Assessment to determine the presence of the attributes consistent with High Conservation Value Forests will be completed, appropriate to scale and intensity of forest management.	5.4.2 Forest management planning, inventory and mapping of forest resources shall identify, protect and/or conserve ecologically important forest areas containing significant concentrations of: a) protected, rare, sensitive or representative forest ecosystems such as riparian areas and wetland biotopes; b) areas containing endemic species and habitats of threatened species, as defined in recognised reference lists; c) endangered or protected genetic <i>in situ</i> resources; and taking into account d) globally, regionally and nationally significant large landscape areas with natural distribution and abundance of naturally occurring species  Note: This does not necessarily exclude forest management activities that do not damage biodiversity values of those



		biotopes
<b>Consultation</b>	9.2 The consultative portion of the certification process must place emphasis on the identified conservation attributes, and options for the maintenance thereof.	5.6.10 Forest management shall provide for effective communication and consultation with local people and other stakeholders relating to sustainable forest management and shall provide appropriate mechanisms for resolving complaints and disputes relating to forest management between forest operators and local people.
<b>Precautionary approach</b>	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.	<i>Applied only in regards to genetically modified trees (see “Genetically modified species” above)</i>
<b>Monitoring of conservation measures</b>	9.4 Annual monitoring shall be conducted to assess the effectiveness of the measures employed to maintain or enhance the applicable conservation attributes.	5.1.7 Monitoring of forest resources and evaluation of their management shall be periodically performed, and results fed back into the planning process.
<b>Soil and water</b>	Forest management shall conserve biological diversity and its associated values, water resources, soils, and unique and fragile ecosystems and landscapes, and, by so doing, maintain the ecological functions and the integrity of the forest.	5.5.3 Special care shall be given to silvicultural operations on sensitive soils and erosion-prone areas as well as in areas where operations might lead to excessive erosion of soil into watercourses. Inappropriate techniques such as deep soil tillage and use of unsuitable machinery shall be avoided in such areas. Special measures shall be taken to minimise the pressure of animal populations. 5.5.4 Special care shall be given to forest management practices in forest areas with water protection functions to avoid adverse effects on the quality and quantity of water resources. Inappropriate use of chemicals or other harmful substances or inappropriate silvicultural practices influencing water quality in a harmful way shall be avoided.
<b>Plantations</b>		
<b>Management plan</b>	10.1 The management objectives of the plantation, including natural forest conservation and restoration objectives, shall be explicitly stated in the management plan, and clearly demonstrated in the implementation of the plan.	<i>Included in general requirements for management plan (see “Requirements for management plan” above).</i>
<b>Layout of plantation</b>	10.2 The design and layout of plantations should promote the protection, restoration and conservation of natural forests, and not increase pressures on natural forests. Wildlife corridors, streamside zones and a mosaic of stands of different ages and rotation periods, shall be used in the layout of the plantation, consistent with the scale of the operation. The scale and layout of plantation blocks shall be consistent with the patterns of forest stands found within the natural landscape.	5.4.2. Forest management planning, inventory and mapping of forest resources shall identify, protect and/or conserve ecologically important forest areas, containing significant concentrations: a) protected, rare, sensitive or representative forest ecosystems such as riparian areas and wetland biotopes; b) areas containing endemic species and habitats of threatened species, as defined in recognised reference lists; c) endangered or protected genetic <i>in situ</i> resources; and taking into account d) globally, regionally and nationally significant large landscape areas with natural distribution and an abundance of naturally occurring species.  Interpretation: The requirement laid out in 5.4.2 shall primarily be addressed at the stage of the establishment of forest plantations and those areas shall form a part of buffer zones and set-aside areas which are dedicated to environmental, ecological, cultural and social functions.
<b>Selection of species</b>	10.3 Diversity in the composition of plantations is preferred, so as to enhance economic, ecological and social stability. Such diversity may include the size and spatial distribution of management units within the landscape, number and genetic composition of species, age classes and structures.  10.4 The selection of species for planting shall be based on their overall suitability for the site and their appropriateness to the management objectives. In order to enhance the	5.4.5. For reforestation and afforestation, origins of native species and local provenances that are well adapted to site conditions shall be preferred, where appropriate. Only those introduced species, provenances or varieties shall be used whose impacts on the ecosystem and on the genetic integrity of native species and local provenances have been evaluated, and if negative impacts can be avoided or minimised.  Interpretation: The evaluation of the impact of “introduced species, provenances and varieties” shall be understood as having increased importance for stands of fast growing trees and

	conservation of biological diversity, native species are preferred over exotic species in the establishment of plantations and the restoration of degraded ecosystems. Exotic species, which shall be used only when their performance is greater than that of native species, shall be carefully monitored to detect unusual mortality, disease, or insect outbreaks and adverse ecological impacts.	shall be an important part of both the planning and management stages of the production cycle.
<b>Restoration to natural forest cover</b>	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.	<i>Provisions for reforestation and afforestation do not require restoration to "natural forest cover" (see above – "Reforestation and Afforestation")</i>
<b>Environmental Impact</b>	10.6 Measures shall be taken to maintain or improve soil structure, fertility, and biological activity. The techniques and rate of harvesting, road and trail construction and maintenance, and the choice of species shall not result in long term soil degradation or adverse impacts on water quality, quantity or substantial deviation from stream course drainage patterns.	<i>Included in general provisions (see "Environmental impact" above)</i>
<b>Pest and fire management</b>	10.7 Measures shall be taken to prevent and minimize outbreaks of pests, diseases, fire and invasive plant introductions. Integrated pest management shall form an essential part of the management plan, with primary reliance on prevention and biological control methods rather than chemical pesticides and fertilizers. Plantation management should make every effort to move away from chemical pesticides and fertilizers, including their use in nurseries. The use of chemicals is also covered in Criteria 6.6 and 6.7.	<i>See provisions for "Lighting of fires" and "Pest management" above.</i>  <i>The standard does not include specific requirement to for plantation management to move away chemical pesticides and fertiliser</i>
<b>Trial period</b>	10.8 Appropriate to the scale and diversity of the operation, monitoring of plantations shall include regular assessment of potential on-site and off-site ecological and social impacts, (e.g. natural regeneration, effects on water resources and soil fertility, and impacts on local welfare and social well-being), in addition to those elements addressed in principles 8, 6 and 4. No species should be planted on a large scale until local trials and/or experience have shown that they are ecologically well-adapted to the site, are not invasive, and do not have significant negative ecological impacts on other ecosystems. Special attention will be paid to social issues of land acquisition for plantations, especially the protection of local rights of ownership, use or access.	<i>Monitoring measures are included in provisions for "monitoring and assessment" (above).</i>  <i>The standard does not include specific provisions for local trials prior to development of plantation.</i>
<b>Conversion to plantation</b>	10.9 Plantations established in areas converted from natural forests after November 1994 normally shall not qualify for certification. Certification may be allowed in circumstances where sufficient evidence is submitted to the certification body that the manager/owner is not responsible directly or indirectly of such conversion.	5.1.1. Conversion of forests to other types of land use, including conversion of primary forests to forest plantations, shall not occur unless in justified circumstances where the conversion...  Interpretation: The requirement for the "conversion of forests to other types of land use, including conversion of primary forests to forest plantations" means that forest plantations established by a forest conversion after 31 December 2010 in other than "justified circumstances" do not meet the requirement and are not eligible for certification.

**Source:**PEFC Council, *Sustainable Forest Management – Requirements*, PEFC ST 1003:2010 (PEFC, 2010)FSC, *International Standard – FSC Principles and Criteria for Forest Stewardship*, (1996)



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