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Requirements for PEFC scheme users

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**Requirements for Sustainable Forest Management  
Standards – Part 1: Temperate, boreal and plantation  
forests**



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**PEFC Council**

World Trade Center 1, 10 Route de l'Aéroport  
CH-1215 Geneva, Switzerland  
Tel: +41 (0)22 799 45 40, Fax: +41 (0)22 799 45 50  
E-mail: [info@pefc.org](mailto:info@pefc.org), Web: [www.pefc.org](http://www.pefc.org)

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## Foreword

PEFC Council (the Programme for the Endorsement of Forest Certification schemes) is a worldwide organisation promoting sustainable forest management through forest certification and labelling of forest based products. Products with a PEFC claim and / or label deliver confidence that the raw material originates from sustainably managed forests.

PEFC Council provides endorsement of national forest certification schemes which are required to comply with PEFC Council requirements subject to regular evaluations.

The PEFC requirements for sustainable forest management standards are published as two parts:

- a) Part 1: Requirements for temperate, boreal and plantation forests,
- b) Part 2: Requirements for tropical forests.

This document has been developed in an open, transparent, consultative and consensus based process covering a broad range of stakeholders.

This document cancels and replaces Annex 3 of PEFC Council Technical Document (Forest certification schemes and their implementation).

## Introduction

Sustainable forest management (SFM) is a holistic approach that is defined as the stewardship and use of forests and forest land in a way and at a rate, that maintains their biodiversity, productivity, regeneration capacity, vitality and their potential to fulfil now and in the future, relevant ecological, economic and social functions, at local, national and global levels and does not cause damage to other ecosystems.

Sustainable forest management (SFM) has been, since the UNCED in Rio in 1992, a leading concept in international deliberations and work. The result today is a broad consensus on principles, guidelines, criteria and indicators for SFM on international governmental level. One example is the Ministerial Conference on the Protection of Forests in Europe (MCPFE), an ongoing process in which hundreds of experts from a very wide range of stakeholder groups have been involved. Other similar intergovernmental processes are the Montreal Process (Criteria and Indicators for the Conservation and Sustainable Management of Temperate and Boreal Forests), ITTO (International Tropical Timber Organisation) process for tropical forests or ATO (African Timber Organisation) / ITTO for tropical African forests Near East, the Lepaterique Process, Regional Initiative of Dry Forests in Asia, 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.

PEFC Council requirements for national forest certification schemes and their forest management standards are based on and respect the results of those intergovernmental processes.

## 1 Scope

This document covers the requirements for forest management standards which are applicable to temperate and boreal forests and to plantation forests. The interpretation of the requirements in case of plantation forests is included in Appendix 1 to this document.

The requirements of this document shall be met by the forest management standards submitted for PEFC endorsement as requirements for owners or managers applying for forest certification, as well as contractors and other operators operating in certified forests.

The requirements are based on the Pan European Criteria for Sustainable Forest Management and the Pan European Operational Level Guidelines for Sustainable Forest Management.

## 2 Normative references

The Pan European Operational Level Guidelines for Sustainable Forest Management, *Annex 1 to Resolution L2 of the Ministerial Conference on the Protection of Forests in Europe (MCPFE) held in Lisbon in 1998*

FAO, *FAO International Code of Conduct on the Distribution and Use of Pesticides*, 2005

ILO No. 87, *Freedom of Association and Protection of the Right to Organise Convention*, 1948

ILO No. 29, *Forced Labour Convention*, 1930

ILO No. 98, *Right to Organise and Collective Bargaining Convention*, 1949

ILO No. 100, *Equal Remuneration Convention*, 1951

ILO No. 105, *Abolition of Forced Labour Convention*, 1957

ILO No. 111, *Discrimination (Employment and Occupation) Convention*, 1958

ILO No. 138, *Minimum Age Convention*, 1973

ILO No. 155, *Occupational Safety and Health Convention*, 1981

ILO No. 161, *Occupational Health Services Convention*, 1985

ILO No. 182, *Worst Forms of Child Labour Convention*, 1999

ILO No. 184, *Safety and Health in Agriculture Convention*, 2001

## 3 Terms and Definitions

### 3.1

#### **Forest plantation / timber plantation / productive plantation**

Forest or other wooded land of introduced species and in some cases native species, established through planting or seeding mainly for production of wood or non-wood goods.

Note 1: Includes all stands of introduced species established for production of wood or non-wood goods.

Note 2: May include areas of native species characterized by few species, straight tree lines and/or even-aged stands.

Note 3: Application of the definition requires consideration of national forestry terminology and legal requirements.”

### 3.2

#### **Fundamental ILO conventions**

Eight conventions (ILO 29, 87, 98, 100, 105, 111, 138 and 182) identified by the ILO's Governing Body as "fundamental", in terms of principles and rights at work: freedom of association and the effective recognition of the right to collective bargaining; the elimination of all forms of forced or compulsory labour; the effective abolition of child labour; and the elimination of discrimination in respect of employment and occupation.

### 3.3

#### **Genetically modified trees**

Trees in which the genetic material has been altered in a way that does not occur naturally by mating and/or natural recombination, taking into account applicable legislation providing a specific definition of genetically modified organisms.

Note 1: the following techniques are considered as genetic modification resulting in genetically modified trees (EU Directive 2001/18/EC):

(1) recombinant nucleic acid techniques involving the formation of new combinations of genetic material by the insertion of nucleic acid molecules produced by whatever means outside an organism, into any virus, bacterial plasmid or other vector system and their incorporation into a host organism in which they do not naturally occur, but in which they are capable of continued propagation;

(2) techniques involving the direct introduction into an organism of heritable material prepared outside the organism including micro-injection, macro-injection, and micro-encapsulation;

(3) cell fusion (including protoplast fusion) or hybridisation techniques where live cells with new combinations of heritable genetic material are formed through the fusion of two or more cells by means of methods that do not occur naturally.

Note 2: the following techniques are not considered as genetic modification resulting in genetically modified trees (EU Directive 2001/18/EC):

(1) in vitro fertilisation,

(2) natural processes such as: conjugation, transduction, transformation,

(3) polyploidy induction.

## **4 Requirements for SFM standards for temperate, boreal, and plantation forests**

### **4.1 General requirements**

The requirements for sustainable forest management defined by regional, national or sub-national forest management standards shall:

- a) include management and performance requirements that are applicable at the forest management unit level, or at another level as appropriate, to ensure that all requirements are met at the forest management unit level.

Note: An example of a situation where a requirement can be defined 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.

- b) be clear, objective based and auditable,
- c) apply to activities of all operators in the defined forest area who have a measurable impact on achieving compliance with the requirements.
- d) require record-keeping that provides evidence of compliance with the requirements of the forest management standards.

## 4.2 Specific requirements

### **CRITERION 1. Maintenance and appropriate enhancement of forest resources and their contribution to global carbon cycles**

#### **1.1 Guidelines for Forest Management Planning**

- a. Forest management planning shall aim to maintain or increase forest and other wooded area, 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.

Forest management shall comprise the cycle of inventory and planning, implementation, monitoring and evaluation, and improvement and shall include an appropriate assessment of the long-term impacts of forest management operations.

Responsibilities for sustainable forest management shall be clearly defined and assigned.

- b. Inventory and mapping of forest resources shall be established and maintained, adequate to the local and national conditions, and in correspondence with the topics described in these Guidelines.
- c. 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.

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 and a budget for their implementation.

Note: The identification of annually allowable exploitation of non-timber forest products is required where forest management covers commercial exploitation of non-timber forest products at a level which can have an impact on the long-term sustainability of non-timber forest products.

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, except for confidential business and personal information and other information made confidential by national legislation or for the purposes of nature protection.

- d. Monitoring of the forest resources and evaluation of their management shall be periodically performed, and their results shall be fed back into the planning process.

#### **1.2 Guidelines for Forest Management Practices**

- a. 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.

Conversion of forests to other types of land use, including timber plantations, shall not occur unless in justified circumstances where the conversion:

- (i) 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,
- (ii) entails a limited pro-portion of forest type,

- (iii) 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,
  - (iv) makes a contribution to long-term conservation, economic, and social benefits (for example through the rehabilitation of degraded forests).
- b. Appropriate silvicultural measures shall be taken to maintain the growing stock of resources at - or bring to - a level that is economically, ecologically and socially desirable.
  - c. Conversion of abandoned agricultural and treeless land into forest land shall be taken into consideration, whenever it can add economic, ecological, social and/or cultural value.

## **CRITERION 2. Maintenance of forest ecosystem health and vitality**

### **2.1 Guidelines for Forest Management Planning**

- a. 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.
- b. 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.

The monitoring and maintaining of the health and vitality of forest ecosystems shall take into consideration the effects of naturally occurring fire, pests and other disturbances.

- c. 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.

### **2.2 Guidelines for Forest Management Practices**

- a. 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 stability, vitality and resistance capacity of the forests to adverse environmental factors and strengthen natural regulation mechanisms.

Initiating fires shall be avoided and is only permitted if that is necessary for the achievement of the management goals of the forest management unit.

- b. 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.

- c. The use of pesticides shall be minimised and appropriate silvicultural alternatives and other biological measures shall be preferred.

The WHO Type 1A and 1B pesticides and other highly toxic pesticides shall be prohibited, except where no other viable alternative is available.

Note: Any exception for the usage of WHO Type 1A and 1B pesticides shall be defined by specific forest management standard.

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.

The use of pesticides shall follow the FAO International Code of Conduct on the Distribution and Use of Pesticides or other regulations compatible with the FAO Code of Conduct. Proper equipment and training shall be provided with regular compliance assessments made to minimise health and environmental risks.

- d. In case fertilisers are used they shall be applied in a controlled manner and with due consideration to the environment.

### **CRITERION 3. Maintenance and encouragement of productive functions of forests (wood and non-wood)**

#### **3.1 Guidelines for Forest Management Planning**

- a. 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.
- b. 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.
- c. 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 merchantable and non-merchantable forest goods and services.

#### **3.2 Guidelines for Forest Management Practices**

- a. Forest management practices shall be ensured in quality with a view to maintain and improve the forest resources and to encourage a diversified output of goods and services over the long term.
- b. Regeneration, tending and harvesting operations shall be carried out in time, and in a way that do 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.
- c. 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 offtake.

When under the responsibility of 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.

- d. Adequate infrastructure, such as roads, skid tracks or bridges shall be planned, established and maintained to ensure efficient delivery of goods and services while at the same time minimising negative impacts on the environment.

## CRITERION 4. Maintenance, conservation and appropriate enhancement of biological diversity in forest ecosystems

### 4.1 Guidelines for Forest Management Planning

- a. Forest management planning shall aim to maintain, conserve and enhance biodiversity on ecosystem, species and genetic level and, where appropriate, diversity at landscape level.
- b. Forest management planning and terrestrial inventory and mapping of forest resources shall identify and protect ecologically important forest biotopes, taking into account protected, rare, sensitive or representative forest ecosystems such as riparian areas and wetland biotopes; areas containing endemic species and habitats of threatened species, as defined in recognised reference lists; as well as endangered or protected genetic *in situ* resources.

#### Optional proposal:

PEFC Council could introduce and incorporate into its metastandard the concept of identification and management of High Conservation Value Forests (HCVF). More information about HCVF can be found at [www.hcvnetwork.org](http://www.hcvnetwork.org).

The forest management shall provide for conservation of the key ecosystems or habitats in their natural state.

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.

### 4.2 Guidelines for Forest Management Practices

- a. Natural regeneration shall be preferred, provided that the conditions are adequate to ensure the quantity and quality of the forests resources and that the existing provenance is of sufficient quality for the site.
- b. 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.

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 recognized as guidance for avoidance of invasive species.

Afforestation and reforestation activities that contribute to the improvement and restoration of ecological connectivity shall be promoted.

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 or guarantee 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. PEFC Council position on genetically modified trees will be reviewed in 2015.

#### Optional solution:

Until 2015, 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 that until enough scientific data on genetically modified trees indicate or guarantee that impacts on human and animal health and the environment are equivalent to, or more

positive than, those presented by trees genetically improved by traditionally methods. PEFC Council position on genetically modified trees will be reviewed by 2015.

- c. 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.
- d. Traditional management systems that have created valuable ecosystems, such as coppice, on appropriate sites shall be supported, when economically feasible.
- e. Tending and harvesting operations shall be conducted in a way that do not cause lasting damage to ecosystems. Wherever possible, practical measures shall be taken to improve or maintain biological diversity.
- f. 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.
- g. 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.
- h. 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 health and stability of forests and on surrounding ecosystems.
- i. Special key biotopes in the forest such as water sources, wetlands, rocky outcrops and ravines shall be protected or, where appropriate, restored when damaged by forest practices.

## **CRITERION 5. Maintenance and appropriate enhancement of protective functions in forest management (notably soil and water)**

### **5.1 Guidelines for Forest Management Planning**

- a. 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. 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.

### **5.2 Guidelines for Forest Management Practices**

- a. Special care shall be given to silvicultural operations on sensitive soils and erosion prone areas as well as on 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 on such areas. Special measures to minimise the pressure of animal population on forests shall be taken.
- b. Special care shall be given to forest management practices on forest areas with water protection function 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.
- c. 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

that preserve the natural level and function of water courses and river beds. Proper road drainage facilities shall be installed and maintained.

## **CRITERION 6. Maintenance of other socio-economic functions and conditions**

### **6.1 Guidelines for Forest Management Planning**

- a. Forest management planning shall aim to respect the multiple functions of forests to society, have 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.

Where applicable, forest management shall stimulate employment of the local population, including indigenous peoples, as well as the local processing of timber and non-wood forest products. The employment of local people, including indigenous peoples, shall be stimulated, for example through training.

Forest management shall promote the long-term health and well-being of communities within or adjacent to the forest management area.

- b. 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.

Forest management activities shall be conducted in recognition of the established framework of legal, customary and traditional rights, which shall not be infringed upon without the free 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.

- c. Adequate public access to forests for the purpose of recreation shall be provided taking into account the respect for ownership rights and the rights of others, the effects on forest resources and ecosystems, as well as the compatibility with other functions of the forest.
- d. Sites with recognised specific historical, cultural or spiritual significance shall be protected or managed in a way that takes due regard of the significance of the site.
- e. Forest managers, contractors, employees and forest owners shall be provided with sufficient information and encouraged to keep up-to-date through continuous training in relation to sustainable forest management as a precondition for all management planning and practices tasks described in this standard.

### **6.2 Guidelines for Forest Management Practices**

- a. Forest management practices shall make the best use of local forest related experience and knowledge, such as of local communities, forest owners, NGOs and local people.

Forest management shall provide for effective communication and consultation with local people and other stakeholders relating to the sustainable forest management and shall provide appropriate mechanisms for resolving complaints and disputes relating to forest management between forest operators and local people.

- b. Working conditions shall be safe, and guidance and training in safe working practice shall be provided.

Forest management shall comply with ILO conventions No. 155, 161 and 184.

Note 1: In countries where ILO conventions 155, 161 and 184 have been ratified, the requirements of 7 (a) apply. In countries where a fundamental convention has not been ratified and its content is not covered by applicable legislation, specific requirements shall be included in the forest management standard.

Note 2: ILO Code of Practice on Health and Safety in Forestry Work is recognized as guidance on specific measures to be applied to ensure health and safety in forestry operations.

**Optional solution:**

Forestry work shall be planned, organised and performed in a way that health and accident risks are identified and all reasonable measures are applied to protect workers from work related risks. Workers shall be informed about the risks involved with their work and about preventive measures.

Working conditions shall be safe, and guidance and training in safe working practices shall be provided to all assigned in a task in forest operation.

Note: Guidance for specifying national standards can be obtained from the ILO Code of Good Practice on Safety and Health in Forestry Work.

- c. 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.
- d. Forest management shall be based inter-alia on results of scientific research. The forest management shall contribute to research activities and data collection needed for sustainable forest management or support the relevant research activities carried out by other organisations, as appropriate
- e. Forest management shall comply with fundamental ILO conventions

Note: In countries where the fundamental ILO conventions have been ratified, the requirements of 7 (a) apply. In countries where a fundamental convention has not been ratified and its content is not covered by applicable legislation, specific requirements shall be included in the forest management standard.

## **CRITERION 7. Compliance with legal requirements**

- a. Forest management shall comply with legislation applicable to forest management; including forest management practices; nature and environment 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. 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.

## Appendix 1: Guidelines for interpretation of requirements in case of plantation forestry

Requirement	Interpretation for forest plantations
<p>1.1 a. Forest management planning shall aim to maintain or increase forest and other wooded area, and <b>enhance the quality of the economic, ecological, cultural and social values of forest resources</b>, including soil and water. This shall be done by making full use of related services such as land-use planning and nature conservation.</p> <p>2.1 a. Forest management planning shall aim to <b>maintain and increase the health and vitality of forest ecosystems</b> and to rehabilitate degraded forest ecosystems, whenever this is possible by silvicultural means.</p> <p>2.2 a. Forest management practices shall make <b>best use of natural structures and processes and use preventive biological measures</b> wherever and as far as economically feasible to maintain and enhance the health and vitality of forests. Adequate <b>genetic, species and structural diversity shall be encouraged and/or maintained to enhance stability, vitality and resistance capacity of the forests to adverse environmental factors and strengthen natural regulation mechanisms</b>.</p> <p>3.1 c. 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 <b>production of merchantable and non-merchantable forest goods and services</b>.</p> <p>4.1 a. Forest management planning shall aim to <b>maintain, conserve and enhance biodiversity on ecosystem, species and genetic level</b> and, where appropriate, diversity at landscape level.</p> <p>6.2 c. Forest management operations shall take <b>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</b>. 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.</p>	<p>The requirements 1.1a, 2.1a, 2.2a, 3.1c, 4.1a and 6.2c cannot be applied to individual forest stands in case of plantation forestry and shall be considered on larger scale (bioregional) within the whole forest management unit where the stands of fast growing trees are complemented by buffer zones and set-aside areas which are primarily dedicated to environmental, ecological and cultural functions.</p>

Requirement	Interpretation for forest plantations
<p>1.2 a 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.</p> <p>Conversion of forests to other types of land use, <b>including timber plantations</b>, shall not occur unless in justified circumstances.</p>	<p>The requirement for the “conversion of forest to other types of land, including forest plantations” means that forest plantations established by conversion of natural forests after the application date of this standard in other than “justified circumstances” do not meet the requirement and are not eligible for certification.</p>
<p><b>Optional solution:</b></p> <p><i>There are a number of options to set an application date (period) for this requirement that would ensure that the PEFC forest certification of a forest plantation would not become (or be perceived as becoming) an incentive for conversion of forests to forest plantations:</i></p> <ul style="list-style-type: none"> <li>- <b>Application date of the standard:</b> <i>For a number of processes, especially legislative one, it is not permitted to apply the requirements retrospectively, i.e. to penalise for actions/activities that have been performed before the adoption of the requirement. Although PEFC is not a legislative process, this argument needs to be taken into consideration.</i></li> <li>- <b>Specific application date:</b> <i>PEFC Council would specify a fixed date (e.g. 2000) after which the requirement is to be applied. This would mean that plantations established after this date are not eligible for PEFC certification.</i></li> <li>- <b>Floating application date:</b> <i>PEFC Council would specify a floating period after the conversion for which the plantation would not be eligible for PEFC certification. This requirement would not create discrimination amongst plantations established in the same way but at different times. This option would also address the issue of ownership transfer of plantations. This floating period could also be defined for example by rotation period(s) of the established plantations.</i></li> </ul>	
<p>3.2 c. 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, <b>with due regard to nutrient offtake</b>.</p>	<p>The requirement for “due regard to nutrient offtake” in case of plantation forestry shall be considered with increased importance and shall be an important part of both the planning and management stages of the production cycle.</p>

Requirement	Interpretation for forest plantations
<p>4.1 b. Forest management planning and terrestrial inventory and mapping of forest resources shall identify and protect ecologically important forest biotopes, taking into account protected, rare, sensitive or representative forest ecosystems such as riparian areas and wetland biotopes, areas containing endemic species and habitats of threatened species, as defined in recognised reference lists, as well as endangered or protected genetic <i>in situ</i> resources.</p> <p>The forest management shall provide for conservation of the key ecosystems or habitats in their natural state.</p> <p>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.</p>	<p>The requirements for “ecologically important biotopes, protected and endangered species, representative forest areas, etc. 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 primarily dedicated to environmental, ecological and cultural functions.</p>

Requirement	Interpretation for forest plantations
<p>4.2 a. <b>Natural regeneration shall be preferred</b>, provided that the conditions are adequate to ensure the quantity and quality of the forests resources and that the existing provenance is of sufficient quality for the site.</p> <p>4.2 b. For reforestation and afforestation, origins of <b>native species and local provenances</b> 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>4.2 c. Forest management practices shall, where appropriate, promote a <b>diversity of both horizontal and vertical structures such as uneven-aged stands and the diversity of species such as mixed stands</b>. Where appropriate, the practices shall also aim to maintain and restore landscape diversity.</p> <p>4.2 d. <b>Traditional management systems</b> that have created valuable ecosystems, such as coppice, on appropriate sites shall be supported, when economically feasible.</p> <p>4.2 h. <b>Standing and fallen dead wood, hollow trees, old groves and special rare tree species</b> shall be left in quantities and distribution necessary to safeguard biological diversity, taking into account the potential effect on health and stability of forests and on surrounding ecosystems.</p>	<p>The requirements 4.2a, 4.2b, 4.2c, 4.2d, and 4.2h do not usually apply to stands of fast growing trees and shall be understood as to be primarily taking place in buffer zones and set-aside areas which complement stands of fast growing trees and which are primarily dedicated to environmental, ecological and cultural functions.</p>
<p>4.2 b. 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 <b>introduced species, provenances or varieties shall be used whose impacts on the ecosystem and on the genetic integrity of native species and local provenances</b> have been evaluated, and if negative impacts can be avoided or minimised.</p>	<p>The evaluation of impacts of “introduced species, provenances and varieties” shall be understood as having increased importance for stands of fast growing trees and shall be an important part of both the planning and management stages of the production cycle.</p>