

## Why this Package?

Forests receive a lot of attention from NGOs and as a result, the media and the public. Their health, their size, their future, the industries associated with them and the products made from them all come under scrutiny. And the conclusions don't always match the reality. One of the main - mistaken - concerns is that European forests are being damaged or destroyed by industry.

Such concerns impact the European forest and paper industry on many levels and increasingly, they're also affecting related industries. Those working in the paper industry and along the paper chain often face criticism but are not always armed with the facts that would allow them to respond effectively.

This package highlights the main areas of debate and misconception on forestry, and supplies information needed to help respond to those concerns.

Where the wood used comes from is probably the main cause for concern about forests and forest-based products today. Other questions often raised include:

- Are Europe's forests really disappearing?
- Are conservation forests being destroyed to make paper?
- Is biodiversity in forests under threat from industry?
- Is the paper industry using illegally logged wood?
- Why isn't all wood certified?

The complexity of the issues involved doesn't make communicating the facts easy. Added to which, cultural views and historical experience of forests across Europe are as different as the forests themselves.

Wood-based products are a sustainable choice. It is vital that misconceptions are corrected and that people feel that they can use wood and paper products without feeling guilty. To achieve this, the economic, social and environmental functions of forest all need to be understood and valued. Hopefully the information in this package will help you contribute to that process.



## Using Forest Facts

### What is it?

An information tool to help users communicate about wood as a raw material, be it with customers, staff, suppliers or stakeholders in general.

### Who's it for?

It has been designed with paper industry customers and key market/policy influencers in mind.

### What's in it?

The pack comprises a series of issue sheets that provide background information and facts and figures on the main topics relevant to today's forestry debate. It is split into background information on core areas, followed by issue sheets that address current key issues. Updates will be available regularly to reflect new and changing issues.

### When would I use it?

The information provided can be adapted for a range of target audiences as needed; e.g. senior executives, procurement people, communication officers, as well as staff in general. It can also be used for other parts of the chain such as pulp producers and merchants, etc.

### How user friendly is it?

- The pack aims to be easy to read and user-friendly. For this reason, many of the references and quantitative data can be found in the annexes. These can be supplemented according to the user's needs.
- The information can be easily updated and translated.
- Definitions are often central to debate but consensus on definitions between different stakeholders is difficult. The industry has adopted a number of internationally accepted definitions on issues relating to forestry and some of those definitions are referred to in this package.

### Is it only relevant to Europe?

The information provided is mainly European-based, reflecting the origin of the vast majority of wood used for papermaking in Europe.

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**Key issues:** certification systems; chain of custody; protected forests; planted forests; illegal logging; biodiversity; climate change and renewable energy sources; paper consumption versus 'saving trees'.



## Public Perception of Forests in Europe

Forests are an emotive issue. NGO campaigns on the health and future of forests have contributed to this and most people have an opinion. But what do they really think?

“What do Europeans think of their forests”<sup>(1)</sup>, provides a useful overview of public perception. It reviews a number of public opinion surveys in Europe and was compiled in 2003 by the FAO and UNECE Forest Communicators Network (UNECE is the United National Economic Commission for Europe).

A summary of its main findings is provided below.

### A subjective issue

- Responses to forest are mainly emotional. Subjective impressions and feelings dominate: it is regarded as socially unacceptable not to express an interest in forests.
- Most people agree with the idea that “forests should be used by man” and also that “forest is nature and a productive field at the same time”. So a multifunctional role for forests is accepted, but preserving and protecting them are regarded as being more important.
- The majority of people surveyed rejected the statement, “the use of wood helps nature”.

### Understanding the concept of sustainable forest management

Generally, people are not clear on what the term sustainable forest management means:

- It has largely positive associations. These go further than just removing wood from forests in a balanced way to include ideas such as maintaining biodiversity and the social impact of forests, but it remains controversial.
- Europeans are divided on whether or not sustainable forest management is applied in practice. There is also a gap between acknowledging that forest management practices are used and linking this to sustainability.
- People tend to rate forestry in their own countries as being better than elsewhere. Eastern European forestry is generally viewed badly, sometimes even more poorly than tropical countries. This is a gross misperception; indicators for sustainable forest management show no clear difference between Eastern and Western Europe. (Ministerial Conference for the Protection of Forest in Europe – MCPFE, “State of Europe’s forests 2003”)

### Forest area

People generally equate the state of forest with the amount of, and changes to, the forest area in Europe:

- Forest is wrongly believed to be decreasing (almost) everywhere. In fact, the MCPFE report “State of Europe’s Forests 2003” shows that forest area in Europe actually increasing (forests in Europe have increased by 30% since 1950 – source: FAO).
- Clear-cutting and environmental destruction are blamed for this perceived reduction.
- People are becoming more aware of forests as carbon sinks.

### Forest health and vitality

The health and vitality of forests is highlighted as one of the most important forest issues for Europeans. The review shows that it is wrongly thought to be fairly poor, and getting worse, in Europe. The overall condition of forests is thought to be unsatisfactory. Forestry is only partly blamed for this; environmental pollution by industry is given as the main reason, followed by traffic exhaust fumes and construction activity.

(1) Their key findings relate to general and overall European perceptions. Exceptions to the general statements are signalled in the report by country. Most of the input was collected in Central, Western and Northern parts of Europe, with less originating from Southern and Eastern Europe. The full review can be found at [www.unece.org/trade/timber/pr/publist/publist.htm](http://www.unece.org/trade/timber/pr/publist/publist.htm)



## Goods and services expected from forests

Over the past decade, people have increasingly changed their view on the most important goods and services they expect from forests:

- People regard wood as being “the” environmentally friendly product, but don’t make the link between forests and forest products, which they regard positively, and harvesting and wood processing, which has negative associations.
- People enjoy forests for recreation and see this as a positive role for forests. The economic side of forestry, i.e. wood production and a jobs provider, is also viewed positively. However felling trees for timber production is only accepted when accompanied by afforestation.

## The relationship between forest and nature

Public perception of the relationship between forest and nature highlights that environmental considerations are regarded as being the most important when managing and utilising forests:

- Preserving plants and animals living in forests is thought to be more important than economic considerations or sustainable forest management.
- Most Europeans think that preserving forest biodiversity is absolutely necessary, but think that in practice it is decreasing.

## Views on the broader socio-economic functions of forest

The socio-economic functions of forests are seen as broad and include forest ownership, the sector’s contribution to providing income and employment, and free services to society.

- The nature of forest ownership is not really understood by the public.
- The forest industry is seen as highly important in Nordic countries.
- Foresters are seen as competent and credible stewards of nature, but people are strongly against measures such as the introduction of mechanisation and the replacement of foresters by heavy machinery.
- The most credible sources of information on forests are thought to be foresters, scientists, environmentalists and representatives of outdoor organisations. Confidence in journalists, civil servants, politicians and industry is limited.

## Conclusions

European public perception of forests is often subjective and even contradictory. In some areas views are accurate, in others views are misinformed.

The European public approves of the idea of forests as multi-functional and values sustainability as a good basis for forest management. It also strongly supports policy measures to protect forests as a central part of natural heritage.

However, the public is unhappy with forest health and the perceived threat to forest biodiversity in many regions. It approves of forests having an economic use and of harvesting wood, if foresters act as nature’s stewards. Many Europeans disapprove of forest management concepts that ignore the natural dynamics in forests and focus on them as a production area for raw material.



## Forest – a Renewable Resource and a Positive Contribution to Society and the Environment

### *Did you know?*

- *Forest is a renewable resource, through responsible management it can be regenerated almost indefinitely.*
- *37.1% of Europe is covered with trees.*
- *Forests in Europe have increased by 30% since 1950 (source FAO).*
- *Europe recycles more paper than any other region in the world with a recycling rate of 64.5%.*

### Providing diversity

Forests cover 30% of the earth's surface and are home to a whole range of species and structures, from tropical rain forests in South America to the dry savannahs of South Africa, to the boreal areas of Northern Europe. Each type of forest creates an ecological system. Of all the eco-systems, the forests that are sustainably managed contain the greatest diversity of species, genetics and ecological processes.

### Renewable

The unique thing about forest is that it is an inherently renewable resource – it can be regenerated in a perpetual cycle, almost indefinitely. Very few natural resources, if any, can claim the same thing. But if we want to make sure that the potential renewability of forests is realised then managing forests has to be responsible, structured and systematic.

### Increasing

The fact is that forest in Europe is increasing annually by an area equivalent to more than 1.5 million football pitches. The latest monitoring results from the United Nations (UN)<sup>(1)</sup> confirm this. The UN has also said that forest health in Europe is both good and improving<sup>(2)</sup>.

### A source of raw materials

Forests don't just play an environmental or social role, they are important to society economically and have been for centuries. As the source of raw materials for industry, including the paper industry, they provide a valuable source of jobs and income across Europe, particularly in rural areas.

Wood is renewable, easily available throughout Europe and the different types lend themselves well to making a wide range of paper.

Using annual crop fibres (e.g. kenaf, hemp, cotton, linen, straw, rice, etc.) instead of wood has been explored. These crops have some advantages for energy consumption and fibre content, but they also present problems that make their use for paper currently unfeasible:

- They are not normally available in sufficiently large quantities.
- They require large amounts of water to grow, often in areas where it is needed for other reasons.
- They would need huge storage capacities, as their harvest is only seasonal, to be able to ensure a continuous delivery of raw material to pulp mills.

Additionally, the potential use of chemicals to grow these fibre sources could have a negative impact on the environment.

(1) "United Nations Food and Agriculture Office (FAO) Global Forest Resources 2005" shows a generally increased tree growth of up to 25% compared to earlier decades

(2) United Nations Economic Commission for Europe "The Conditions of Forests in Europe – 2004 Executive Report"



## Carbon stores

The world's forests are the second largest stores of CO<sub>2</sub> next to oceans. Wood and paper products are therefore also important carbon stores.

## Recyclability

Paper products are ideal for recycling. More paper products are recycled into new products than any other materials. Recycling makes an important and positive environmental contribution to both sustainable development and climate change.

## A source of renewable energy

Wood and wood based products can also be an excellent source of renewable energy when they reach the end of their product life and can't be recycled any further. Being CO<sub>2</sub> neutral, they provide the best substitution for fossil energy.

## Contributing to society

Environmental awareness is increasing in society today, even becoming fashionable. But for today's generations the link between society and nature is still much weaker than in the past and one result is that the general understanding of how we can work successfully with nature is lower. The forest-based sector makes a really important and positive contribution to society in Europe today, improving our quality of life. But we don't always recognise the extent of this contribution.

- Forests products are essential to daily life: protecting food and goods makes them easily available to users; they're essential in construction and house building, for heating and for furniture; they're a major means of delivering information and have driven education and democracy down through the ages.
- Forests also provide recreation, ensure secure table water, help protect against flood, erosion and landslides, conserve biodiversity, help stabilize the climate, and produce oxygen and even food.
- There are also many products that are forest-based that are not immediately obvious for example, textiles, liquid bio-fuels, chemicals and health products. As well as the more everyday objects that we take for granted such as household utensils, banknotes, cork, wallpapers, photos, art objects, handicrafts and wooden toys.
- Forestry generates employment and skilled jobs in urban areas, but it also provides and maintains vitally important jobs in rural areas across Europe.



## Forest Related Raw Materials for Papermaking

### *Did you know?*

- *Recovered paper is an important raw material, it makes up 50% of the material used to produce paper.*
- *Fibre can be recycled, on average, 4-6 times.*

Wide ranges of forest and tree types exist across Europe. The length of wood fibres, short or long, varies depending on the tree type. In paper making, it is the length of the wood fibres that dictates which trees are best suited to which products.

### Hardwood trees

These include oaks, beeches, poplars, birches and eucalyptus. In Europe it is mostly birches (found in Sweden, Norway, the UK and Spain) and eucalyptus (found in Portugal, Spain and Norway) that are used for papermaking.

- Type of fibre: short.
- Average length of fibres: 1mm.
- Good for: achieving bulk, smoothness, opacity.
- Typical products: writing papers, printing papers, tissue papers.

### Softwood trees

These include pine and spruce. In Europe pine is found in the UK, Norway, Finland, France, Spain, Portugal and Greece. Spruce is found in the UK, Finland, Norway and Sweden.

- Type of fibre: long.
- Average length of fibres: 3mm.
- Good for: products requiring additional strength. Also suitable for writing and printing.
- Typical products: shipping containers, grocery bags, corrugated boxes.

Hardwood and softwood fibres can of course be blended into a single paper, to achieve a desired combination of strength, whiteness, writing surface or other required characteristics.

### Recovered paper

Recovered paper is an important raw material for the paper industry, in fact it accounts for 50% of all raw material used. The industry is the largest recycler in Europe. The mixed characteristics of recovered fibres makes them particularly suited to applications such as newsprint and increasingly, packaging. Many different types of paper are included in recovered paper. They are all listed and described in the European List of Standard Grades of Recovered Paper and Boards EN 643.

Recycling has limits as fibre can only be recycled, on average, four to six times; there is an ongoing need to feed the supply of recovered fibre with virgin fibre in the form of wood pulp, from hardwood or softwood.



## The Principles of Sustainable Forest Management (SFM)

### *Did you know?*

- *Sustainable forest management = ‘Managing with good sense’.*
- *Sustainable forest management is vital for the future of forest-based industries.*
- *More than 60% of European forests are family owned (source CEPF-eu.org).*

### Why sustainable forest management?

Society expects a lot from forests. For centuries we have relied on them to meet our needs, economic, environmental and social. If they are to fulfil all the different functions we ask of them, they need to thrive. This is why sustainable forest management is so important.

The idea behind sustainable forest management is to encourage healthy, useful and enduring forests that can meet all our different expectations. Because our needs touch on all three pillars of sustainability, sustainable forest management does the same. Managing forests sustainably means: preserving ecosystems, biological diversity and encouraging optimal environmental conditions; recognising that forests have economic value and importance, particularly in delivering raw materials, and encouraging their responsible use; and also making sure that they continue to be of cultural and recreational value.

In practice, it means ‘managing with good sense’, making today’s forests useful and making sure they continue to be so, now and in the future. It is an approach and commitment that goes beyond legal obligations.

Paper industries value the forest; it’s a very important resource for them. Sustainable forest practices are vital to ensure that wood is not only available but of good quality, and that means healthy. Forest companies and forest owners actively welcome and use sustainable forest management techniques as a way to ensure their own future.

Public awareness and concern for sustainable issues is growing and the public bodies responsible for forest have recognised this. Since the 1990s they have increasingly recognised and defined sustainable forest management at both national and European level. The result is specific criteria and indicators that identify those forestry practices that contribute to sustainable forest management.

Rio in 1992 (United Nations Conference on Environment and Development), Helsinki in 1993 (Second Ministerial Conference on the Protection of Forests in Europe) and the 1998 Lisbon Third Ministerial Conference on the Protection of Forests in Europe all resulted in pan-European criteria and indicators for sustainable forest management. These are widely used across Europe today; national forest policies are often measured against them and they also provide a basis for sustainable forest management certification systems.

### There are six broad criteria

1. Maintaining and enhancing forest resources and thus their contribution to the global carbon cycle and the reduction of CO<sub>2</sub> in the atmosphere.
2. Preserving the health and vitality of forests’ ecosystems.
3. Sustaining and encouraging forests productive functions (wood and non-wood).
4. Maintaining and enriching the biological diversity found in forest ecosystems.
5. Retaining and strengthening forest management’s protective functions (particularly soil and water).
6. Preserving other socio-economic functions and conditions of forest.

Operational guidelines based on these criteria are available to forest managers as are indicators, quantitative and qualitative, that allow them to record and report change over time more easily.



## Harvesting Methods

### *Did you know?*

- *40-50% of the round wood used to make paper comes from commercial thinnings, which are necessary to keep Europe's forests in a healthy condition.*
- *When trees are harvested new trees are planted or regeneration is encouraged.*
- *Europe has more than 16 million private forest owners.*
- *Less than 4% of European forests are owned by European paper companies.*

Today, the sustainable practices employed to manage European forests mean that harvesting methods are chosen that help to preserve biodiversity, maintain ecosystems and give forests the best opportunity to regenerate. For example log debris or dead wood, which would have been removed in the past, is left to rot and provide sustenance for wildlife.

Landscape planning is now also used, mainly in Sweden and Finland, to develop a more complete picture of large forests and encourage a more holistic approach - looking at all of the different functions of the forest and trying to mimic nature as much as possible in their methods - when identifying which areas to harvest.

Technological advances have supported these methods in the past and new developments continue to do so. For example, modern harvesters are designed specifically to reduce the environmental impact of the harvesting process on soil conditions.

### Thinning: for a healthy forest

Managing the health of forests includes the technique of thinning which removes the weaker trees to allow the remainder to continue to grow healthily. It is part of silviculture (the art and science of sustainably growing trees). On average, 40-50% of the roundwood used to make paper in Europe comes from thinning.

### A new cycle

The stage at which trees are felled commercially depends on the species, its geography and the nature of the forest but is generally when the tree is regarded as being of the most use. The majority of wood harvested in Europe, 61%, is used for commercial timber purposes, e.g. producing wooden furniture, and not for making paper. The wood that is used for paper includes mainly wood from thinning and the by products, from sawmills, of other industries.

When trees are harvested, sustainable forest management practices ensure that new trees are planted or regeneration is encouraged, to replace them. In some European countries such as France, Germany, Sweden and Finland this is even required by law. There are a number of replanting methods, including sowing, but the most common is the planting of seedlings grown in nurseries.

### Is there clear cutting in Europe?

Clear cutting has become a contentious and emotive term, conjuring images of the commercial clearing of vast areas of forest with no regard for environmental or social consequences.

Clear cutting in this context is not practiced in Europe. Pressure groups such as environmental non-governmental organisations (NGOs) have argued that felling any large expanse of forest area for industrial purposes constitutes clear cutting and is wrong. This argument reflects little understanding of what sustainable forest management actually means in practice. For example, sustainable forest management practices prevent soil erosion and protect biodiversity by ensuring that a minimum level of trees are left remaining after harvesting in a forest area.

