Stora Enso is a leading supplier of FSC-certified products. SCA uses two types of wood fibre in production, recycled fibre and fresh fibre. From forests owned by SCA or others in Sweden, Austria and Germany. SCA has been working for many years to promote responsible forestry and was the first company to establish a forest management certification scheme. SCA requires its suppliers to comply with its wide-ranging policy on responsible sourcing. SCA’s Forest Policy is also reflected in its environmental protection program. SCA’s Forest Policy is also reflected in its environmental protection program. SCA’s Forest Policy is also reflected in its environmental protection program. SCA’s Forest Policy is also reflected in its environmental protection program.
Forests are part of a complex ecosystem and are among the most notable storehouses of biological diversity on the land they house over 2/3 of known terrestrial species. Forests serve multifunctional purposes and help to protect the soil, water and other ecosystem functions. Almost 12% of the forest area in Europe is set aside for conserving biological and landscape diversity.

European companies are investing in new production capacity in Latin America and Asia. The development of industrial monoculture aims at growing forests more efficiently by producing a uniform commodity. This results in lower cost for raw material and a more efficient forest management.

Research using genetically modified (GM) trees aims at reducing the lignin content (the reinforcing glue that makes the tree strong) in pulpwood trees.

Through the loss of tax revenues, illegal logging has an important economic and social impact on local communities.

The value of non-commercial goods and services provided by forests (fuelwood, medicines) may well exceed that of the commercial output. Forestry is often a very important element of rural economies, providing complementary employment to the agriculture sector and offering jobs in regions where few other employment opportunities exist. In particular, Indigenous Peoples’ culture and identity rely heavily on the forests in which they live.

Wood is a renewable resource. However, the pulping process uses large amounts of energy and fresh water. Efficiency in production processes differs among companies. The best sawmills in Europe and US use close to 70% of each processed log, while this figure is about 30% in developing countries due to a lesser use of chips and sawdust.

Rising energy prices have created a new interest in fibre as biofuel. The resulting rising cost of fibre calls for a reduction of virgin fibre demands.

Transportation is another important cost item and the increase in energy prices requires companies to develop more efficient transport logistics.

Biodiversity

Monoculture forests are less biodiverse and more vulnerable to problems such as winds and pests, necessitating the use of agrochemicals. Overtime, this can lead to less fertile soils and erosion, impacting long-term production capacity and increasing potential damages from storms and fires. To mitigate biodiversity risks, companies should set aside small areas of protected forests and use alternative plantation design and use the term “biodiversity corridors” can also improve the levels of biodiversity in and around the plantations.

In some countries in South East Asia, Africa and Latin America up to 80% of the trees are cut illegally. Illegal logging stems from a variety of factors (overcapacity in the forestry industry, abuse of property rights of local communities, lack of transparency in the forestry sector).

The consequences of climate change affect forests. Research shows that climate change can make forests drier, increasing the likelihood of forest fires in number and severity.

An important function of forests is to provide carbon storage. Deforestation is thus a serious threat to the climate. Forests are one of the three most dangerous occupations in most countries. All segments of the forestry workforce – in particular, Indigenous Peoples’ culture and identity rely heavily on the forests in which they live.

Forest health is compromised when exposed to light, pulp is still sometimes bleached with ingredients of trees. Pulping is either done mechanically (by adding water and stirring the tree) or chemically. As the lignin darkens when exposed to light, pulp is still sometimes bleached with chlorine-based chemicals. The process also requires a long cooking time and extensive washing.

Pollution from production is affecting water (by adding nutrients and removing oxygen) and air quality. It also contaminates marine habitats, wildlife and the food chain.

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Contract labour accounts for a growing share of the forestry workforce in most countries. Often, contractors are not covered by labour legislation and enjoy much less protection than their employed workers.

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Cyclical prices, restructuring and rationalisation of paper companies lead to redundancies and reduction in workforce.

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Resource Use

By redesigning their production line, companies can increase raw material efficiency. In particular, waste wood and bark can be used as a source of energy (as biothermal) once the technology is ready, thereby reducing the demand for external energy. Companies investing in improved energy use avoid rising energy and environmental costs. (see case study)

Human Rights & Labour Standards

By improving vertical integration (e.g. combining pulp and paper production), companies can achieve transportation synergies and reduce transportation costs and greenhouse gas emissions at the same time.

Pollution represents a risk for companies in terms of regulatory restrictions and legal costs. Recent examples of accidental pollution include liquid waste from two paper mills overwhelming a tiny village in Inner Mongolia, China in April 2006.

Companies can manage illegal logging by using and promoting traceability systems to check that all wood and external pulp has been harvested in compliance with national legislation and through systems covered by third-party certification schemes (examples include FSC, PEFC). The use of traceability systems can also present a competitive advantage for companies. (see case study)

Responsive Forest Management & Traceability

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By switching to less toxic bleaching processes, the risk of paper mills to lose their licence or even strike is reduced. Building a closed-loop system with purifying water for re-use and recovering used chemicals can help companies reduce their environmental footprint.

Forest owners can profit from the Kyoto Protocol by generating carbon reduction credits and selling them on the market.

Companies can reduce the environmental impacts of transportation by improving logistics, and using more sustainable shipping methods such as water ways and railway networks.

Climate Change

EU Emission Trading Scheme registered mills are likely to face costs due to restrictions on GHG emissions as the scheme enters its second phase.

Forest owners can profit from the Kyoto Protocol by generating carbon reduction credits and selling them on the market.

By using sustainable forest practices and shifting to more reducing forest products, companies allow forests to prolong their carbon storage function and therefore mitigate climate change.

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As a result of difficult working conditions, turnover in the workforce tends to be high, even in many industrialised countries. Adequate training is one of the key elements in breaking the cycle of low productivity, low wages, high accident rates and high turnover in the forestry workforce.

Capacity closures and structural changes can cause tense labour relations or even strikes. Lack of transparency in the different stakeholders and reinforce their licence to operate. (see case study)

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Pollution

Pollution from production is affecting water (by adding nutrients and removing oxygen) and air quality. It also contaminates marine habitats, wildlife and the food chain.

A study estimated that world prices were depressed by between 7% and 16% (depending on the product) due to the presence of illegal timber products in the market. This caused losses of at least US$460 million each year in forgone sales for US firms.

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Stora Enso in Partnership with UNDP

Stora Enso began discussions with the United Nations Development Programme (UNDP) in 2003 to explore possible partnerships regarding its forestry project in the Guangxi province in southern China. Stora Enso intends to expand its plantation of fast-growing eucalyptus from 20,000 hectares in 2003 to a sustainable fibre base of 120,000 hectares in 2010.

UNDP conducted an ESA (Environmental and Social Impact Assessment) on Stora Enso’s plantation in Guangxi. The ESA report identified a lot of minor issues, including the need for Stora Enso to intensify communication with local communities, but no major social and environmental show-stoppers.

To address the key findings of the ESA report, UNDP and Stora Enso have signed a memorandum of understanding. From 2006 to 2010 they will cooperate to conserve biodiversity in Guangxi and improve community well-being. In 2006, Stora Enso also signed a loan agreement with the International Financing Corporation (IFC) to finance its activities in China. IFC conducted its own sustainability audit.

Stora Enso expects that the cooperation with UNDP will increase the credibility of the project and win the acceptance of stakeholders.

Unscll.org

UPM’s Use of Forest-based Biofuels

The pulp and paper industry is an important producer and consumer of renewable energy in the form of waste fibre and wood residues. According to CEPI (Confederation of European Paper Industries) the industry intends to increase the share of biomass-based energy in its total primary consumption from 49% in 2001 to 56% in 2010. UPM has been a forerunner in using bio-renewable energy. In Finland the company is self-sufficient in terms of electricity and more than 75% of fuels used by UPM mills are CO2-neutral. During the past ten years UPM has cut manufacturing CO2-emissions by 34% while production has increased by 47% during the same period. Energy efficiency is also essential in emissions reduction and all UPM mills are continuously evaluated.

In 2006, UPM opened energy plants in Finland and the UK that use renewable fuels. In 2009, UPM and the town of Lappeenranta (Finland) agreed to build a joint power plant whose energy sources are renewable forest biofuels such as bark, logging residues, stumps and small wood. The plant will generate heat and energy for the UPM mills and electricity and district heating for Lappeenranta.

Source: www.upm-steenbrink.com

SCA – Leading Supplier of FSC-Certified Products

The forest products from SCA consist of paper, pulp, timber and solid-wood products. For SCA it is important to have control of its own wood raw materials. Environmentally certified forestry and control of timber’s origin make it possible to offer products with a high environmental profile. The demand for FSC-certified paper products has increased in Europe, especially in the UK and Germany.

SCA uses two types of wood fibre in production, recycled fibre and fresh fibre mainly from forests owned by SCA or others in Sweden, Austria and Germany. SCA has been working for many years to promote responsible forestry and was certified by FSC in 1999. SCA is also entitled to issue FSC group certification, enabling the company to service private forest owners seeking FSC certification. SCA requires its suppliers to comply with its requirements that no deforestation took place.

Eurosif wishes to acknowledge the support and direction provided by the Forestry & Paper Sector Report Steering Committee: HSBC Holdings plc, Meeschaert Asset Management, Pictet Asset Management, Schroders

This sector report, created with the support of the European Commission, has been compiled by:

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FOREST & PAPER OVERVIEW

European paper and board production has traditionally been based on large export volumes to Asia and North America; although exports to Asia are gradually shrinking due to growth of local production. China is the world’s largest fast-growing market for forest products (8% per year) and Latin America’s share as a raw materials supplier has rapidly increased.

Due to cost pressure on the paper industry, industrial capacity in Europe is being reduced as European companies are investing in Latin America and Asia; where production costs are lower.

Two out of every five felled trees are pulped for paper. The demand for paper is growing 6% per year in the developing world and about 2% in the industrialized world. The world consumption will double in the next 25 to 30 years which cannot be sustained by traditionally managed forests only. Intensively managed planted forests (currently 15% of planted forests) have an important potential to meet the growing demand.

Fibre and human resources are the most significant cost items for the sector, which is dominated by companies from Europe and North America. The top five companies process about 20% of the world’s industrial wood and the concentration of companies is likely to continue.

Wood forests cover in total 3.9 billion hectares, about 30% of the earth’s land area. European forests cover one billion hectares. The world forest area is shrinking by 0.18% per year. The major threat to forests is unsustainable management, natural risks such as fires and pests and illegal logging.

One third of global forest areas is used by forest industries. Plantation forests’ share (4%) is increasing as they are far more productive than natural forests. Fast growing plantations already supply a quarter of the world’s industrial wood harvest and are expected to contribute to nearly half of it by 2040.

The forest industry is mature, capital intensive and highly competitive. In 2001, the European industry employed about 3.4 million people and the annual production value was about €356 billion.

Wood is a renewable raw material converted into a number of products vital to human well being (homes, hygienic paper, newspaper, packaging, etc). Round wood use can be broken down into fuelwood (55%), pulpwood (29%) and logs (18%).

Similarly to other raw material sectors, the sector growth is closely linked to global economic growth. The companies’ ability to adapt to current market demand is constrained by available production capacity, causing fluctuations between over and under capacity (hence also the cyclical prices of fibre).

According to UNECE/FAO (FAO, Global Forest Resources Assessment 2005) the world’s industrial wood is used on fuel, furniture, construction, packaging, paper and bio-renewable energy. In Europe, only a minor fraction of this wood is used on fuel. 66% is used in furniture, 17% in construction, 16% in paper and 1% in bio-renewable energy. In Africa and South America, 1% is used in bio-renewable energy.

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