

# Sappi Fine Paper Europe

2011  
Sustainability  
Report



**sappi**

The art of adding value

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# “ Our approach to sustainability is based on a holistic view of Planet, People and Prosperity ”

Sappi Europe has undergone many changes in recent years. The company has been restructured, bringing forward new and innovative products, changing our practices and repositioning ourselves for the 21st century. Sappi Europe is the leading company in the coated fine paper market and has sustainability at its heart.

Sappi's commitment to sustainability manifests itself in the creation of The European Sustainable Development Council. This body consists of the company's most senior directors, and is chaired by the European Environmental Manager. Its existence and direct influence ensures that sustainability is given the highest possible attention and that it reaches all parts of the organisation.

Our approach to sustainability is based on a holistic view of Planet, People and Prosperity (the 3P's). These values and commitments underpin everything we do,

from our business decisions and processes to our dealings with stakeholders and customers.

**Planet:** contributing to a world of biodiversity, renewable energy and environmental care

**People:** adding to the wellbeing, safety and health of employees and communities

**Prosperity:** aiming at long-term profitability and customer satisfaction through innovation and ethical conduct

Under these over-arching themes we have placed our Charter Commitments. These commitments provide clear guidance to all our staff, suppliers and shareholders on how the company will behave and how we believe it must operate.

We see ourselves as a part of the communities in which we work, and while we strive to be a successful and profitable company, we must achieve this aim in a sustainable way.

## Sustainability report

This report spells out where Sappi has come from, where it is headed, and how the company believes it is going to get there. Sappi Fine Paper Europe (SFPE) has been publicly reporting progress on sustainability initiatives since 2008 as part of a global sustainability report issued annually by Sappi Limited after the financial year-end. Our financial year starts on 1 October and ends on 30 September of the following year. This year marks the first time each regional division issues its own sustainability report, with consolidated global sustainability performance included in the annual report to shareholders. Sappi Limited will also continue to publish a separate online report in conformance with the Global Reporting Initiative's 3G framework and disclosing compliance with the UN Global Compact, to which we are a signatory. This regional reporting structure allows a deeper regional focus that reflects local markets and aspects, and covers the financial year 2011 (1 October 2010 to 30 September 2011). Emission figures are based on the operation of our operating mills in Europe unless it is specified otherwise. All production and non-production activities on our mill premises are included. People and prosperity metrics are reported for the full region, including central facilities and sales offices.

# “ Sappi Fine Paper Europe is the leading European producer of coated fine paper ”

Sappi Fine Paper Europe is the leading European producer of coated fine paper used in premium magazines, catalogues, books and high-end print advertising.

Operating eight mills in Europe and headquartered in Brussels, Belgium, Sappi Fine Paper Europe is recognised for innovation and quality. Our graphic paper brands include Magno, Quatro, Royal, Galerie and GalerieArt ranges. Algro, Fusion, Leine and Parade are the brands for speciality labelling, topline, packaging papers and boards. Jaz is the paper brand for digital printing.

Sappi Fine Paper Europe is a division of Sappi Limited (listed on NYSE and JSE), a global company headquartered in Johannesburg, South Africa, with over 14,900 employees and manufacturing operations in nine countries on four continents, sales offices in 50 countries, and customers in over 100 countries around the world.

Sappi Europe is a major part of the global company's operations, employing just over 40% of its staff and providing over 60% of its paper production capacity.





**Kirkniemi, Finland**

**Brussels, Head Office**

**Nijmegen, The Netherlands**

**Alfeld, Germany**

**Stockstadt, Germany**

**Ebingen, Germany**

**Lanaken, Belgium**

**Maastricht, The Netherlands**

**Gratkorn, Austria**





# “ Our reputation as a reliable company with integrity serves us well ”

Since I joined in 2007, Sappi has undergone considerable change. The company has restructured itself, advanced new products and put the concept of sustainable development at its core. Through these changes we have developed a new strategy founded on the 3P's — Planet, People and Prosperity. These themes encapsulate Sappi's approach for the 21st century and serve as a guide to all our employees.

## **Sustainability**

Sustainability is at the heart of everything that Sappi does. This has led to improvements in greenhouse gas reductions, waste management and certified fibre usage. Our staff are also continually being trained in the importance of sustainability and how they can make it a reality.

It is important, though, to understand how sustainability affects the bottom line; through reduced costs, and also because good business depends on relationships with communities. Sappi relies on the goodwill of governments and much smaller communities in the regions in which it operates. By placing sustainability at the heart of our organisation, we are sending out a strong message to these groups, which both reassures and delivers.

## **Culture**

Sappi has developed a health and safety culture of which I am proud, and the level of accidents and injuries in our workplaces has fallen significantly. However, there is more to be done, especially to achieve our ultimate ambition of a zero injury rate across the entire

company. I really want our employees to feel that Sappi is not only a great place to work, but also a safe one. This means achieving the right engagement and expectations at each of our sites, and there are initiatives in place to do that, which we are, justifiably, excited about.

## **Competition**

Sappi has been in a catch-up phase over the last twelve months. We have substantially reduced our costs, cut our capacity to fit the market and made improvements to our service offering, so that we are now easy to do business with and can deliver cost-effective solutions. Some of the decisions have been hard – the closure of the Biberist mill in Switzerland is a prime example. However, I am relieved and pleased that we were able to give good support to the staff affected and that most of them got new jobs quickly. But we must ensure that these actions were not in vain.

With a more efficient company, we are getting better at keeping our customers satisfied and making profit. Our reputation as a reliable company with strong integrity serves us well.

I now believe we have a bright future, as long as we recognise the challenges ahead and act on them early. The digital age has brought an overall decline in demand for paper products. We don't yet know where that will stop, but we have done the right things to deal with the consequences so far. More than ever, our focus is on our customers. By delivering what they need and value in the most cost competitive way, we will all prosper together.



**Berry Wiersum,**  
CEO Sappi Fine Paper  
Europe





# Our commitment to sustainability

Our approach to sustainability is based on a holistic view of Planet, People and Prosperity (the 3P's). These values and commitments underpin everything we do, from our business decisions and processes to our dealings with stakeholders and customers. Below are our charter commitments, outlining the way Sappi Fine Paper Europe wants to do business, our targets and results

## planet

By treading more lightly on the Planet with cleaner, more efficient manufacturing and waste beneficiation processes, we can produce more with less – an approach which has obvious economic benefits. This approach involves reducing the energy intensity of our business and reducing the associated greenhouse gas emissions across the full supply chain. It also necessitates using less water and improving effluent water quality, mitigating our impact on biodiversity and promoting sustainable forestry through internationally accredited, independent environmental management and forest certification systems.

### Reduction of Specific Water Use\*

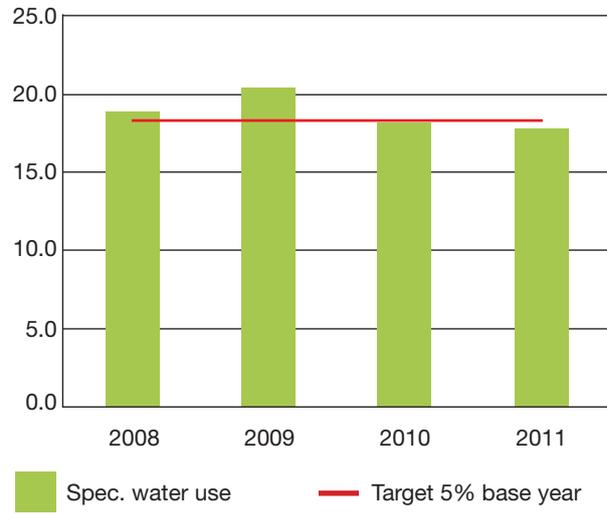
We consider the water supply to our mills as abundant and have rarely experienced a stressed supply situation. According to the Global Water Tool of the World Business Council of Sustainable Development, the average water stress index is considered as abundant at all but two of our mill locations, those of Maastricht and Lanaken – where the index is considered to be at stress level due to the relatively high population living in the area. In our experience, however, water has always been abundant and we do not see

a water shortage risk. We also do not expect our impact to significantly change at any of our locations due to our water use and discharge.

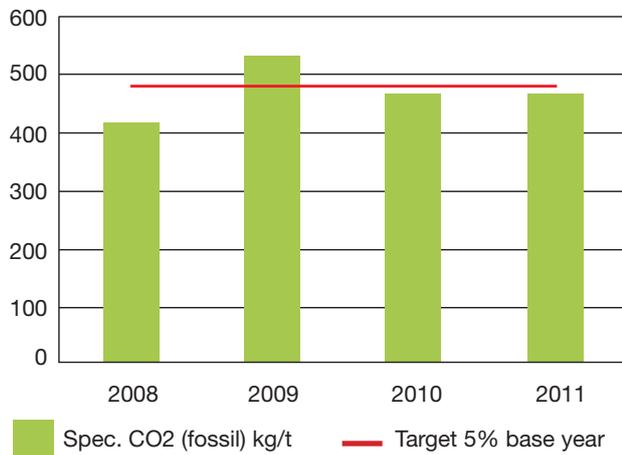
In addition, water use has an impact on energy, as it is heated up within the process and the mills lose energy through their water discharge.

We have been able to reduce our specific water use according to the target set, and are lower already than the 5% reduction envisaged for 2012.

Specific water use m<sup>3</sup>/t



## Specific fossil CO2 kg/t, incl purchasing power at 400g CO2/kWh



### Reduction of Specific CO2\*

Our 2012 target is the reduction of specific direct fossil CO2 emissions (i.e. tons of CO2 per tons of manufactured pulp and saleable paper), including purchased power emissions (calculated at 400g/kWh) by 1% per year\*.

The CO2 figures shown in the graph are the sum of specific direct CO2 emissions and the indirect CO2 emissions from the external electricity supply. It is calculated with the factor of 400g/kWh. The national average factors in the countries of operation are lower or higher than the 400g. The 400g is close to the European average and also the factor used by the EU-Flower criteria for copying and graphic paper.

This target has the disadvantage in that the capacity of the integrated chemical pulp production is limited, as is the availability of our most important biofuel black liquor, for which generation is proportional to the pulp production.

When the paper production is increased compared with the integrated chemical pulp production, the share of fossil fuels is increased and, in line with it, the fossil CO2 emissions. This is the case for our integrated mills Alfeld, Ehingen, Gratkorn and Stockstadt.

For efficiency reasons it is of course almost always sensible to maximise production of our machines. As a rule of thumb, the higher the machine utilisation the lower the specific energy needed.

We have been successful in reducing the specific CO2 level and are on track to meet the 2012 target.

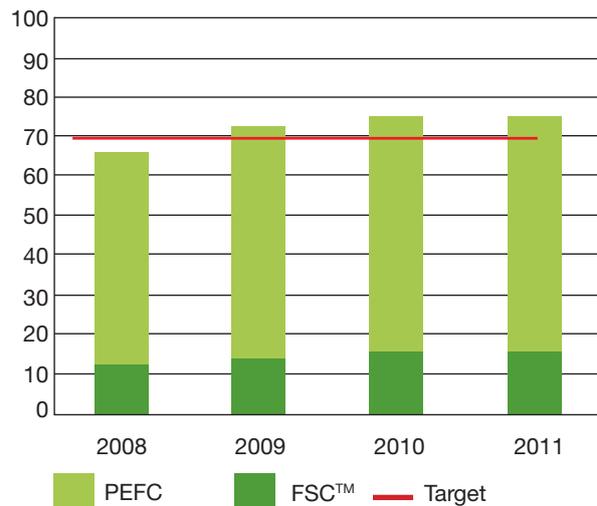
### Certified Fibre\*

Our 2012 target for certified fibres overall is 70%. We have achieved this high figure from 2009 onwards. Increasing the certified share further will be a challenge as we must also take operational targets into account, such as the preference to source locally.

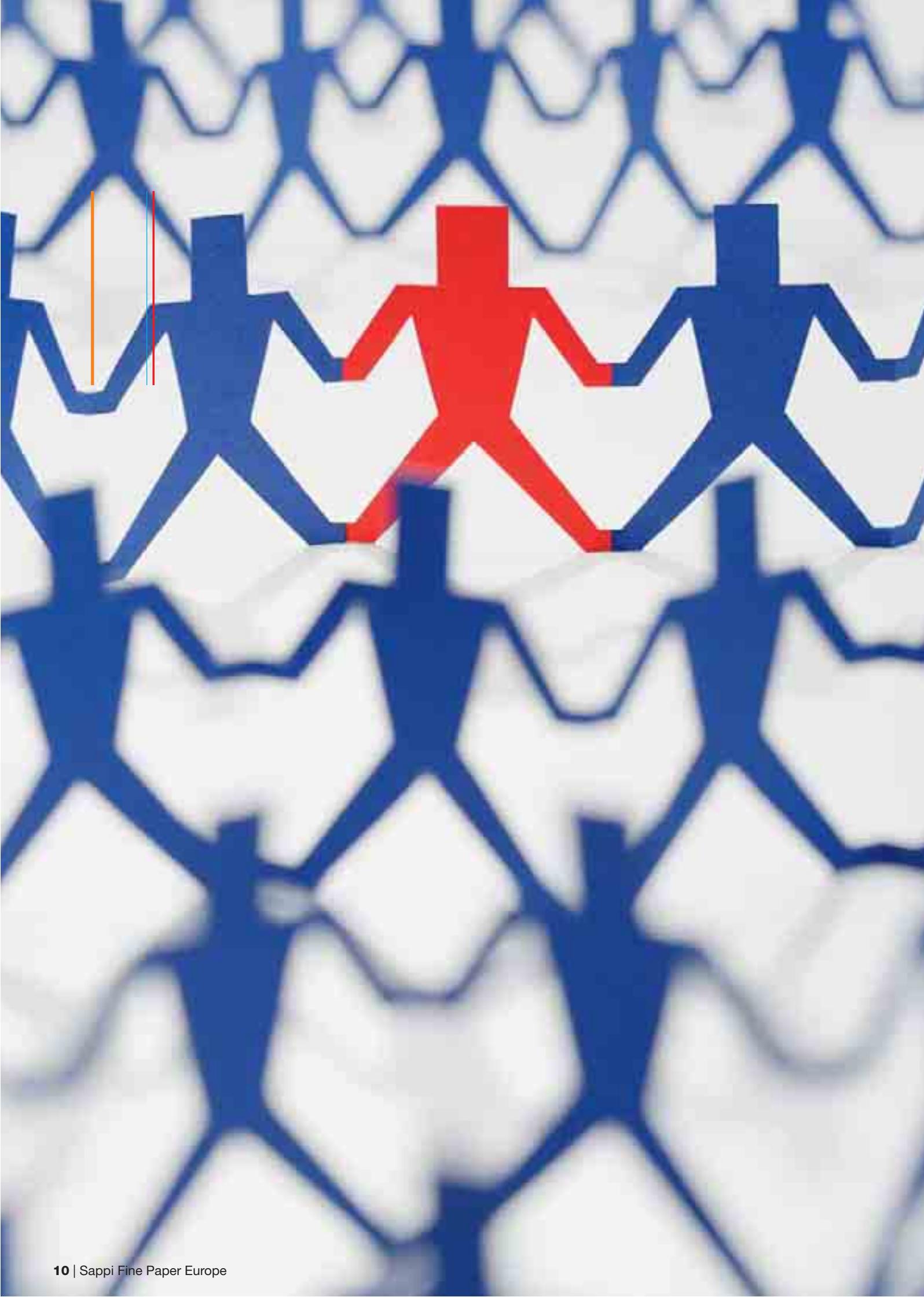
The certification of the chain of custody has improved significantly over the past years with most of our suppliers following this route. All of our pulp suppliers are certified, in most cases in accordance with both FSC™ and PEFC certification schemes. Some of our smaller wood suppliers, however, are still not certified. Some certified wood material loses its certification in the chain as a few intermediary traders do not hold the same certification as the traded material.

Any non-certified material entering our products is subject to strict risk assessment processes, which meet the FSC™ Controlled Wood requirements and those of the PEFC Due Diligence System.

## Certified fibre share SFPE



\*Important to note: targets were initially set in 2008 to be achieved in 2012, but as we acquired several M-real mills in 2009 we had to adjust accordingly by including the performance of those mills retrospectively in the targets as well. The benchmark is the average of the mill performances of the year 2009 for Kirkniemi and Stockstadt, and 2008 for Alfeld, Gratkorn, Ehingen, Lanaken, Maastricht and Nijmegen. The reference year 2008 is actually better than 2009 due to the higher emission average of the new mills and mainly due to the extremely low utilisation of our paper machines in this year. The figures only include mills that are in operation to help comparability. Mills that do not produce anymore are not included.

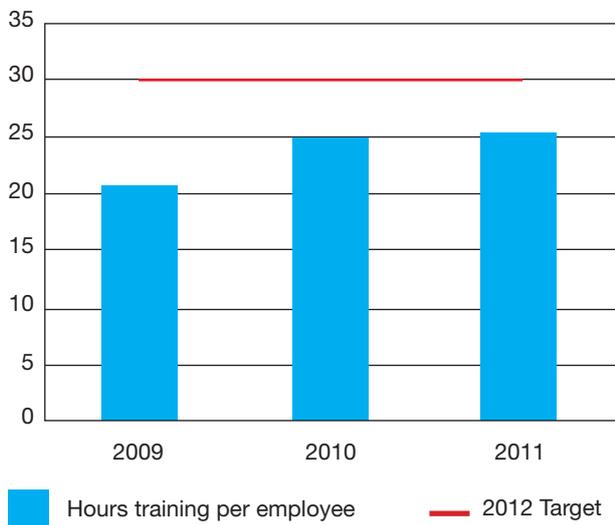


# people

By creating a safe, healthy workplace for our People in which diversity is encouraged and valued, and people are provided with on-going development opportunities so that they can develop to their full potential, we enhance productivity and our ability to service global markets. Active corporate citizenship programmes relevant to the needs of the communities where we operate ensure that we promote socio-economic development within these communities.

Each employee should receive 30 hours of training per annum. In 2011, we achieved an average of 25.52 hours of training per employee. Our various people development initiatives, which include training, have helped us to ensure that our employees can work more effectively and confidently and are able to take up different roles.

Hours training per employee



# 0.26

The Lost Time Injury Frequency Rate achieved in 2011 (LTIFR) by Maastricht Mill

### A Safe and Healthy Workforce

A true health and safety policy is something you keep working on. Sappi's safety approach is based on no less than five fundamental principles:

- A zero-injury target
- Integrated health and safety planning and management
- Training at every organisational level
- Participative information and control structures
- Adherence to international best practice and safety standards

Other initiatives include an annual Global Safety Awareness Day at all our sites, offering preventive medical check-ups, and programs to stay in excellent condition both mentally and physically. Our 2011 target was to reduce the LTIFR (Lost Time Injury Frequency Rate) to 0.39 (this includes central units) and to report occupational injuries better and more comprehensively.

We achieved a LTIFR rate of 1.3 in 2011 with Maastricht Mill achieving an LTIFR of 0.26. We have been continuously successful in lowering our LTIFR each year, and in 2012 we will continue our commitment to achieving a LTIFR target of 0.21 for the entire European operation.



# prosperity 2011

By generating Prosperity, we can continue to attract investors, leverage growth opportunities and invest more in our processes, people, and the communities in which we operate. This ensures that the business becomes more customer-centric, and keeps us focused on ongoing product, process and service innovation. Investing in research and development ensures we maintain a competitive global advantage.

## Generating Prosperity

Sappi started the financial year with a strong performance and produced good results during the first half of the year. Increased uncertainty in global markets, the deepening of the European debt crisis, as well as increasing input costs, however, negatively affected sales volumes and profit margins. This resulted in the financial performance for the year falling short of our targets, despite our best efforts.

We took decisive action in 2011 to improve the cost base and competitiveness of the business. These actions have proven to be quite successful and made significant progress. These actions were not easy to implement and unfortunately, and regrettably, also resulted in the loss of a considerable number of jobs in Europe.

We expect to see the results of these actions in 2012 as we continue our cost-saving programs, and our production efficiencies and customer service continue to improve, reaching very good levels. Our 2012 target is to achieve a RONA\* of 7.13%.

\*Return on net average operating assets

The year Sappi launched Fusion, Algro Nature and Jaz

## Focus on Innovation

The speciality packaging business in Europe performed very well in 2011. The variety of speciality products and the service offer make Sappi very competitive in this area.

Sappi launched Fusion, a new generation topline in 2011, as well as Algro Nature, a home compostable paper for flexible packaging. We will continue to grow our specialities business in 2012 and further penetrate the flexpack, release liner, premium cartonboard and white top liner markets.

Sappi launched Jaz silk in 2011, meeting our target to bring a digital paper to market. Jaz silk's technology was developed in cooperation with HP for high speed inkjet web printing.

After being introduced to the market in early 2011, trial runs have been successful and the product is now commercially available. The Jaz product will be extended, with the addition of Jaz Book, currently under development for low grammage high speed inkjet web printing and expected to be brought to market in 2012. In the coming year we will continue to work towards the further commercialisation of the Jaz family, growing the market and extending the portfolio to include other Original Equipment Manufacturers (OEMs).



# The green paper trail

Sappi is determined to reduce the environmental impact of its processes. This report follows our product lifecycle, from forest to pulp, paper to print, and shows how the people at Sappi are instrumental in making this happen

665,000 PEOPLE ARE EMPLOYED BY EUROPE'S FORESTRY INDUSTRY<sup>1</sup>

273,000 PEOPLE ARE EMPLOYED BY EUROPE'S SAWMILLS<sup>2</sup>

225,000 PEOPLE ARE EMPLOYED BY EUROPE'S PULP AND PAPER INDUSTRY<sup>2</sup>



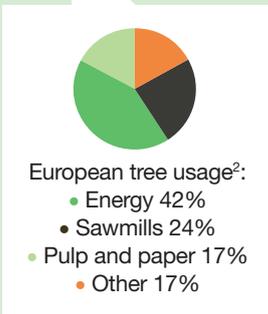
FOREST

WE SEND 2.7M m<sup>3</sup> OF ROUNDWOOD TO OUR PULP MILLS EACH YEAR, AS WELL AS 1.6M m<sup>3</sup> OF WASTE WOOD FROM SAWMILLS<sup>4</sup>



Our pulp mills are designed to avoid emissions of sulphur dioxide – a raw material needed for chemical pulp production. They feed as much SO<sub>2</sub> as possible back into the process and use it again

All our fibre material comes from certified sustainable and controlled sources. As well as providing habitat for wildlife and recreation for people, forests protect soil and water. One hectare of forest also absorbs about 2.5 tonnes of carbon dioxide a year<sup>3</sup>



34.2% OF THE FUELS USED BY SFPE ARE BIOFUELS<sup>4</sup>

At Alfeld Mill, during wastewater treatment, 12,000m<sup>3</sup> of biogas is produced each day. This is used to generate energy, and supplies about 1.2% of the mill's needs

In Finland, strict rules govern effluent discharges into Lake Lohja, next to Kirkiemi Mill. State-of-the art processes mean the mill meets them by a large margin

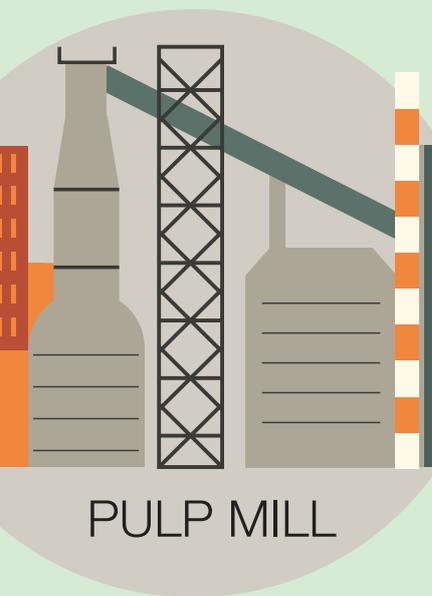


PAPER MACHINE

At Gratkorn Mill, steam from the power-plant turbines, rather than fossil fuels, is reused to warm up the gas supply

At Maastricht Mill, waste sludge is dried and sold to farmers as bedding for cows (the cows love it). Sludge is also used as an ingredient in bricks





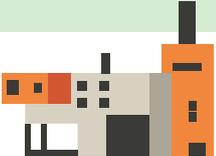
## PULP MILL

SFPE PRODUCES 950,000 TONNES OF PULP EACH YEAR AND BUYS IN ANOTHER 1.1M TONNES<sup>4</sup>

All SFPE mills bleach pulp without using chlorine

Lignosulfonates – a by-product from the pulping process – can be used in making building materials. In 2010, lignosulfonates from SFPE pulp mills helped create 18M m<sup>3</sup> of concrete

The black liquor created during pulping is a great source of renewable energy. In our integrated mills it is burned to produce steam and power



All the power plants supplying our European mills are combined heat and power plants. As well as generating electricity from gas, they also use the heat generated in the process, raising their energy efficiency to about 80% – twice as much as traditional power plants

45% of our deliveries now go by rail or canal<sup>5</sup>. To reduce our carbon footprint we're switching from road to rail wherever we can



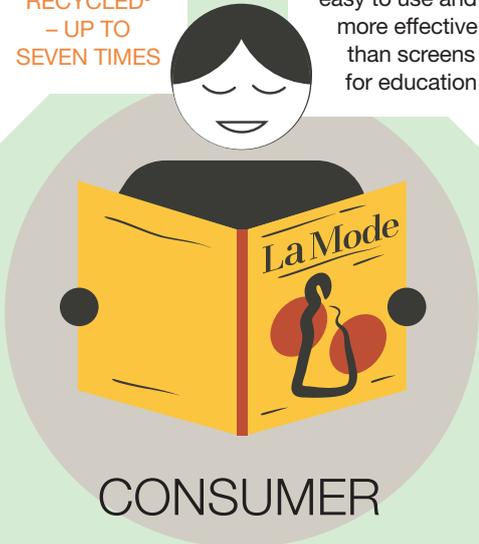
Sludge left over from effluent treatment contains fibres and biomass – a perfect source of energy. Alfeld Mill turns the sludge into pellets and uses it as fuel

The paper we sell<sup>4</sup>:

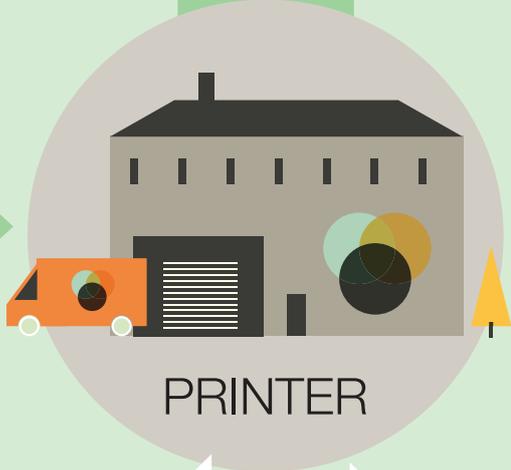
- Coated fine paper: 2.4M tonnes
- Mechanical coated: 1.4M tonnes
  - Uncoated: 284k tonnes
- Speciality papers: 162k tonnes

69% OF PAPER IN EUROPE GETS RECYCLED<sup>6</sup> – UP TO SEVEN TIMES

Paper brings joy to people. It's relaxing to read, easy to use and more effective than screens for education



## CONSUMER



## PRINTER

908,000 PEOPLE ARE EMPLOYED BY EUROPE'S PRINTING INDUSTRY<sup>2</sup>

Digital printing is increasingly popular. It allows short runs, personalised printing – and less waste

SOURCES: 1) FAO, 'State of the World's Forest 2011' 2) Eurostat, 'Forestry in the EU and the world', 2011 3) approximation, value can vary depending on factors such as tree species, location and density 4) 2011 SFPE 5) Sappi sustainability leaflet, 2011 6) CEPI Sustainability Report 2011



# “ Sappi Europe is committed to sustainable forestry and to reducing our carbon footprint ”

To be a sustainable industry, paper manufacturers need to have effective and transparent policies dedicated to the long-term survival of the world's forests, woodlands and other natural habitats. Sustainable forestry and the reduction of our carbon footprint must be a priority for all companies, and Sappi Europe has focused on this area. This involves working with partners to ensure that the wood purchased can be traced throughout its supply chain, ensuring strict sustainable forestry practices.

#### Supply chain

Sappi is committed to purchasing only wood and fibre when it understands precisely how it came to market. The best way to combat illegal logging and non-sustainable practices is for all wood and fibre to be certified or at least controlled.

Understanding the supply chain is crucial, and certification is required if we are to be sure of how our products are made. Sappi set a target that 70% of all the fibre we purchase should be certified, and we are pleased that this goal was exceeded by a large margin. In 2011, 73% of the fibres we used were certified, placing us a step above the European average. The remainder of the fibre came from known and controlled sources.

# 73%

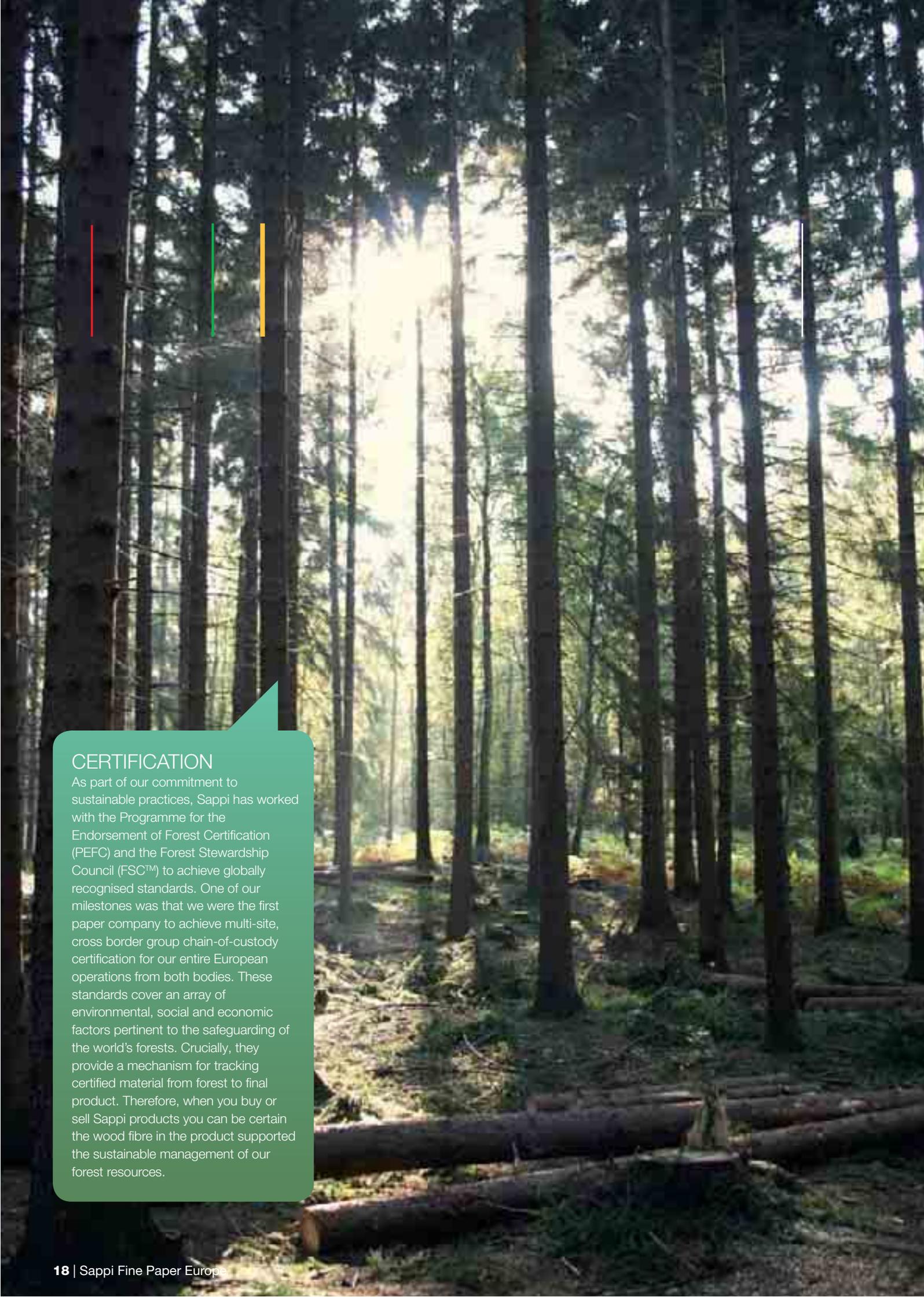
The amount of fibres we used that were certified





**DID YOU KNOW?**

European forests grow by the equivalent of 1.5 million football pitches each year



## CERTIFICATION

As part of our commitment to sustainable practices, Sappi has worked with the Programme for the Endorsement of Forest Certification (PEFC) and the Forest Stewardship Council (FSC™) to achieve globally recognised standards. One of our milestones was that we were the first paper company to achieve multi-site, cross border group chain-of-custody certification for our entire European operations from both bodies. These standards cover an array of environmental, social and economic factors pertinent to the safeguarding of the world's forests. Crucially, they provide a mechanism for tracking certified material from forest to final product. Therefore, when you buy or sell Sappi products you can be certain the wood fibre in the product supported the sustainable management of our forest resources.



# Our goal: sustainable paper production

In order to be committed to purchasing wood only from sustainable forests and controlled sources, it is crucial that our efforts extend to the entire supply chain. In the forests that we purchase from, the cycle of planting, growing and logging is meticulously managed. Such a sustainable approach ensures that there is always more growth than what is harvested.

## Working closely with partners

The forests of Austria hold a special affection in the hearts of its people. Therefore, Sappi works closely with its wood purchasing company Papierholz Austria (PHA) to maintain the biodiversity of the forests and harvest its wood in a sustainable way. In fact, the Sappi Gratkorn mill was one of the founder companies of PHA in 1997. The key tasks of PHA are wood supply, wood logistics and administration. Through this co-operation, the mill is able to produce almost one million tonnes of paper every year, while maintaining a sustainable approach.

Key market information is shared, which means the two companies can ensure their approaches are aligned and optimised. Both Sappi and PHA hold high standards and have independent certification to demonstrate this fact, such as PEFC, FSC™ and ISO 14001 certifications. Sappi aims to engage with the communities its operations are based in. Similarly, the wood purchasers of PHA are well-trained forestry experts that support wood land owners with their expertise with forest management and wood harvesting.

The Gratkorn mill is a key part of the local economy. However, its future must be sustainable and this means the wood from Austrian forests needs to be used in the most efficient way possible. It is worth

mentioning that Austrian forest law is one of the strictest in the world and both Sappi and PHA are able to work within its boundaries. In fact, over the past 50 years, the forest has grown by over 300,000 hectares in Austria – seven times the size of Vienna.

## Sustainability across the chain

The way in which Sappi – the exclusive wood supplier to Sappi Lanaken in Belgium – manages the forests in which it operates has also helped Sappi Europe realise its environmental aims in terms of its fibre certification. Sappi has been at the forefront of sustainable forestry practices for over eight years. In 2004, the company gained PEFC certification, and the following year it gained FSC™ certification. In the years since then, the world as a whole has altered its views on the types of products it buys as more and more consumers are demanding eco-friendly products. Sappi and its suppliers are very aware of this fact, and the company is committed to environmental protection. Indeed, the growth of the certified market means there is little other choice for companies in the wood and paper markets.

Many of Sappi's achievements mirror Sappi's in terms of accreditations. For instance, the company has long led the way in certification, holding ISO 9001 and ISO 14001 standards, as well as FSC™ and PEFC accreditations. For both companies, it is important that accreditation goes all the way down the supply chain, indeed it is a requirement of such standards. Sappi has long worked with all its suppliers to encourage a more sustainable approach, and the result of this work can be seen in the increasingly higher yields of certified wood.

Employees of  
Papierholz Austria





pulp mill

# “ Sappi Europe is the biggest producer of sulphite pulp on the continent, producing 675,000 tonnes per year ”

The work that takes place in Sappi Europe’s pulp mills is central to our efforts to be a truly sustainable company. In fact, Sappi Europe is the biggest producer of sulphite pulp on the continent, with the capacity to produce 675,000 tonnes of sulphite pulp every year.

We are committed to reducing our energy use and emissions, and the production of sulphite pulp goes a long way towards achieving this.

There are several advantages to manufacturing sulphite pulp, rather than kraft (sulphate). It produces higher fibre yields and requires fewer bleaching chemicals, for example – all our pulp mills are totally chlorine-free (TCF). In addition, less energy is required in the refining process, and there are fewer odorous emissions. Wood is also used more efficiently, as a high proportion of residues

from the saw mills can be added to the mix. Sulphite pulping also lends itself well to smaller operations; the Alfeld Mill, for instance is our smallest pulp mill.

Sappi’s mills take wood with a low resin content, such as spruce or beech. The wood arrives either as logs or chips from the saw mills. The logs are debarked, reduced to chips and then added to the chip mix. The chips are cooked in acid for six to eight hours at temperatures of 140°C and a pressure of eight bar. During this process the binding elements of wood turn into liquid. The resulting by-product (lignin and acid) is called lignosulphate.

Lignosulphate has useful applications in the building and construction industry, but Sappi Europe uses most of it as a biofuel to power its mills. The pulping chemicals are recycled in this process as well.



The manufacture of sulphite pulp produces higher fibre yields, and requires less specific energy than kraft pulping



pulp mill

### Sustainability

The raw materials begin their transformation into paper products in Sappi Europe's pulp mills – where there has been considerable innovation in recent years.

One approach is Sappi Europe's ongoing commitment to reducing waste sent to landfill. Our organic waste material is burnt to make energy. By creating heat out of biomass and using it to power Sappi's own operations, as well as helping others to meet their energy needs, the company is adding positive value. It is mainly ash that goes to landfill, when its not used in the production of cement, other building material, fertilizer and soil substrates.

Currently, the use of chemicals at the pulp

mill is process-given. However, Sappi Europe has strict policies designed to ensure that the environmental impact of this part of the operation is as low as possible. Sappi's bleaching processes are entirely TCF, we bleach with peroxide which leaves behind no harmful chemicals. Our market pulp can also be elementary chlorine free (ECF).

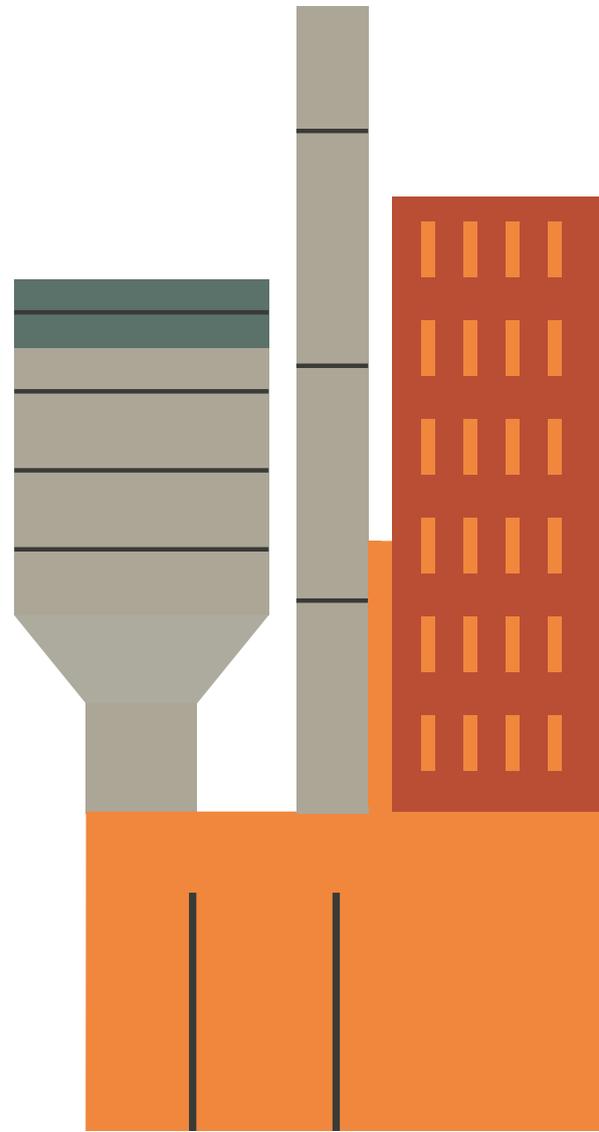
Water usage is a crucial part of Sappi's operations, so it's important that the company continues to make strenuous efforts to minimise water intake and to recycle and reuse it as much as possible. After use, Sappi cleanses effluents in highly sophisticated waste water treatment plants to meet local legislation, before they are returned to the environment.

### HOW SAPPI HELPED BUILD AN AIRPORT

One byproduct of the pulp production process, produced by the reaction of cooking acid and lignins, is called lignosulphate. This liquid chemical is used as a biofuel and is used to power Sappi's pulp and paper mills. However, in modified form it can also be used as a speciality chemical with many beneficial applications.

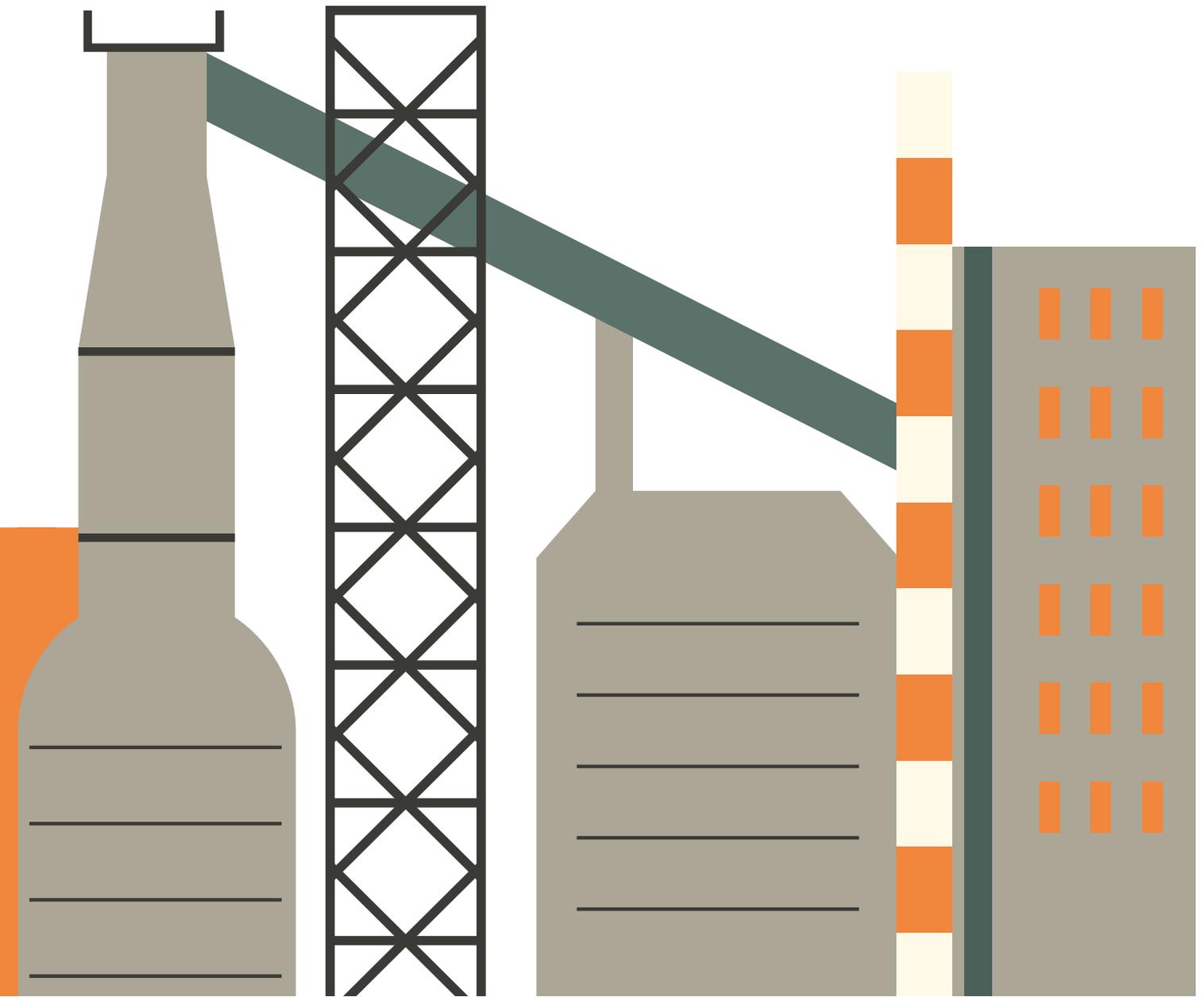
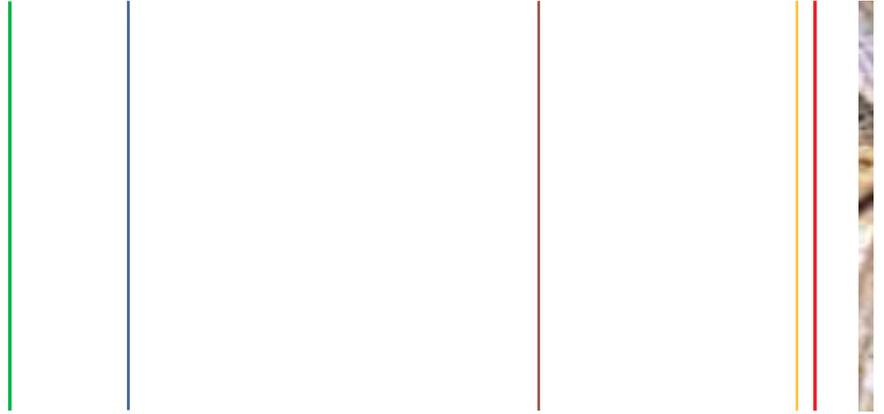
This useful byproduct is actually all around us everyday, as it is used in the production of plasterboard, chipboard, bricks and paving stones.

Lignosulphates have the advantage of being non-toxic and environmentally friendly, unlike many other industrial chemical substances. Some of Sappi's byproduct has been used in building materials at high-profile locations, such as Frankfurt International Airport buildings.



# 7

The number of times paper can be recycled. Virgin fibres are needed to start the cycle





paper mill

# “ We continue to raise the bar in terms of certification and energy management ”

Sappi's paper mills are at the forefront of our move towards increased sustainability. New technologies, initiatives and changes in culture have been the drivers for some exciting developments, and amid a changing industry and challenging economic landscape, the commitment to our people, planet and prosperity across Sappi's mills is stronger than ever.

#### Navigating a changing market

Economic conditions in the paper market continue to challenge even the most resourceful. Overcapacity in the market and macroeconomic uncertainty across Europe are key factors, as is the longer-term backdrop of efforts by Sappi and others to create and preserve a level playing field against global competition.

Sappi has made some timely and necessary adjustments to its operations in the face of these conditions, with the closure of the Biberist mill in Switzerland perhaps the most notable.

There is no doubt that the closure of Biberist had a major impact on the lives and careers of the many staff based there.

Nonetheless, we worked hard to ensure that our employees had a good prospect of alternative employment, and were positioned as well as possible after the closure. The results have been promising: within four months of our confirmation of the mill's closure, 70% of staff had found new jobs. Furthermore, all of the mill's apprentices were found positions in other companies, and were able to complete their apprenticeships.

These results speak well of the excellent skills and experience levels of the Biberist staff, and of the hard work on Sappi's part in ensuring that potential negative impacts of the closure were minimised for all concerned.

#### Custodians of our environment

We have spent a considerable amount of time, money and effort in reducing pollution and waste in our mills. Conserving water, decreasing emissions and discharges, and using energy more efficiently, are key priorities for the company. These aims are not just environmentally beneficial, but are also regarded as essential for the long-term growth and prosperity of the company.

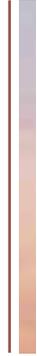
All of Sappi Europe's mills are located near



## WARM EXCHANGE

Sappi Europe's mill in Maastricht has installed a heat exchanger in the chimney of its plant to capture warmth, which is then used to warm and cool nearby buildings in the Mosae Forum.

The Mosae Forum, which is 700m from the Sappi mill, is a large site containing residential apartments, offices and retail units. Maastricht aims to reduce its CO2 emissions by half as of 2050. As a result of the collaboration with Sappi, this is now closer to becoming a reality, as excess heat from the mill is supplied to municipal buildings.





## paper mill

to rivers or surface waters where water supply is plentiful all year. Water gathered from these sources is cleaned before use and then used several times before it is thoroughly treated to remove impurities and returned to the environment. Recycling water in this way makes our mills more efficient and reduces our environmental impact.

The way in which water is used is constantly monitored. Sophisticated piping and instrumentation allows online visualisation of how Sappi's water circuits operate, in order to maintain a high efficiency level, reducing waste and increasing recycling. One breakthrough has been to establish that waste water impurities are turned into biogas which is recovered and used as fuel.

At Sappi Europe, we operate combined heat and power (CHP) plants in all of our mills. These plants not only generate electricity but also heat, which is used at the paper machines to dry the paper. Such efficiencies mean the company's CHP units are twice as energy efficient as conventional power plants. We make such investments with consideration to our long-term plans, which are designed to create prosperity today as well as in the future.

### **Innovation and energy efficiency**

With energy prices increasing, energy efficiency remains a financial imperative, as well as an environmental concern.

Sappi Europe has made considerable headway in reducing its carbon emissions and improving energy efficiency. But while these efforts have won recognition, they are just part of an ongoing drive for more efficient use of energy across the business.

Specific carbon dioxide emissions from fossil fuels in our paper mills has dropped an impressive 6.7 per cent over the past three years – outperforming all our stated emissions targets.

While Sappi's European mills were among the first to achieve international environmental ISO14001 and EMAS accreditation, we continue to raise the bar in terms of certification and energy management. We publish our Environmental (EMAS) declaration, covering the operation, environmental performance and the

environmental programs on our website. For maximum efficiency, and because very similar procedures are used across the group, Sappi mostly uses group certification.

Sappi's management system encompasses organisational structure, planning, responsibilities, procedures, processes and the provision of resources for developing, implementing, achieving and reviewing the activities of the company. This management system has a long record of certification; first with quality management, then the certification of environmental management standards, health and safety, forestry chain of custody, and energy management.

Our environmental and health and safety standards also undergo aspect and

impact analyses, the results driving our mills' health, safety and environmental programs. And the push for ever higher certification continues.

Pleasingly, Sappi Europe's Stockstadt and Kirkniemi mills were the first paper mills to gain EN160001 certification, while Nijmegen expects to receive the ISO50001 certificate in 2012; with accreditation of all of our mills to follow by 2014.

The example of the Netherlands shows the uniqueness of our approach: there are only four EMAS registered companies in the country, two of them are our Maastricht and Nijmegen mills.

### **Less waste, smaller footprint**

Sappi is committed to increasing prosperity both now and in the long term, and to international treaties and legislation promoting best environmental practice, as well as the importance of reporting and measuring impact.

Sappi Europe's mill in Alfeld has found an innovative way to deal with its waste – it converts it into fuel. Sludge from the plant contains enough fibres and biomass to give it a heating power comparable to that of brown coal. Since 2009, we've been converting the waste into pellets and using it as fuel in the plant's bark boiler to generate steam for the production process. This process uses around 18,000 tonnes of waste and saves on 900 truck journeys over an average distance of 100km.

Waste sludge from the production

### **DID YOU KNOW?**

Specific emissions from fossil fuels in our paper mills has dropped by 6.7% over the past three years



## paper mill

process is often further used in applications such as the manufacturing of bricks or cement. However, there are also more novel applications.

When companies innovate, there are sometimes unexpected benefits from their efforts. Sappi Europe found that the dried residual paper sludge from its waste water was very popular with some local inhabitants – the cows in the stables of the region. Their farmer attests to the fact that his cows are happier sleeping upon Sappi's dried waste sludge than their more traditional bedfellows of sawdust and straw. The material keeps the animals cleaner, as it is less sticky, and is more comfortable. The improved hygiene also means the number of white cells in the cow's milk has increased and is therefore more healthy too.

At Sappi Europe's Gratkorn Mill in Austria, too, we have found a more efficient way of using natural gas. Previously, the incoming natural gas was pre-heated by burning fossil fuels. Now, hot steam from the mill's turbines is used to power the water heat exchanger. And while our Stockstadt mill already uses a mixture of fossil fuels and renewable energy sources to power its paper production, the mill is moving towards the implementation of more sophisticated energy management systems.

### Culture and values

However, the drive towards greater energy efficiency isn't just about changing technologies, but changing mindsets, too. The efforts by management and employees at the Stockstadt mill demonstrate the challenges that exist in this area, and point to some of the ways in which those challenges can be overcome.

Efforts are also already underway to further improve energy usage. Management is constantly engaging with employees on

ways to change practices that are energy intensive and to promote best practice. Staff have been provided with special training in energy conservation, there are special quizzes with prizes, awareness days and the promotion of energy efficiency via newsletters and company literature. The effects of these campaigns is that the Stockstadt mill achieved a total reduction in energy use of 3.6% in 2011, well above the mill's 2% target.

### Increasing efficiency, reducing waste

Sappi's Kirkniemi mill is located by Lake Lohja in Finland – an important natural resource providing drinking water and fish to the local area. It is also an area for recreation. Conservation of this lake and of the many others in Finland is crucial, however it is also an opportunity; water is so abundant in this part of the world that by producing products in Finland there is less pressure on countries where water is scarce.

Nonetheless, there are tight restrictions on water usage and effluent discharges, and Kirkniemi mill remains well within these limits. Water usage is 25% less than the general level for a paper mill process and it is circulated 18 times.

Effluent discharges into the environment have also been minimised. The effluent treatment plant in Kirkniemi consists of mechanical, biological and chemical treatment steps. Kirkniemi was the first paper mill in Finland to use biological treatment methods for its waste water and this, and other environmental policies, have had beneficial effects.

The effluent discharges containing suspended organic matter have caused there to be a biological oxygen demand in the lake. However, in response to this, Sappi has installed four oxygenation pumps in the deep-water site to help restore the biological condition of the lake. The company also supports efforts to increase fish stocks by sponsoring the introduction of over 20,000 whitefish annually.

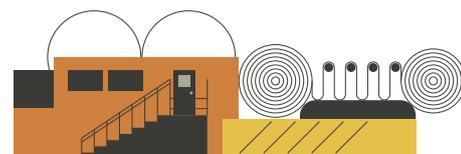
As a result of Kirkniemi's effective water protection actions, the Kirkniemi mill accounts for only about 7% of phosphorus and 5% of the nitrogen loading in Lake Lohja, although it is the biggest industrial establishment by the lake. As an indication of the mill's good work, Salla Leskinen, who is responsible for the waste water treatment plant in Kirkniemi, was named Water Protector of the Year by The Western Uusimaa Water and Environment Association. This was the first time that the association had chosen an industrial representative for this award.

Sappi Europe's dedication to the environment has also been highlighted by its success at awards held by the Dutch Paper Industry Association. Sappi's mill in Nijmegen won the VNP Trophy for the lowest energy use, and Sappi's mill in Maastricht came third.

In 2011 Salla Leskinen, who is responsible for the waste water treatment plant in Kirkniemi, was named Water Protector of the Year by The Western Uusimaa Water and Environment Association



## Sappi Fine Paper Europe - Mills



Mills	Products	Paper Capacity (tons ps)	Pulp Capacity (tons pa)	Certifications
Alfeld, Germany	Graphic Paper, Speciality Paper	330,000	125,000	ISO 9001 / ISO 14001 / EMAS / OHSAS 18001 / PEFC CoC / FSC™ CoC / FSC™ CW / EN 15595 hygiene management
Ehingen, Germany	Graphic Paper	250,000	135,000	ISO 9001 / ISO 14001 / EMAS / OHSAS 18001 / PEFC CoC / FSC™ CoC / FSC™ CW
Stockstadt, Germany	Graphic Paper	250,000	135,000	ISO 9001 / ISO 14001 / EMAS / OHSAS 18001 / PEFC CoC / FSC™ CoC / FSC™ CW
Kirkniemi, Finland	Coated Magazine Paper	730,000	330,000	ISO 9001 / ISO 14001 / EMAS / OHSAS 18001 / PEFC CoC / FSC™ CoC / EN 16001 energy management
Lanaken, Belgium	Coated Magazine Paper, Graphic Paper	500,000	180,000	ISO 9001 / ISO 14001 / OHSAS 18001 / PEFC CoC / FSC™ CoC / FSC™ CW
Maastricht, The Netherlands	Graphic Paper	280,000		ISO 9001 / ISO 14001 / OHSAS 18001 / PEFC CoC / FSC™ CoC / FSC™ CW
Nijmegen, The Netherlands	Graphic Paper	240,000		ISO 9001 / ISO 14001 / EMAS / OHSAS 18001 / PEFC CoC / FSC™ CoC / FSC™ CW / ISO 50001 energy management
Gratkorn, Austria	Graphic Paper	950,000	255,000	ISO 9001 / ISO 14001 / EMAS / OHSAS 18001 / PEFC CoC / FSC™ CoC / FSC™ CW
<b>Total Capacity<sup>1</sup></b>		<b>3,710,000</b>	<b>1,175,000</b>	

### A DAY IN THE LIFE

Henri Welman heads up the Utilities department at Maastricht Mill. He tells us about his job. "Along with my team, I ensure that the mill has the energy it needs to function – the electricity, steam and water. But we also use energy to make money for Sappi. The power plant at Maastricht produces more energy than we need, so residential neighbourhoods take our excess heat, and we sell electricity on the open market, which can be lucrative. We also clean waste water from local firms in our effluent treatment plant.

"Turning waste into value is another speciality. We dry waste-water sludge from the mill with residual heat from our power plant. Farmers use the dried sludge as bedding for cows, and the construction industry for bricks.

"There are 20 of us in the team. Everyone is always coming up with new ideas. That's what makes the department special – enthusiastic people. My job is to keep them that way! I also try to keep things calm when they get hectic. The mill depends on us.

"Each day is different but I always spend some time looking for the best price we can get for our electricity."

PEFC – Programme for the Endorsement of Forest Certification

FSC™ – Forest Stewardship Council

EMAS – Eco Management and Adult System: a voluntary clean citizenship initiative, constituting the highest environmental standards in Europe

OHSAS – Occupational Health and Safety



transport

# “ Sappi transports around four million tonnes per year and we’re committed to minimising our environmental impact ”

Sappi Europe has a large and extensive supply chain comprising many individuals, vehicles and depots. The company transports around four million tonnes of finished paper every year. Understandably, such a large organisation must look at its impact, which could be considerable if not managed correctly.

## Less road, more rail

Much of Sappi’s raw material and finished produce is now transported by rail or canal, rather than road. Investment in rail infrastructure at the mills plays an important role in this. For example, Sappi’s mill in Gratkorn, Austria, recently shifted 17,000 tons of material to cargo train. Previously, these materials were carried by truck.

Sappi aims to increase this capacity to the maximum, and block trains from Gratkorn to its operations in Wesel now tow some 22 wagons. Similar efforts were taken with regard to the Lanaken and Maastricht operations, where transportation to the south of Europe was shifted from road to intermodal (rail and road).

Nevertheless, road transport continues to be an important means of distribution; most

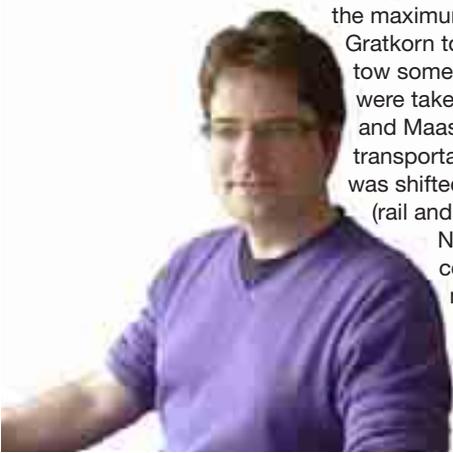
customers simply do not have access to rail or canals, and road is often the only practical method of transport for short distances. However, the move to intermodal transport means that 45% of all Sappi’s finished paper is transported by rail or canal; both comparatively energy efficient means of transport.

## Intermodal transport

Produce from Sappi Europe’s mills in Lanaken, Belgium, and Maastricht, the Netherlands, is now taken to the south of Europe via a combination of rail and road transport. This intermodal approach makes sense from both a financial and environmental point of view. “Intermodal transport is a cost saver, good for the environment and more reliable,” says Daniel Thiemann of Sappi Logistics Wesel.

The move to intermodal transportation also means that Sappi’s delivery fleet has been significantly reduced. There are now 5,000 fewer truck deliveries per year as a result of using trains for long distance journeys to deliver and collect materials. Sometimes the benefits are even greater, as it is possible for trains to be powered by hydro-electricity. This means emissions can be cut by over 30,000 tonnes per year compared to road transport.

Daniel Thiemann  
of Sappi  
Logistics Wesel





45%

of all Sappi's finished paper is transported by rail or canal

#### FROM NORTH TO SOUTH

Sappi Europe's distribution centre at Wesel in northern Germany offers a clear example of how intermodal transport can be simple, effective and environmentally beneficial. Trucks carry shipments to the nearest rail port. There, the entire trailer gets heaved onto a train where it sets off to a destination in Europe. Another truck picks up the trailer at this destination and completes the last leg of the journey.



# “ We have streamlined and refocused our brands, making it easier for customers to understand our offering ”

Print communication remains a powerful medium that plays a vital role in any media mix. Despite the rise of digital media and the challenging economic climate, the paper industry is adapting to new circumstances and print is taking its place alongside new media. In order to maintain our position as a market leader, it is vital that Sappi rises to the challenges of this new environment. To do so, we must continue to sharpen our competitiveness and deliver the products and services our customers need at a cost-effective price. We are committed to adding value to the businesses of the printers and end-users that depend on the quality of our paper, technical knowledge, and reliable service.

## **Seizing opportunities**

Sappi has embarked on a journey to bring us even closer to our customers; to provide them with the right offering of products and services at a competitive price. Through 'Project Breakthrough', in addition to regular business interaction, we continue to engage with our major customers in creating new value propositions, product positioning, brands and services, and working with them to create a business model that creates sustainable value for both parties.

Sappi has long been focused on improving

customer service and today has adopted a more structured approach. By making a better assessment of customer needs and developing cost-effective solutions, we add value to the supply chain without adding costs, while becoming more flexible and responsive to customer needs. Using effective tools to measure the added value of new initiatives, the business has made significant changes to the way it interacts with its customers. For instance, in the past the company used to send customers many shipping documents and we discovered that this was considered to be excessive. Now such dispatches have been greatly reduced and customers have welcomed this service change. This is just one example of our many initiatives. Customers appreciate the efforts we have made on this front and a recent survey on customer service showed that we have earned a score of 8.17 on a scale of 10. This result demonstrates the excellence of our logistics service and puts us among the best in the industry.

Over the last year, we have significantly reduced our cost base and improved our efficiency and will continue to reduce our fixed and variable costs. Sappi has a well-respected reputation for reliability and is working hard to maintain this reputation while meeting customers' needs, at a competitive price.



## STREAMLINING OUR PRODUCT OFFERING

Sappi Europe has streamlined and refocused its brands, making it easier for customers to do business with us and easier for them to understand our offering. By simplifying our brand ranges, customers benefit from more targeted products that better suit their needs. Not only that, our streamlined product ranges provide a 'one-stop-shopping' option for customers, allowing them to choose from a range of products within a familiar brand name. The change will allow Sappi to concentrate our efforts on just a few brands.



## JAZ: A COATED PAPER DESIGNED FOR FULL COLOUR PERSONALISATION

The move to personalisation has led to an increase in the need to tailor information to consumers. The transfer of information from web to print (e.g. printed photo albums, personal publishing) in a cost and time efficient manner is also driving demand.

Launched in 2011, Jaz silk is a coated paper that delivers excellent print quality for high-speed inkjet printing with full-colour personalisation. But it's not just an aesthetic choice; it's also a practical one. Its technology is jointly developed with HP and further fine-tuned to perform perfectly well on other high speed inkjet printers. Jaz silk eliminates the use of bonding agents and reduces ink consumption. The market response has been positive and Sappi's ongoing partnerships with main OEMs have resulted in our market innovator position being maintained.



printer/  
consumer

# “ We have considerable expertise in creating special grades of paper ”

Sappi's commitment to innovation is best expressed through its product range. We have considerable expertise in creating special grades of paper designed for specific markets. Several of our most recent product launches demonstrate this point clearly.

#### **Fusion: The premium white top liner**

Sappi launched Fusion premium top liner in 2011 in response to the increasing demand for high-quality print finishing for packaging and displays. Fusion is the first liner we have produced and it opens up an exciting new business market for us. In an increasingly tough economic environment, there is a need and interest for creative and business-savvy ways to differentiate brands and to maximise point of sale presence, and Fusion meets this need.

Fusion offers a whiteness and brightness that was rarely achieved previously with liners. In addition to the extra dimension that Fusion can bring to packaging and displays, it has numerous other benefits that can be experienced throughout the production chain. These include less downtime related to washing intervals in the printing process, reduced glue consumption in the lamination process, and a choice between sheet and reel formats from the outset. A simplified pricing model and the lighter weight of the paper itself means more sheets per stack, and reduced transport costs. By coating and calendering the paper, the Fusion surface offers a superior quality and gloss that other top liners can't match, all elements that our customers were asking for combined in one product.

#### **Algro Nature**

Sappi joined forces with Innovia Films Ltd in 2011 to demonstrate potential laminate structures, using their respective products, suitable for end users in the food, confectionery and pharmaceutical industries. These bio plastic laminates provide technical functionality in addition to being made from renewable resources and offering compostability.

Both companies recognise that the best end-of-life options for flexible paper/film laminates are either industrial, home composting or ultimately anaerobic digestion, which turns waste into a useful energy source, compared to current landfill or incineration solutions.

Innovia Films Ltd with its NatureFlex™ product range, brings its unique expertise in manufacturing renewable and compostable cellulose-based films with tailored moisture and barrier properties. Sappi brings our expertise in manufacturing flexible packaging papers, and now offers coated and uncoated compostable paper options; Algro Nature is a home compostable one side coated paper; Leine Nature is an uncoated equivalent, which is also compostable. The products have been independently tested and have received the 'OK Compost Home' certification by Vinçotte, and also the compostability DIN E13432 certification by DIN CERTCO.

Trials have been made on both extrusion and adhesive laminate systems, targeting end users who are seeking alternatives to existing non-compostable structures.

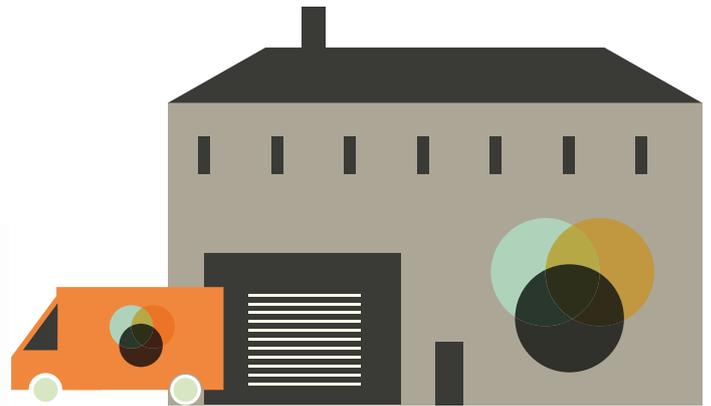


# Initiatives that you should know about

## Ideas that Matter

The Ideas that Matter competition run by Sappi for over a decade places the emphasis on the realisation of design projects to generate awareness of well known, and less well known issues in the broad categories of Environment, Culture, Education, Healthcare, Human Rights and Society. The strong partnership approach between designers, non-profit organisations and Sappi that has been established during the lifetime of this initiative has proved to make a difference, helping people and doing our planet some good. The winners of the 12th edition of the competition have been announced and can be found on the dedicated Ideas that Matter website.

[sappi-ideasthatmatter.eu](http://sappi-ideasthatmatter.eu)



## Sappi European Printers of the Year Awards

The Sappi European Printers of the Year Awards (SEPOTY Awards for short), first launched in 1993, were established by Sappi to reward and recognise excellence in print. The competition has evolved alongside the industry, by recognising innovation in the sector and adding new categories along the way, such as digital print and both sheet fed and web magazines. The SEPOTY Awards encourage printers to find the best processes, find the best papers and find the best combination of experience and graphic materials to achieve the best results for their customers. Recognising printers who give their utmost and set new standards in print excellence, the contest is open to any printer from Europe and the Middle East who has his or her work commercially printed on mainly Sappi paper. Out of an average of 5,000 entries, the best print job in each continent is rewarded and competes for the global Printers of the Year Award.

[sappi.com](http://sappi.com)



### My Life in Print

*My Life in Print*, released by Sappi in 2011, celebrates the richness that print has brought, and continues to bring, to the lives of people in all walks of life, in all sorts of situations and for all sorts of reasons. A myriad of examples in a creatively and specially designed publication that looks like a magazine but reads like a book, reflect



how print and paper is integral to our daily lives.

In it, fascinating content on subjects ranging from print and the environment, to print and business, to print and the intimate detail of people's lives, is shared with curious readers.

The book contains five chapters, exploring how print puts us in

touch with ourselves; the unique place of print in the media mix; why print and paper are key to a sustainable future; the enduring adaptability of print and paper; and how print allows us the space to be who we really are. Intimate stories using real life examples bring our relationship with paper to life in a relevant and meaningful way. This latest publication by Sappi Fine Paper Europe belongs to the Life With Print (LWP) initiative, the objective of which is to show the efficient and effective use of the right media mix.

[sappi.com](http://sappi.com)



### Houston

Sappi developed a brand new online knowledge platform in 2011 called Houston, specifically designed as a support tool for professionals working in the paper and graphic industries. As well as easily accessible information on paper, printing and converting-related topics, live experts will work with professionals to find solutions to issues in real time. Once users register, they will be able to access information on the latest printing techniques and paper types, market trends etc. Polls, market feedback and opinions will also be hosted on the regularly updated site providing valuable news to users about the broader industry environment they are working in.

[sappi.com/houston](http://sappi.com/houston)



### What's Next

*What's Next* is first and foremost a support tool for Sappi and its customers. With several grades and types of paper used in every issue, Sappi combines sight and touch to bring the articles alive and provide new ideas and tools for printers. The magazine is the ultimate showcase of Sappi papers. The diverse content featured in *What's Next* reflects Sappi's passion for print. By focusing on how innovation in paper and publishing can help push the boundaries of creativity, Sappi aims to show that paper is more relevant than ever, providing engaging and sensory functionalities that set it apart from the online world. A recent survey has shown that the magazine is very much appreciated amongst publishers and design agencies who are pleased that Sappi supports the industry in such an innovative way. They appreciate the source of inspiration it provides. And the figures are showing this with an increased membership and paper sample ordering. Also, the complementary content on the *What's Next* website serves to amplify and add to the story in the magazine paper version demonstrating how print and digital can work well together.

[whatsnextmagazine.net](http://whatsnextmagazine.net)



people

# “ Every one of the 6,000 people employed by Sappi across Europe underpin our success as a business ”

A commitment to People is one of the pillars on which Sappi's business rests. Our employees are vitally important to the success of our business and we want our mills and offices to be great places to work. Sappi's ethos of the 3P's – Planet, People and Prosperity – illustrates this commitment. However, there is no single policy that can make this happen, but rather, a series of different initiatives, which help to create a culture of health and well-being.

Sappi is very committed to having a fulfilled and engaged workforce that delivers on its key business drivers.

We believe it is important that the work of each and everyone of our employees is connected to our overall strategy. As a result, Sappi focuses on creating work environments that stimulate and support our employees in building strong skills through various training and development initiatives. This, in turn, will help staff to improve their performances and increase the prosperity of the company as a whole. It is needless to say that our leaders play a key role in that process! Strong and effective leadership will make the difference – be it towards engaging our staff, further transforming the work place, or leading the changes needed in response to the constantly evolving

environment we are operating in.

We strongly believe, and are confident that, our people initiatives are well established and support the various challenges we are facing, and are going to face.

## **Skills and sustainability**

We are committed to building a sustainable future for our business and staff. Skills and training play an important role in this ambition. However, responsibility for this rests with both management and staff. Sappi creates a work environment that stimulates and supports employees to continuously increase their skills. This desire to improve must, however, be driven by the staff members themselves otherwise the programme won't work.

An ever increasing skill and experience base means more flexibility, enabling managers to more easily realign the company's operations with customer demands as they change.

The paper industry is going through a period of many challenges at the moment and this dynamic period is likely to continue for the foreseeable future. But by increasing and improving their skills, staff will provide a resource from which management can continuously draw upon.





# 1.4%

The voluntary staff turnover rate at Sappi

### Connecting our people to our business

Sappi's management takes considerable efforts to discuss the future of the business with all employees. Its

processes enable them to understand fully what they need to do in their roles to contribute to the overall achievement of the strategy and annual business targets. Sappi's communication and strategy initiatives include:

- Annual roadshows by the CEO, supported by the respective European Functional Heads. The last roadshow, which took place in the fall of 2011, was a great success

- Annual strategy deployment sessions to ensure that the targets of the management population are well aligned

- Actively working to ensure all employees participate in the performance management process

During the past year, we have continued in our efforts to reach a 100% participation rate in our performance management process. One major step toward achieving this was an agreement with the works council at our Lanaken Mill to launch the pilot for the performance management process with the blue-collar staff. Meanwhile, discussions to include blue-collar employees at our Stockstadt mill in the performance management process are on-going.

### Training and development

Our focus on training and development, whether it is to learn new skills, improve performance or to prepare for a future career step, is recognised as a strategic tool for Sappi's continued growth, productivity and its ability to retain valuable employees.

Together with our employees we aim to foster a culture of life-long learning. This approach is becoming increasingly critical for our success, especially in the context of ageing workforces, rapidly changing demands, declining numbers of apprentices and a lack of skilled workers in the foreseeable future.

The industry is going through many changes. Continuously investing in our people, as well as bringing in new/younger staff with potentially different skills and mind-sets, will help us to remain competitive. Sappi's apprenticeship programme provides over 220 school leavers with training for roles such as paper makers, process operators, engineering artisans and business clerks. This training comprises both formal learning and practical on-the-job experience, and means a new generation of workers are coming into Sappi's operations. At the management level, Sappi's pan-European two-year graduate trainee program enables the company to source and grow managerial talent. Meanwhile there are company-wide targets to ensure that every employee gets 30 hours of training per year. In the past two years (2010 and 2011) the average amount was 25-26 hours.

### Developing a strong leadership culture

Sappi focuses on building leadership capability at all levels of the business and is committed to bringing through these people from within the existing workforce. We

believe that a strong leadership culture drives others and that this is crucial for effective execution of our strategic priorities. Sappi has defined a set of leadership competencies, which state what qualities and behaviors are expected from our leaders. It also runs an annual bottom-up talent review process to identify, validate and

## Performance management process

Business Year	Total number of employees in Europe	Total number of population eligible to participate in Performance Management	Total number of completed performance appraisals	Completion Rate
2009	6,870	3,200	2,400	75%
2010	6,615	5,600	3,976	71%
2011	6,010	5,233	3,980	76%

further develop all its talents across the organisation.

Over the last six to seven years, approximately 80 managers have participated in Sappi's Leadership Academy. During this 12-month program, participants undergo a series of development initiatives focusing on Sappi's six leadership competencies. The company aims to run this initiative for a group of up to 15 participants on a regular basis.

By continuously developing the leadership skills of managers and ensuring they have an understanding of leadership appropriate for the times, Sappi is establishing some of the essential prerequisites for attracting, retaining and developing good people. All managerial and supervisory staff have been trained in-house in Situational Leadership II. This training is targeted to further enable managers to adjust their leadership style to the task-related development level of the employee, and thereby improve the overall effectiveness of process and results.

Over 130 employees have participated in the Business Academy over the past six to seven years. This program provides insights into the pan-European business and

functional strategies and networking opportunities.

A series of professional tools are used to give its leaders regular feedback on how their environment sees them behaving, as well as continuously growing their

self-awareness to build effective relations across the organisation (MBTI, 360 feedback tools, etc.).

#### Women and diversity

As a global company, we employ a diverse workforce. We value this diversity, believing that it contributes to innovative thinking and our ability to serve diverse global markets. A workplace free of discrimination and harassment is the minimum requirement for all modern companies, and Sappi has effective policies in place that take this into account.

Sappi has recently had some success in

bringing forward people with different nationalities, backgrounds and experience into management positions. Of the most recent 25 new management appointments two-thirds were from a different function, location or nationality or any combination of the three.

Sappi has also intensified its efforts to recruit, retain and promote women.

This will be a challenge because women traditionally have been underrepresented in engineering domains. Sappi is aware of the need to appoint women at management levels and continuously strives to find opportunities to address this shortage.

	Business Year 2010	Business Year 2011
Women as % of total European workforce	12.5%	12.2%
Women as % in European Management positions	12.0%	12.4%

#### Engagement and staff retention

The Sappi Group employee engagement survey measures staff attitudes with regards to their work. It looks at the employees level of discretionary effort and intent to remain with the company by measuring their rational and emotional commitment.

In the most recent survey (2011) European employees said working for their team, their boss and Sappi, in general, is giving them the best opportunities for personal growth and recognition. This, in turn, has a positive impact on their intent to stay with the company.

One area that requires further attention, though, is employee commitment and willingness to go beyond the minimum requirements of their jobs. While discretionary effort is at good levels for our management population, it decreases for our middle-management, and is below the benchmark for our white- and blue-collar populations. Efforts are underway to address this issue – staff will be engaged through workshops, team analyses, feedback sessions and action plans. In addition we have launched our 'Driving

# 220

Sappi's apprenticeship programme provides training for over 220 school leavers



people

Change' program, which will support addressing some of the organisational topics identified.

Sappi needs to keep our best people, and a low staff turnover rate is a clear indicator of whether or not this is happening. In 2011, Sappi's turnover rate was 14.2% up from 7.4% the year before, although this was primarily due to restructuring activities. The company's voluntary turnover numbers are considerably lower – 1.4%.

Sappi's aim is to keep voluntary turnover below 1.5%.

#### Trade unions

The Industrial Relations climate between Sappi Fine Paper Europe and its unions and employee representatives is generally constructive and good – bargaining and negotiations overall take place in good faith. The company will continue to keep dialogues open and cordial and ensure staff are properly represented.

#### Health and safety in the workplace

Sappi's health and safety approach has five key ambitions: a zero injury rate, integrated health and safety management, training at all levels, participative information and control structure, adherence to international best practice and safety standards. We hold a Safety Awareness Day at all our sites around the world. The purpose of the day is to focus the attention on health and safety issues and to ensure that all staff behave in a responsible way for the sake of themselves and their colleagues. Sappi's mills are getting safer and the majority of the company's plants have achieved the target of one million hours without an injury. The company officially recognises plants when they surpass this milestone.

Another measure of good health and safety is the Lost Time Injury Frequency rate (LTIFR). The table (right) demonstrates Sappi's progress.

Sappi supports its staff in maintaining their physical and mental capacity to perform, and in encouraging them to adopt healthy lifestyles throughout their working lives. The company offers preventive medical check-ups and programs. Activities range from flu vaccinations and counseling for employees whose well-being is affected by work or external factors, support of employee sports and social activities, to consultation with a dietician, and stop-

smoking support programs.

Sappi has advanced its health and safety programme through the development of SARA its new state-of-the-art Europe-wide IT system for improving safety and environmental management. The system supports that all of Sappi's European mills and workplaces conform to the same protocols and reporting standards. This makes measurement easier and has improved management.

#### Compensation philosophy

Sappi's compensation policy is about rewarding staff fairly and equitably in relation to job level, experience and employment market. Variable rates of pay designed to drive individual and team performance are part of this policy.

The majority of staff participate in a variable bonus program which will pay out a bonus if certain thresholds and targets are met. In addition we have a Sales Incentive Plan in place for our sales staff, as well as a globally aligned Management Incentive Scheme for our management employees. Long-term incentive awards are granted to our management group across Europe through the Sappi Limited Share Incentive Scheme and the Sappi Limited Performance Share Trust.

Business Year	LTIFR (own employees)	LTIFR (contractors)
2009	1,85	6,77
2010	1,44	4,77
2011	1,30	3,67

#### Pensions

The majority of our employees are covered through social security funded state pension schemes. Sappi offers company pension schemes to:

- (i) All employees where minimal state pension schemes are provided (e.g. The Netherlands)
- (ii) Certain employees (senior management) where state pension schemes provide a replacement income only up to a certain salary level (e.g. management pension schemes in Germany and Austria);
- (iii) All employees in line with market practice and in response to relatively low



## DID YOU KNOW?

The majority of staff participate in a variable bonus program which will pay out a bonus if certain thresholds and targets are met

state pensions (e.g. Belgium). While our existing schemes are a combination of Defined Contribution and Defined Benefit plans, the way forward will be to offer Defined Contribution plans only where appropriate.

### In summary

Sappi can secure its future by attracting skilled employees, continuously developing their skills, and building loyalty through a wide range of initiatives and services as detailed in this report. Measures that will help us to achieve our goals include:

- Offering attractive conditions and training programs to prepare young, skilled employees for their future work and ensuring that we retain employees with key skills for the long term
- Analysing individual competencies and focusing on developing them through our competency and talent management programs
- Showing our appreciation for our employees' dedication – for example, through competitive remuneration and a range of additional benefits
- Promoting the mental and physical health of our employees and providing them with secure, healthy jobs
- Supporting collaboration within the company between people of different cultural backgrounds, age groups and genders
- Complying with all the relevant standards and declarations at all times (e.g. ILO)

It takes inspirational and engaging leadership to attract, develop and retain talented and motivated employees who form the heart of a high performance culture. At Sappi we are confident that our programmes are sufficiently rigorous and far-reaching to enable the company to create a high performance culture and for the business to fulfill its ambitions.

# “ The management of the environmental aspects of our production processes is part of our day-to-day work ”

Our paper is based on fibres derived from wood – a renewable resource with high levels of renewable energy, and a resource that is completely recyclable. The pulp and paper production requires sophisticated processes, raw materials and energy. The management of the environmental aspects of these processes and their impact is part of our day-to-day work.

The following performance indicators offer readers a deeper look at our environmental performance data over the past five years—from fibre procurement and energy usage to how our operations impact on air, water and solid waste. They are based on actual production, and include production of those paper machines and mills that have since closed (Blackburn, Maastricht PM5, Kangas and Biberist).

**It is important to note:**

□ that 2009 was a significant year for Sappi Fine Paper Europe with the integration of four paper mills from m-real – Kirkniemi and Kangas in Finland, Stockstadt in Germany and Biberist in Switzerland. This, coupled with extreme production curtailments due to poor market demand from the economic crisis, had a negative impact on the environmental performance indicators. Paper machines are designed for continuous production. Starting and stopping them required extra water and energy and impacted on the raw material efficiency of the production process.

□ If the indicators are also GRI indicators they are reported according to these guidelines. SO<sub>2</sub> and NO<sub>x</sub> (GRI indicator EN-20), water use (GRI indicator EN-8 and EN21), COD and TSS (EN-21), solid waste to landfill (EN-22).

# Fibre

Over the last five years we were able to increase the share of certified fibres and keep it well above 70%.

Our European mills predominantly use PEFC certification for their fibre sources. In a few regions, including Finland and the state-owned forest in some areas of Germany, both FSC™ and PEFC certification is planned. Overall the number of certified forests is slowly increasing in Western and Central Europe.

Any non-certified material entering our products is subject to strict risk assessment processes which meet FSC™ Controlled Wood requirements and the PEFC Due Diligence System.

We are the Europe market leader in integrated sulphite pulp production. Together with the CTMP (Chemical Thermo Mechanical Pulp) production at our Lanaken and Kirkniemi mills we produce 47% of our fibre needs ourselves.

## Fibre-split 2011

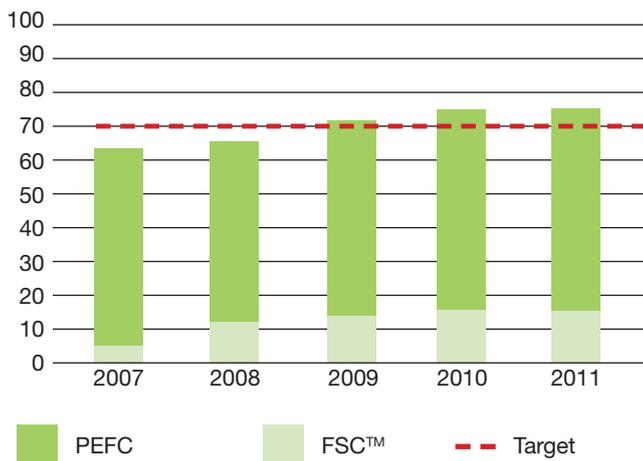
53%

Purchased fibre

47%

Own made fibre

## Certified fibre share SFPE



## Total fibre input 2011

73%

Certified

27%

Controlled wood

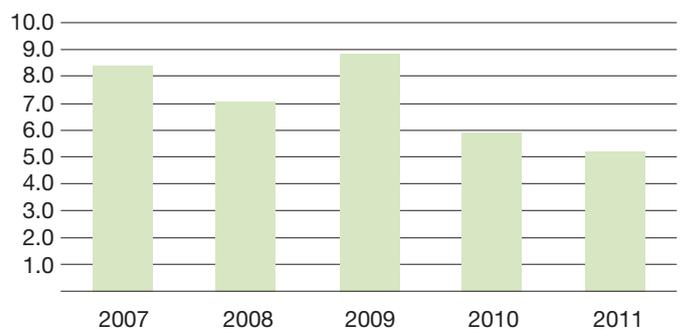
# Waste

The material that is landfilled is to a large extent ash, which can be used for other things, such as the production of cement, other mineral building material, fertiliser and soil substrates. The majority of our ashes are already recycled and we are further working to reduce the amount of material to landfill.

There is no organic material from our mills going to landfill. Where possible, the organic waste material generated at our sites is used as a renewable fuel on site to produce by-products.

Waste paper, scrap metal, scrap electronics and even most of the hazardous waste and building rubble is recycled, while residual waste is sent to sorting centres where recyclable material is recovered.

## Waste to landfill (kg/adt)



# Emissions

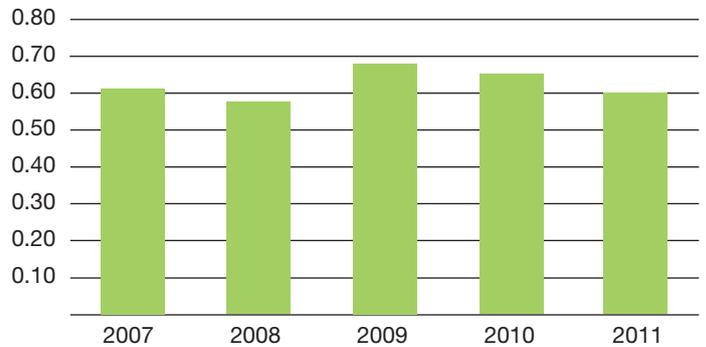
The emission parameter which is receiving most of the attention is carbon dioxide due to its impact on climate change. We are addressing this with our reduction target (see page 9).

SO<sub>2</sub> and NO<sub>x</sub> are two emission parameters important to control as they can contribute to acid rain which, in turn, negatively impact our forests' health, as well as the health of the plant and wildlife around us.

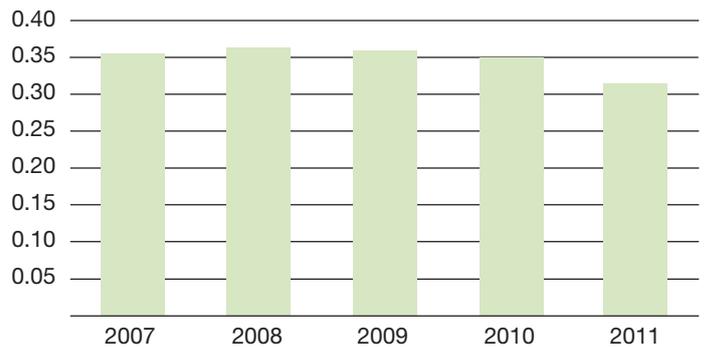
SO<sub>2</sub> is emitted from the use of fossil fuels, such as coal and oil. More significant, however, are the emissions from our recovery boilers which use the black liquor from the pulping process. The SO<sub>2</sub> in the off gas of the incineration process is recovered in a cascade of wet scrubbers and recycled into cooking acid.

NO<sub>x</sub> emissions are caused by any combustion process where nitrogen (air) is present. High temperatures, which are sometimes needed to increase efficiency, can increase the generation of these emissions. A small downward trend can be shown over the past three years.

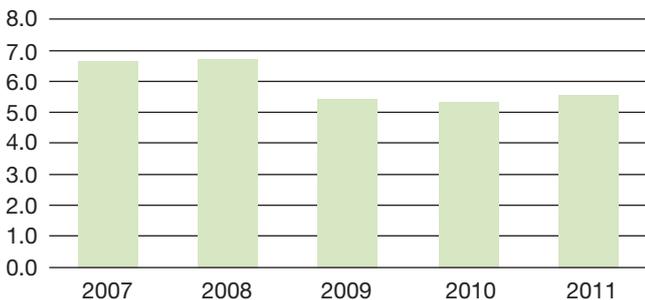
NO<sub>x</sub> emissions (kg/adt)



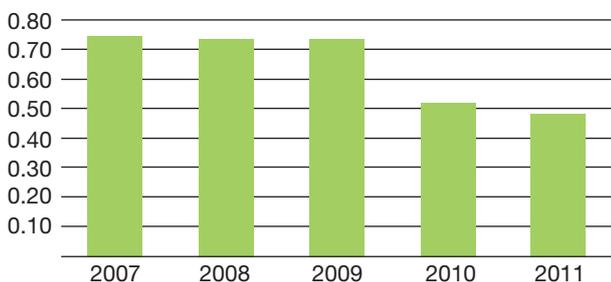
SO<sub>2</sub> emissions (kg/adt)



Chemical oxygen demand (COD) (kg/adt)

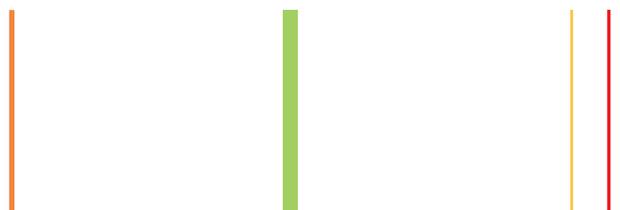


Total suspended solids (TSS) (kg/adt)



# Water emissions

COD and TSS are key indicators for organic pollution to water. Our highly sophisticated waste water treatment plants dramatically reduce the organic pollution. Some of the COD is residual lignin that our treatment plants cannot reduce further. However, it is inert and does not reduce oxygen levels in receiving waters. The general specific trend is downwards with a small increase in COD in 2011.

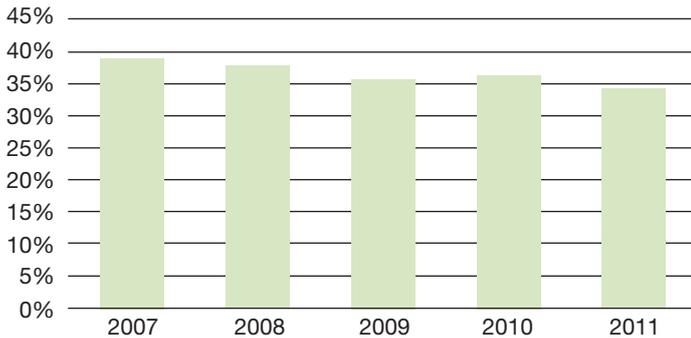


# Energy

Although the total use of renewable fuel increased, the share of renewable fuel shows a small downward trend. However, it still reaches a very significant share of 34.2% in 2011.

The shares of total energy use includes all fuels, purchased steam and the net balance of sold and purchased power.

Share of renewables in fuels used



Total energy use for SFPE 2012

41%

Natural gas

29%

Renewable fuel

12%

Coal

10%

Net purchased electricity

5%

Purchased steam

3%

Fuel oil

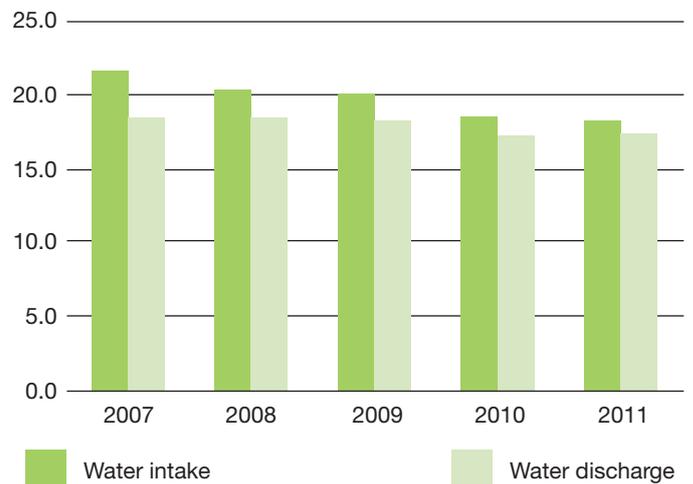
# Water

Over the past five years, as you can see we have reduced the water use of our production further. This graph also shows the difference of water intake and discharge. Some water footprint methodologies consider this difference to be the water footprint, and as such this amount is not available for subsequent processes.

For a complete balance, we would have to consider the water in our raw materials (paper contains about 5% of water), evaporation and precipitation.

By far the largest share of our water is abstracted from river or surface waters. Wells on or very close to our mill premises account for 14.4% and a very small amount is municipal water. We also treat a small amount of waste water from external processes, which accounts for 0.8%.

Water use



Total water withdrawal by source 2011

84.5%

Extraction from river

14.4%

Own boreholes

(0.8%)

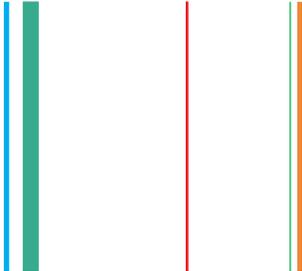
Waste water from outside operation

(0.2%)

Ex utility

sappi

The art of adding value



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