Sappi Group Sustainability Report 2012

sappi

Inspired by life

Contents

More information…

More detailed information on many of the topics discussed in this sustainability report is available from other Sappi publications, our website, and third-party sources. Where available, we provide hyperlinks to these sources.

S Click to read more detailed information available on the Sappi website, www.sappi.com. This link will direct you to the specific web-page or page in a PDF document.

W Click to read more detailed information on third-party websites.

Additional and explanatory information is provided in 'pop-up' windows which can be accessed by clicking on this icon.

Related information within this document is cross referenced and can be accessed by clicking on this icon.

Conventions

tons

At Sappi we standardise all our reported measurements around the metric ton equivalent to 1,000kg (one thousand kilograms).

billion

Sappi follows contemporary 'short scale' convention; defining a billion as one thousand millions.

Contents

03 Message from the CEO

05 About this report

09 Sustainability governance

10 Our Code of Ethics

11 Accolades in 2012

12 Our process

13 Performance against targets

16 Our key sustainability drivers

17 Our key sustainability drivers Prosperity

25 Our key sustainability drivers People

32 Our key sustainability drivers Planet

44 Prosperity

52 People

81 Planet

112 UN Global Compact

115 Global Reporting Initiative

140 Glossary

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Profitability affects our performance in the People and Planet areas

Although recognising that Prosperity, People and Planet — the 3Ps as we refer to them internally — are all interlinked, we have long maintained that our current and future viability as a business and our performance in the People and Planet areas is contingent upon our ongoing profitability.

Accordingly, I am pleased to report that we continued our momentum in improving our financial performance and competitiveness in the year under review. All three of our regional businesses continued to make good progress in implementing various strategic actions in order to reduce costs, improve production efficiencies and margins, maximise cash generation and improve our competitive positions in the market.

Our sustainability focus is on creating value for current and future stakeholders in all aspects of our business.

We continue to use internationally recognised standards like ISO 9001 for quality management, ISO 14001 for environmental management, OHSAS 18001 for health and safety management. In Europe at the majority of our mills, the energy standard 50001 is applied.

In each region, we also continue to use internationally recognised, independently verified forest certifications such as the Programme for the Endorsement of Forest Certification™ (PEFC™), the Forest Stewardship Council™ (FSC™) and the Sustainable Forestry Initiative (SFI®).

Our Sustainability Charter and corporate values of Excellence, Integrity, Respect and Resourcefulness underpin our sustainability governance system. Our values have been a strong guide to us during a challenging period of change and, together with the dedication and unstinting efforts of all our people, have enabled us to achieve success in many areas.

Some of these successes have been highlighted through accolades received in the year under review.

We are pleased that our efforts in enhancing our performance in all areas of the 3Ps were highlighted when we were recognised as one of the 10 Best Performers on the Socially Responsible Investment (SRI) Index of the Johannesburg Stock Exchange (JSE).

Our sustainability governance structure was further strengthened during the reporting period by the establishment of the Social, Ethics, Transformation and Sustainability (SETS) Committee which has an independent role with accountability to the Board. The role of the SETS Committee is to assist the Board with the oversight of the Company and to provide guidance to management's work in respect of its duties in the fields of social, ethics, sustainability and transformation issues. Our sustainability ambassadors continued to do good work.

In FY12, Sappi Limited celebrated its 75th anniversary. Since we produced our first paper from straw in South Africa way back in the 1930s, the world has changed immeasurably in all aspects. Of particular relevance to us are developments in the communication field which is altering the way we use paper. We have shifted our product focus to keep up with evolving trends and we will continue to keep our finger firmly on the pulse of the market.

One of the most significant milestones we will pass as a group is our investment in dissolving wood pulp solutions which is taking shape through the conversion of our Ngodwana and Cloquet Mills. The conversion of these mills is on track for 2013. Once completed, the conversions will enable us to increase our market offering of 800,000tpa to 1.3m tons per annum of dissolving wood pulp.

As our business evolved over the years, we have always believed that we would be successful if we provided our customers with the very best services and products, made sustainability a priority, and conducted our business in line with our values.

With our strategy and values being embraced across the group, we have continued to improve our

Profitability affects our performance in the People and Planet areas continued

results — not just to our bottom line performance, **Prosperity**, but also to our performance in terms of **People** and **Planet**.

In a world where natural resources are under increasing pressure, we are achieving our goal of treading more lightly on the planet — and the graphs in this report tell the story more eloquently than words can.

Globally over the past five years, we have reduced specific purchased energy use by 19.6% and correspondingly, our fossil-based carbon dioxide emissions have decreased by 19.8%. These figures highlight the fact that actions in one area of the 3Ps impact on another – by reducing specific purchased energy we are increasing our use of own renewable energy, an approach which reduces fossil-based emissions. Globally, we use over 50% renewable energy to manufacture our products — and we're working on increasing our use of renewable energy all the time.

Globally we have also decreased specific water usage by 10.5%. And globally the amount of solid waste we send to landfill has decreased by 31%.

We continued to train and develop our people, and add value to the communities in which we operate.

I regret deeply having to report two contractor fatalities in South Africa. Our sympathies go out to the families of the deceased. We view contractor safety as being as important as that of our own employees and our focus, throughout all operations, is on trying to realise the goals of our Project Zero safety programme so that all employees can go home safely to their families.

Disclosing our performance against targets highlights our commitment to transparency in all aspects of our business. We have once again documented both our progress and our challenges.

I remain confident that we have a sound strategy and that we will continue to further improve our financial performance and competitiveness going forward.

To all my colleagues, I would like to say thank you for helping us to continue providing our customers with the very best services and products, thereby distinguishing Sappi as the provider of choice in all our markets and enhancing our overall sustainability.

Ralph Boëttger
Chief Executive Officer
Sappi Limited

Our current and future viability as a business and our performance in the People and Planet areas is contingent upon our ongoing profitability

With our strategy and values being embraced across the group, we have continued to improve our results — not just our bottom line performance, Prosperity, but also our performance in terms of People and Planet

About this report

Scope of this report

This report is aligned with our integrated annual report and covers FY12, the period from the beginning of October 2011 to the end of September 2012. We report on a regional and global basis wherever possible, graphically presenting data over five years to make the information relevant, accessible and comparable. Safety, health, quality and environmental data is compiled according to international best practice. Additional commentary accompanies graphs to: aid interpretation; provide supplementary information; explain trends, achievements and anomalies; explain specific measurement criteria, and indicate where these have changed.

Integrated report 2012

Europe
Sustainability report

North America
Sustainability report

Southern Africa
Sustainability report

Reporting framework

As Sappi Limited is headquartered in South Africa and we have our primary listing on the Johannesburg Stock Exchange, we abide by the King III Code on Corporate Governance (King III). In line with King III's recommendation for integrated reporting, our Integrated Report provides a very clear link between sustainability and strategy and gives a broad view of our overall sustainability performance.

In 2011, we departed from our previous practice of publishing an annual sustainability report backed up by further, in-depth information online. Instead, we provided a group overview of our sustainability performance in our online report and published regional sustainability reports. This was in response to stakeholders' needs for more in-depth information pertinent to their specific region in addition to the group overview. Our 2012 regional reports for our operations in Southern Africa and North America, and a revised report for Sappi Fine Paper Europe which updates 2011 information, will be available in printed form and online, early in 2013.

About this report continued

Joint ventures excluded

We had a 34% stake in our joint venture in Jiangxi Chenming Mill in the People's Republic of China. The major shareholder is the Shandong Chenming Group (listed on the Shenzen and Hong Kong stock exchanges). As a consequence we had limited influence on operations. This mill is therefore not covered in this online group sustainability report.

LignoTech South Africa, our 50:50 joint venture with Borregaard at Saiccor Mill is also excluded as we do not manage the operation.

Global Reporting Initiative

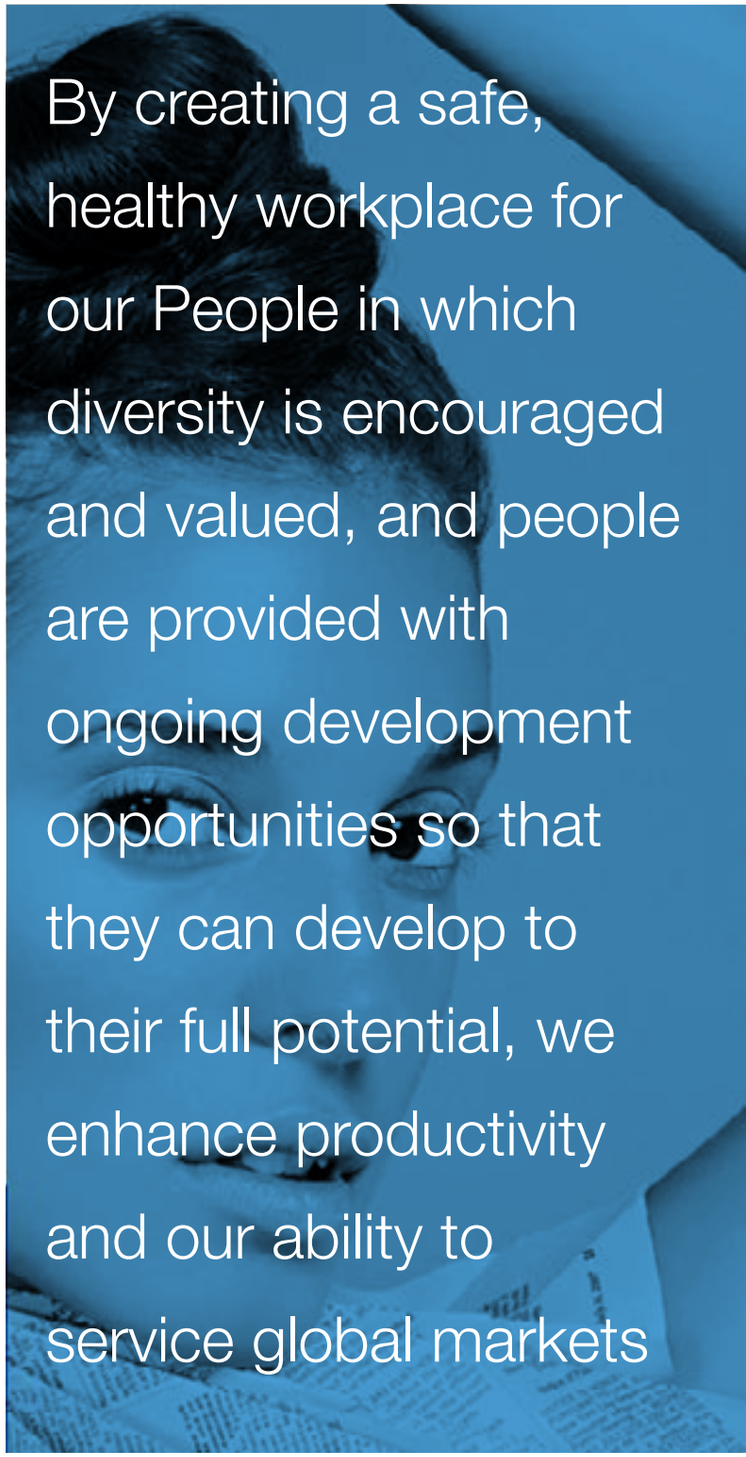
To date we have reported in terms of the Global Report Initiative (GRI) G3.1 reporting guidelines — a practice we have continued in this report. We declared ourselves as an A-level reporter in 2009, 2010 and 2011. Each year, our self-declared rating was confirmed by the GRI. This year we have once again declared ourselves as an A-level reporter and have had this rating confirmed by the GRI. References to the GRI indicators, for example: EN 1, LA 2, EC 3 etc are interspersed in relevant sections throughout the report for ease of reference.

The principles of the United Nations Global Compact (UNGC) are also referred to throughout the report and in greater detail in the UNGC-specific specific report on our performance.

Management systems

International, independently verified management systems underpin our approach to sustainable development.

ISO 5001
ISO 9001
ISO 14001
OHSAS 18001



About this report continued

External assurance

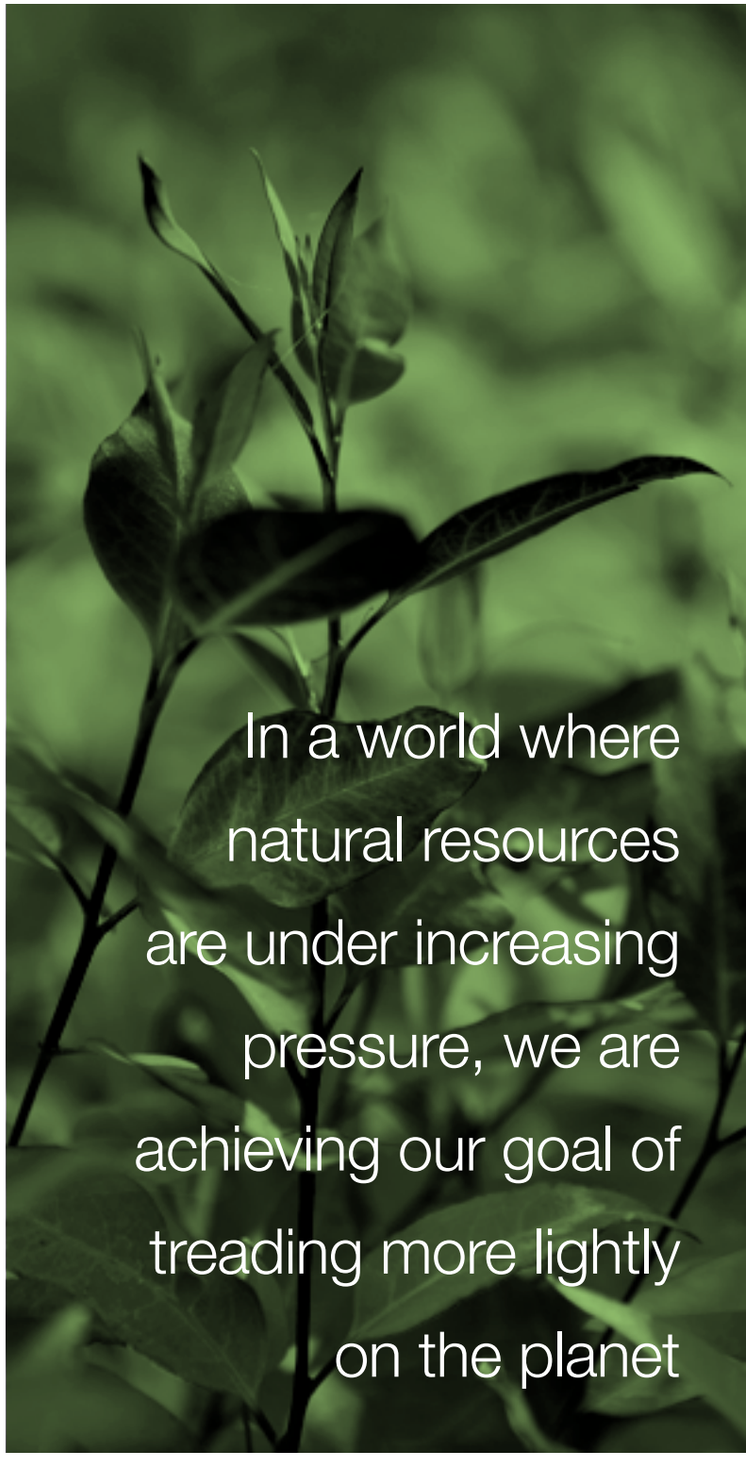
The issue of external assurance remains a challenge. We recognise that our stakeholders expect us to undergo external verification. However, in the light of difficult economic circumstances in 2011 and 2012, we found the expense of external verification difficult to justify. The expense lies in the fact that we are a global operation and also in that accurate technical assurance requires a high level of skills.

During 2011 and 2012, apart from the on-going focus on financial controls, our internal audit team began the process of verifying non-financial performance. This involved reviewing the procedures applied for collecting and/or measuring, calculating and validating non-financial data, as well as reviewing reported information and supporting documentation. . This has proved to be valuable in entrenching sustainability throughout the organisation.

Our mills in the European Union are certified under the Eco-Management Audit System (EMAS) which involves annual external auditing of our environmental data. Environmental data is collected on a quarterly basis via our E4 (Energy, Environment, Emissions and Effluent) cluster comprising a team of internal experts. The aim of the E4 cluster is to identify the best available and practicable means for securing compliance with the Sappi group's regional legal requirements and environmental policies in the most efficient manner.

All our pulp and paper mills hold ISO 14001 environmental, ISO 9001 quality and OHSAS 18001 certification. In terms of these certifications, annual audits are undertaken by external verification organisations to ensure adherence to standards.

Our governance, social and environmental performances are assessed annually in terms of our listing on the Socially Responsible Investment (SRI) Index of the Johannesburg Stock Exchange (JSE). Collectively, these external assessments and certifications give us confidence that our performance indicators are reliable and accurate.



About this report continued

Defining report content

Determining materiality

The GRI's Reporting Principles for defining report content call for an emphasis on information and performance regarding the most material topics. These are set out in the section entitled 'Our key sustainability drivers' and expanded upon in the **Prosperity**, **People** and **Planet** sections — Sappi's '3Ps' of sustainability.

Throughout the report, qualitative information is complemented by quantitative information, generally in the form of graphics illustrating performance over five year, FY08-FY12 period.

The information presented has been determined on the basis of our ongoing extensive engagement with our stakeholders and has been assessed against the backdrop of current business operations, as well as prevailing trends in our industry and the global economy.

In preparing this report we have tracked environmental findings and research, public opinion, employee views and attitudes, the interests and priorities of environmental and social groups, as well as the activities, profiles and interests of investors, employees, suppliers and customers.

We aim to present information that is material, comparable, relevant and complete. The information presented covers topics and indicators that reflect our significant economic, environmental, and social impacts, as well as issues that would substantively influence the assessments and decisions of stakeholders. We publish our performance against targets in both the group report and our regional reports, transparently reporting on success or lack thereof in achieving these targets.

Prioritising content

Recognising that our industry has a high impact on the environment and that this could substantively influence the assessments and decisions of stakeholders, we have prioritised environmental or Planet issues.

We are headquartered in South Africa, where the government has prioritised the development of the forestry sector. The government has also prioritised development of rural areas where our plantations are situated. Consequently, our social or People section is also extensive.

While we do cover economic (Prosperity) issues to some extent, these are dealt with in detail in our integrated annual report.

Identifying stakeholders

We have identified the stakeholders we expect to use our report on the basis of our ongoing engagement— formal and informal — with them.

The various ways in which we engage our stakeholders are set out in detail in the People section of this report. The stakeholders we expect to use this report include investors, customers, suppliers, employees, communities, governmental and non-governmental organisations, environmental bodies and all those who are affected by our activities.

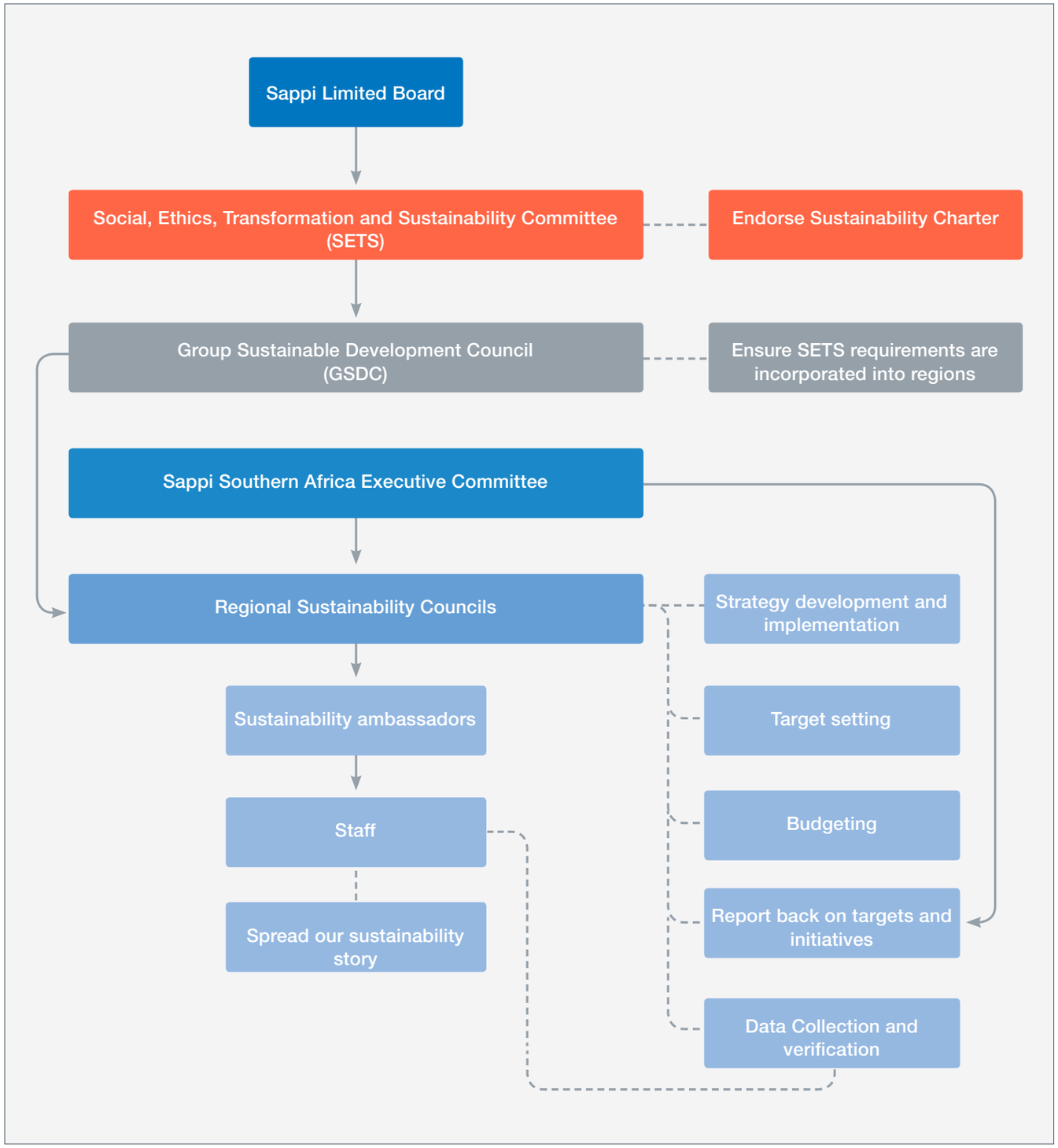
Sustainability governance

Our approach to sustainability is framed in terms of Prosperity, People and Planet, referred to internally as the 3Ps — and is set out in our Sustainability Charter. This in turn is underpinned by our Code of Ethics and our group values of Excellence, Integrity, Respect and Resourcefulness.

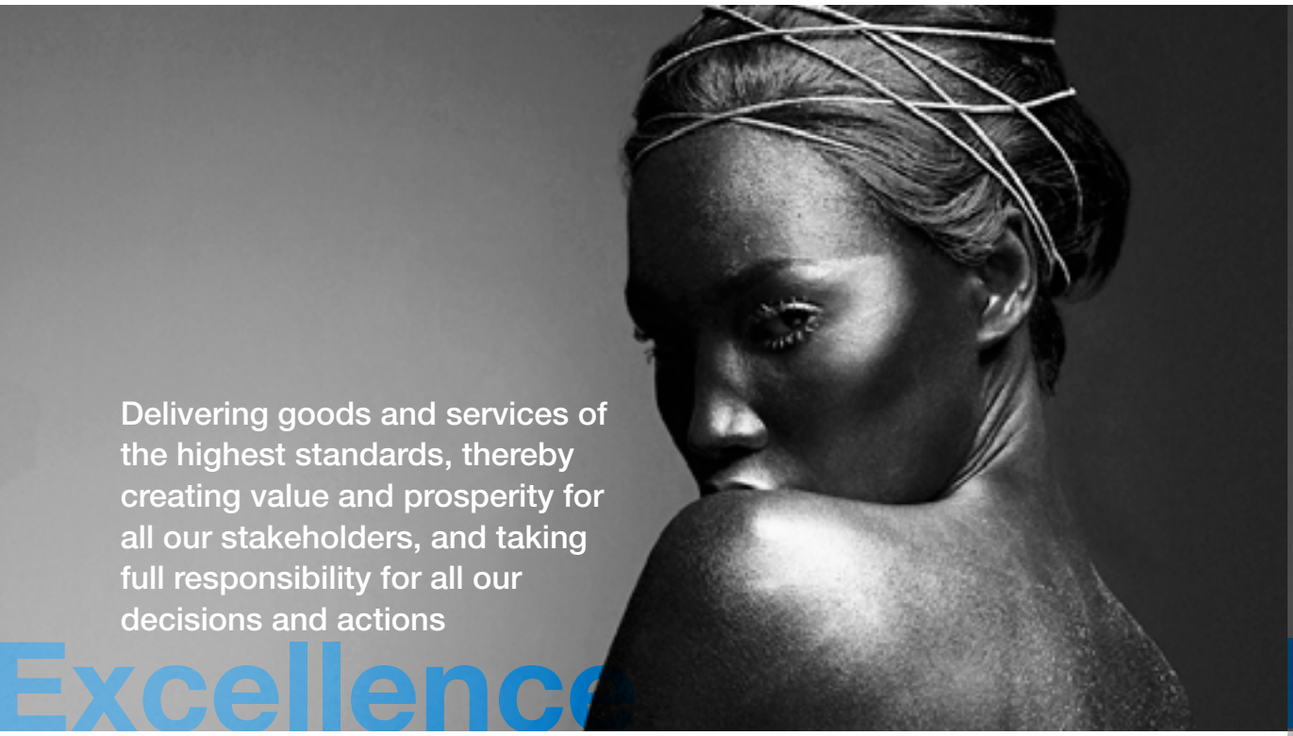
Regional Sustainability Councils (RSCs) operate in Europe, North America and South Africa. Each RSC focuses on key material issues relevant to their specific region and on incorporating sustainability into everyday business processes.

These RSCs report to the Group Sustainable Development Council which in turn reports to the newly established Social, Ethics, Transformation and Sustainability Committee which in turn reports to the board.

Sustainability ambassadors in each region help to entrench an holistic approach to the 3Ps of Prosperity, People and Planet throughout the group.



Our Code of Ethics

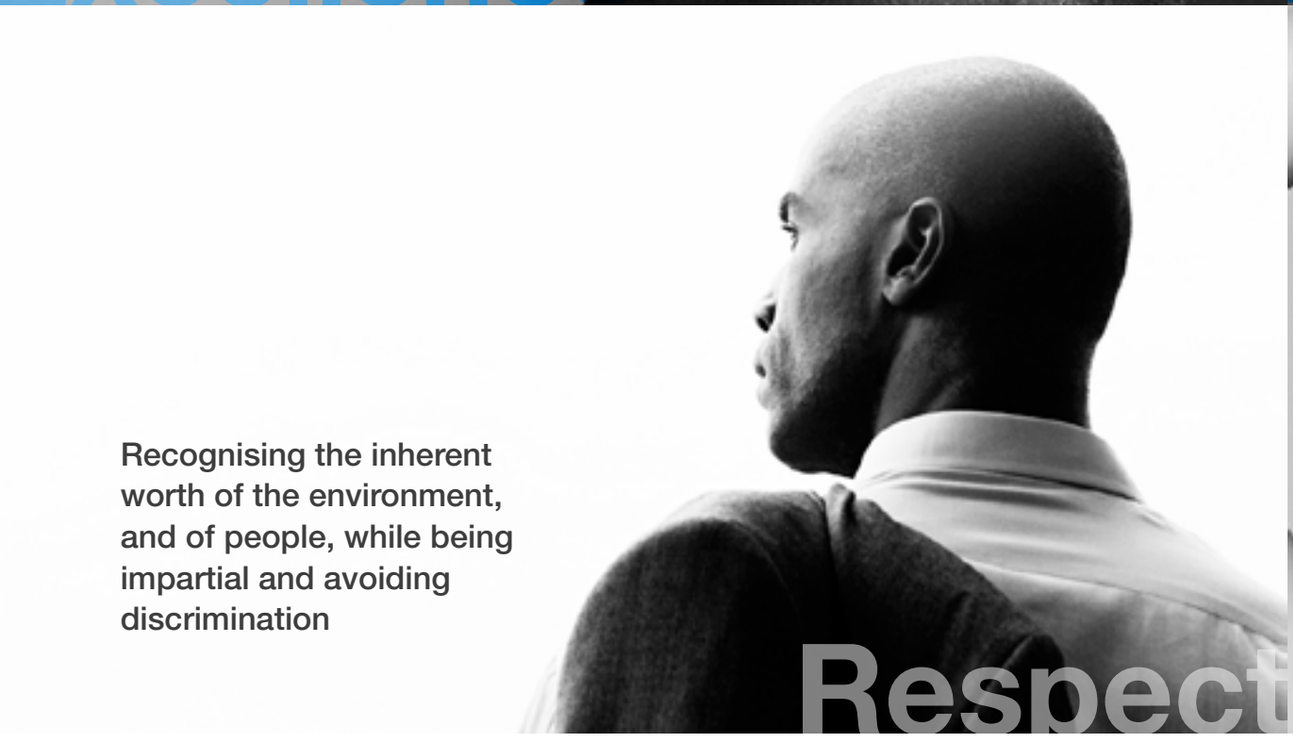


Delivering goods and services of the highest standards, thereby creating value and prosperity for all our stakeholders, and taking full responsibility for all our decisions and actions

Excellence

Being truthful, and building trust through our actions

Integrity



Recognising the inherent worth of the environment, and of people, while being impartial and avoiding discrimination

Respect

Constantly looking ahead. Being naturally curious, imaginative and intuitive. Building on the knowledge and experience within the business. Having the courage to be customer focused and to be prepared to make a plan, 'finding a route through the maze'

Resourcefulness

Accolades in 2012

top 10 Performers on the JSE SRI Index

We were recognised as one of the 10 Best Performers on the JSE Socially Responsible Investment Index.

88% CDP

We increased our score in the Carbon Disclosure Project from 80 to 88%.

Fusion wins awards

Our white top liner Fusion, won the category Advances in Innovation in Speciality Papers (Mill) in the 2012 Pulp and Paper International Awards in Europe.

First x2

In the Netherlands, our Nijmegen Mill came first in the Royal Netherlands Paper and Board Association's energy awards competition — the second time in a row the mill has won the award.

Maine Manufacturer of the year

Sappi Fine Paper North America was named 2012 Maine Manufacturer of the year by the Maine Forest Products Council (MFPC).

Henri Benoit

We received the Henri Benoit Award for Leadership in the Private Sector at the Portland Regional Chamber's 158th annual Dinner and Community Leadership Awards.

Gold Ink

Sappi Fine Paper North America received recognition from the annual 2012 Gold Ink Awards print contest with Gold winners in ten categories printed on Sappi paper, including the Softcover Books category where the winner was our own The Standard 5.

GoCell recognised

Our Ngodwana Mill's GoCell Upliftment Training Programme was awarded two first places in the prestigious BHP Billiton Achiever Awards Competition in July 2012 in the categories: Re-skilling and Empowerment and Best Training Programme for large companies.

CSI Leadership

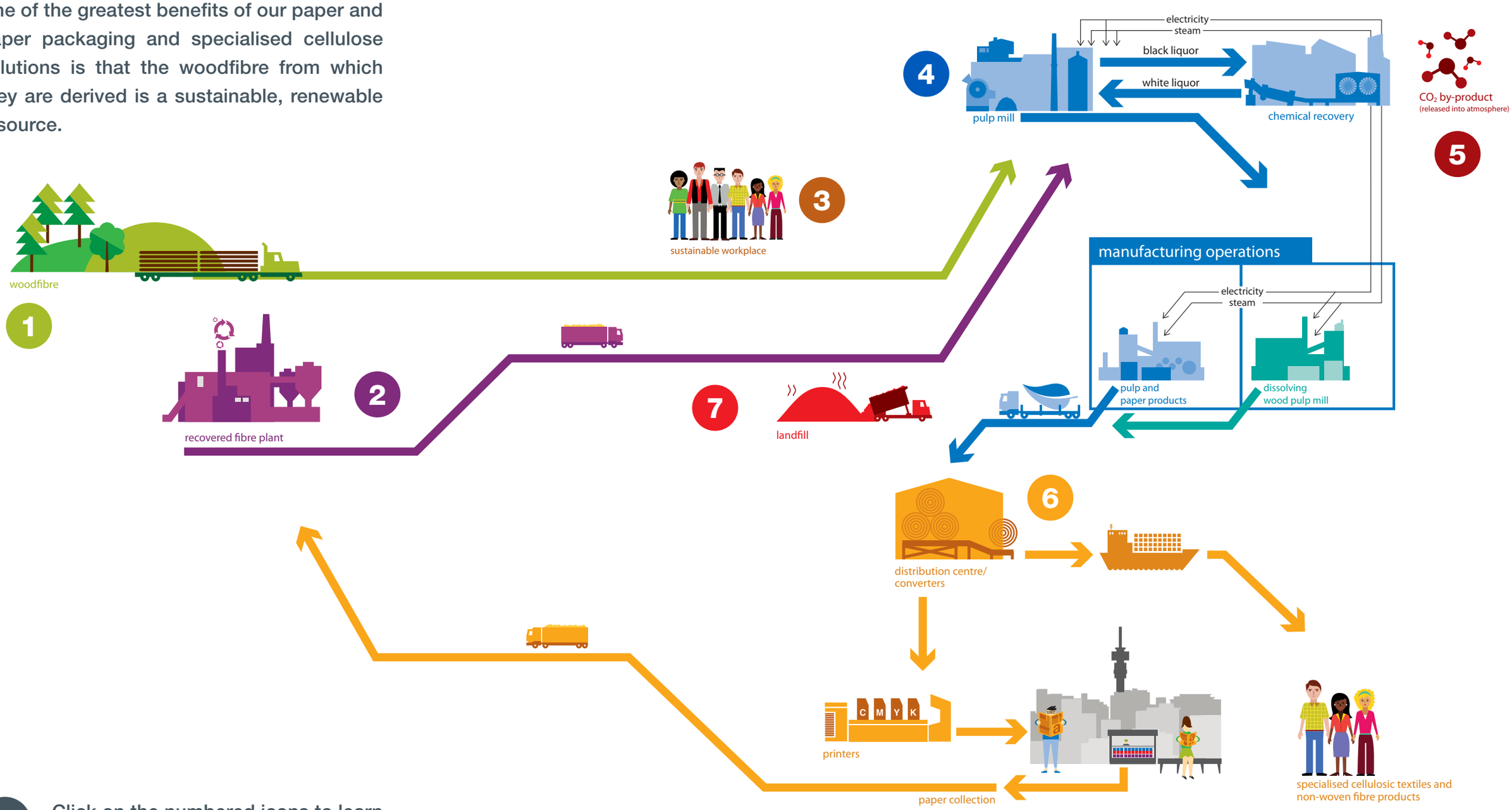
We received the Corporate Social Investment Leadership Award in the South African Sunday Times Top 100 Companies award for Project Grow and the KwaDukuza education initiative.

Chemical gold

Our Tugela Mill won a Gold Certificate in the chemical category of a competition organised by the KwaZulu-Natal branch of the IWMSA (Institute of Waste Management of Southern Africa) and provincial regulators (DEA&RD). The mill was also declared the winner of the Best New Entrant Award.

Our process

One of the greatest benefits of our paper and paper packaging and specialised cellulose solutions is that the woodfibre from which they are derived is a sustainable, renewable resource.



? Click on the numbered icons to learn about that part of the process.

Prosperity

With our strategy and values being embraced across the group, we have continued to improve our results — not just to our bottom line performance, Prosperity, but also to our performance in terms of People and Planet.

Disclosing our performance against targets highlights our commitment to transparency in all aspects of our business. We have once again documented both our progress and our challenges.

Europe

The first period of our sustainability targets ended in 2012.

We missed our RONOA (Return on Net Operating Assets) target by a small margin and did not achieve our safety target, but achieved or exceeded our Planet targets during the period. We have set new targets for 2017 with 2012 as a benchmark where applicable. The challenging Planet reduction targets listed for 2013 are indicative only as, in each case, they are aimed at a 5% reduction by 2017.

North America

In 2007, Sappi Fine Paper North America established seven five-year sustainability improvement goals. At the start of 2008, the region began tracking performance against these goals and by 2012 — the final year of the goal period — we significantly exceeded all goals bar the certified fibre goal.

New five-year goals have been set for the 2012-2016 period. Three of the original goals are included again with increased targets — we believe these goals aligned well with corporate objectives and that continuous improvement in these areas would continue to benefit the organisation, customers and the environment.

South Africa

The due date for all current targets is end 2015, while the baseline for all targets is the beginning of 2011 unless otherwise stated. Some targets have been adjusted and are indicated.

Achieved Exceeded Not achieved

		2012 Target	2012 Performance	2013 Target
Europe	RONOA (Return on Net Operating Assets) and EBIDTA (Earnings Before Interest, Depreciation Tax and Amortisation) of 10% by 2017.	7.1%	6.9%	i
North America	Achieve or exceed an annual 12% RONOA (Return on Net Operating Assets)	12%	10.3%	i
Southern Africa	RONA (Return on Net Assets) to be equal to or greater than 15% by 2018 on a five-year rolling basis.	8.7%	9.0%	i

People

Achieved Exceeded Not achieved

		2012 Target	2012 Performance	2013 Target
Europe	Training hours per employee per annum	30	30.4	30
	LTIFR (own employees)	<0.21	1.24	1.20
North America	Training hours per employee per annum	75	60	75
	Customer training and education through Sappi ETC (hours) Target: 30,000 hours by 2016	20,000	22,500	24,000
Southern Africa	Achieve Level 3 compliance in Broad-based Black Economic Empowerment (BBBEE)	3		3
	80% compliance to the Work Skills Plan (WSP)	54%	52%	67%
	Training and development opportunities: average hours per employee per annum	52	64	54
	LTIFR (own and contractors) target: better than 'best ever' ever achieved on a continuous 12 month basis	<0.27	0.35	<0.27
	Corporate Social Responsibility (CSR) investment: a minimum of 1% of NPAT (Net Profit After Tax)	>1%	1.2%	>1%

Planet

Achieved Exceeded Not achieved

		2012 Target	2012 Performance	2013 Target
Europe	Reduce specific direct fossil CO_2 emissions (tons CO_2 /ton saleable product), including purchased power emissions (calculated at 400g/kWh) by 5% by 2017. Base-year: 2012 saleable production.	↓1% per annum	↓11.4%	↓1% per annum
	Reduce specific water use (m^3/ton saleable product) by 5% by 2017. Base-year: 2012 saleable production.	↓1% per annum	↓8.5%	↓1% per annum
	Maintain a high level of certified fibre delivered to our mills (FSC™ or PEFC™ certified, or equivalent)	73%	73.1%	>70%
North America	Increase total certified fibre content to 65% by 2016	60%	51%	61%
	Reduce energy intensity by 10% by 2016	↓1%	↓2.3%	↓3.1%
	Reduce raw material waste by 10% (fibre, fillers and coatings) by 2016	↓1.5%	↓1.6%	↓3.0%
Southern Africa	Reduce specific purchased fossil fuel energy by 15% by 2015 Base-year: 2000	↓6.0%	↓13.5%	↓14.0%
	Reduce specific fresh water usage by 10% by 2015 Base-year: 2007	↓7.5%	↓2.8%	↓4%
	Recover 28% of fibre put into the market	25%	27%	26%

Our key sustainability drivers

Our key sustainability drivers are those important factors we believe may have a material impact on our business' success; either by impacting directly on our ability to operate profitably or by affecting our reputation and the trust stakeholders have in Sappi.

The 3Ps are interlinked — our profitability affects our performance across all 3Ps

Our People distinguish us as the provider of choice for our customers

We strive continuously to tread more lightly on the planet

Adding value

EC 9

Understanding and describing indirect economic impacts, including the extent of the impacts

Our business is built on a renewable and sustainable resource — wood fibre — the growing and harvesting of which supports local employment as well as many small businesses, individual farmers, contractors and rural communities.

Our paper and pulp mills are mostly situated in peri-urban areas where they are the largest, or one of the largest employers and businesses. These mills also support significant local economic activity including everything from the provision of security and cleaning services to the supply of raw materials, goods transportation and specialised maintenance work.

In all the communities where we operate, we contribute to health and welfare services, education and other community services. In some instances we also contribute to public infrastructure.

As a public company, we contribute to the economies of the countries where we operate through the taxes and fees we pay. By focusing on delivering acceptable profitability we create value for our shareholders and our staff.

Sappi's products add value to people's lives each and every day. Our dissolving wood pulp is used in making viscose fabrics and textiles, and in foodstuffs, cosmetics and pharmaceutical products.

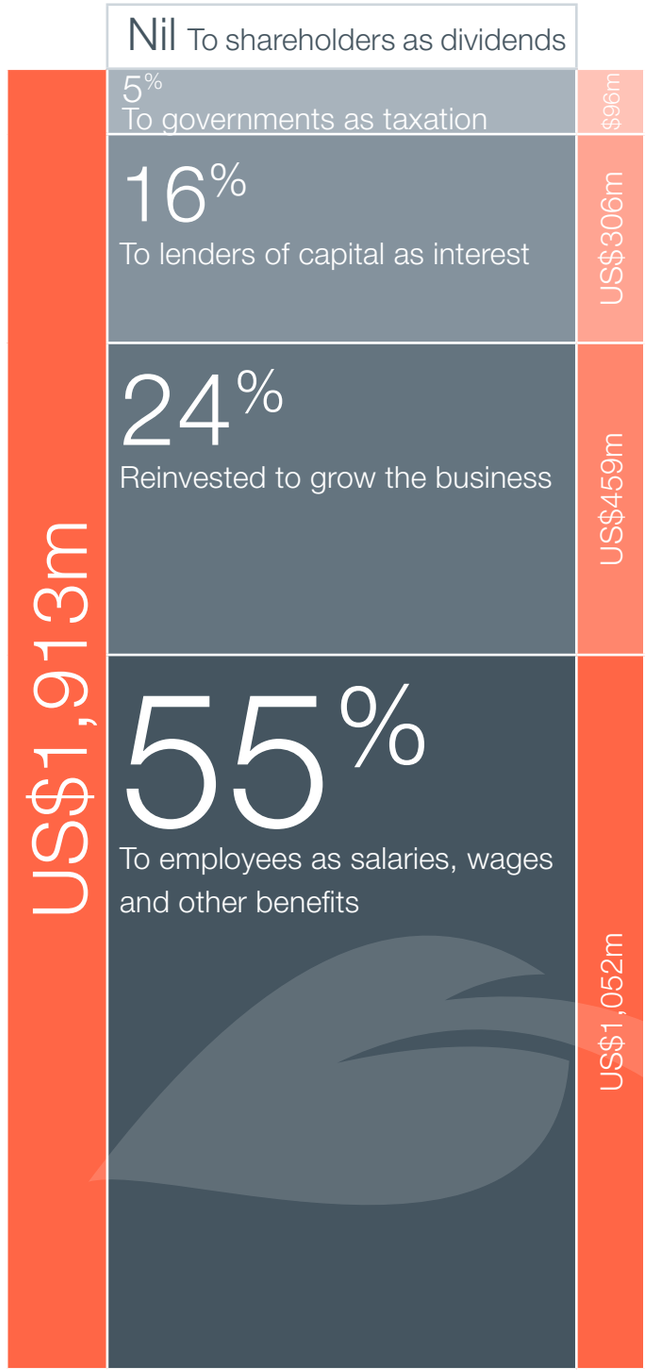
Our graphics papers are used for commercial printing including magazines, brochures, catalogues, direct mail, corporate reports and calendars.

Our packaging papers are used to package convenience food, serve fast food and to protect and transport fresh produce.

Our speciality, security and release papers are used for consumer goods, labels, and a variety of other applications, including the new South African passport, regarded as the most advanced and secure passport in the world.

Globally, growing awareness of environmental impact has increased the demand for natural and renewable products, a demand which Sappi is well placed to meet.

Economic value added in 2012



Adding value — the pulp and paper sector's contribution to regional economies

Europe's pulp and paper sector

€550b turnover

comprises ±180,000 companies

employing ±6m people

multiplier effect X8 additional jobs for each job in the sector

35% forests cover of total EU land area

↑ 3.5m ha over the last ten years

North America's forest products sector

±6% USA manufacturing GDP

US$7b taxes per annum

among top 10 manufacturing employers in 48 states

employing ±1m people

≈ automotive and plastics industries

generates and uses 28.5m MWh per annum renewable energy

enough to power 2.7m homes

South Africa's forest products sector

±1% contributes GDP

government recognition

a strategic economic sector

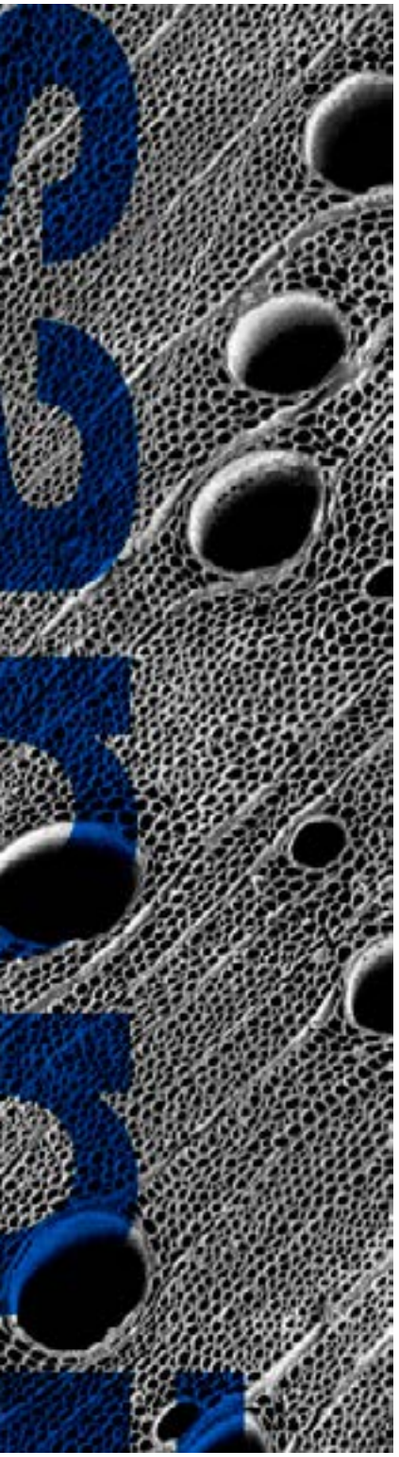
significant contributor economic growth job creation

R2.9b goods exported in 2009

>99% converted value-added products

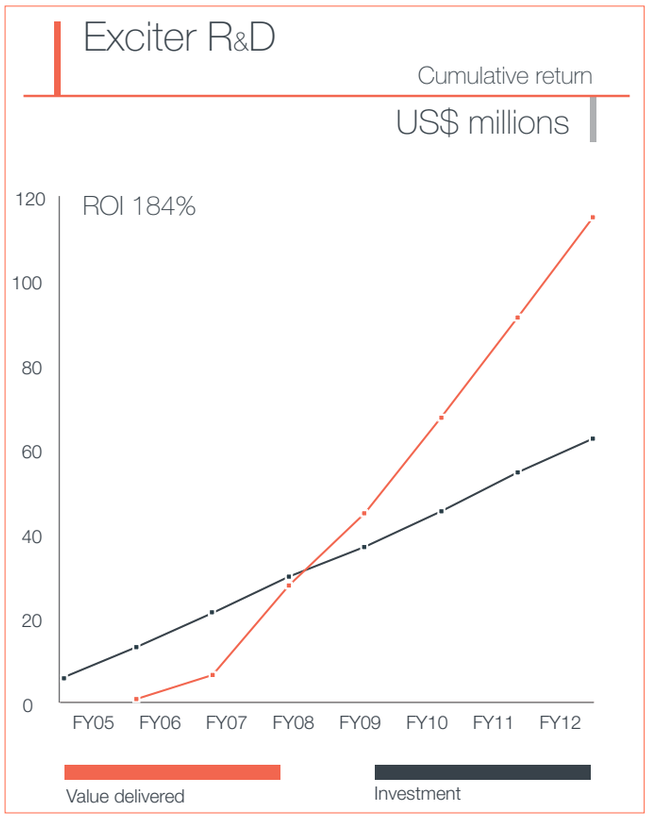
employed 170,000 people in 2009

Research and development



Recognising that technology is the cornerstone of our business, we established a global technology strategy in 2004, which aligned technology and R&D expertise across three continents and the different sectors of the business.

This centrally co-ordinated approach allows for a pooling of expertise and cross pollination. Our technology centres around the world are focused on product/process improvements and developing new product and processes.



To ensure that our solutions remain relevant to the needs of our customers in more than 100 countries across the globe, our total FY12 R&D investment, including US$8.1m in our 'Exciter' programme, was US$32.6m.

Our 'Exciter' programme, which operates alongside our more traditional research and development work, aims to accelerate the development of breakthrough technological competency in our core markets.

Because of the continuing pressure on margins in the graphics paper markets, 70% of the total value delivery from the Exciter Programme over the last four years has been from cost saving and process improvement applications for the graphics business.

Exciter value delivery for FY12 was US$23.9m bringing the total value delivered from Exciter, from FY2005 to date, to US$115.2m against a total expenditure of US$62.6m. This gives a ratio of total return versus investment of 184% for the Exciter programme and continues the trend of increasing return.

since FY05
Exciter value delivered
US$115.2m on investment US$62.6m

Our markets — paper

5X
Magazine advertising increase purchase intent five times more than television or internet advertising

While there is no doubt that, globally, paper-use is declining, research studies show that print continues to be the most effective medium for branding and memory retention and delivers superior sales, merchandising and marketing return on investment.

Recent 'value of print' research findings:

- Direct mail transcends the age demographic: younger consumers (18-34 years old) prefer to learn about marketing offers via postal mail rather than online sources.
- Adding direct mail to a marketing campaign increases return on investment by 20%.
- Print conveys trust: magazines, for example, increase purchase intent five times as much as television or the internet advertising.
- Print is particularly effective at reaching certain niche demographics, including wealthy consumers.

We have focused our Exciter programmes on research into specialised and niche markets.

We are also focused on investing in higher-growth and higher-margin businesses. For example, we recently began the 12-month conversion of our Alfeld Mill, in Germany, into the world's largest and lowest-cost producer of one-sided coated speciality grades for packaging, label and technical applications in response to strong continuous demand growth.

Case study
Physical media leaves a deeper imprint…

A research study by branding agency Millward Brown used magnetic resonance imaging (MRI) brain scans to explore the different ways in which our brains process paper-based and digital marketing.

The study showed that paper advertisements, in particular, caused more emotional processing, with physical media leaving a 'deeper footprint' in the brain. Material shown on paper cards generated more activity within the area of the brain associated with the integration of visual and spatial information than material in a digital format. This suggests that physical material is more 'real' to the brain as it has a meaning and a place and that it is better connected to memory because it engages with the brain's spatial memory networks.

These findings, important from a branding and advertisement recall perspective, are backed up by another study which shows that some print advertisements can be impactful enough to create a false memory of having tried a product that doesn't even exist! Subjects were divided into two groups and shown either high- or low-imagery versions of print advertisements for a fictitious popcorn product. A third group was allowed to consume 'samples' of the invented product. A week later, all the participants were surveyed to determine their attitudes toward the product. Interestingly, members of the group that viewed the more vivid advertisement were as likely to report that they had tried the product as the group that actually consumed the samples. The group that saw the low-imagery advertisements was less likely to report they had tried the product, and had less favourable opinions about it.

The overall conclusion one can draw from these studies is that people have a powerful emotional response to paper — something advertisers need to take cognisance of, as paper evokes a sensory response that goes beyond visual appeal alone.

Print conveys trust

Generation C
Younger consumers (18-34 years old) prefer printed, rather than online marketing messages.

Our markets — dissolving wood pulp

We currently produce approximately 800,000tpa of dissolving wood pulp at Saiccor Mill, supplying approximately 15% of market demand which makes us one of the world's largest suppliers of this product.

In May 2011, we announced the US$340m expansion of our Ngodwana Mill in South Africa. The expansion will change the product portfolio of the mill to include 210,000tpa of specialised cellulose.

In November 2011, we announced an additional investment of US$170m in our Cloquet Mill in North America, which will enable this mill to produce 330,000tpa of dissolving wood pulp.

Together with our existing capacity at Saiccor Mill, these investments will increase our total annual dissolving wood pulp production capacity to approximately 1.3m tons per annum. Both projects have been initiated, are progressing well and scheduled for commissioning during 2013.

We are market leaders in the viscose staple fibre (VSF) segment, where demand is projected to grow by 8% per annum and there is potential to enter even higher value speciality/acetate markets in future.

Underpinning these growth ambitions, our strengths in the dissolving wood pulp field include:

- Secure and sustainable wood baskets — like Saiccor Mill, Ngodwana Mill will use locally sourced eucalyptus, while Cloquet Mill will use mixed northern hardwoods, primarily aspen (approximately 65%) and maple (35%), also sourced locally.
- A business model anchored on long-term contracts with leading customers and minimal spot business.
- Strong and mature customer relationships.
- Supply flexibility.
- In-depth technical knowledge in all target segments.

Saiccor Mill

One of the world's largest producers, supplies

15% Global dissolving wood pulp market demand

1.3m tpa

Dissolving wood pulp capacity 2013

Case study
Clothing a growing population

A growing world population drives an increasing need for clothing.

Currently, the bulk of our dissolving wood pulp (also known as chemical cellulose) is exported to Asia, where the middle-class is expected to grow from the current 1.9 billion to 2.7 billion people by 2030, accounting for 43% of global consumption. It's anticipated that this growth will be accompanied by greater urbanisation and higher standards of living — including comfortable clothing.

On the other hand, global production of cotton is forecast to remain stagnant or shrink, with the growth in total fibre consumption offset by man-made fibres. The fact that oil-based synthetic fibres lack certain moisture management properties — such as the ability to breathe — enhances the opportunity for cellulosics such as viscose staple fibre (VSF) — a biodegradable, natural, organic product with breatheability and moisture absorbency properties.

VSF

Viscose staple fibre is a biodegradable, natural, organic product with breatheability and moisture absorbency properties

Sustainable fibre supply

70%
South Africa
Fibre self-sufficiency

554,000ha
Land owned, managed or leased

Wood fibre, together with energy and water is the most important input into our production processes. Ensuring sustainable fibre supply is therefore a key priority for our business.

Europe

We do not own plantations or land; wood fibre is mainly sourced from forests in the regions where our mills are located. Softwood and hardwood pulp is sourced from Europe and the Americas. Tree species used, include: spruce (used for mechanical pulp and softwood chemical pulp) and beech (used for hardwood pulp). Lanaken Mill can also process significant amounts of poplar.

North America

In this region, as in Europe, we do not own plantations or land. Wood fibre is sourced from landowners and commercial loggers in the temperate forests of Maine, New Hampshire, Michigan, Minnesota and Wisconsin and from the Canadian provinces of New Brunswick, Quebec and Ontario. Tree species used in this region include: maple, poplar, aspen, beech and birch (hardwoods) and spruce, pine and fir (softwoods).

Sappi's position

In both Europe and North America, we are able to mitigate fibre supply risk through a combination of approaches which include short- and long-term wood supply agreements and shareholdings in wood sourcing co-operatives.

Southern Africa

We source wood fibre from softwood and hardwood plantations (tree farms of exotic trees). The softwoods are all pine species including *Pinus patula*, *P elliottii*, *P taeda* and some hybrids. The hardwoods consist of eucalypts including *Eucalyptus grandis*, *E dunnii*, *E nitens*, *E smithii* and a range of hybrids, and the wattle, *Acacia mearnsii*.

Sappi's position

Owning, managing and leasing 554,000ha of land in this region gives us a high degree of wood fibre self-sufficiency. We supply approximately 70% of our own fibre requirements.

Our fibre supply initiatives:

- We are investing around US$7.5 a year to rehabilitate our 52,000ha Usutu plantation in Swaziland almost half of which was destroyed by devastating fires in 2007/8.
- We are working with communities in the Eastern Cape to establish 30,000ha of plantations — a project in support of the government's goal of driving rural development.
- We are promoting Project Grow, a small-grower initiative, which currently supplies 2% of our total timber requirements — the standing timber is valued at approximately US$36m.
- We are assisting with land reform projects where timber is grown.

Mitigating the risk of climate change

We are mitigating the risks of climate change through our tree improvement programmes:

- Over 15 years, our research efforts have resulted in a 60% improvement in eucalypt plantation yield.
- We have maintained sample plots in the Usutu plantation to allow comparison of four successive rotations of pine since the first rotation were planted in the 1950s. The latest measurements taken in 2011 indicate an 8% yield improvement — consistent with the expectation from genetically superior planting stock and measures taken to maintain site productivity.

Fire protection

Since the devastating fires of 2007/8, we have implemented a more aggressive, and extensive fire protection strategy.

Risks are now managed via an integrated Fire Risk Management System comprised of a comprehensive risk assessment, monthly monitoring compliance checks, management procedures, standards, and general back-up information.

We have also increased community participation in fire prevention activities.

Tree improvement — enhancing sustainability

Our tree improvement programmes in South Africa are focused on enhancing the sustainability of our fibre base by mitigating the impacts of climate change, pests and disease, while maximising yield. More productive trees have increased potential for greater carbon capture.

Producing hybrids

In recent years the focus has been on producing and testing a number of interspecific hybrids to increase yield and mitigate the impact of pests and diseases. These include both eucalypt and pine hybrids:

- The *Eucalyptus grandis* x *E nitens* hybrid increased yields and improved resistance to the cossid moth that has impacted the growth of *E nitens*.
- The *Pinus patula* x *P tecunumanii* hybrid increased yields and improved tolerance to pitch canker (caused by the fungal pathogen, *Fusarium circinatum*) that has impacted on *P patula*.

These hybrids contribute to maintaining and improving the health and productivity of our plantations, eliminating the need to use chemicals such as pesticides and fungicides.

Selecting genotypes

Our breeding programme continuously tests and selects genotypes best suited to the range of sites where Sappi plants trees, including harsh sites that are drought susceptible. In this way more drought tolerant trees have been identified. The eucalypt species, *Eucalyptus dunnii*, has proven to be the most drought tolerant of Sappi's commercial species and is now planted on sites where drought risk is high.

Breeding for specific pulping characteristics

Our tree breeders test the wood properties of the trees that will be supplied to our mills. The selection criteria include fibre that results in higher pulp yields, ensuring that for the same plantation area and resources the amount of pulp produced per hectare has increased.

Responding to new challenges

Sappi maintains and manages a broad genetic base, consisting of many species, populations and trees. This ensures that we are able to respond to new challenges like pests, diseases, changing market requirements and global warming while providing continuous genetic improvement over the long term.

Compartments of this genetic base are managed specifically as conservation parks, where tree species and populations are conserved as part of a global conservation effort. Sappi is a member of CAMCORE, an international, non-profit organisation dedicated to the conservation and utilisation of subtropical and tropical tree species. Several of these conservation parks are conserving species/populations (ex situ) that are threatened or severely endangered within their native habitat.

Leveraging biotechnology

Biotechnology tools — such as DNA fingerprinting — help improve our tree breeding, seed production and propagation efficiencies by allowing us to keep track of our elite pine and eucalypt breeding material.

We are also using biotechnology to develop trait-linked molecular markers for breeding and for understanding host defence mechanisms to important tree pests and diseases such as *Leptocybe invasa* and *Fusarium circinatum*.

60% South Africa improvement
Eucalypt plantation yield over 15 years

8% improvement in pine yield since first rotation — 1950s

Forest certification

Against a backdrop of increasing global concerns about the deforestation of endangered tropical forests, the use of internationally recognised, independently verified forest certification systems gives us an important competitive edge.

The forest certification systems we use include:

- **FSC™** Forest Stewardship Council™
- **PEFC™** Programme for the Endorsement of Forest Certification™
- **SFI®** Sustainable Forestry Initiative®

Globally, 70.2% of the fibre we use is certified. In Southern Africa, all our owned and leased plantations are FSC™ certified; 87% of fibre used in this region is certified.

Sappi's position

We are working to increase our share of certified fibre on a global scale, but we are constrained by a global shortage of certified fibre.

We are trying to promote group certification for small growers who often battle with the costs of certification.

70.2% certified fibre

Of the fibre used globally is certified fibre; the balance is procured from known and controlled sources.

Group

Non-certified fibre (wood and pulp) is sourced from known and trusted suppliers close to each mill which are regularly visited by our buyers.

FSC™ controlled wood and PEFC™ DDS (Due Diligence System) requirements are incorporated into our purchasing specifications and contracts, in accordance with our purchasing policy. Environmental- and forestry-related information (including wood sources) is obtained from every pulp supplier on a regular basis and this data is then evaluated by a team of experts.

North America

Our involvement in initiatives to promote third-party forest certification include:

- A partnership with Time Inc, Hearst Corporation and two of our competitors to help small- and medium-sized landowners in Maine achieve third-party forest certification.
- The Sustainable Forestry Programme®, a certified FSC™ group management scheme dedicated to assisting wood-lot owners in the state of Maine develop and manage their wood-lots. The scheme comprises a team of highly-trained forestry professionals, including licensed foresters.

Southern Africa

We recognise that certification creates problems for small plantation owners because these plantations are often situated in remote areas, making certification very expensive relative to larger plantations (on a per hectare basis). In addition, many small forest owners found the administration involved in certification onerous and difficult to interpret.

We therefore established a FSC™ group certification scheme which provides training and support to facilitate the implementing of standards on the individual members' properties. Members of the scheme are audited manually against group standards. There are currently 53 members in the scheme with plantations ranging from a few hundred hectares to well over 10,000ha in size

To promote certification in this region, we are currently paying a premium for FSC™ certified timber.

100% FSC™ certified

South Africa: own and leased plantations

Our relationships with our employees

LA 4

Percentage of employees covered by collective bargaining agreements

UNGC 3

Freedom of association and the effective recognition of the right to collective bargaining

Given today's extremely challenging global economic conditions and the current socio-economic dynamics in the South African labour market, Sappi's relationship with employees and their representatives has become a key business driver. Protecting the right to freedom of association and collective bargaining are fundamental to the manner in which Sappi does business.

Globally, approximately 62% of our workforce (8,500 employees) is represented by 21 unions; in effect, 66% (9,279 employees) of the workforce is covered by collective bargaining agreements.

We firmly believe that, in common with all organisations, the success of ours depends on our employees' levels of engagement and commitment.

Europe

Of all the regions in which Sappi operates, Europe is the most unionised. Our European blue- and white-collar employees are represented by 13 trade unions; approximately 77% of the workforce are members of the bargaining unit.

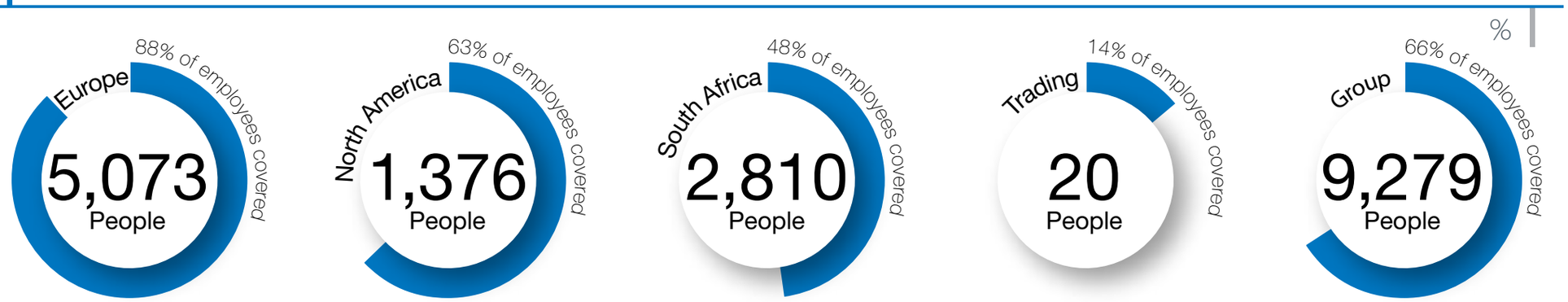
Negotiations occur at the various country and industry-specific Collective Labour Associations; the contract terms range from 1-2 years. The labour framework in Europe consists of Works Councils and collective labour agreements that differ from country to country. The Works Council meets with Sappi's European leadership biennially to share information and consult on topics of interest, including market developments, macro-economic effects, industry changes and organisational restructuring. Within the collective labour framework, Sappi is represented by industry employer representatives.

Case study
Disciplined behaviour

Disciplined behaviour is essential not only for individual wellbeing, but also to ensure our group goals and objectives. In each region, disciplinary codes ensure disciplinary procedures, while grievance policies entrench the rights of employees, including the right to raise a grievance without fear of victimisation, the right to seek guidance and assistance from a member of the Human Resources department, or their representative, at any time and the right to appeal to a higher body, without prejudice.

We have identified no operations or significant suppliers where the right to exercise freedom of association and collective bargaining has been violated or is at significant risk.

Employees covered by collective bargaining agreements



Our relationships with our employees continued

globally
8,500
employees
represented
by 21
unions

HR 5

Operations and significant suppliers identified in which the right to exercise freedom of association and collective bargaining may be violated or at significant risk, and actions taken to support these rights.

North America

In North America, 63% of our workforce is represented by 11 collective bargaining agreements covering each of the plant sites.

The majority of our hourly employees — generally production unit employees — are represented by the United Steelworkers (USW) union. Employees are also represented by various craft, guard and railroad unions. In this region, labour agreements are usually for three years.

In addition to meeting with local union leadership for the purposes of agreeing bargaining contracts and resolving grievances, the company relies on local unions to help with safety and wellness initiatives, as well as various forms of community outreach.

On a national level, the unions have been a valuable partner in terms of lobbying and government affairs on issues of importance to the paper industry.

During 2009 and 2010, Sappi and two other paper industry companies worked with the United Steelworkers union's international representatives to bring a successful trade case protesting the dumping and subsidy practices of Chinese and Indonesian paper manufacturers.

Southern Africa

Four trade unions represent 48% of the workforce; mostly blue-collar workers and artisans. Our wage negotiations with recognised trade unions take place at the Pulp and Paper and Sawmilling Chambers under the auspices of the Bargaining Council for the Wood and Paper Sector in South Africa. Our agreements are generally annual.

The complexity of the work environment in our South African operations is compounded by a number of legislative labour requirements. To manage this complexity, we have established a number of forums with our shop stewards and trade unions with a view to sharing information and discussing matters of mutual interest and working together on matters which pertain to Sappi specifically and not to the industry as a whole.

These forums include:

- The National Employment Equity and Skills Development Forum meets quarterly and is attended by union officials from three unions, shop steward and management representatives.

  The primary focus of this forum is to agree on the Employment Equity Plan and the Workplace Skills Plan submitted to the Department of Labour and to the Fibre Processing and Manufacturing Skills Education Training Authorities.
- Shop Steward Forums at each mill meet with management to discuss mill specific work issues and conditions.
- The Partnership Forum, a joint union and Sappi senior management forum, meets quarterly to share information on business performance, strategy direction, industry developments and union priorities.

Shortly after year-end, Sappi Southern Africa announced plans to mothball a paper machine (PM4) at Tugela Mill. Consultation with the unions has begun and in line with the required legislative framework, a section 189A filing has been submitted to the Commission for Conciliation, Mediation and Arbitration (CCMA).

48% Southern African workforce represented by
4 Trade unions

Transformation in South Africa

As a company head-quartered in South Africa, with significant assets and people in the region, Broad-based Black Economic Empowerment (BBBEE) is an important component of our reputation and licence to trade. We regard BBBEE as pivotal to economic and social stability and hence, sustainability of South Africa.

The government and organised business have taken a number of steps in recent years to increase the participation of black people in the South African economy. To this end, the Employment Equity Act (No 55 of 1998), the Skills Development Act (No 97 of 1998) and the Preferential Procurement Policy Framework Act (No 5 of 2000) were promulgated.

The Broad Based Black Economic Empowerment Act (No 53 of 2003) ('BBBEE') formalised the country's approach to distributing skills, employment and wealth more equitably between races and genders.

BBBEE focuses on increasing equity ownership, management and control of businesses by black people, and improving black representation in all levels of employment. It also promotes the: development of skills within businesses; nurturing of black entrepreneurship through preferential procurement and enterprise development, and the uplifting of communities through social investment.

The Forest Sector Charter was published in the Government Gazette in June 2009 as the 'Forest Sector Code'. This Charter applies to all enterprises engaged in commercial forestry and the first level processing of wood products.

Our South African businesses are signatories to this charter through their membership of both Forestry South Africa (FSA) and the Paper Manufacturers Association of South Africa (PAMSA).

The Forest Sector Charter sets the objectives and principles for BBBEE, and includes a scorecard and targets to be applied within the forest products industry. It also details specific undertakings by the government and the private sector (South African forestry companies) to assist the forest products industry to achieve its BBBEE targets. Our South African businesses have been evaluated against the Forest Sector's BBBEE scorecard since 2010.

US$4.3m **Invested** in training and development in South Africa

US$16.7m **Committed** to enterprise development in South Africa

US$1.5m **Invested** in corporate social responsibility projects in South Africa

Employee safety

In 2012, the safety performance of all employees improved in all three regions.

Tragically in Southern Africa, there were two contractor fatalities in the year under review — one at our Ngodwana forestry operations and another at Tugela Mill. In the previous year the group suffered four contractor fatalities. The continued safety focus with our contractors has resulted in a noticeable reduction in lost time injuries.

The OHSAS 18001 safety management system continues to be our foundation and structure for managing safety; all paper mill sites maintained their certification in 2012.

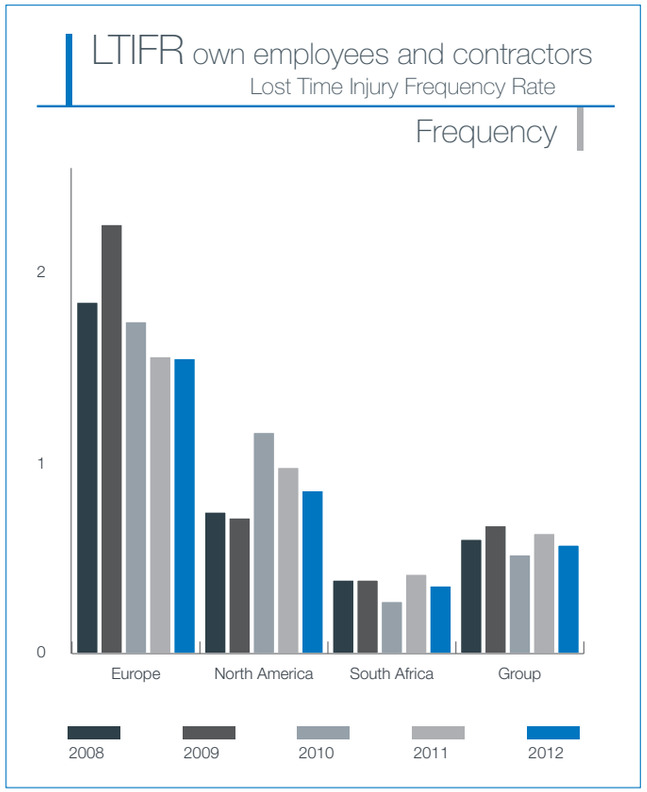
Our behaviour-based safety (BBS) programme, together with the hazard identification and risk assessment process, helped to identify task-specific hazards and risks, and also quantified exposures and risk reduction activities. The process has driven many physical enhancements and improved our safe work procedures.

We will continue our focus on employee involvement and working with line supervisors to further embed the positive safety culture we are developing.

The goal of our safety programme, Project Zero, is to eliminate fatalities and lost time injuries and achieve constant 'front-of-mind' safety awareness for all employees and contractors.

We continue improving our systems, procedures and, in particular, our safety awareness programmes. Our 'Do You Know What's in Your Safety Circle?' campaign gained positive traction at all operations. This programme, and a refocus on BBS, was used as the theme for our Group Safety Awareness Day held in 2012 and proved to be an excellent safety motivation initiative.

Despite the slight drop in performance in South Africa, we believe that ongoing disciplined adherence to the systems and procedures in place will achieve more positive results in the year ahead.



"While the overall safety improvement is encouraging, I deeply regret having to report two contractor fatalities – one in Sappi's forestry operations and one at our Tugela Mill in South Africa. Our hearts go out to the families of the deceased. We view contractor safety as being as important as that of our own employees and our focus, throughout all operations, is on trying to realise the goals of our Project Zero safety programme so that all employees can go home safely to their families at the end of every day."

Ralph Boëttger
Chief Executive Officer
Sappi Limited

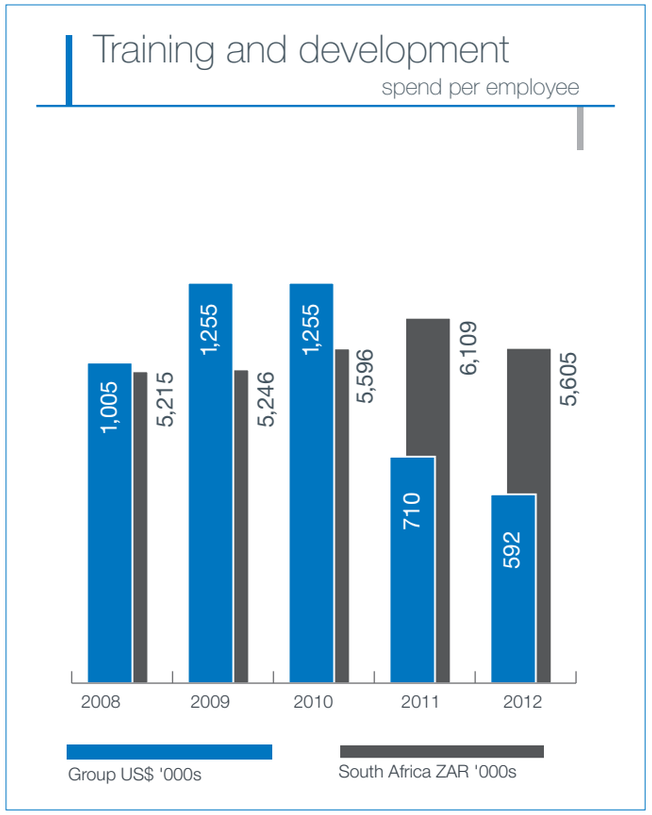
Employee training and development

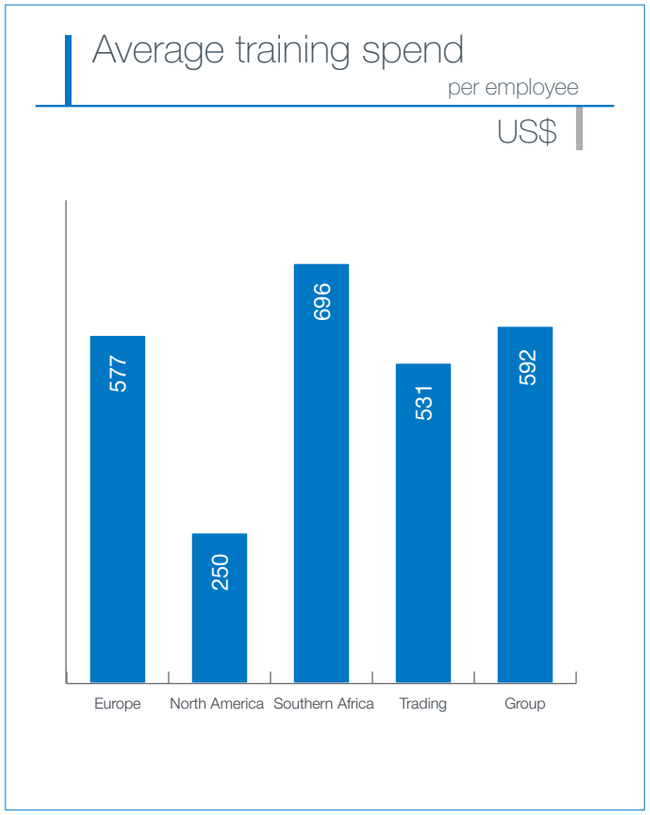
During 2011 and 2012, we restructured our European and South African businesses, resulting in headcount reductions and cost savings.

Despite the challenging business environment, our investment in people continued to be a priority; providing skills and competencies to ensure a sustainable business.

While training and development covers a wide array of capacity building initiatives, the focus has been on:

- Creating a safe work environment
- Ensuring compliance
- Continuously developing the existing skills base to maintain and improve operational efficiency
- Developing employees for the future
- Upskilling employees for the new dissolving wood pulp production units, due to come on line in 2013.





Corporate social responsibility

An alignment review, between our Corporate Social Responsibility (CSR) programmes, our community needs and our own strategic priorities, coupled with our challenging operational environment, has led to a refocused CSR policy and a reduction in our overall CSR investment.

1.2% NPAT

CSR Investment in South Africa

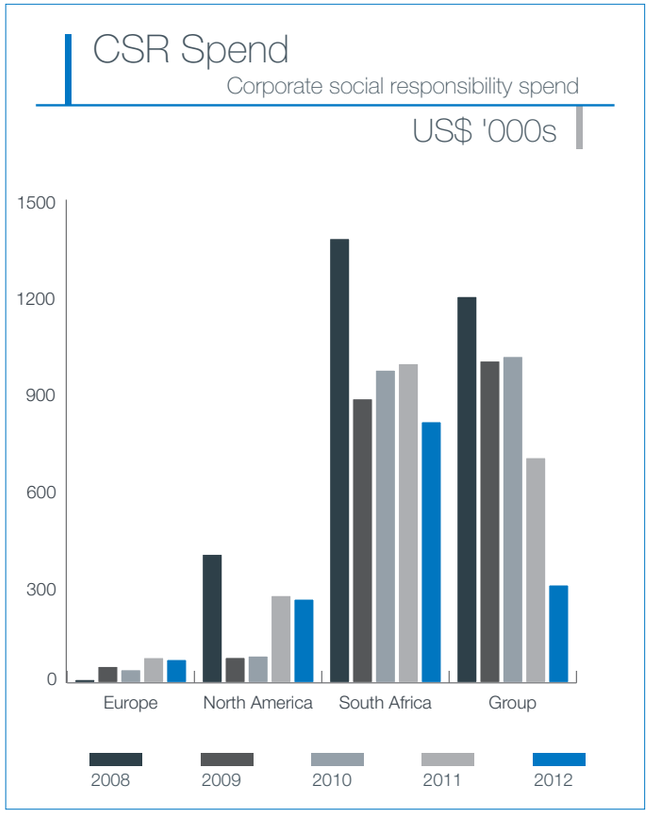
South Africa

The bulk of our CSR investment is allocated to South Africa — a developing country with greater developmental needs than the other regions in which we operate — where we are headquartered.

During 2011 and 2012, we conducted socio-economic assessments of our mills in order to profile the communities near our operations and determine key stakeholder issues. We use this information to guide our CSR investments.

We aim to spend the equivalent of 1% of Net Profit After Tax (NPAT) in CSR programmes. Our FY12 investment again exceeded our regional target. The bulk of our funding has gone towards:

- Literacy and education with a particular focus on developing mathematics and science skills
- The environment and conservation programmes with a particular focus on the natural resources and ecosystems on which our business depends
- Health and welfare with a particular focus on the communities surrounding our operations, and
- Community engagement and upliftment, including projects to improve basic infrastructure and services as well as projects that improve community life.



Group corporate social responsibility policy

Our approach to sustainability is to focus on performance based on generating prosperity for shareholders, while improving the lives of people and treading more lightly on the planet. This approach is founded on our core values of excellence, integrity, respect and resourcefulness.

Sappi believes that a formal programme for Corporate Social Responsibility (CSR) — often referred to as Corporate Social Investment (CSI) in South Africa — is critical in giving substance to our commitment to being a responsible corporate citizen. We believe that our CSR approach and programmes should be aligned with and support the achievement of our business objectives, forming part of our engagement and partnering initiatives with our key stakeholder groups throughout all our businesses.

Our approach to CSR

Our approach to CSR encapsulates all three areas of sustainability. We identify and support longer term initiatives or individual projects which promote and build our prosperity, people and planet charter commitments.

- Prioritises investment in the first place in initiatives and projects relevant to the communities where we operate (mills, offices and plantations) and secondly on initiatives and projects relevant to our role in society and our other key stakeholder groupings, including printers and other customers, environmental and conservation organisations, as well as organised industry and business groups.
- Strives to align our CSR activities with our business activities and objectives, including through cause-related marketing initiatives and sponsorships.
- Is guided by the principles of the United Nations Global Compact.

The bulk of our funding is directed at

- **Literacy and education**
  Promoting literacy and education, particularly mathematics and science skills, helps expand the talent pool in areas which are pivotal to our overall sustainability. Promoting literacy and education also increases demand for paper as there is a definite correlation between high levels of literacy and development and demand for paper and paper products.
- **The environment**
  Land, air and water are shared resources. By motivating and encouraging people, particularly those close to our operations, to share our commitment of treading more lightly on the planet, we aim to enhance the sustainability of the natural resources and ecosystems on which our business depends.
- **Health and welfare**
  The health and welfare of the communities surrounding our operations is inextricably linked with our own. Focusing on the health and welfare of local communities helps lower internal health and welfare costs, leading to increased productivity.
- **Community engagement and upliftment**
  Sappi's profile in the communities where it operates is most often that of a major economic role-player. As such, communities look to Sappi for support and engagement on fundamental development issues beyond short term projects, donations or sponsorships.

Given the wide spectrum of requirements, Sappi engages with communities on a case-by-case basis and encourages projects which facilitate partnerships and collaboration between communities, government and private sector.

We commit to

- Measuring and monitoring the impact of the projects we support on a regular basis to determine whether pre-established outcomes are being achieved.
- Reporting on CSR investment, as well as impacts and outcomes.
- Ensuring that our overall CSR programme supports the principles of the UN Global Compact.

Biodiversity

EN 14

Strategies, current actions, and future plans for managing impacts on biodiversity

At Sappi we recognise that biodiversity is key to the healthy functioning of our plantations (in Southern Africa) and the managed natural forests (in Europe and North America) from which we source wood fibre. Neither our plantations nor third-party managed forests would be productive without biotic processes taking place.

Our plantations and managed forests are actively managed to enhance these beneficial processes and restrict harmful influences like pests and disease.

Management takes place in terms of internationally accepted, independently verified forest certification systems FSC™, PEFC™ and SFI®, all of which make provision for biodiversity management. For example, principle 6 of the FSC™'s 'Principles and Criteria', states: "Forest management shall conserve biological diversity and its associated values, water resources, soils, and unique and fragile ecosystems and landscapes, and, by so doing, maintain the ecological functions and the integrity of the forest [and plantations]".

PEFC™ certification is dependent on forest biodiversity being "maintained or enhanced", while the SFI® guidelines stipulate the protection of biodiversity.

Europe

Approximately 87% of forests in the European Economic Area (EEA) countries are classified as semi-natural. In other words these forests are harvested but managed to retain their natural characteristics, including biodiversity, to a certain degree. Practices to promote biodiversity in Europe's managed forests include:

- Green tree retention during logging which leaves single living trees or preferably clumps of trees that offer continuity of habitat for species throughout the regeneration phase and help re-colonise the stand faster. It also promotes rarer broadleaved species, protects and creates habitats for species dependent upon older large diameter trees and deadwood eg slowly colonising lichens, fungi, wood-boring insects and hole-nesting birds.
- Avoiding soil compaction which protects the habitat of soil inhabiting bacteria, insects, worms, fungi, and animals. It also ensures that the growth and penetration of the roots of remaining trees and plants is unrestricted while minimising the risk of run-off and erosion.
- Logging site planning which identifies the key elements for biodiversity that must be considered during harvesting operations. The most common features identified for biodiversity are often water, sensitive soils, valuable biotopes, deadwood, natural forest remnants (eg oak, ash and elm in pine plantations), and rare, threatened or endangered species.

Definition

Convention on Biodiversity

The Convention on Biodiversity defines biodiversity as follows: "Biological diversity… is the term given to the variety of life on Earth and the natural patterns it forms…

Biodiversity also includes genetic differences within each species — for example, between varieties of crops and breeds of livestock.

Chromosomes, genes, and DNA (the building blocks of life) determine the uniqueness of each individual and each species."

Biodiversity continued

Europe continued

In each case, precautionary measures are taken to protect them and protection buffer zones are left. Seasonal timing can also be crucial especially with sensitive soils and species eg nesting birds.

North America

We do not (contrary to some misperceptions) harvest rare and slow-growing species like Giant Sequoia or Coastal Redwood.

Instead, we use trees that are superabundant in the area in which we harvest. By focusing on thinning the population of pioneer species like aspen and birch, which grow rapidly but don't live long, we can promote biodiversity by giving other species a chance to take root. For instance, in Minnesota where our Cloquet Mill is located, aspen is the most common tree in the state and is therefore the most harvested tree. In Maine, home to our Somerset Mill, spruce and fir and northern hardwoods like maple and birch dominate the landscape and are therefore harvested more than other species.

Using a variety of sources not only helps us to produce paper with the properties customers need, it also ensures that no particular species is over-harvested.

Southern Africa

In Southern Africa, our plantations are biological systems and are based on biodiversity in that they comprise a variety of tree species which are genetically diverse and rely on biotic processes to be sustained. In our plantations, it is seldom that more than 65% of the land is planted, with approximately 30% of the land being managed for the conservation of the natural habitats (including indigenous forests) and the biodiversity they contain.

87% semi natural
Forest classification:
EEA countries

No rare, slow growers
We do not harvest rare and slow-growing species like Giant Sequoia or Coastal Redwood in North America

30% conservation
Own land in South Africa managed for the conservation of the natural habitats and biodiversity.

Definition
IUCN

The International Union for Conservation of Nature (IUCN) red list is the world's most comprehensive inventory of the global conservation status of biological species.

Definition
IUCN Red list in Europe

According to the Confederation of European Paper Industries (CEPI), 659 red list species live in European forests; 62 belong to threatened categories (eight critically endangered, 17 endangered and 37 vulnerable). Amongst the threatened species are nine mammal species (Iberian lynx, Bavarian vole, Wisent, Broom hare, Corsican hare and four bat species), five bird species, 12 amphibians (salamanders and frogs), nine reptiles (lizards), eight gastropods (snails), 12 insects (butterflies and dragonflies) and seven plants.

Biodiversity continued

Mainstreaming biodiversity

Through Forestry South Africa (FSA), Sappi and other plantation forest owners in South Africa have partnered with the South African National Biodiversity Institute to mainstream biodiversity into the forestry sector.

In association with this programme, a number of products have been developed and implemented. These include:

- A stewardship programme facilitates the proclamation of nature reserves and protected areas on forestry land.
- A conservation planning toolkit helps to prioritise the conservation significance of unplanted forestry land.
- A biodiversity screening tool is used to protect important ecological areas in the Eastern Cape where small grower plantation forestry is being expanded.
- Guidelines have been developed for managing natural habitats.

This programme has also played an important role during the negotiation and developing of a proposed national Forest Stewardship Council ™ (FSC™) standard for South Africa. The South African forestry industry is in the process of adapting the internationally recognised FSC™ standards for responsible forest management.

The FSC™ standards contain a number of criteria that pertain to safeguarding and managing biodiversity. These include:

- The prohibition of transforming high conservation value forests and in South Africa other ecosystems like grasslands.
- Ensuring best management practices are adopted by consulting widely with appropriate expertise.
- Insisting that these conservation sites are monitored appropriately.
- Monitoring and protecting rare, threatened and endangered species.

Certification to the FSC™ standards will guarantee that the management of a plantation estate is carried out responsibly according to sound international practice and that the biodiversity on that estate will be managed appropriately to generally accepted high standards.

All of the plantations we own and lease in South Africa are managed to the FSC™ standard.

Assessing ecosystems services

Biodiversity underpins the supply of ecosystem services on which the world's population depends. As the Millennium Ecosystem Assessment of 2005 points out, most people are unaware of the extent of their dependence on these services, probably because they are taken for granted, and their contribution to the formal economy is undervalued and not priced or paid for.

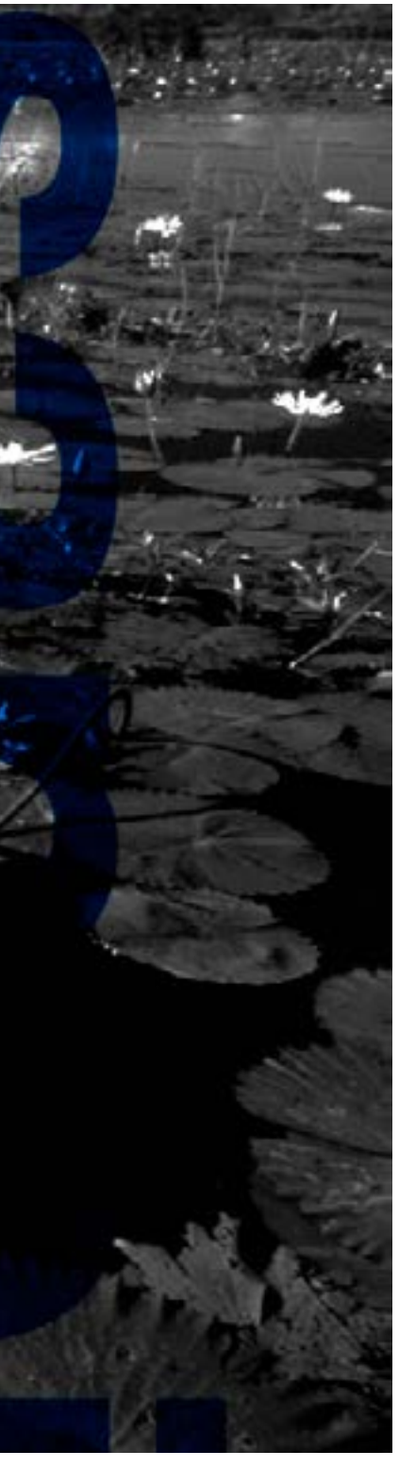
In the year under review, Sappi Forests undertook an analysis of the supply of ecosystems services from their landholdings and the importance of these to stakeholders.

The process involved determining and scoring both habitat functionality and the ecosystem services supplied in relation to the demand by stakeholders including Sappi employees, contractors, shareholders and local and downstream users, as well as provincial and national users.

Going forward, understanding which ecosystem services Sappi plantations supply in abundance and which are limited and which of these are extensively or little used by various user groups should enhance:

- Management of specific ecosystems and plantations
- Land use decisions that may affect the supply of ecosystems
- The way in which Sappi interacts with the various user groups
- The way in which Sappi promotes plantation forestry as a land use

Biodiversity continued



Ecosystem services have been identified and evaluated for all Sappi Forests' (South Africa) land holdings

Ecosystem services (a-f)

Birding
Access to spaces which attract a variety of bird species for birding

Carbon sequestration
The capture and storage of carbon in the trees, plants and soils

Carbon storage
The carbon already stored in the trees, plants and soils

Cash income to households
Income that surrounding households derive directly through employment on the estates

Cultural heritage
Access to environmental features which play a part of the local culture of communities

Energy (wood fuel/black liquor)
Black liquor, which is used as an energy source in our mills is derived originally from trees during the pulping process.

Wood used by the surrounding communities for heating and cooking

Fibre
Access to building materials, such as thatch or indigenous timber, which local communities use to construct crafts, homes etc

Fire damage control
The reduction in the likelihood, intensity and/or extent of an unplanned fire, through ecological processes

Flood attenuation
The reduction of peak flows through a reduction in water velocity and volume

Ecosystem services (f-n)

Fodder
Access to grass and browsing for stock animals

Food
Access to foods, such as mushrooms (including commercial harvesting) and honey, which the local community harvests to sustain their livelihoods.

Hiking/picnicking
Access to attractive spaces for hiking and picnicking

Hunting/angling
Access to water bodies for sport fishing or spaces for hunting animals

Industrial wood
The primary product of the estates

Medicinals/biochemicals/lignosulphonates
Access to plant chemicals for commercial purposes and/or treating human and livestock health problems

Recreational events
Access to spaces for hosting sporting events and active recreational activities, such as mountain biking and trail running

Natural heritage
Maintaining a society's natural assets or heritage to sustain traditions, folklore and current or future direct or indirect appreciation. This includes biodiversity conservation as a human pursuit.

Ecosystem services (p-z)

Pest control
The reduction of pest plants and animal populations and distribution through ecological processes

Plant seed dispersal
Access to pollinators which pollinate trees and plants, thereby improving the resilience and yield of trees and plants

Pollination
Provision of propagules which seed downstream areas

Refuge or nursery for wild plants and animals
A space for animals (particularly birds and fish) to breed and repopulate other areas (upstream, downstream or regionally)

Sense of place
Contribution to the uniqueness of the area, including the views of attractive natural areas

Soil formation and fertility
Formation of soils and nutrient cycling

Soil stability
The retention of soil on the land and the reduction of sediment loads of streams and rivers draining the estates through a reduction in soil erosion

Water quality management
The dilution and assimilation of waste, thereby improving water quality

Water storage
The promotion of surface water infiltration with soil water storage and the associated delayed release of the water. This also includes the storage of water in dams

Water supply
The promotion of stream flow through increased yield

Energy

EN 18

Initiatives to reduce greenhouse gas emissions and reductions achieved

Pulp and paper production is highly energy intensive; the cost and availability of energy is therefore a key consideration for Sappi.

Energy costs as a percentage of operating costs currently account for approximately 11% of cost of sales.

We mitigate this risk by focusing on reducing specific purchased energy, improving the energy efficiency of our mills, increasing our use of renewable energy and selling surplus energy.

The cost and availability of **energy** is a key consideration for Sappi

Europe
Energy costs were stable; total cost of sales declined.

North America
Energy costs remained stable

South Africa
The cost of coal increased by 13.3%/GJ and the price of electricity generated by Eskom increased by 19.6%/kWh.

Energy continued

Specific purchased energy

The term 'specific purchased energy' is the energy that is purchased by the mills and excludes 'own energy' from biomass such as black liquor, bark and sludges.

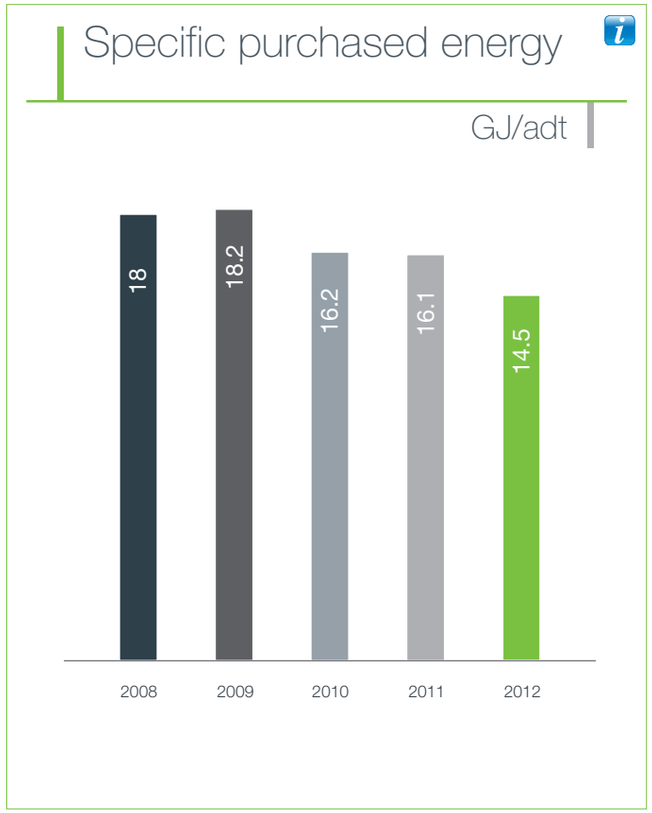
There has been a steady decline in our specific purchased energy since 2008 with the largest decrease occurring in 2012.

Sales of power

Many of our mills have excess power which we sell to third-party customers. The South African government-owned power utility, Eskom, established a scheme allowing independent power producers to supply power to the grid at pricing levels that are higher than they would be charged for power. Our Ngodwana Mill sells power to this scheme.

FY12 sales by region

Europe	554,100MWh (1,994,700GJ)
North America	130,230MWh (468,800GJ)
South Africa	32,200MWh (115,941GJ)



Europe

There were energy efficiency improvements in all mills. Because of high gas prices in the region and lower power prices during warm periods of the year, Alfeld, Gratkorn and Kirkniemi Mills bought in more electrical power from the grid. This in turn enhanced average boiler efficiency.

North America

Westbrook Mill purchased less coal due to reduced power sales; Somerset Mill used more renewable fuel due to increased black liquor solids burning and drier purchased biomass (offsetting the use of fossil fuels) and Cloquet Mill used more renewable fuel than prior years (offsetting the use of fossil fuels).

Case study

Eliminating 32,000t of CO_2

One of our most notable recent renewable energy projects is our FY11, US$49m programme, at our Somerset Mill in Maine which primarily involved an upgrade to the evaporator and recovery boiler. This investment has resulted in reduced consumption of pulping chemicals and generation of an increase in renewable energy equivalent to 100,000 barrels of fuel oil per year. The energy generated is being used throughout our manufacturing plant in the form of steam and electricity. The upgrade has meant that 32,000tons of fossil-based CO_2 emissions are avoided annually.

South Africa

Purchased energy decreased significantly in 2012 as manufacturing efficiencies at Saiccor Mill improved and the mill increased the percentage of own fuel (black liquor) generated. The partial curtailment of pulping operations at Tugela Mill and complete mothballing of pulping operations at Enstra Mill also contributed to the decrease in purchased energy. Increased production at Ngodwana Mill was accompanied by increased boiler stability and steam production. The mill also generated more electrical energy in 2012, thereby reducing the amount imported from Eskom.

Renewable energy

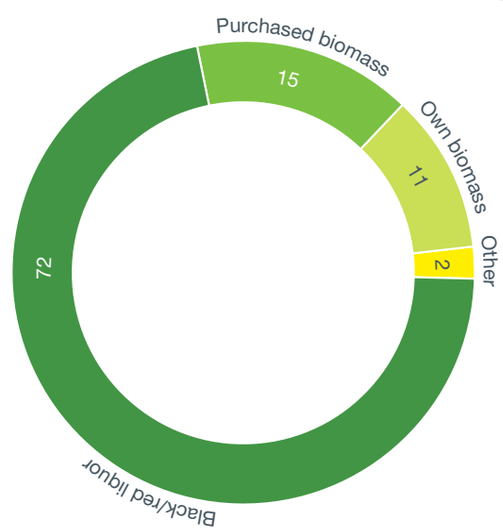
We have a major advantage over other industrial companies in that globally, 50.3% of our energy is derived from renewable sources, namely: black liquor (a by-product of the pulping process), sludges (in North America and Europe) and biomass.

Globally, our extensive use of renewable energy results in a high degree of energy self-sufficiency and lower levels of greenhouse gas emissions from fossil fuels.

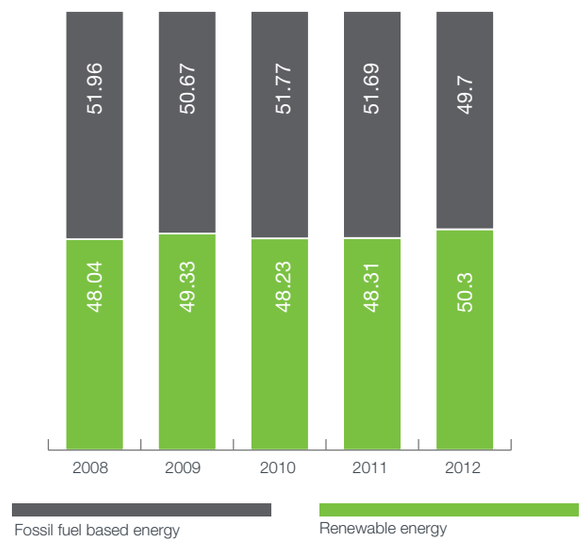
In Sappi Fine Paper North America, use of renewable energy currently stands at over 80% which is a significant competitive benefit not just in terms of costs, but also in terms of customers choosing papers with a lower environmental footprint.

50.3%
use of renewable energy globally

Renewable energy sources



Renewable energy
as a percentage of total energy use



Case study
Using biogas in Europe

The waste water at some of our mills goes through an anaerobic digestion process. The methane generated during this process is essentially biogas and is used to generate steam and power. The sludge generated in the waste water treatment process is dried, recycled, burnt or used as fertiliser. Alfeld Ehingen, Gratkorn, Lanaken and Stockstadt Mills generate their own biogas, while Gratkorn Mill buys it from an external supplier. This use of biogas at our mills in Europe reduces our need for fossil fuels.

Renewable energy
Compared against 2011, collectively our operations increased the use of renewable energy during Fy12

Europe The closure of Biberist Mill in 2011 contributed to the improvement in Europe. Less power from the gas turbines at Kirkniemi and Gratkorn Mills was used as more power was bought from the grid and as a result the proportion of biofuel increased. (In the countries where these mills are situated, bought-in power contains biofuels.)

North America The most positive contribution was made by Somerset Mill, attributable to the recent rebuild of the recovery boiler.

South Africa Saiccor Mill decreased fossil fuel usage by increasing the solids content of black liquor. This was due to improving evaporator performance which led to an increase in boiler solids. Ngodwana Mill increased bark and black liquor usage.

Cogeneration

Most conventional power (electricity) generation is based on burning a fuel to produce steam; steam pressure in turn, drives the turbines and generates power.

Cogeneration, or combined heat and power (CHP) makes use of more than one form of energy provided from a combustion source — most commonly excess heat, usually in the form of relatively low-temperature steam exhausted from the power generation turbines. Such steam is suitable for a wide range of heating applications and effectively displaces the combustion of carbon-based fuels.

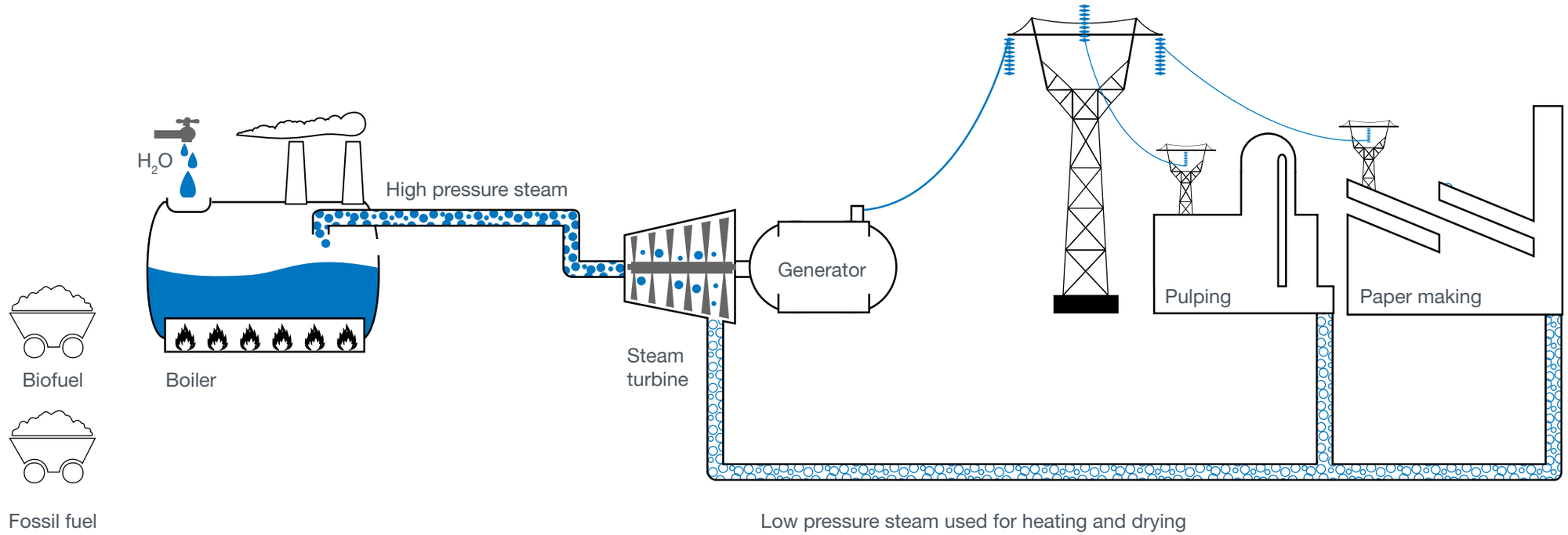
The efficiency ratio of condensing power plants is well below 40%. In other words only 35% to 45% of the energy content of the primary fuel is converted into usable energy. However CHP plants convert a much higher — 60% – 90% — portion of the primary fuel into usable energy.

Gas and steam cogeneration
Gas and steam cogeneration power plants are in operation at the following mills: Gratkorn, Kirkniemi, Lanaken, Maastricht and Nijmegen.

Steam-based cogeneration
Steam-based cogeneration power plants are in operation at the following mills: Alfeld, Cloquet, Ehingen, Ngodwana, Saiccor, Somerset, Stockstadt, Tugela and Westbrook.

Generating power and steam

Cogeneration | Without cogeneration



Emissions

EN 16

Total direct and indirect greenhouse gas emissions by weight

UNGC 7

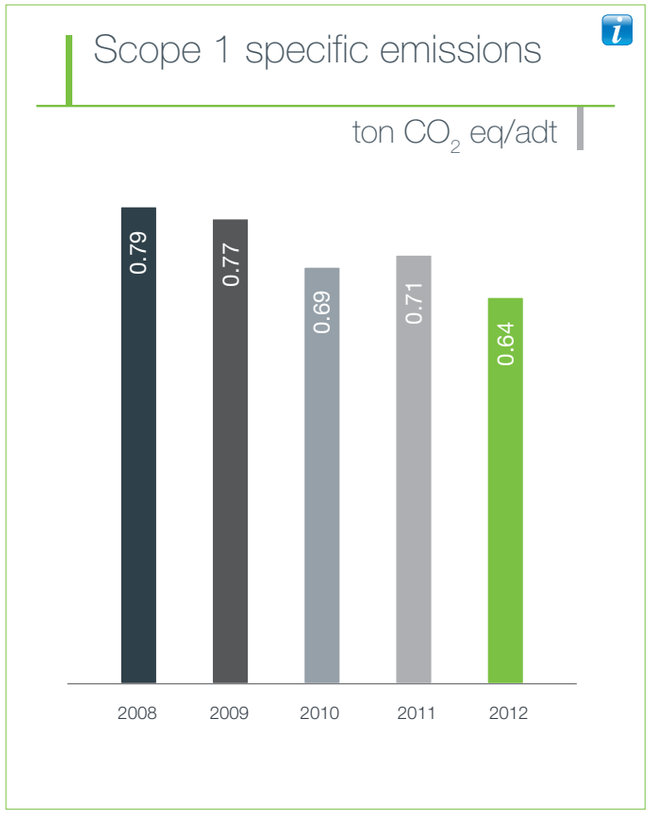
Support a precautionary approach to environmental challenges

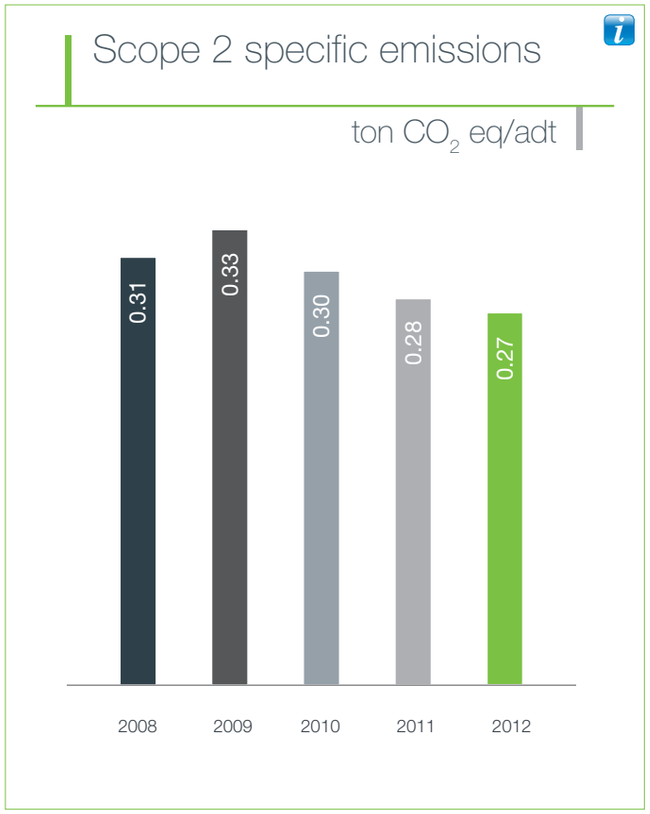
UNGC 9

Encourage the development and diffusion of environmentally friendly technologies

The Greenhouse Gas (GHG) Protocol, one of the most widely used international GHG accounting tools, defines Scope 1 (direct) and Scope 2 (indirect) emissions as follows:

- Scope 1 GHG emissions are emissions from sources that are owned or controlled by the reporting entity.
- Scope 2 GHG emissions are emissions that are a consequence of the activities of the reporting entity, but occur at sources owned or controlled by another entity.





Scope 1 emissions

The decrease in Scope 1 emissions can be attributed to the following:

Europe Gratkorn and Kirkniemi Mills reduced natural gas demand and increased their use of biofuel.

North America Cloquet and Somerset Mill slightly improved Scope 1 emissions, while Westbrook Mill improved significantly due to less coal burned.

South Africa Improved manufacturing efficiencies and increased use of own fuel (black liquor) at Saiccor Mill meant that fossil-fuel use was reduced. The partial curtailment of pulping operations at Tugela Mill and complete mothballing of pulping operations at Enstra Mill also contributed to the decrease in purchased energy and hence, of Scope 1 emissions. Ngodwana Mill generated more power from black liquor and bark, thus imported less Eskom power which is fossil based.

Scope 2 emissions

The decreasing trend apparent from 2009 has been maintained.

Europe Emissions increased slightly due to power suppliers changing mix (increased non-combustible power).

North America Emissions were stable.

South Africa The emissions decrease is attributable to: the mothballing of pulping operations at Enstra Mill which precipitated a reduction in purchased power; improved manufacturing efficiencies and increased use of own fuel (black liquor) at Saiccor Mill which also led a reduction in fossil fuel purchases; Ngodwana Mill generating more electrical energy in 2012 and therefore reducing the power bought in from Eskom which is largely fossil based.

Carbon taxes

Europe — carbon taxes

The carbon tax proposal formulated by the European Commission in 2010, has yet to be agreed upon by the 27 member states. The current proposal would charge firms between €4 and €30 per ton of CO_2 released.

Several European countries have enacted a carbon tax including: Denmark, Finland, Ireland, the Netherlands, Norway, Slovenia, Sweden, Switzerland and the United Kingdom.

Launched in 2005, the European Union Emissions Trading Scheme (EU ETS) works on the 'cap and trade' principle. The scheme now covers the 27 countries of the European Union, and three non-European Union members.

From 2013, new rules come into effect in terms of which the mill's emissions have to be covered by emission rights (allowances), which are partly received for free and partly have to be bought at government auctions.

According to the legislative framework that sets the new allocation rules, CO_2 allowances for the pulp and paper industry are based on benchmarks, which are set for the top performing 10% of installations in every pulp and paper grade in terms of CO_2 emissions.

Sappi's position

In 2012, our mills were allocated CO_2 allowances of 2,131,667 tons (2011: 2,140,478). However, the new allowances are significantly lower and, beginning in 2013, Sappi Fine Paper Europe expects to incur additional costs. The current estimate to purchase additional rights is €4 million for 2013. The European Paper Industry is very concerned about carbon leakage to production outside the EU. CEPI, the confederation of European Paper Industry is lobbying on behalf of industry to reduce the negative impact on the industry.

North America — carbon tax

Although a few states have introduced a carbon tax, there is no federal carbon tax levelled in the United States of America (USA).

However, on the international stage, the President has committed the USA to GHG emissions reductions of 17% below 2005 levels by 2020. As part of the Better Practices, Better Planet 2020 sustainability goals announced in March 2011, AF&PA has committed to reduce the intensity of the industry's GHG emissions by at least 15% and to improve the industry's energy efficiency in purchased energy-use by at least 10% by 2020.

Sappi's position

With a 53% reduction in greenhouse gas (GHG) emissions over a 2007 baseline, our performance in this region has already exceeded the AF&PA goals. The fact that over 80% of our energy in this region is produced from renewable energy (black liquor, sludges and purchased biomass) should help to mitigate the effect of any potential carbon taxes.

Carbon taxes continued

South Africa — carbon tax

Although South Africa only accounts for 1.1% of global greenhouse gas (GHG) emissions, the country is Africa's largest carbon dioxide (CO_2) emitter and is one of the world's 20 largest emitters of GHGs.

South Africa pledged to reduce emissions 34% by 2020 and 43% by 2025 below a "business as usual" growth trajectory at COP15 in Copenhagen in December 2010.

In his February 2012 budget speech, the Minister of Finance confirmed the Government's commitment to the implementation of a carbon tax in South Africa. This is aligned with the pledges made at COP15 and the Climate Change Response White Paper published in October 2011.

The tax will come into effect during 2013-14 and increase by 10% per annum through to 2020.

To lessen the impact on industry, a basic tax-free threshold of 60% (with additional concessions for process emissions and trade-exposed sectors) and maximum offset percentages of 5% or 10% until 2019-20 are proposed. Additional relief will be considered for firms that reduce their carbon intensity during this first phase. The reduction in carbon intensity will be measured with reference to a base year or industry benchmark.

Tax-free thresholds will be reduced during the second phase (2020 – 2025) and may be replaced with absolute emission thresholds thereafter.

Sappi's position:

Our view is that paper imported from countries without carbon taxes would result in unfair competition. While we await clarity on the final nature of carbon tax, we are mitigating this risk by engaging with a number of bodies including Business Unity of South Africa (BUSA), Treasury, the Department of Energy (DOE) and the Department of Environmental Affairs.

In addition, the Papermakers' Association of South Africa (PAMSA) has been seeking greater recognition by Treasury of the role that commercial forests play in acting as a carbon sink.

Annually, Sappi's plantations absorb 13m tons of CO_2 and give off 8m tons of oxygen. This more than offsets the CO_2 emissions from our manufacturing and forestry operations: Taking into account our CO_2 emissions from our own biofuels (black liquor) and coal, oil and gas (direct or Scope 1 emissions); purchased power and steam (indirect or Scope 2 emissions); transport, goods and services (Scope 3), as well as plantation decay, our absorptions exceed our emissions by 0.5m tons of CO_2.

>13m tpa CO_2 absorbed by our plantations

Water

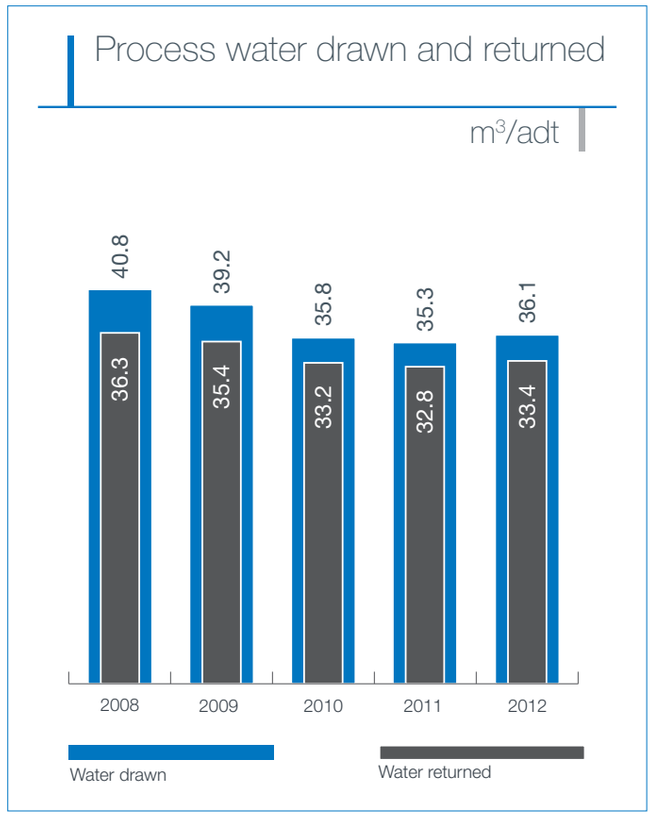
EN 10

Percentage and total volume of water recycled and reused

Water issues have been identified as one of the most serious sustainability challenges facing the planet, partly due to the impacts of climate change.

Increasing population, urbanisation, per capita demand and pollution damage to supplies will put even greater pressure on this limited resource going forward.

Globally, we return approximately 92% of water drawn to the environment



The overall downward trend apparent from 2008 was maintained, albeit with a slight increase noticeable for 2012.
Europe and **North America** Stable performance.
South Africa Saiccor Mill experienced high turbidity in incoming raw water requiring more frequent backwashing.

Forestry operations

South Africa

A misconception exists that timber plantations throughout South Africa use vast amounts of water.

Collectively, commercial forestry uses just under 3% of South Africa's available water by intercepting rain water and thus reducing run-off into rivers and streams.

Agriculture, on the other hand uses as much as 62% of the country's available water, mostly through irrigation.

Sappi's position

The trees we grow require no irrigation and as the only designated streamflow reduction activity in the country, commercial forestry pays for the water it uses in the form of planting licences.

Some stakeholders are concerned about our planned increased production of dissolving wood pulp made from eucalyptus fibre because eucalypts (hardwoods) use more water than pines (softwoods).

However, converting a plantation of pine trees to eucalypts does not automatically mean that stream flow will reduce because the rotation length (the point at which trees are harvested) is different and older trees use more water. In Sappi's plantations, eucalypts are generally harvested at 10 years while pines are generally harvested at 18 years. In other words, the average age of a pine plantation is almost twice that of the average eucalypt plantation.

Manufacturing operations

Pulp and paper operations are highly dependent on the use and responsible management of water resources. Water is used in all major process stages, including raw materials preparation (wood chip washing), pulp washing and screening, and paper machines (pulp slurry dilution and fabric showers). Water is also used, for process cooling, materials transport, equipment cleaning, general facilities operations, and to generate steam for use in processes and on-site power generation.

While we use a significant amount of water in our production processes, it is recycled many times before being treated and returned to the environment. In addition, unlike most other industries, globally we return 92% of the water we extract back into the watershed, mostly into the same rivers and lakes from which it was extracted or into agricultural irrigation systems. All effluent is treated before being returned to the environment, and complies with the highest environmental standards. Globally, over five years, the difference between specific process water drawn and returned has reduced by 10.5%.

Prosperity

Our sustainability focus is on creating value for current and future stakeholders in all aspects of our business

Repositioning ourselves for improved performance

GRI 2.9

Significant changes during the reporting period regarding size, structure, or ownership

In 2011, we announced that we would refocus our global business to ensure Sappi remained a globally competitive, sustainable business. Building on our decisive actions, in 2012 we revised our operating strategy to reposition ourselves for improved performance.

Revised strategy

The three pillars of our revised strategy are:

- Growth in dissolving wood pulp solutions
- Focused paper business
- Healthy balance sheet — debt reduction and future dividends.

Expected outcomes

The strategy is expected to result in:

- Increased profitability, cash generation and sustained growth over the short, medium and long term
- A competitive advantage in all markets in which we operate
- A strong financial position
- Increased shareholder returns.

Healthy balance sheet

In a move aligned with our strategy of disposing of non-core assets and reducing debt, in 2012 we concluded an agreement to sell our entire 34% shareholding in the Jiangxi Chenming Paper Company Limited (JXCM), situated in Nanchang City, Jiangxi Province, China, for US$41.6m to the Shandong Chenming Paper Holding Company.

During the year under review, we successfully refinanced US$700m of debt resulting in the extension of our maturities and reduction in our finance costs, thereby reducing our annual interest charge by US$45m and our cash interest charge by US$30m per annum.

↓ US$45m
annual interest charge

↓ US$30m
cash interest charge

Growth in dissolving wood pulp solutions

In 2012, our projects to expand our dissolving wood pulp production capability at Ngodwana and Cloquet Mills progressed well and are on track for completion during 2013.

The Ngodwana project will increase our dissolving wood pulp capacity to over one million tonnes per annum in South Africa, while the Cloquet expansion will allow for the production of 330,000tpa of dissolving wood pulp in North America.

Favourable long term contracts for the increased volumes have been concluded with various customers. Our strategic reasoning behind these expansions are discussed as a key sustainability driver.

1.3m tons
dissolving wood pulp in 2013

Repositioning ourselves for improved performance

PM2
Alfeld Mill
The world's fastest and most productive speciality machine in the world

Classics
release paper
Positioned for growth and new opportunities

Focused paper business

The second pillar of our group strategy, a 'focused paper business', aims to: continue to improve customer service, increase efficiencies, reduce costs and manage capacity in the most cost-effective manner.

Europe

In line with this strategy, in September 2012 we announced the conversion of Alfeld Mill in Germany to focus exclusively on producing one-sided coated paper for packaging, packaging labels, liners and other technical applications. The conversion is scheduled to take place in September 2013.

The mill's current coated graphic paper production will be moved to other Sappi Mills in Europe in close consultation with customers.

Paper machine number two (PM2), currently producing 150,000tpa coated fine paper, will be converted to produce a 135,000tpa speciality paper range, focusing on one-sided coated grades from 40 -180g/m^2. The mill's four other paper machines already produce a combined 165,000tpa of speciality paper and board.

Once the conversion is complete, the mill will benefit from increased margins, improved quality, increased efficiencies on raw material consumption and an optimized fixed cost profile. The conversion will position Alfeld Mill as the world's largest and lowest-cost producer of these one-sided coated speciality grades. The converted PM2 will be the fastest and most productive speciality machine in the world.

North America

In addition to the Cloquet Mill's conversion to dissolving wood pulp described above, we are also continuing to invest in each of our three business units.

We are rebuilding an off-machine coater at our Westbrook Mill; improved quality and operational flexibility will improve productivity. This investment positions us for growth in our 'Classics' release paper business and opens opportunities for new products.

At both our Somerset and Cloquet facilities, we continue to make investments in the core coated fine paper business:

- Cloquet Mill is modifying refining equipment and the stock preparation area to be better suited for using purchased dry fibre.
- Somerset Mill is replacing the forming section on PM3.

Both of these investments are expected to deliver increased production rates and result in better returns through material savings.

South Africa

We continued the extensive change process we initiated in FY11. Actions taken to return the region to profitability included:

- Switching certain products between paper machines for increased efficiencies and viability
- Modifying our liner-board machine at Ngodwana Mill to produce a wider range of virgin liner-board products and investing US$330m in a specialised cellulose plant at the same mill
- Increasing our re-pulping capacity and capability at Enstra Mill to enable the production of kraft packaging papers and support our recycled container-board output in periods of peak demand
- Investing in a new state-of-the-art recycled fibre plant at Enstra Mill to offer a wider range of products incorporating recovered fibre in order to meet increased market demand; and
- Reducing pulp and paper capacity at Tugela Mill.

Recycle Enstra Mill
New state-of-the art recycled fibre plant to meet increased market demand

Continuously improving and innovating

We strongly believe that innovation is pivotal to profitable sustainable development — whether it's our products or our processes. Continuous investments in our assets and research and development (R&D) help to ensure Sappi remains a globally competitive, sustainable business.

Our research scientists and engineers are focused on developing product enhancements, new products and process improvements.

Our discerning customers are always looking for new and improved products and services that benefit their businesses, while reducing their own environmental impact. By partnering with responsible customers and suppliers, we offer products that are best-in-class in respect of quality, environmental performance and total value. This helps us in our goal of being a customer-centric business focused on ongoing product, process and service innovation.

The Exciter programme

Our Exciter programme is focused on developing breakthrough technological competency in our core markets which will allow us to develop products and processes to drive market differentiation.

To date, the Exciter programme's payback to the business is double the amount we have cumulatively invested since 2005, with the value to the company having increased over time — a trend we expect to continue.

Recently, projects in the Exciter programme have been categorised in terms of Exciter I (core business) and Exciter II (new adjacent business) projects. An example of an Exciter 1 project undertaken in the year under review was the analysis of timber feedstocks at both Cloquet and Ngodwana Mills and recommendations on mill processes to maximise yields and minimise quality issues.

Case study

Sugars and lignin extraction

The Sappi Technology Centre, based in Pretoria, has been undertaking extensive bench and pilot plant trials using membrane technology to remove hemicellulosic sugars — mainly xylose — contained in by-product streams at Saiccor Mill. This creates the opportunity for Sappi to produce higher value chemicals such as xylitol (a sugar substitute), ethanol and furfural. Both ethanol and furfural are considered foundation chemicals as they can form the basis for the manufacture of a host of other chemicals.

The membrane trials have also proven that the lignosulphonate stream can be enriched and precipitated for the production of lignin-based higher value products, rather than be used as a fuel or disposed of in a waste stream.

A two-step process to recover high purity lignin from both Saiccor Mill's waste streams was developed at the Sappi Technology Centre in Pretoria. This new technology runs parallel with investigations into the ultrafiltration of the spent liquor streams and could result in two high value products from waste, namely lignin and sugars. Together with our biorefinery teams, these recovered compounds are being tested for possible use as feedstock into high value end products.

Continuously improving and innovating continued

sappi | technical innovation awards

Sappi Technical Innovation Awards

In 2000, we launched the Sappi Technical Innovation Awards (TIA), a platform from which technical advances and those who create them, are acknowledged and rewarded for their contribution to Sappi's prosperity and long-term sustainability.

The focus of the awards is to create new technologies which will result in noticeable improvements for the customer.

The global winners of the 2012 Technical Innovation Awards were a team from Sappi Fine Paper Europe who developed and brought to market a new-generation white-top liner, Fusion, which significantly outperforms existing products.

Case study

Regional TIA awards

North America

A team from Cloquet Mill innovatively re-engineered a coating system, yielding a significant reduction in costly binders, with no sacrifice in product quality. This technology can be expanded to our other manufacturing sites.

South Africa

The ethers sector is the third-largest user of dissolving wood pulp (viscose staple fibre (VSF) and acetate are the largest users) with an installed capacity of nearly 750,000tpa.

Sappi has supplied small volumes into the bottom-end of the market, in the past. However, the high-value cellulose ethers sector, which offers higher returns, could not be penetrated with Sappi's short fibre pulp.

An innovative individual from Saiccor Mill worked on improving Sappi's opportunities in the market by manipulating the screen size and optimising operational control of the grinding equipment, to achieve the required properties. This resulted in the qualification and commercialisation of the first methyl cellulose product produced from short fibre hardwood pulps.

Case study

The eucalypt genome

Sappi is a long-standing member of the Eucalyptus Genome Network (EUCAGEN). The driver of the project, Prof Alexander Myburg, is also the leader of Sappi's Forest Molecular Genetics Programme (FMG) at the University of Pretoria.

The results of the sequencing of the *E grandis* genome, which is widely planted on our plantations, were released in 2011.

Sequencing the *E grandis* genome not only serves as an excellent reference for gene and marker discovery, but high-throughput marker platforms will enable us to link the genome sequence to the physical traits of plantation trees. This will help us to understand how genetic variation, gene expression, wood properties and metabolite levels in trees are interlinked, thereby enabling us to decipher the genetic control of wood formation in trees.

This has placed us at the cutting edge of eucalypt tree improvement, maximising our potential to develop genomic tools and accelerate our tree improvement programme.

New products and innovations in 2012

Jaz™ silk
it's sappi

New Generation Topliner

ALGRO Nature

4 Patents

Casting release papers

In developing new products, we ask two key questions: How and to what extent are emerging trends impacting on people's needs and hence on paper as a communication, packaging and storage medium? The next question is: How do we meet and anticipate these needs with value added, differentiated products at the best possible price in the simplest way?

Introducing Fusion

The global winners of the 2012 Technical Innovation Awards were a team from Sappi Fine Paper Europe who developed and brought to market a new-generation white-top liner, Fusion, which significantly outperforms existing products.

Fusion is a premium white liner made entirely from bleached virgin fibres. High brightness and whiteness impart exceptional print quality and excellent conversion properties. Fusion, as the name implies, is a perfect marriage between the whiteness and brightness of high-quality paper and the stability of container board. The brand name merges the requirement of brand owners, retailers, and design agencies for outstanding appearance, with the requirement of corrugators and converters for optimal convertibility.

In the 2012 Pulp and Paper International Awards, Fusion won an award in the category Advances in Innovation in Speciality Papers (Mill). Sappi Fine Paper Europe was nominated in a further three categories in the same awards:

- **Innovative Products — Graphic Papers**
  Jaz Silk, digital paper
- **Promotional Campaign**
  Houston, the digital universe of paper and printing knowledge
- **Advances in Innovation in Sustainable Packaging (Mill)**
  Alfeld Mill — Innovia Laminate Structure for Compostable Packaging — Algro Nature.

Building on the success of Jaz™ silk

In 2011, we announced the launch of Jaz™ silk, a high-quality coated paper specifically made for high speed digital inkjet web printing and the result of a partnership between Sappi Fine Paper Europe and Hewlett-Packard (HP).

Jaz™ silk digital coated paper has full high-speed inkjet functionality, yet manages to combine the reassuring look and feel of offset paper with full colour personalisation options and flexibility. Key characteristics for this paper include the fact that no bonding agent or other treatments are required, leading to increased print efficiency and time saving, and, when compared with offset paper, ink consumption is lower.

Building on this success, the partnership has resulted in the launch of other products in the range, including Jaz™ book and Jaz™ gloss.

Expanding the Mokka range

Casting release papers are used to create textured surfaces in a variety of materials and applications, ranging from synthetic leathers and fabrics to car dashboards.

The Mokka family of textures produced at Westbrook Mill has a soft texture that is much loved by our customers. We applied the underlying engraving technology that made Mokka so luxurious to the touch, to Frisco, a veined leather version of Mokka, and the newly launched Espresso, a pebbled Mokka, predicted to be a hit in the upholstery market.

This investment in engraving technology has furthered Sappi's Ultracast aesthetic advantage over our competition. The Mokka technology is also being used to add a depth and matte effect to the valleys of our newest pebble grains, Libra and Gemini. With the possibility of using Mokka on an increasing number of synthetic leather textures and expanding into traditional fabric textures, we expect the Mokka range to continue to grow.

Four new patents

In North America we recently had four patents issued for innovations that uniquely textures surfaces: from panel to plastics to metal and even textures to enhance electricity flow. These achievements and others will allow for new market development and improved customer satisfaction.

Marketing innovation

Europe

Positivity campaign

Building on our successful positivity campaign, we launched a new website, www.sappipositivity.com, focused on making sustainability an everyday reality.

EcoPrint

Sappi Fine Paper Europe participated as education sponsor in EcoPrint 2012, thought to be the world's first exhibition and event focused entirely on sustainable printing. Sappi's participation focused on promoting sustainability and maintaining paper's image as a sustainable product.

Treehouse

In September 2012, Sappi Fine Paper Europe and other partners including ANB (the Agency for Nature and Forests), the Belgian Municipality of Hechtel-Eksel, and communication agency Proximity BBDO launched the Treehouse; a platform, both physical and virtual, for like-minded individuals and companies to come together to find ways to embrace sustainability in their daily activities.

Located in Bosland, the largest forest in Flanders, the Treehouse is made from wood and metal; the meeting room in the trees is designed in the form of an open book, to provide the blank canvas and the environmental inspiration to drive, and share, sustainable thinking. Companies from different sectors meet at the Treehouse to brainstorm, generate ideas, and put them into action. Participants must adhere to some basic principles designed to maintain the concept. An ambassador programme to support the work of the Treehouse community has also been established.

Layar

The region's most recent What Next magazine incorporates Layar, a freely available augmented reality application which enhances subject matter with layers of digital information via smartphone. Scanning the Layar logo with a smartphone immediately brings the reader various forms of complementary content about the subject either in the form of an image, text or even a short movie. The technology also enables publishers to provide additional product information for readers, and suggest possible purchases.

North America

eCommerce

The region's eCommerce website allows customers to check orders, obtain stock manufacturing dates and product specifications and print invoices. In 2012, the region enhanced the responsiveness of the website with the launch of eChat, an innovation that allows customers to connect with customer service in real time. We also increased Electronic Data Interchange by 10% to 65% and rolled out four mobile apps.

Off Register™

We continued with our humorous online video series, Off Register™ based on the hilarious real-life experiences of printers, which people involved in the print process relate to, or find entertaining.

South Africa

Earth Kind

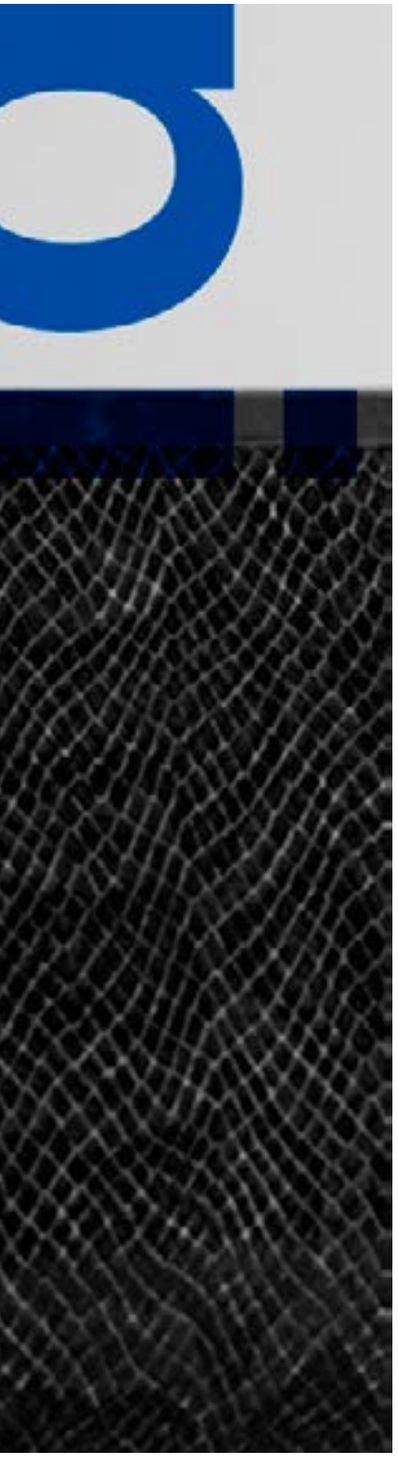
Many of the imported papers flooding into South Africa do not have the same environmental credentials as Sappi's papers. In response, we repositioned the well-known Typek brand as 'Earth Kind' To promote and reinforce the message that our local papers are made responsibly from fibre grown in sustainably managed plantations. This category-changing new idea will ultimately come to signify Sappi's commitment to sustainability and responsible corporate behaviour.

'Earth Kind' is represented by a powerful eco-friendly emblem that leaves no room for confusion. The heart shape symbolises humanity, nestled in an orb which depicts the earth, encompassing nature and the environment. The execution is deliberately naïve and uncomplicated, reminding the viewer of the very basic nature of the relationship between people and the planet.

Paper. Here today. Here tomorrow.

This brochure, published in 2012 sets out the advantages of Sappi paper and dispels some of the myths around paper.

Marketing innovation — case studies



Case study
Customer engagement one step further

In 2012, Sappi Fine Paper Europe launched Houston, a new online knowledge platform specifically developed as a support tool for professionals working in the paper and graphic industries.

Once users register (via their LinkedIn profile) they can access a live support service — free of charge — and chat directly with Sappi technical staff to ask questions and share ideas.

The site also allows users to access information on the latest printing techniques and paper types, market trends etc. Polls, market feedback and opinions are hosted on the regularly updated site, providing valuable news to users about the broader industry environment in which they work.

Houston will shortly begin hosting a series of webinars on relevant issues.

Feedback and suggestions are actively encouraged so that the platform can be continuously tailored to best meet the need of customers and value chain partners.

Case study
Westbrook Mill New casting release papers

The process by which release papers are made is much the same as any papermaking process. However, at Westbrook Mill, the paper is also textured and receives a release coating.

The mill's customers cast liquid vinyl or polyurethane onto the release paper. Once the liquid has set, the paper is peeled away and the vinyl or polyurethane retains an impression of the paper to become synthetic fabrics and synthetic leathers.

The mill's release papers are used in a variety of applications such as car dashboards, shoes and fashion accessories.

In addition to synthetic leathers and fabrics, Sappi Warren release paper is also used in a variety of laminate flooring, laminate furniture, and technical film applications.

An example of a technical film application is a trend in the auto industry known as car wrapping. Our customers are using Ultracast® release paper to create a vinyl car wrap that allows owners to protect and change the colour of their cars. The vinyl films can be customised with gloss effects and textures, properties of the release paper, or colour. A popular pattern is 'Alloy', which looks like brushed aluminium. They are non-permanent and take less than a day to install, so when customers tire of one colour or texture, the original wrap can be peeled off and replaced with a new colour or texture.

Currently, 80% of all the Ultracast® pattern, Fibra release paper produced at Westbrook Mill is used to make the vinyl car wrap. Another new market is making textured wall coverings used in hotels, casinos, and karaoke bars. This is a growing trend in Asia to add sophistication to the surfaces of hotel head boards and walls of guest rooms, conference rooms, and elevators. Traditional leather grains are selling into this market as well as geometrics.

People

By creating a safe, healthy workplace for our People in which diversity is encouraged and valued, and people are provided with ongoing development opportunities so that they can develop to their full potential, we enhance productivity and our ability to service global markets

How we engage with our people, contributes significantly to our success

Our approximately 14,000 dedicated employees around the world underpin our business success and our products play a vital role in promoting development and helping people across the world to communicate.

People play a critical role in the delivery of our overall performance and the manner in which we lead, manage and develop our people contributes significantly to our success.

We enhance productivity and our ability to service global markets by creating a workplace:

- That is safe and healthy
- In which diversity is encouraged and valued
- Where employees are provided with ongoing development opportunities so that they can develop to their full potential.

We focus on equipping our people and the communities in which we operate with the life- and career-skills, knowledge and confidence that allows them to build on their own capabilities and further their development. Our objective is to have a fulfilled and engaged workforce that delivers on our key business drivers. Establishing a connection between work and organisational strategy is important to achieve this; it ensures that employees feel their work is truly of value to the organisation and therefore to their peers and managers, and leads to heightened commitment and retention.

Our key People drivers

The key drivers to achieving our people strategy are:

Connecting people to the business

Communicating our business strategy to all employees, providing them with the opportunity to engage with management on the strategy and helping them understand what they need to do to contribute to its overall achievement.

In 2012, in view of the restructuring changes in South Africa, we focused in particular on engaging with the unions in the region.

Building strong skills across Sappi

Hiring correctly, retaining talent, accelerating development, sourcing talent strategically, providing performance feedback and creating development opportunities.

Developing a strong leadership bench

Building leadership capability at all levels within the organisation and using the leadership pipeline framework as a means of guiding development.

Transforming our workplace

In the context of our Southern African business, this involves focussing on transformation, and a group commitment to diversity, as well as changed mindsets in how we conduct business and behave in line with our values.

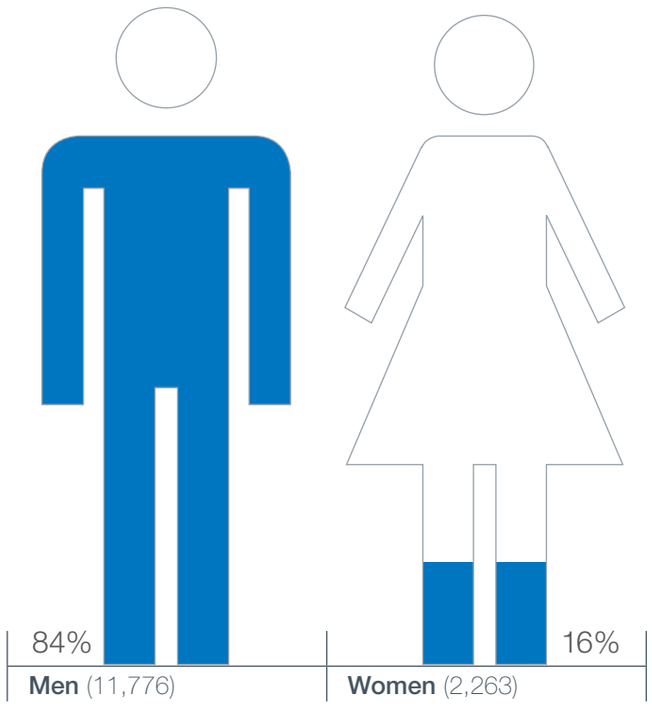
Energising our work environment

Optimising recognition and reward programmes, giving employees the freedom to act resourcefully in accordance with our values and the opportunities to reach their full potential, working collaboratively across geographies, business units and functions.

Developing a strong human resources function

Ensuring that those tasked with delivering the people strategy focus on exceeding their clients' expectations.

Our workforce Total 14,039



Profiling our people

LA 1

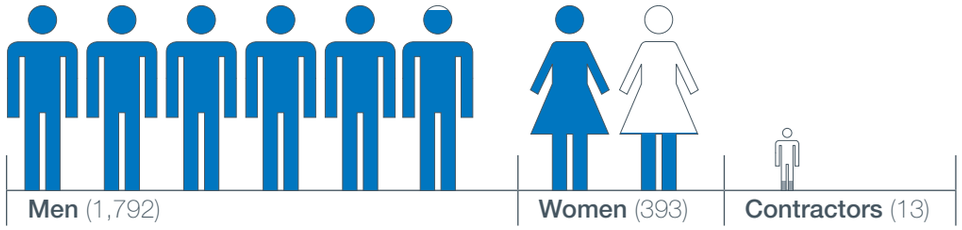
Total workforce by employment type, employment contract, and region

Sappi Limited workforce 88

Sappi Trading workforce 145

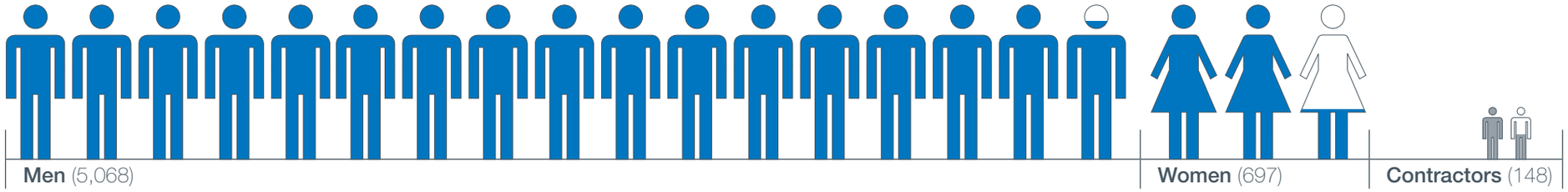
Sappi Fine Paper North America workforce

Total workforce 2,198

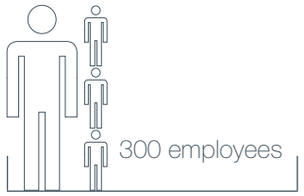


Sappi Fine Paper Europe workforce

Total workforce 5,913

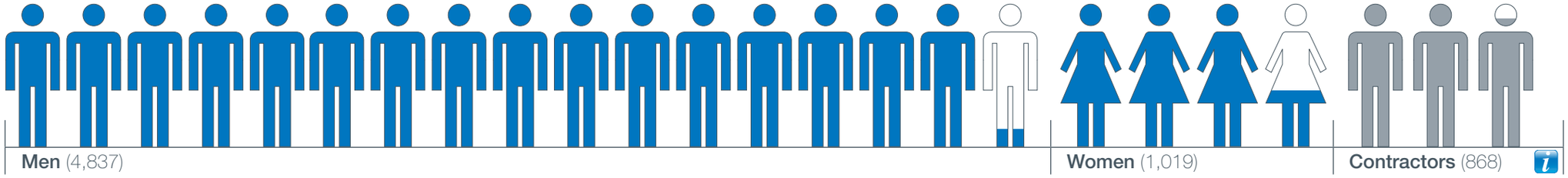


Key



Sappi Southern Africa workforce

Total workforce 6,724

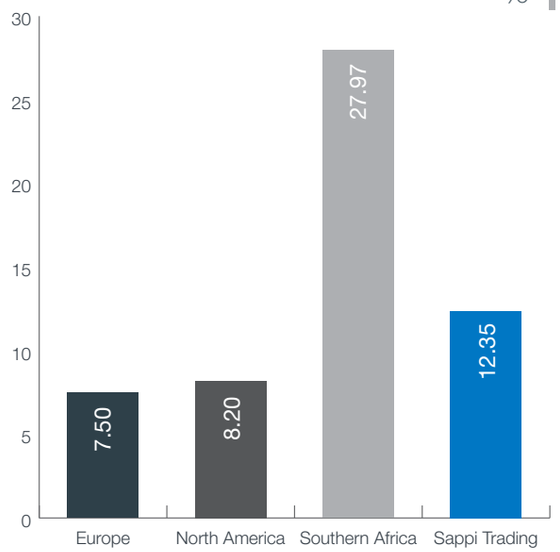


Profiling our people

LA 02

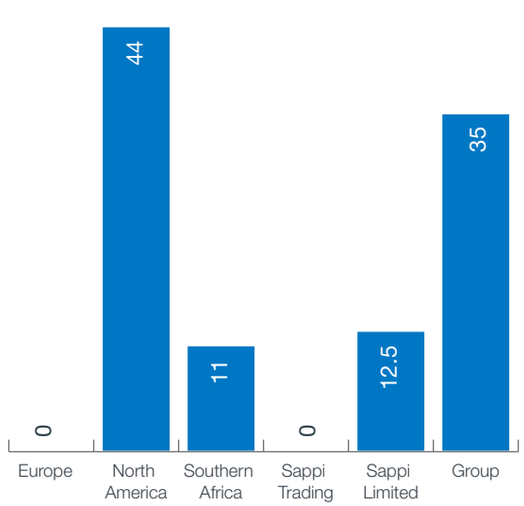
Total number and rate of employee turnover by age group, gender, and region.

Employee turnover 2012



Women in senior management

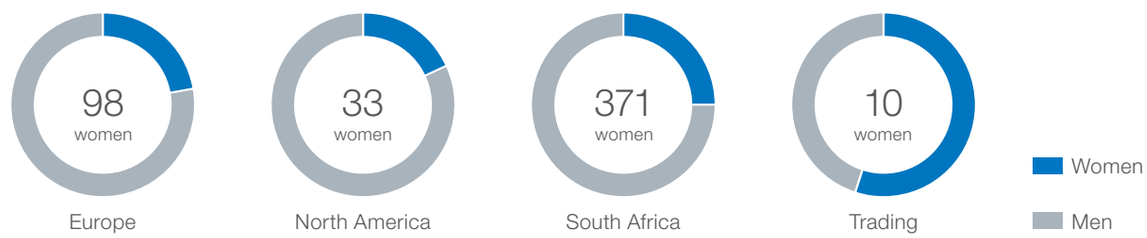
lead teams



New employees by gender

New employees by age

Employee turnover by gender



Employee turnover by age

Change and diversity

LA 05

Minimum notice periods regarding operational changes, including whether it is specified in collective agreements

LA 13

Composition of governance bodies and breakdown of employees per employee category according to gender, age group, minority group membership and other indicators of diversity

UNGC 6

The elimination of discrimination in respect of employment and occupation

Dealing with operational changes

We apply the principles of transparency, inclusivity and fairness when dealing with operational changes.

Europe

Notice periods are included in collective labour agreements and in the employment contract of senior managers.

North America

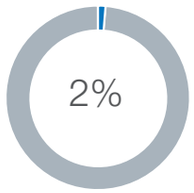
Per Federal law, 60 days. Notice periods are not specified in collective bargaining agreements.

Southern Africa

Notice periods are stipulated in the employment contract and are typically 30 days. Based on market practice, senior management usually have longer notice periods of three months and six months. Notice periods are not specified in collective agreements.

Employees with disabilities

% of all employees



Employees with disabilities

by ethnicity

- African/Asian
- Coloured
- Indian
- Caucasian

Encouraging a diverse workplace

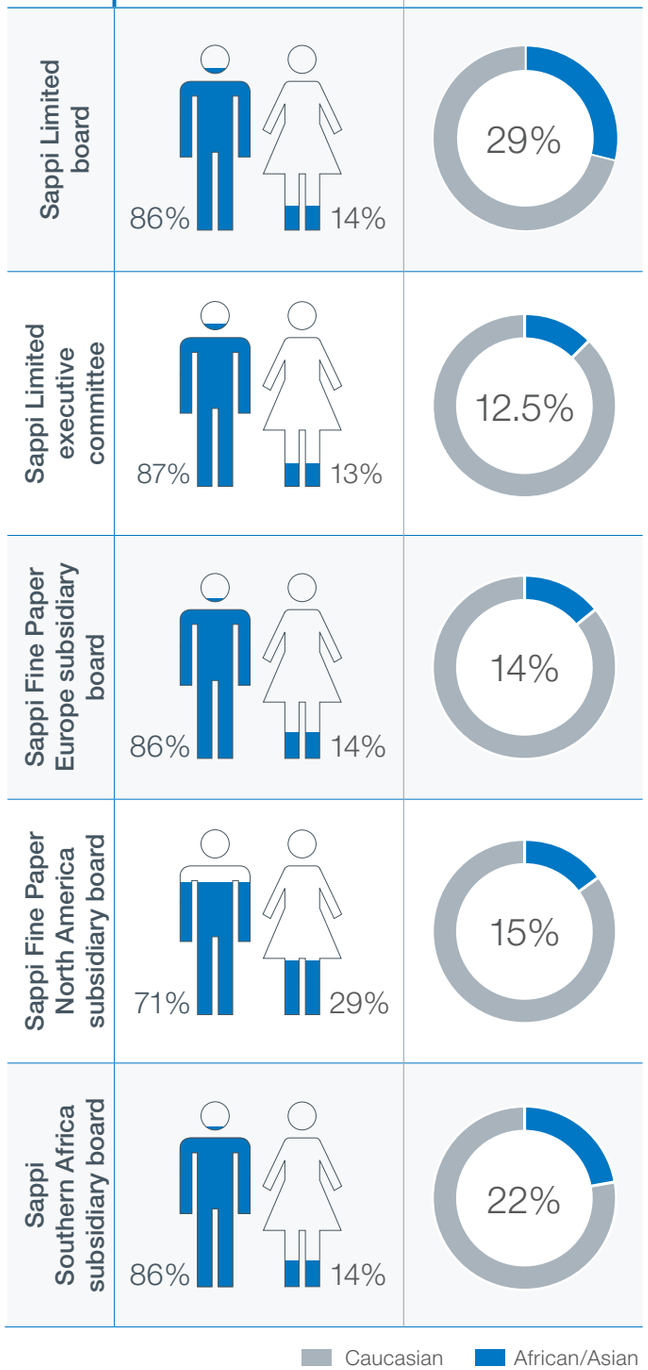
We recognise that diversity facilitates interaction with different cultures, colleagues and clients in today's global marketplace. We believe that by creating an inclusive culture representative of the diversity of people, thoughts and ideas, we are able to deliver decisions and service our customers based on a broad palette of considerations.

Diversity and inclusiveness is not just about fairness, morality and justice as being the right thing to do, nor is it just about legal compliance — it is about delivering value to our shareholders by achieving bottom-line results.

We are committed to valuing and promoting diversity and inclusion so that all employees can develop their full potential, irrespective of gender, ethnicity, disability, age, religion, belief or sexual orientation. We administer our people policies, programmes and practices in a non-discriminatory manner in all aspects of the employment relationship, including recruitment, hiring, assessments, work assignments, promotions, transfers, terminations, wage and salary administration and selection for training and development.

We continually challenge ourselves to enhance the connection between our commitment to diversity and inclusion and our performance in living up to this commitment.

Diversity in Sappi boards



Diversity

Recruitment

Apart from employment equity targets in South Africa, group targets for promoting equal opportunities are general rather than specific. Managers are encouraged to consider a diverse slate of candidates for salaried management positions.

In South Africa, each human resources manager and hiring manager is required to recruit according to the employment equity plan in place at their site. Emphasis is given to appointing the best person for the job with preference being given to those demographics which we under-represent in a category. If skills and competencies are comparable, then previously disadvantaged employees are given preference.

Regulatory developments

We are monitoring regulatory developments in both Europe and South Africa.

Europe

The European Commission has been weighing options for ways to promote women on company boards. Currently, there are no laws in place related to quotas based on gender in the countries in which we operate (Austria, Belgium, Finland, Germany and the Netherlands).

In recent years we have increased our focus on bringing people from different nationalities and backgrounds into management positions. Two thirds of 25 recent management appointments came from a different function, locality or nationality.

South Africa

The Women's Empowerment and Gender Equality Bill is being tabled for approval by Cabinet and will take effect during 2013. Broadly, the bill entails gender mainstreaming across all categories of employees in both government and the private sector. It is proposed that gender equality is managed in a similar manner as the employment equity bill.

South Africa — ethnicity and gender diversity by occupation

	Top management	Senior management	Professional qualified	Junior management	Semi-skilled	Unskilled
Gender diversity	88% / 12%	81% / 19%	80% / 20%	78% / 22%	86% / 14%	82% / 18%
Ethnicity diversity	18% PDE	13% PDE	32% PDE	61% PDE	96% PDE	99% PDE

African/Asian Coloured Indian Caucasian PDE Previously Disadvantaged Employee

Promoting training and development

LA 10

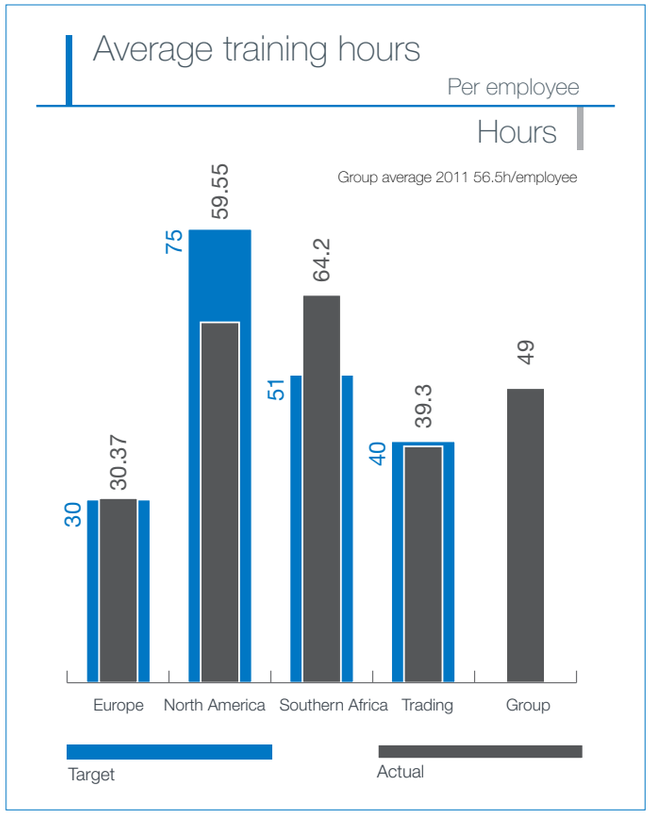
Average hours of training per year per employee by gender and by employee category

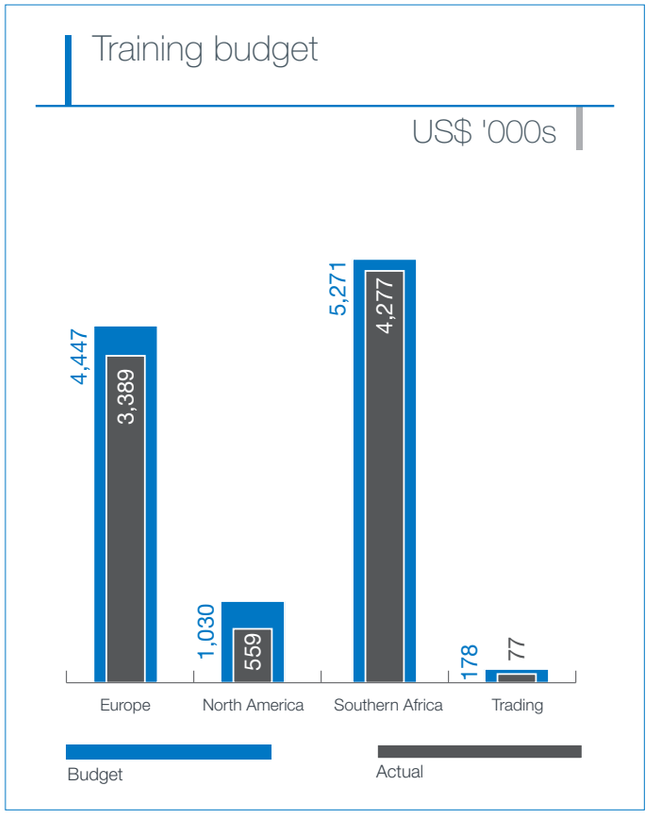
LA 11

Programmes for skills management and life-long learning that support the continued employability of employees that assist them in managing career endings

Our aim is to provide successful learning solutions that enable individuals, groups and the organisation to improve performance, learn new skills, adapt to change and meet groupwide business objectives

Our focus on training and development, whether it is to learn new skills, improve performance or to prepare for a future career objective, is recognised as a strategic tool for Sappi's continued growth, productivity and our ability to retain valuable employees. Consequently, we are committed to helping employees reach their full potential by developing their knowledge skills and abilities and by providing opportunities to gain new experiences.





Training hours by category per employee

	Management and leadership development	Knowledge and capacity building	Skills programmes and individual development	Sappi World of Work
	Training associated with management, supervisory and leadership development	Training that enhances individuals' skills for current or future positions for a 'best practice' organisation	Formal programmes/self-study with both practical and theoretical components that may lead to educational qualifications	Mandatory training — legal, safety, health, environment and quality compliance
Southern Africa	1.10 hours	18.80 hours	34.20 hours	10.10 hours
Europe	1.91 hours	13.57 hours	7.61 hours	7.28 hours
North America	1.85 hours	34.30 hours	2.14 hours	21.26 hours
Trading	2.00 hours	26.20 hours	8.00 hours	3.10 hours

Promoting training and development continued

During 2011 and 2012 we embarked upon major business restructuring in our European and South African businesses which resulted in headcount reductions and cost saving initiatives.

While training spend was cut, resulting in a decrease in the group average from 56.5 hours per employee in 2011 to 49 hours in 2012, we are pleased to have maintained an acceptable level of spend, despite the constrained economic conditions we experienced.

Europe

We reached our target of 30 hours of training per employee for the year

North America

Our target is similar to South Africa's target. In 2012, each employee achieved the targeted objective of 60 hours of training, nearly double the level in 2008.

South Africa

We have a five-year target to provide training and development opportunities of an average 60 hours per employee per annum. The region exceeded this target in 2012, with 64 hours of training per employee.

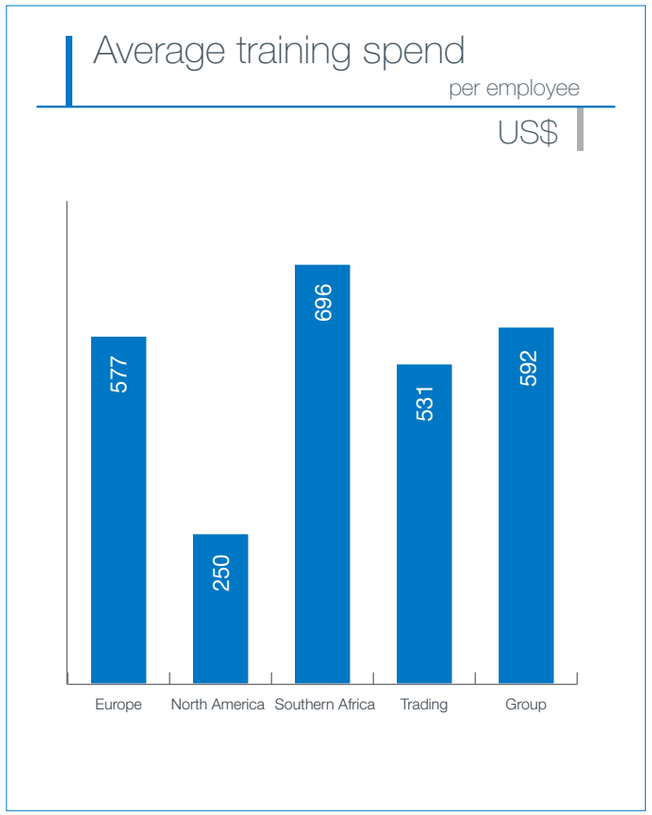
Career growth

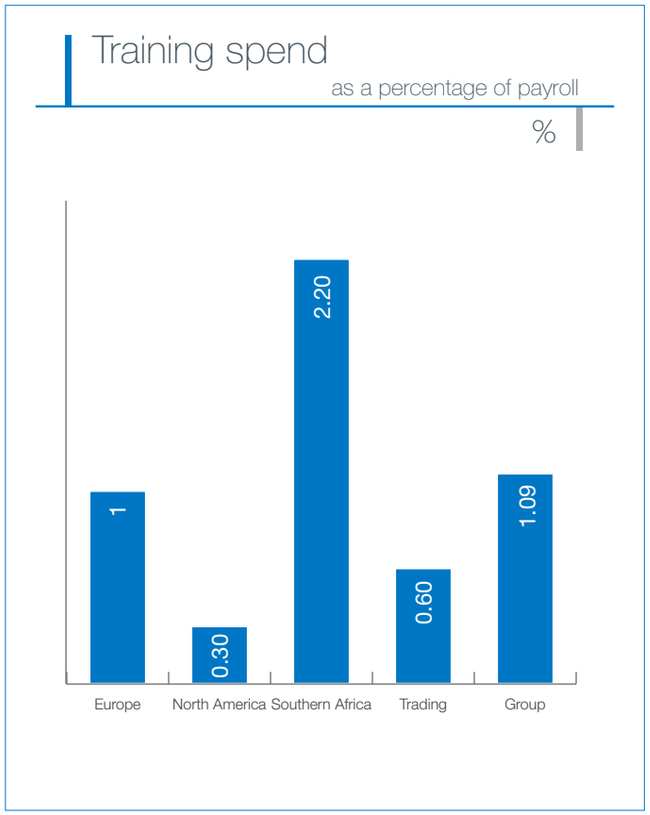
Where appropriate, we offer assessments to employees to identify their work strengths; their motives to help guide future career growth and aspirations. Going forward, training and skills development opportunities for all employees at all levels, together with performance management, remain key priorities.

Career endings

In terms of career endings, access to retirement planning services is provided on a regional basis and in some instances this is supported by financial wellbeing programmes. To the extent that there are employee lay-offs, we provide severance pay to all employees and, in some instances, outplacement assistance.

Following the extensive restructuring process in the Southern African region in 2012, Sappi Southern Africa made use of the Government training lay-off scheme in terms of which employees were provided with the opportunity to train for a new skill set, thereby improving their job search prospects.





Performance reviews and benefits

LA 3

Benefits provided to full-time employees that are not provided to temporary or part-time employees, by significant locations of operations

LA 12

Percentage of employees receiving regular performance and career development reviews, by gender

LA 15

Return to work and retention rates after parental leave, by gender

Performance reviews

Europe

During 2011 approximately 76% of our eligible employees received performance reviews. Approximately 74.2% of males and 89.3% of females who were eligible completed their reviews. 52.7% of employees had a training and/or development need identified.

North America

During 2011, 100% of the salaried workforce completed their performance reviews and development plans. Women made up 30% and males 70% of the salaried workforce who completed the reviews.

Southern Africa

Approximately 75% of white collar employees, both male and female, received performance feedback and career development reviews.

Benefits

Europe

Both full- and part-time employees receive the same benefits such as healthcare, disability coverage, maternity/paternity leave, retirement provisions.

North America

Permanent and part-time employees, who work 20 hours or more per week are provided with medical insurance. life insurance, disability insurance, retirement and other benefits.

Southern Africa

In addition to benefits such as retirement and medical aid, full-time employees qualify for varied leave benefits which include maternity-, paternity-, study-leave etc. They also participate in an annual bonus scheme.

Temporary and part-time employees would not normally qualify for these benefits although in some circumstances and depending on the length of the contract, some temporary employees may be eligible for a bonus at year-end.

Sappi Trading

Depending upon the duration of the part-time contract, benefits similar to those provided to full-time permanent employees may be provided. Sappi Trading does not currently have any part-time employees.

Parental Leave

	Europe			North America			Southern Africa			Trading		
	Maternity leave	Paternity leave	Total	Maternity leave	Paternity leave	Total	Maternity leave	Paternity leave	Total	Maternity leave	Paternity leave	Total
Total employees who took parental leave	24	48	72	6	7	13	71	0	71	1	0	1
Number of employees who did not return to work post parental leave	20	5	25	0	0	0	8	0	8	0	0	1
Number of employees who returned from parental leave and are still employed with Sappi, 12 months after their return	10	30	40	Not currently available			Not currently available			Not currently available		

Remunerating fairly

LA 14

Ratio of basic salary of men to women by employee category

Our compensation programmes are designed to achieve our goals of attracting, motivating and retaining employees who can drive the achievement of financial and strategic objectives that are intended to build long-term shareholder value.

The primary components of pay include base salary, benefits eg medical and retirement, annual incentive awards and long-term incentives. Compensation levels are set to reflect competitive market practices, internal equity as well as company and individual performance.

Sappi's benchmarking philosophy is to pay at the median of the market for all components of pay except for short-term incentives which are targeted at the 75th percentile. Total compensation is between the 50th and 75th percentile of the market.

We do not discriminate on the basis of gender. Amongst employees earning minimum wages, there is very little income disparity.

The income disparity at the higher levels of the organisation, where in some instances men earn more than women and vice versa, is based on differentials such as performance, length of service and on the fact that we do not remunerate at a specific rate, but rather, within a specific band.

Remuneration by gender and occupation

	Senior management	Management	First-line management	Specialist groups
Europe		92%	82%	
North America	84%	97%	89%	99%
Southern Africa	91%	98%	95%	91%
Trading		85%	=	98%
Limited	83%	90%	97%	98%

Prioritising wellbeing, health and safety

LA 06

Percentage of total workforce represented in formal joint management–worker health and safety committees that help monitor and advise on occupational health and safety programmes.

All our pulp and paper mills are certified to the internationally recognised OHSAS18001 Safety Management System.

A core element of this approach is the hazard identification and risk assessment process in terms of which task-specific hazards and risks are identified, evaluated in terms of current controls and managed by establishing additional controls and risk reduction activities. Roles, responsibilities and accountability are documented, with management in all regions actively involved in our safety programmes. Like preventive action, corrective action involves root-cause analysis with the emphasis on improvement rather than blame. In addition to actual incidents, near-misses are documented and also undergo root-cause investigation.

Annual safety audits are conducted at all operations. Internal safety tools and techniques which have proven to be effective are shared within the group with particular emphasis on the empowerment of our workforce to identify where and how improvements can be made. We also share regular feedback with our employees on performance measured against our standards to instil a sense of ownership and awareness.

We emphasise employee awareness and competence through ongoing training programmes which take into account differing levels of ability, literacy and responsibility.

Training related to health and safety hazards and safe work practices is reinforced by educational pamphlets, posters, videos and a global safety awareness day, around which each facility arranges a week of focused activities to reinforce and reinvigorate our year-round work programme on safety.

In addition to addressing hazards in the workplace by means of the OHSAS 18001 related systems we also address 'at risk behaviour' of our employees by means of behaviour based safety (BBS).

Health and safety committees

Health and safety committees are in place at all of our operations. Employees are consulted about the development and review of policies and procedures and changes that affect workplace safety or health through these committees.

Europe

Formal health and safety committees are normally part of a production unit and are in place at all major sites. Approximately 75% of all employees are represented by the safety committees.

North America

Approximately 65% of all employees are represented at joint safety committee meetings with management.

Southern Africa

Approximately 75% of the total workforce is represented by safety representatives who participate in safety meetings with management.

Case study

Better — Safer — Smarter

In June 2012, we held our seventh Global Safety Awareness Day (GSAD) which aims to reinforce our year-round commitment to safety through targeted activities. On this day employees and contractors focus on safety in- and outside the workplace.

In the spirit of the Olympic theme 'Faster, Higher, Stronger.' the GSAD theme was Better — Safer — Smarter. Most business units took this theme further, using sporting activities with a focus on winning as a result of team work, to reinforce the safety message. Other activities were work-related with practical demonstrations on how to work safely in confined spaces, working safely at elevated levels and correct fire-fighting techniques, as well as suggestions on healthy lifestyles.

Safety management

LA 09

Health and safety topics covered in formal agreements with trade unions.

Discussions governed by formal agreements with trade unions about wellbeing, health and safety vary across regions:

Europe

There is no regionwide agreement on health and safety topics covered in trade union agreements. However, in the Netherlands formal local agreements cover health and safety issues; legal requirements and deal with issues such as personal protective equipment; training and education, and determining the complaints mechanism.

Local Works Council representatives participate in health and safety topics; have a right to be included in site inspections, audits, accident investigations, training and development; determine the complaints mechanism and support an employee's right to refuse to do unsafe work.

North America

The majority of collective bargaining agreements provide for union participation in safety committees.

Southern Africa

Our current agreements with the unions do not cover health and safety issues. Employees are represented at safety committees by safety representatives, who are not necessarily union or shop steward representatives as prescribed by legislation.

Safety terminology

Key to graphs and terms used

LTI **Lost Time Injury**
Lost days are calculated as days that an employee cannot report for the next work day or shift due to an illness, injury, disability or death arising from an incident occurring at work. If the employee is unable to complete the work he is hired to do, but is well enough to attend work (restricted work), this is also deemed to be a lost day. Lost days are recorded from the day after the accident/ incident until the employee returns. The day of the accident and the day returning to work are not included. A fatality or permanent disability is counted as 6,000 days.

LTIFR **Lost Time Injury Frequency Rate**
based on a Sappi groupwide standard for man hours

$$\text{LTIFR} = \frac{(\text{LTI} \times 200{,}000)}{\text{hours of exposure}}$$

LTISR **Lost Time Injury Severity Rating**
based on a Sappi groupwide standard for man hours

$$\text{LTISR} = \frac{(\text{№ days lost to injury} \times 200{,}000)}{\text{hours of exposure}}$$

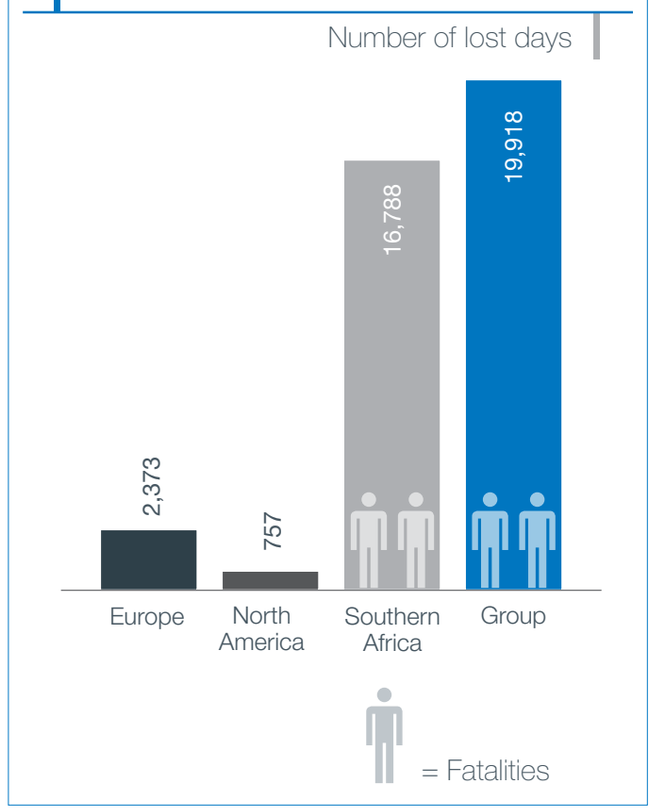
II **Injury Index** — provides an overall sense of safety within the measured unit

$$\text{II} = \text{LTIFR} \times \text{LTISR}$$

AIFR **The All Injury Frequency Rate represents the number of all injuries**

$$\text{AIFR} = \frac{\text{All injuries} \times 200{,}000}{\text{hours of exposure}}$$

Lost days and fatalities



Lost days and fatalities
Southern Africa and therefore Sappi group lost days are high as they include the 12 000 lost days attributed to the two death of two contractors in the year under review.

One death is regarded as 6,000 lost days.

Safety performance

LA 07

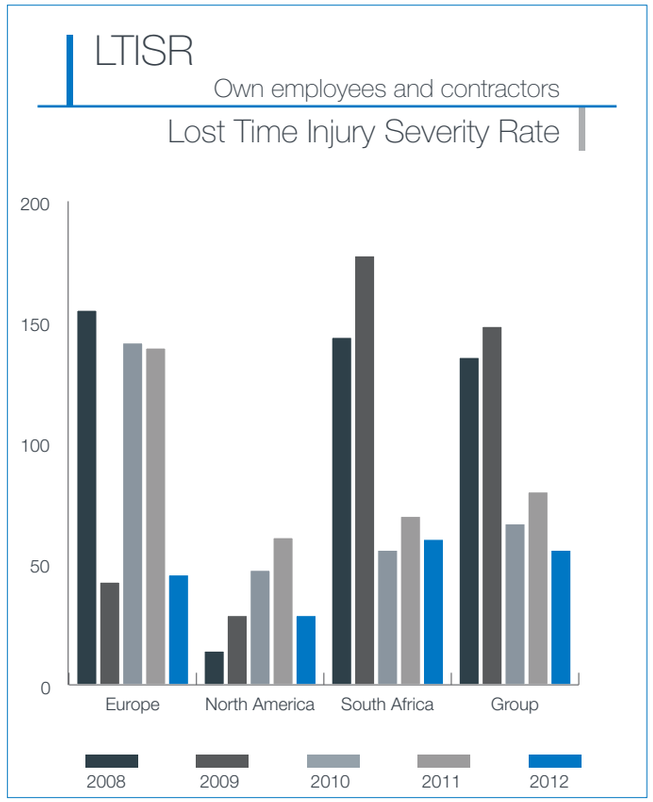
Rates of injury, occupational diseases, lost days and absenteeism and number of work-related fatalities by region.

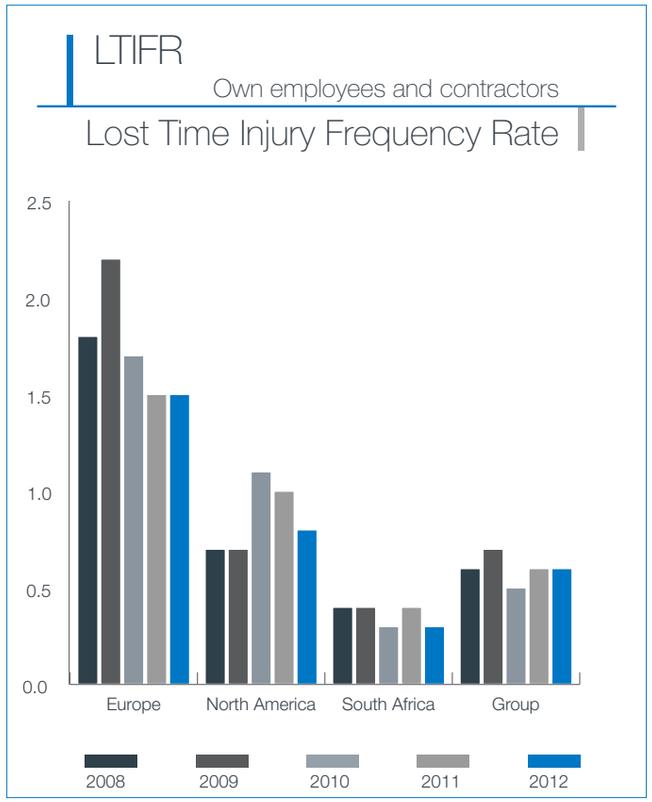
Improvements in reducing fatalities and lost time injuries are evident throughout the group.

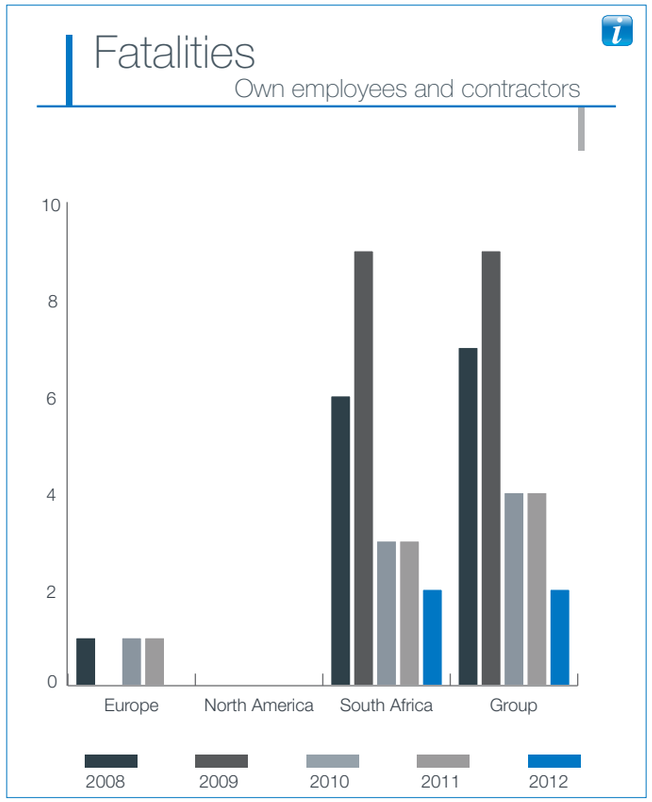
Going forward, we are committed to our goals of eliminating fatalities and lost time injuries by selecting the most appropriate leading performance indicators and identifying the areas of our activities that present the greatest threat to performance or opportunity for improvement.

Detailed regional safety information

More detailed information on our safety performance in each region is available in our regional sustainability reports.







Safety performance

Europe

We improved our safety performance in FY12 with an LTIFR of 1.24 for own employees compared with the FY11 rate of 1.33.

Lost Time Injuries (LTIs) for Sappi employees improved to 59 from 72 in FY11. Nijmegen Mill reported a zero LTIFR for own employees.

Contractor LTIs increased to 20 from 18 in FY11, increasing the LTIFR from 3.79 to 4.44. Ehingen Mill reported a zero LTIFR for contractors.

Conducting thorough root cause investigations into safety incidents and focusing on how best to permanently remove safety risks helped to drive the improvement in safety performance. The improvement can further be attributed to the relentless drive by supervisors and managers to report all near misses and leverage the sharing of each incident investigation through the SARA safety reporting tool.

North America

Our safety performance improved by a 25% reduction compared to FY11 and we achieved an LTIFR of 0.72. The top quartile benchmark for our industry is 0.80

Contractor performance deteriorated — in this region we use very few contractors and single incidents have a significant impact on LTIFR statistics.

The incident investigation method — a core element of the OHSAS 18001 system — provided the root-cause analysis output that drives all prevention activities. For example, Somerset Mill virtually eliminated eye injuries and Westbrook Mill has significantly reduced sprains and strains associated with handling materials. When incidents do occur, the focus is on learning-and-sharing and determining the actions necessary to prevent a reoccurrence. This information is then shared with mills in other regions.

Actions taken throughout the year to improve safety communications included weekly news, videos, tool box talks and websites to consistently generate and maintain awareness and discussions. A safety circle video was produced with the objective of providing a tactical tool to drive the immediate situational assessment and hazard identification in the field.

Southern Africa

We ended the year, for all personnel employed, with an LTIFR of 0.35, an improvement on the FY11 LTIFR of 0.41.

The All Injury Frequency Rate (AIFR) for the year was 3.52. An LTISR of 60.30 shows that although the number of injuries was well contained, severity remained high. Two contractor employee fatalities contributed to the high severity rate.

Contractor safety issues have historically been challenging — the majority of contractors are employed by Sappi Forests which has a large number of people spread over an extensive geographical area, making management difficult. However, the good contractor safety performance of the previous two years was maintained with an LTIFR of 0.24 for the year under review — an improvement on the FY11 Contractor LTIFR of 0.36.

Disappointingly, the excellent contractor safety performance was not emulated by our own employees; The FY12 LTIFR at 0.65 against a target of 0.42 disappointed and is a deterioration on the FY11, 0.55 achievement. We are currently identifying and transferring the best practice results of the contractors' excellent performance to our own employees. This includes focus on communication and discipline as well as a refocus on the BBS programme to ensure that the

Safety performance

Southern Africa continued

principles and fundamentals of the program are clearly understood and the data collected utilised to eliminate accidents.

The Sappi group initiative of Safety Circles was well utilised by all units with focus on a different element for each month of the year. Regular safety communications at each operation included various publications, notifications, sharing ideas on improvements, management attendance on regular safety walk-abouts and tool box talks.

Safety milestones

In October and November 2011, Tugela and Ngodwana Mills respectively achieved one million man hours without any Lost Time Injuries for own employees.

Ngodwana Mill also achieved one million man hours without Lost Time Injuries for contractors.

Case study
Europe safety improvements

Nijmegen Mill had no Lost Time Injuries in FY12. This outstanding safety achievement was the result of the mill's reinforcement of behaviour-based practices with specific attention to housekeeping in terms of the **5Ss** (Sort, Straighten, Sanitise, Standardise, Sustain) observations and inspections.

The introduction of the Dutch VCA standard safety training tool, in 2011, proved to be a particularly effective tool in driving safety improvement. The VCA Standard is a Dutch safety, health and environmental checklist for contractors.

The training modules cover all aspects of safety (risk, hazardous substances, safe working tools, working with hoists, working in confined spaces etc). The lessons learnt during the Nijmegen Mill expansion project were shared with other units in the European region. The key of this success was adequate job preparation through the **5Ps** (Proper Preparation Prevents Poor Performance) approach.

Significant LTIFR improvements were also achieved by Stockstadt and Kirkniemi mills, both of which achieved their lowest LTIFRs ever.

At Stockstadt Mill, the main tools used for improvement were behaviour-based safety audits and more frequent reporting of near misses.

Kirkniemi Mill launched a campaign to improve safety awareness by utilising the **Safety Circle** concept, where every meeting commences with safety discussions. In addition, risk assessments and incident investigations were intensified

Safety priorities during 2013

Europe

Our main objective is to achieve a significant LTIFR improvement for the entire operation through:

- Integrated health and safety planning and management;
- Training at every organisational level;
- Participative information and control structures;
- Adherence to international best practices; and
- Improved reporting and sharing of best practices through the regional safety platform.

North America

We will build further on the safety circle concept. The video My Safety Circle will continue to be used to further drive awareness and provide a consistent message.

The continued improvement in LTIFR will be consolidated by:

- Continuing with the SafeStart programme, a methodology used at our Allentown sheeting facility which teaches the patterns of incident causation and behaviour that reduces human errors
- Realigning the focus on employee involvement and working with line supervisors to further embed the positive safety culture
- Furthering the development of the Westbrook near-miss process, and
- Focusing on hazard identification and risk assessments throughout the region and leveraging opportunities to improve work methods and equipment.

Southern Africa

Our target for FY2013 is to achieve an LTIFR (for contractors and employees) better than 0.27 by:

- Prioritising communications with all personnel
- Shifting focus from reactive reporting to pro-active reporting and the management of lead indicators
- Utilising all databases to proactively identify trends and eliminate hazards
- Continuing to maintain a high level systemic adherence and compliance to the OSHAS 18001 standard
- Aligning own employee safety performance with contractor safety performance, and
- Providing metrics to monitor industry performance as part of industry benchmarking.

Health and wellbeing initiatives

LA 08

Education, training, counselling, prevention, and risk-control programmes in place to assist workforce members, their families, or community members regarding serious diseases.

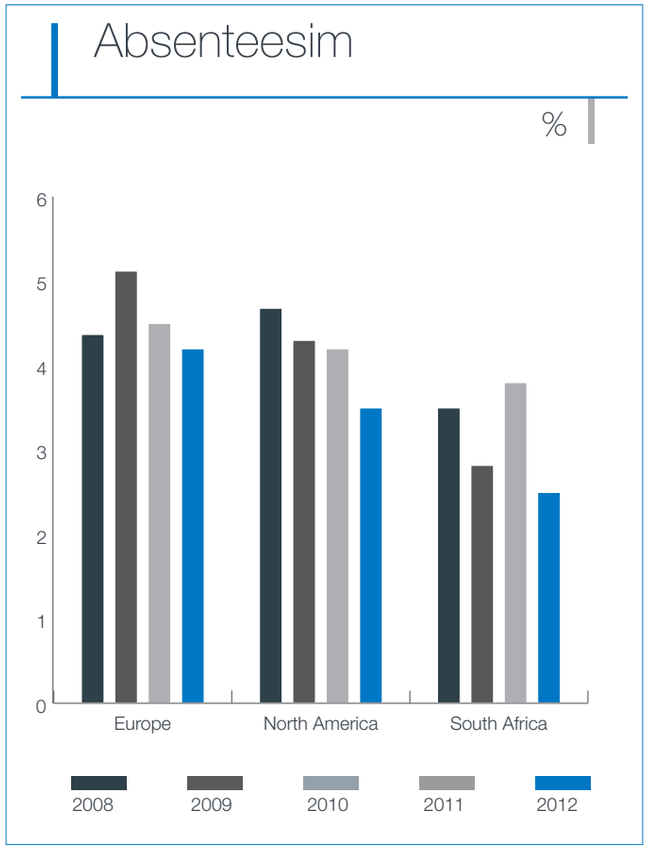
Absenteeism

It is important to monitor absenteeism as it can significantly impact productivity and financial performance. Our absenteeism rates benchmark well against industry trends.

Occupational disease

Europe

There were no confirmed cases of occupational diseases but there were two suspected cases: a spinal disease and a noise induced hearing loss.



North America

One workers compensation claim, alleging historic exposure to asbestos over a 30-year period is under investigation.

Southern Africa

Two cases of noise induced hearing loss and acoustic trauma.

Health and wellbeing initiatives

Our operations continue to support, engage and facilitate wellbeing programmes to increase the health and productivity of our people at work and in their personal lives.

Europe

There is an increased awareness of stress and burn-out; programmes are in place to assist and support employees who need support. The company also has a number of wellness programmes in place to help educate employees on healthy living and to minimise the risk of serious diseases.

North America

Several wellness programmes are in place to educate employees about healthy living and minimising the risk of serious diseases. All of our programmes focus on our own employees. Resources are not available to extend these programmes. If, however, as a result of an operating procedure at a mill, the communities living around the mill have been impacted, then the company will proactively engage with that community to address issues.

Southern Africa

Our employee wellbeing programmes include annual wellness risk assessments conducted at each mill and prevention/outreach programmes conducted to mitigate identified risks.

South African employee wellness risks

Risk	Awareness intervention
Distress	Coping with change
Motor vehicle accidents	Safe driving
Noise	Noise induced hearing loss
Financial debt	Financial wellness
Alcohol and drug abuse	Alcohol and drug awareness and rehabilitation programmes
Health claims	Cardiac wellness
Women related claims	Breast cancer
HIV/AIDS	Prevention and treatment

Health and wellbeing initiatives continued

PR 6

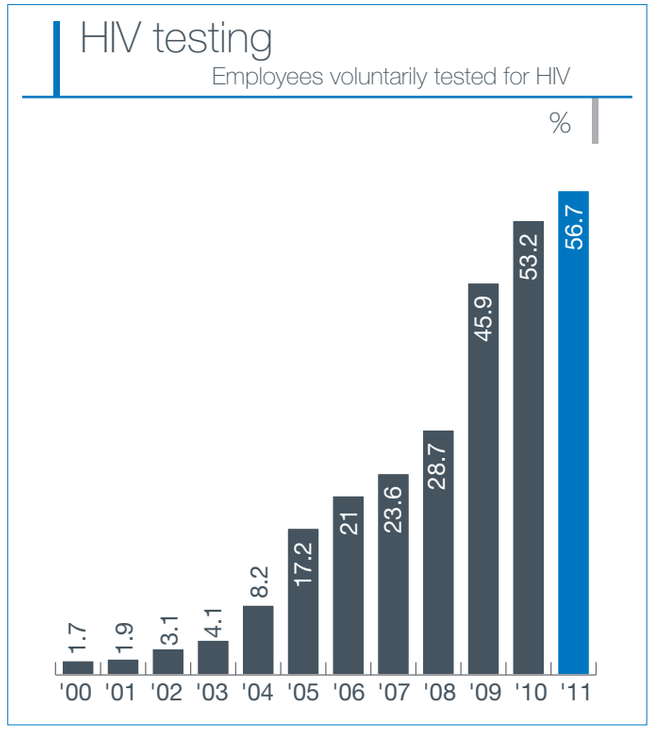
Programmes for adherence to laws, standards, and voluntary codes related to marketing communications, including advertising, promotion, and sponsorship

HIV/AIDS

HIV/AIDS continues to be a significant business risk for our Southern African operations. Extensive work has been undertaken to manage and minimise the risk and impact HIV/AIDS poses to our employees and the business. Our integrated response strategies focus on risk assessment, prevention and treatment, and empowering employees through knowledge-sharing and awareness.

Testing for HIV serves as an entry point for both prevention and treatment; taking an HIV test is arguably the single most influential driver for behavioural change and therefore we have extensive voluntary testing programmes at our operating units. We have extended our HCT (HIV Counselling and Testing) programme and offer an HIV test to every employee who visits the clinics for a medical examination.

Read more about our efforts to combat HIV/AIDS in Southern Africa.



Customers' health and safety

We work closely with our customers to meet their food packaging requirements.

We encourage users of our paper products to recycle. The majority of our papers are recyclable, the exceptions being wet strength and release papers.

Europe

An independent testing institute monitors the majority of our papers for conformance with the German Recommendation for Paper and Board for Food Contact and the European Union directive 1935/2004/EC.

Many of our papers are also used in children's toys. Compliance with the Toy Safety Standard EN71 (part 3 — Toy Safety — Migration of Certain Substances and part 9 — Organic Substances) of most of our paper grades is also regularly monitored.

North America

Our Lusterprint products comply with the regulations promulgated by the US Food and Drug Administration (FDA) for paper and paper-board packaging in contact with dry, aqueous or fatty foods. Our graphic papers are not intended for contact with food.

Southern Africa

Our food packaging paper grades are tested for compliance with the requirements of FDA, BFR (German Federal Institute for Risk Control) and 94/26/EC (environmental requirements for packaging and packaging waste). Tests are conducted both in-house and by accredited third parties to enable us to issue certificates of compliance to our customers.

Supporting communities

Our management approach to societal support is outlined as a key sustainability driver. Following are showcase initiatives from each region.

Making ideas matter in Europe

Our Ideas that Matter programme, has granted US$12m to professional and student designers since 1999, in support of over 500 paper-based creative campaigns that promote worthy causes that change our lives, our communities, and ultimately, our planet.

In 2012, a professional designer from the United Kingdom, Zoe Watkins, won a grant for her **Please Turn Over** campaign which aims to raise awareness for Community Healthcare Innovations — an organisation that helps people in deprived areas 'turn over a new leaf' and lead a healthier lifestyle.

A student designer from the UK, Emily Boon Yin Tang, won the student category for her **Drawing Life** initiative; she partnered with The Big Issue, a magazine sold by homeless people. Emily and The Big Issue will organise open-air events where homeless people pair up with members of the audience to produce paintings. This is focused on raising the self-esteem of the participants as well as changing stereotypical public perceptions of the homeless.

Recycling leadership in North America

Following several years of support for the Codman Academy, the Boston Sustainability Committee engaged the Academy's Climate Action Network student body to upgrade its recycling programme to LEED building standards when the Academy moved into a new building in 2012.

The LEED certification system provides building owners and operators with a framework for identifying and implement practical and measurable green building design, construction, operations and maintenance solutions.

After joint meetings at both the Sappi office and Codman Academy, the Codman students wrote a recycling plan for the new building. The plan has been approved and Sappi will help with implementation.

Supporting education in South Africa

PROTEC

Our flagship education project is our support for the Programme for Technological Careers (PROTEC), a 30-year-old national career development non-governmental organisation. The project which promotes science, mathematics and technology education operates through nine branches in Sappi communities of the Eastern Cape, Mpumalanga and KwaZulu-Natal, running classes on Saturdays for over 900 students in grades 10, 11 and 12. The annual budget is US$240,000.

The 2011 grade 12 class consisted of 325 students; 98% passed their final year of schooling; 64% achieved university exemption.

Resource centres

Sappi established the KwaDukuza and Umjindi Resource Centres in 2000 and 2005 respectively, giving local schools and the communities access to digital centres with computers, dedicated study areas, reference libraries, resource materials for projects and study materials. The centres are also used by educational authorities for meetings, training sessions and stakeholder engagement get-togethers. Sappi provides US$120,000 per annum in funding.

CSI Award

The inaugural Sunday Times Top 100 Companies CSI Award honoured Sappi Southern Africa in November 2012, in recognition of the KwaDukuza Resource Centre and Project Grow initiatives.

The award follows a review of the enterprise development and socio-economic development components of 997 companies by an independent panel of judges.

Our approach to human rights

UNGC 01

Support and respect the protection of international human rights within their sphere of influence.

UNGC 02

Make sure their own corporations are not complicit in human rights abuses.

UNGC 04

The elimination of all forms of forced and compulsory labour.

UNGC 05

The effective abolition of child labour.

We do not tolerate any form of unfair discrimination, inhumane treatment, forced labour, child labour, harassment or intimidation in the workplace. We are committed to the labour rights principles of the UN Global Compact, including the right to freedom of association and collective bargaining (discussed under Employees in the 'Our key sustainability drivers' section of this report), the eradication of child and forced labour, and non-discrimination.

We subscribe to the core labour standards of the International Labour Organisation, which promote:

- Freedom of association
- Non-discrimination
- Abolition of forced and child labour.

We also uphold the principles of the Universal Declaration of Human Rights and have used these principles as the basis for our Human Rights policy.

The countries in which we have manufacturing operations are ranked as 'Low Risk' or 'Medium Risk' on the Human Rights Risk Atlas.

In FY12, we sold our 34% stake in a joint venture in Jiangxi Chenming Mill in the People's Republic of China which is regarded as an 'Extreme Risk' country for Human Rights abuses. Although our influence was limited, neither our investigations nor any information from the company indicate that there are any human rights abuses at the mill.

Engaging with our stakeholders — general

GRI 4.4

Mechanisms for shareholders and employees to provide recommendations or direction to the highest governance body.

GRI 4.8

Internally developed statements of mission or values, codes of conduct, and principles relevant to economic, environmental, and social performance and the status of their implementation

GRI 4.12

Externally developed economic, environmental, and social charters, principles, or other initiatives to which the organisation subscribes or endorses

Our focus is on understanding our stakeholders' needs and building trust by engaging with them on the basis of relevance, materiality, completeness and responsiveness. Our stakeholders and the ways in which we engage with them are set out below.

Key topics and concerns	Our approach
Internally developed statements of mission or values, codes of conduct, and principles relevant to economic, environmental, and social performance and the status of their implementation	• Code of Ethics (revised in 2012, to be published in 2013) • Sustainability Charter (revised in 2011) • Corporate Social Responsibility Policy (revised in 2012) • Group Environmental Policy (revised in 2011) • HIV/AIDS policy • Human Rights Policy • Stakeholder engagement policy
Externally developed economic, environmental and social charters, principles, or other initiatives to which the organisation subscribes or endorses	• UN Global Compact (signed in 2008) • Universal Declaration of Human Rights, International Labour Organisation • The Organisation for Economic Cooperation and Development (OECD) Policy Guidelines for Preventing Corruption are incorporated into our Code of Ethics • **South Africa** Energy Efficiency Accord
Memberships in associations (such as industry associations) and/or national/international advocacy organisations	**Industry associations** • **Europe** Confederation of European Paper Industries (CEPI) and relevant national associations, • **North America** American Forest and Paper Association Industry association (AF&PA) • **South Africa** Paper Manufacturers' Association of South Africa (PAMSA), Forestry South Africa (FSA) and other sectoral bodies • **Group** Pulp and Paper Products Council (PPPC) **Other** • **Europe** Print Power • **Europe** and **North America** Two Sides • **North America** Sappi Fine Paper North America is a founding member of the GreenBlue Forest Products Working Group (FPWG), established in October 2011 • **South Africa** National Business Initiative (NBI) • Business Unity South Africa (BUSA) • South African Chamber of Commerce and Industry (SACCI) • Manufacturing Circle • SA Energy Intensive Users Forum • FSC™ • Sappi Limited is a member of WWF-SA and Birdlife SA

Engaging with our stakeholders — employees

GRI 4.13
Memberships in associations (such as industry associations) and/or international advocacy organisations

GRI 4.14
List of stakeholder groups engaged by the organisation

GRI 4.16
Approaches to stakeholder engagement, including frequency of engagement by type and by stakeholder group

GRI 4.17
Key topics and concerns that have been raised through stakeholder engagement, and how the organisation has responded to those key topics and concerns, including through its reporting

Key topics and concerns	Our approach

Organisational developments and channels through which employees can raise issues and matters of concern	Our CEO and regional CEOs engage with staff through:
	• Site visits and discussions.
	• Suggestion lines exist at some facilities.
	• Unions have formal channels through which they engage with management.
	
	We encourage full engagement between managers and their staff. Other avenues of engagement include:
	• Global, regional and local newsletters
	• Global intranet
	• Letters, roadshows and presentations by the Group CEO as well as regional CEOs
	• Feedback on 2011 employee engagement survey
	• **South Africa**
	  • National Employment Equity and Skills Development Forum
	  • Shop Steward Forum
	  • Partnership Forum

Health, wellbeing and safety	• Wellbeing committees at business units • Health and safety committees at mills
Our aim is to entrench a culture of sustainability within our organisation	**Europe** The Sappi positivity campaign is built on contribution and input from our people. It highlights positive stories that emphasise Sappi's commitment to the 3Ps. **North America** We developed a group of Sustainability Ambassadors with personnel at each location to help exchange information on sustainability goals and various key sustainability initiatives. **South Africa** • We established the Green Ambassador initiative. • We developed a 'Take ownership for the sustainability of Sappi' programme in 2012. This includes a sustainability learning and engagement programme that provides easy access to sustainability material for all employees. The programme enables self-study on a wide range of internal and external related subjects on an ongoing basis.

Engaging with our stakeholders — employees continued

Key topics and concerns	Our approach
Channels through which concerns and grievances can be discussed	Grievance mechanisms are discussed under 'employees' as a key sustainability driver In addition to grievance mechanisms, the Sappi hotlines in each region allow employees to report alleged breaches of the Code of Ethics in full confidentiality.
Our aim is to entrench a culture of sustainability within our organisation	**Europe** The Sappi positivity campaign is built on contribution and input from our people. It highlights positive stories that emphasise Sappi's commitment to the 3Ps. **North America** We developed a group of Sustainability Ambassadors with personnel at each location to help exchange information on sustainability goals and various key sustainability initiatives. **South Africa** • We established the Green Ambassador initiative. • We developed a 'Take ownership for the sustainability of Sappi' programme in 2012. This includes a sustainability learning and engagement programme that will provide easy access to sustainability material for all employees from 2013. The programme enables self-study on a wide range of internal and external related subjects on an ongoing basis.

Engaging with our stakeholders — communities

Key topics and concerns	Our approach
Information and issues relating to specific communities in which our operations are situated	**Environmental issues** In South Africa, there are environmental liaison committees at most of the mills and forestry operations. These committees include members from various regulatory authorities, residents' associations, conservancies, municipal representatives and non-governmental organisations (NGOs). Members of the public and other parties participate in the environmental impact assessments (EIAs) conducted before the start of any major project. **Social issues** • In South Africa we engage communities close to our operations with regards to their social needs. • In 2011 and 2012, we conducted a socio-economic assessment of the communities close to our company's operations. This is being used to inform corporate social responsibility initiatives going forward.

Engaging with our stakeholders — customers

Key topics and concerns	Our approach
A partnership approach, whereby customers feel that their needs and concerns are heard and reacted upon, and high levels of service	The group follows an approach of regular engagement with customers by senior and executive management in support of the ongoing engagement by the relevant sales and marketing teams. **Europe** We conduct regular customer surveys. In a recent survey our customer service scored ahead of our competition. **North America** The e-Commerce website allows customers to check orders, obtain stock manufacturing dates and product specifications and print invoices. In 2012, we enhanced the responsiveness of the website with the launch of eChat, an innovation that allows customers to connect with customer service in real time. We increased Electronic Data Interchange by 10% to 65% and rolled out four mobile applications. **South Africa** We communicated extensively with our customers in 2012, keeping them abreast of the changes initiated during the year. We also engaged with customers regarding the development of new products. **Global** In addition to customer satisfaction targets related to price, service and quality, Sappi has established complaints targets per mill and paper type. Product specialists in the mills deal with complaints and provide feedback to the production units. Regular meetings are held with customers to determine their product needs as well as their needs in relation to emerging trends.
Information about the fibre sourcing and production processes behind our brands.	**Europe** and **South Africa** We publish Paper Profiles and information sheets for our papers. These give details regarding the composition of our papers, as well as key environmental parameters related to our pulp and paper production processes and information on environmental management systems and wood fibre sourcing policies. **North America** • We use Metafore's Environmental Performance Assessment Tool (EPAT) which enables buyers to evaluate our performance on a mill by mill basis. • The web-based eQ tool provides stakeholders with the foundation to engage with the broader environmental considerations when choosing a paper supplier. The eQ tool also provides users with the ability to generate a customised product statement that summarises the environmental benefits of choosing Sappi Fine Paper North America's papers for a print job.

Engaging with our stakeholders — customers continued

Key topics and concerns	Our approach
Information about print as a communication medium and technical information	**Europe** • We published the Life with Print series. • We participated as education sponsor in EcoPrint 2012, thought to be the world's first exhibition and event entirely focused on sustainable print business. • In September 2012, we launched Houston, a new online knowledge platform specifically developed as a support tool for professionals working in the paper and graphic industries. • Together with other partners including ANB (the Agency for Nature and Forests), the Belgian Municipality of Hechtel-Eksel, and communication agency Proximity BBDO, the region also launched the Treehouse, a platform, both physical and virtual, for like-minded individuals and companies to come together to find ways to embrace sustainability in their daily activities. **North America** • We published the eQ journal which covers a broad range of sustainability topics and the eQ Insight series into a variety of topics such as water and host a sustainability blog: The Environmental Quotient. • We continued the humorous online video series, Off Register™. The series is based on the hilarious real-life experiences of printers. **South Africa** • We published a brochure entitled 'Paper. Here today. Here tomorrow' which sets out the advantages of Sappi paper and dispels some of the myths around paper. • A series of discussion documents or FAQs (Frequently Asked Questions) dealing with specific aspects of each of the 3Ps is available on www.sappi.com. **Global** A series of technical brochures is available on our website www.sappi.com.

Engaging with our stakeholders — customers continued

Key topics and concerns	Our approach
Initiatives to promote design and print	• Ideas that Matter Europe • Ideas that Matter North America • Sappi International Printers of the Year • Life with Print Europe • Life with Print North America • Life with Print South Africa • **Europe** What's Next magazine • **North America** Sappi ETC (Education Training and Consulting) programme. A microsite will be launched in 2013 where customers can readily access the kind of information normally covered in SFPNA seminars and in-person consultation. • **North America** The Standard, a series of information guides to designing for print with useful tips, techniques and methods for achieving optimum printing results. • **North America** Digital design centre • **South Africa** Paper. Here today, Here tomorrow

Engaging with our stakeholders — investors and others

Industry and regulatory bodies

Key topics and concerns	Our approach
Join forces to deal with matters of mutual concern	Consultations take place on an ongoing basis with industry associations in each region.

Investors

Key topics and concerns	Our approach
Timeous, relevant communication that facilitates informed decisions	As a public company the shareholders can raise issues at the quarterly results presentations and the AGM. Our investor relations (IR) team engages with shareholders continuously. This team has direct access to the executive directors and any issues shareholders raise that would be relevant for the board are channelled through the IR team. Our Chairman also engages with shareholders on relevant issues. • Mill visits • Road shows • Quarterly results presentations and other ongoing presentations • One-on-one presentations • Reports: Integrated Report • on-line Global Sustainability Report • regional sustainability reports • Form 20-F report for USA investors • Stock Exchange News Wire Services (SENS) • Media releases • Dedicated investor section on the Sappi website

Engaging with our stakeholders — suppliers

Key topics and concerns	Our approach
Understanding what is required to establish a mutually beneficial relationship.	The procurement executives from each region coordinate at global level to improve relations with suppliers and provide benefits to all parties through better understanding of the requirements of the Sappi group. We discuss our efforts to promote fibre certification for small growers in North America and South Africa under 'Sustainable fibre and certification' as key sustainability drivers.
Help with forestry matters	**North America** Sappi Fine Paper North America's Sustainable Forestry Programme is staffed with a full complement of licenced foresters. This programme offers education regarding certification, estimates on timber value as well as help with developing and managing harvest plans. **South Africa** Qualified extension officers assist small growers participating in our Project Grow scheme, our enterprise development initiative.

Planet

In a world where natural resources are under increasing pressure, we are achieving our goal of treading more lightly on the planet — the facts and graphs that follow tell the story more eloquently than words can

Overview

EN 30

Total environmental protection expenditures and investments by type.

We are advantaged by the fact that our primary resource, wood-fibre, is derived from sustainably managed natural forests and plantations — a sustainable, renewable resource.

Both natural forests and plantations are essential to a healthy environment, sustaining vital plants and wildlife, filtering water and air and reducing greenhouse gases by removing carbon dioxide from the atmosphere. Forests are also an economic resource, providing a plentiful, natural material.

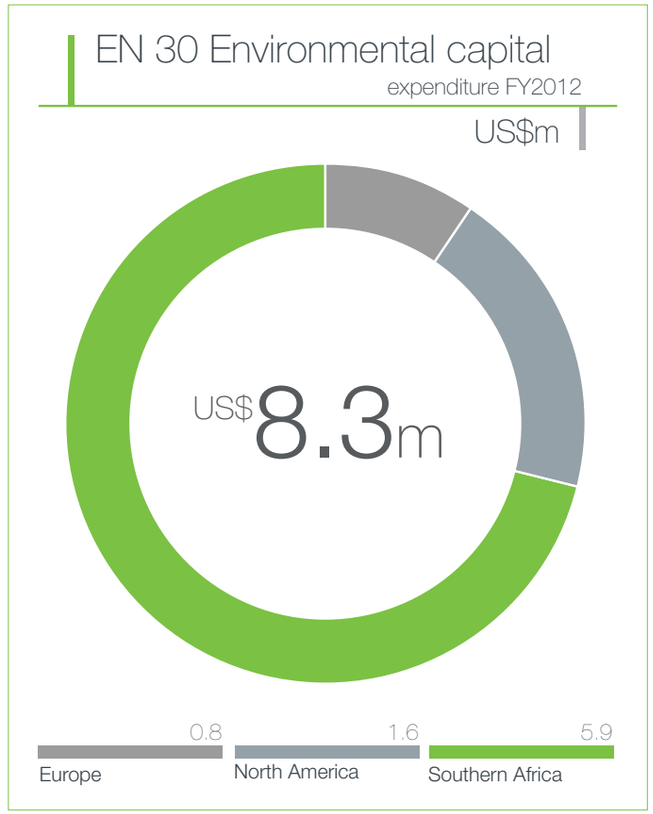
In our mills, we use the principles of Lean Manufacturing to reduce energy, re-use resources and minimise waste. We have a rigorous system of measuring our inputs and outputs, particularly those of all our paper machines, so that we know how much production capacity exists and where it is located. This allows us to focus on our performance gaps and to take the necessary actions to continually improve our paper machine efficiencies. The direct comparison of operating equipment performance between mills helps us identify strengths and weaknesses in our operations, promote the Sappi group's best practices and improve our processes, thereby increasing profitability.

By treading more lightly on the Planet we can produce more with less — an approach which has obvious economic benefits and involves reducing our use of fossil energy and the associated greenhouse gas emissions across the full life cycle of our products. It also predicates using less water and improving effluent quality, mitigating our impact on biodiversity and promoting sustainable forestry through internationally accredited, independent environmental management and forest certification systems.

Throughout our operations, we use independently verified forest certification systems including:

FSC™ Forest Stewardship Council™
PEFC™ Programme for the Endorsement of Forest Certification™
SFI® Sustainable Forestry Initiative®

We also use internationally recognised environmental and quality management systems such as ISO 14001 and ISO 9001.



EN 30 Environmental expenses
While we typically do not account separately for environmental expenses, our capital expenditure allows us to meet our goal of treading more lightly on the Planet. For example, the conversion of our Ngodwana Mill in South Africa to produce 210,000tpa of dissolving wood pulp will deliver the following environmental benefits: mill odour and effluent will be reduced; improved efficiencies from new equipment will mean burning 61,000tpa less coal which equates to 120,000tpa fewer CO_2 emissions.

Sustainability structures

At each of our operations and owned plantations, legal compliance (emissions, solid waste and effluent) and other specific company targets are monitored and appropriate action is taken to improve or mitigate identified environmental risks.

Clusters

In addition, there are a number of internal 'clusters' comprised of experts in various fields focused on:

- Aligning technology and R&D expertise
- Establishing best practice across a broad variety of disciplines
- Driving performance across the three continents where Sappi's manufacturing operations are located and across different areas of the business.

This allows for a pooling of expertise and a cross-pollination of ideas.

Central coordination

To ensure central coordination, clusters report to the Group Technology Management Team (GTMT), responsible for technical management throughout the group and overseeing research activities. For example, the Energy, Emissions, Effluent and Environment (E4) Cluster, is tasked with environmental and energy monitoring.

The E4 cluster measures greenhouse gases (GHGs), as well as energy use and energy costs, together with 43 other key energy and environmental parameters (gaseous emissions, solid waste, water), based on the premise of 'measure, monitor, manage and mitigate' — anticipating trends by many years. The impetus for this came about from rising energy prices, interest in global warming, increasing the use of renewable energy, reduction in emissions and effluent quality. Some of the parameters are now used as management key performance indicators.

Our sustainability structures play a key role in making sustainability a way of life by allocating responsibilities, setting targets and reviewing progress. To achieve the targets, technical support is provided by the technical departments, R&D and the various global clusters to ensure there is a common approach and use of best available technology and practices.

Risks and opportunities

In a constantly evolving consumer, technical and regulatory environment, some of the issues, risks and opportunities on which we focus include:

- Fibre supply issues
- Disease, fires and biofuel related risks
- Carbon taxes which could affect us even though 50% of our energy is derived from renewable sources
- Reduction of waste to landfill — aggregate and specific
- Access to raw materials and maintenance of operations due to shortages of natural resources such as water
- The opportunity to produce biobased products
- The opportunity to increase biomass based energy
- The opportunity to produce lighter-weight products which will meet customers' needs to reduce their carbon footprint
- Energy reduction initiatives
- Equipment and process efficiency improvements
- The opportunity to work with customers to create more environmentally friendly products.

Our sustainability structures play a key role in making sustainability a way of life.

Monitoring compliance — driving performance

Charter compliance

We ensure compliance with the commitments of our Sustainability Charter and Environmental Policy by:

- Providing appropriate training to all employees and contractors whose activities have an impact on the environment.
- Making all stakeholders aware of the importance of our commitments.
- Assessing and mitigating the environmental impacts of new projects;
- Conducting regular environmental audits and management reviews.
- Making every effort to meet established targets, including environmental performance, when measuring managerial performance.
- Requesting suppliers of goods and services to apply standards similar to our own.

Sappi Sustainability Charter
Sappi Environmental Policy

Complying with global standards

External benchmarks

In addition to internal standards, Sappi uses external benchmarks to monitor environmental performance and ensure compliance with best practice. For example, we use best practice energy consumption benchmarks as indicated by:

TAPPI The Technical Association of Pulp and Paper Industries (USA)

PAPTAC The Pulp and Paper Technical Association of Canada

CEPI Confederation of European Paper Industries

Forest certification

Forest certification gives consumers the assurance that products have been legally logged in accordance with sound environmental practices and that social aspects such as indigenous rights have been taken into consideration.

Sappi has achieved certification by the three most internationally recognised forest products certification programmes, namely:

FSC™ Forest Stewardship Council

PEFC™ Programme for the Endorsement of Forest Certification

SFI® Sustainable Forestry Initiative

We do not endorse one certification as 'better' than another. Rather, our goal is to use as much independently certified wood as possible. To accomplish this, we have pursued certification by the FSC™, SFI® and PEFC™ and have achieved certification from each of these independent, third-party organisations at our manufacturing sites and on our forest plantations in South Africa.

We do not endorse one certification as 'better' than another.

Chain of custody

Chain of Custody (CoC) tracks the origin of a raw material at each stage of the production process, from beginning to end.

For forest based industries, like Sappi, certifying the Chain of Custody means verifying that the wood used at each stage of the production process came from a forest certified as being sustainably managed.

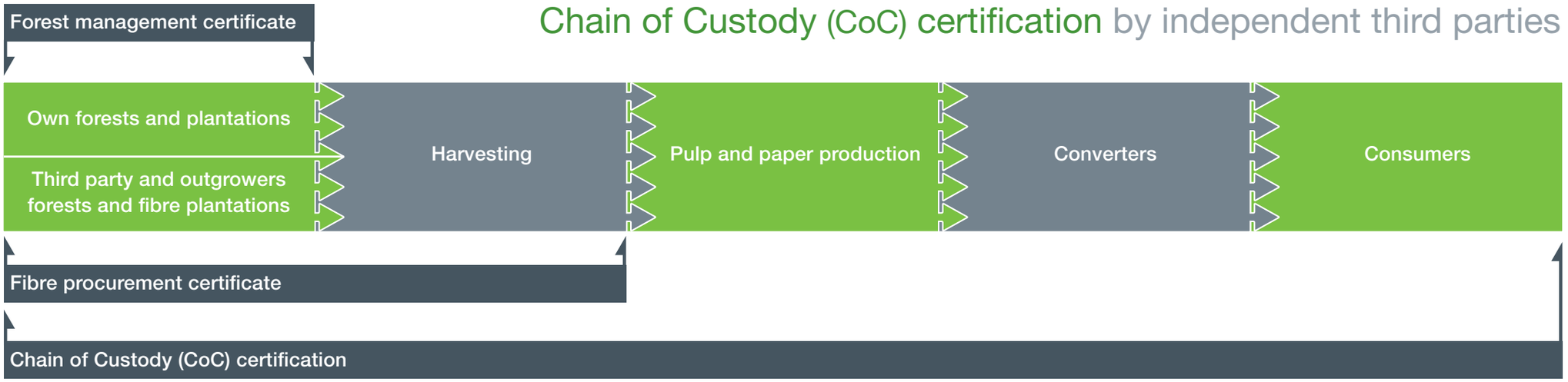
It is only valid if each link in the chain is checked. Once a link in the chain is broken, subsequent links cannot be verified and the material loses its certified status.

To ensure an unbroken chain, each time the timber is processed the processor must be certified to verify that they have a system of tracking the timber material through the process.

For the paper industry, the value of certification lies in being able to label the final product as coming from a sustainably managed forest, providing added value for the customer or retailer.

CoC certification assures consumers that our products come from sustainably managed forests and plantations.

Chain of Custody (CoC) certification by independent third parties



Management systems and certifications

Forest certification gives consumers the assurance that products have been legally logged in accordance with sound environmental practices.

FSC™ Forest Stewardship Council™
PEFC™ Programme for the Endorsement of Forest Certification™
SFI® Sustainable Forestry Initiative®

External benchmarks and management certification ensures that our environmental performance is monitored and our operations comply with best practice

ISO 14001 Environmental management systems
ISO 50001 Energy management standard
ISO 9001 Quality management systems
EMAS Eco Management and Audit System

	Wood fibre	Mill certification
Europe	Our certified fibre share is 73.1% PEFC and FSC™.	All mills certified: ISO 9001 • ISO 14001 • OHSAS 18001 • EMAS ISO 50001 certified: Alfeld • Ehingen • Gratkorn • Nijmegen • Kirkniemi • Stockstadt Mills In 2007, before the acquisition of the M-real mills, Sappi Fine Paper Europe achieved FSC™ and PEFC™ multi-site cross-border group Chain of Custody (CoC) certification for the entire European manufacturing and sales operation (including Sappi Trading). Mills acquired from M-real in 2009: • Stockstadt Mill has been included in the group certification described above • Kirkniemi Mill continued with its independent PEFC™ CoC certification.
North America	51.4% of our wood-fibre is procured from landowners who participate in either the SFI® or FSC™ programmes. Our licensed professional foresters can offer assistance with forest management plans, sustainable forest management practices, technical forestry services and much more to land owners in New England and the Lake States Region.	Triple chain of custody certification to the SFI®, FSC™ and PEFC™ standards: Kirkniemi • Somerset • Westbrook • Cloquet Mills Our wood procurement system is SFI® fibre sourcing standard certified. ISO 14001 and ISO 9001 certified: Somerset • Cloquet • Westbrook Mills
Southern Africa	All the plantation wood grown on Sappi owned and leased is FSC™ certified. 87% of the wood supplied to Sappi is FSC™ certified.	FSC™ CoC certified: Cape Kraft • Enstra • Ngodwana • Saiccor • Stanger • Tugela Mills All pulp and paper mills certified: ISO 9001 • ISO 14001

Promoting transparency

We provide information on our environmental performance to a wide range of stakeholders. For example, we provide customers with environmental product information and participate in the Carbon Disclosure Project (CDP) and the Forest Footprint Disclosure Project.

Stakeholder information

Increasingly, customers ask about environmental aspects of fibre sourcing and production processes.

Europe

The paper profile is broken down into the Confederation of European Paper Industries' (CEPI) '10 Toes' approach. In special cases, a carbon footprint sheet accompanies the paper profile.

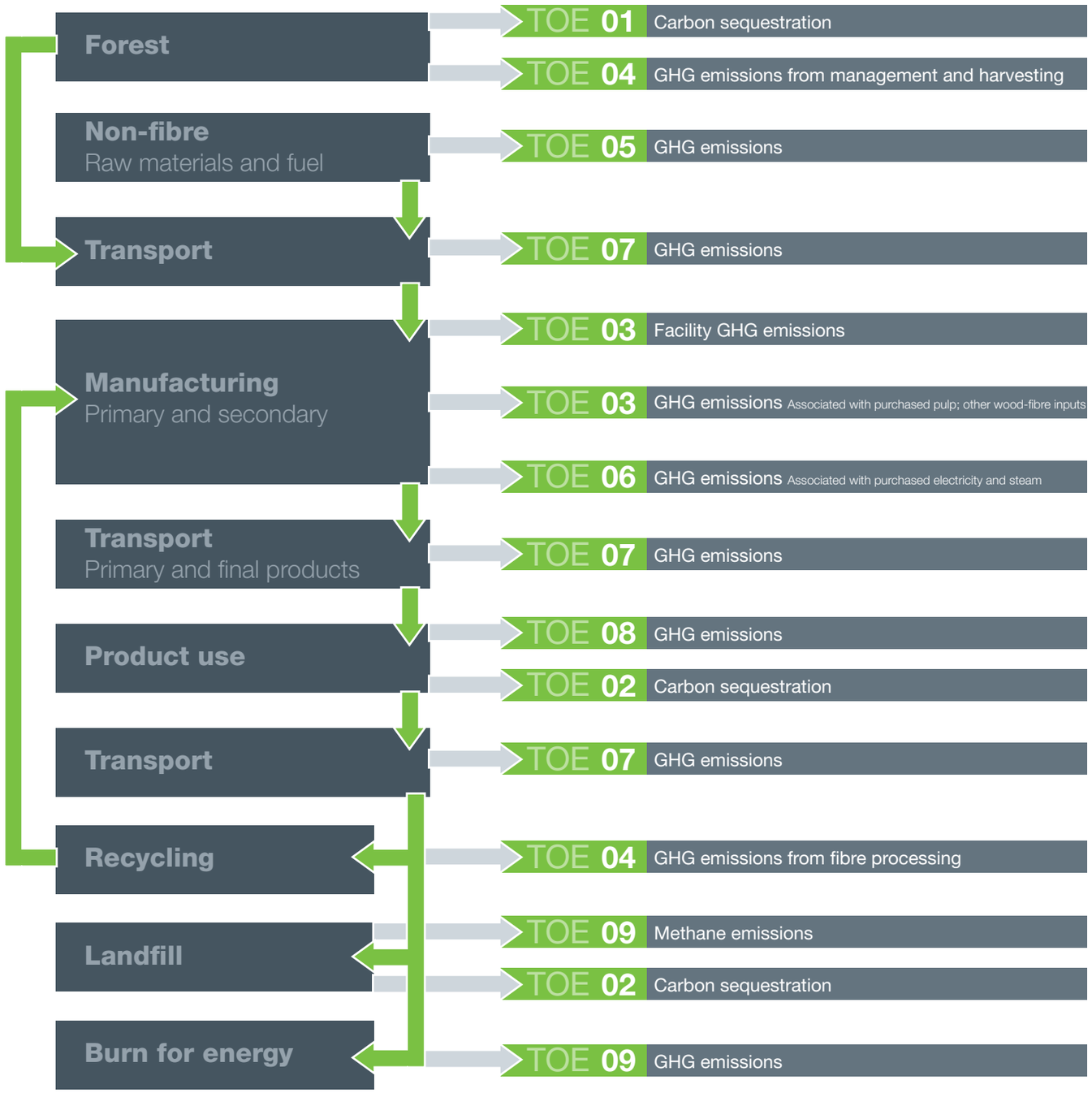
Europe and South Africa

Each of our products is accompanied by a standardised paper profile sheet giving the gate-to-gate energy use, emissions (greenhouse gases, nitrous oxides, sulphur dioxides and particulates), effluent quality (chemical oxygen demand (COD) and total suspended solids (TSS)) and solid waste as well as the product furnish.

North America

We have committed to Metafore's Environmental Performance Assessment Tool (EPAT). This tool can be used by buyers to evaluate our environmental performance on a mill by mill basis.

CEPI 10 Toes Carbon footprinting for the pulp and paper industry



Promoting transparency continued

88% CDP 2012

North America continued

In addition the web-based eQ tool allows stakeholders to engage with the broader environmental considerations when choosing a paper supplier. The eQ tool also provides users with the ability to generate a customised product statement that summarises the environmental benefits of choosing SFPNA's papers for a print job.

Reporting on our carbon footprint

We participate in the CDP every year and make our response publicly available. We supply cradle-to-gate and cradle-to-grave foot-printing for our mills, regions and the company as a whole. This is obtained using the following tools: **FICAT** Forestry Industry Carbon Accounting Tool, developed by NCASI (the US National Council for Air and Stream Improvement)

- **PAPTAC** Pulp and Paper Technical Association of Canada
- **TAPPI** Technical Association of Pulp and Paper Industries
- **CEPI** Confederation of European Paper Industries

Europe

Our customers' need to ascertain Scope 3 emissions has been established and we follow the standard that was developed by the Environmental Working Group of CEPIFINE/CEPIPRINT (lately merged into EuroGraph).

North America

During 2012, we conducted a comprehensive cradle-to-gate life-cycle analysis of our Somerset Mill located in Skowhegan, Maine, using the Footprint Estimator for Forest Products (FEFPro) developed by the National Council for Air and Stream Improvement (NCASI). This is an expansion of reporting to date which has been limited to our own direct emissions (Scope 1) and emissions associated with purchased electricity (Scope 2).

In the cradle-to-gate study, we include carbon emissions associated with material inputs (Scope 3) (eg pulping chemicals, coatings and fillers) as well as purchased pulps. This analysis shows that our mill generates kraft pulp with a footprint of 0.77t of CO_2 per ton of pulp.

South Africa

In South Africa, we use the Forest Industry Carbon Assessment Tool (FICAT). This comprehensive methodology was co-developed by the National Council for Air and Stream Improvement (NCASI) and the Confederation for European Paper Industries (CEPI). FICAT uses the CEPI 'Ten Toes' approach to provide Scope 1, 2 and 3 greenhouse gas (GHG) information.

We find that customers in South Africa have little need for Scope 3 emissions information and in this region we currently measure only business travel.

Case study

Third-party certification

For some North American landowners, seeking third-party certification can be an onerous process and expense. In 2010, we joined forces with the Sustainable Forestry Initiative SFI®, Time Inc, Hearst Enterprises and two of our competitors, Verso Paper Corporation and NewPage Corporation, to launch a pilot project to make certification to the SFI® standard more accessible to medium-sized landowners in Maine. The original pilot program added 299,500ha of SFI®-certified managed forests in Maine. In 2011, the project was expanded with support from the National Geographic Society and new landowners, including Hilton, Timberlands and LLC, resulting in an additional 315,700ha of certified managed forests in the state.

We also maintain a FSC™ group forest management certificate through which, participating small landowners have their land certified to the FSC™ standard. At the end of September 2011, 19 landowners with 4,450ha of land participated in this programme. Developing access to certified wood in close proximity to our manufacturing plants is proving to be a triple win: for the economic health of our local community, for the reduction of transportation costs from forests to mills and for lowering the consumption of fossil fuels.

Mitigating climate change

During the last few years, the rise in greenhouse gases (GHGs) in the atmosphere has become a concern for consumers and businesses around the world. Our focus on reducing our carbon footprint pre-dates this contemporary focus by many years.

As far back as 2000, Sappi instituted a system for measuring greenhouse gases (GHGs), based on the premise of 'measure, monitor, manage and mitigate'. Since then, one of our key strategic goals has been to reduce our carbon footprint by improving energy-use efficiency and decreasing our reliance on fossil fuels.

There are significant opportunities, inherent in our business and processes, that can help us to meet this key strategic goal and sustainability driver:

- Carbon sequestration in our plantations and forests
- Generating a high proportion of our energy requirements from renewable biofuel sources, including those generated by our pulping processes
- Cogeneration opportunities
- Energy savings initiatives

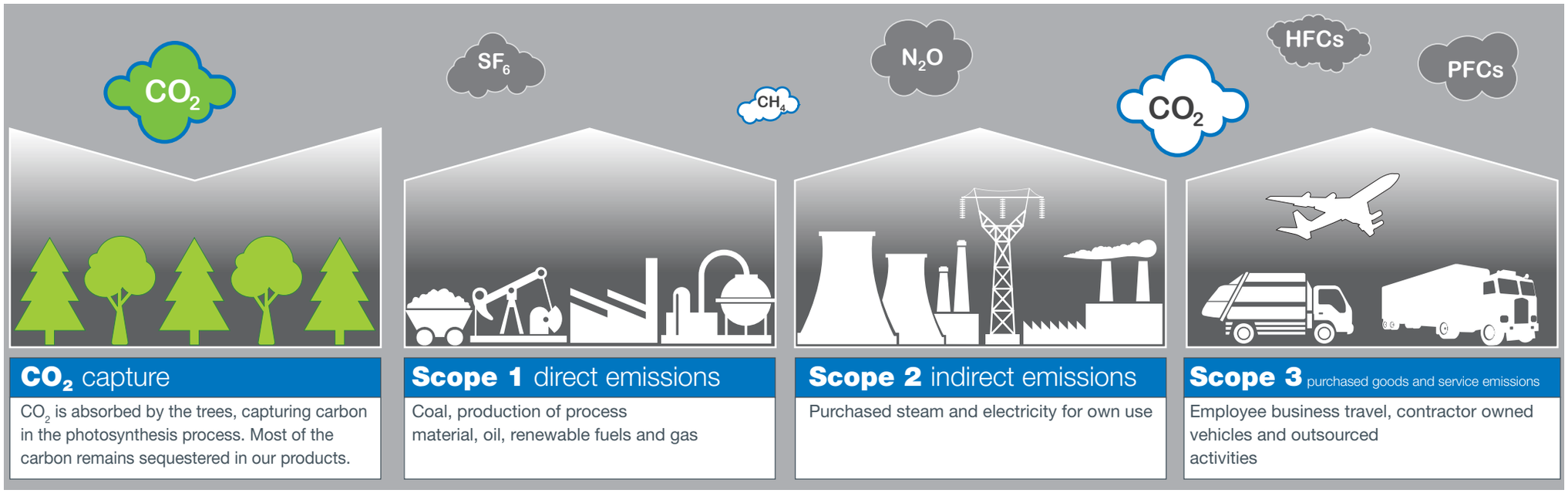
To entrench our approach to reduce our carbon footprint by improving energy-use efficiency and decreasing our reliance on fossil fuels, mill management have energy reduction targets (which in themselves result in GHG reductions) and achievement of those targets is linked to remuneration. At group level, executives who have responsibility for the mills also derive financial rewards associated with a reduction in GHG emissions.

We have reduced purchased energy (electricity and fossil fuel) and increased our use of renewable energy — an approach which ultimately results in a reduction in GHG emissions.

Our greenhouse gas emissions — cradle to gate

Emitted/captured by Sappi. For more information click on the 'cloud'

Not emitted by Sappi



Energy consumption and associated emissions

EN 3

Direct energy consumption by primary energy source

The graphs for EN 3 and EN 4, direct (Scope 1) and indirect (Scope 2) energy are accompanied by the equivalent EN 16 GHG emission graphs.

This is a useful self-checking method as the annual variations in energy use should correspond with the associated GHG emissions.

Variations are explained in the comments accompanying the graphs.

EN 4

Indirect energy consumption by primary source

EN 16

Total direct and indirect greenhouse gas emissions by weight.

Our processes are energy intensive; the cost and availability of energy is therefore important and discussed in detail as one of our key sustainability drivers.

Reducing our specific purchased energy consumption is a financial imperative, with the added benefit of reducing emissions.

50% biofuels

Own and purchased biofuels constitute 50% of all our energy requirements

EN 3 Direct energy fuels

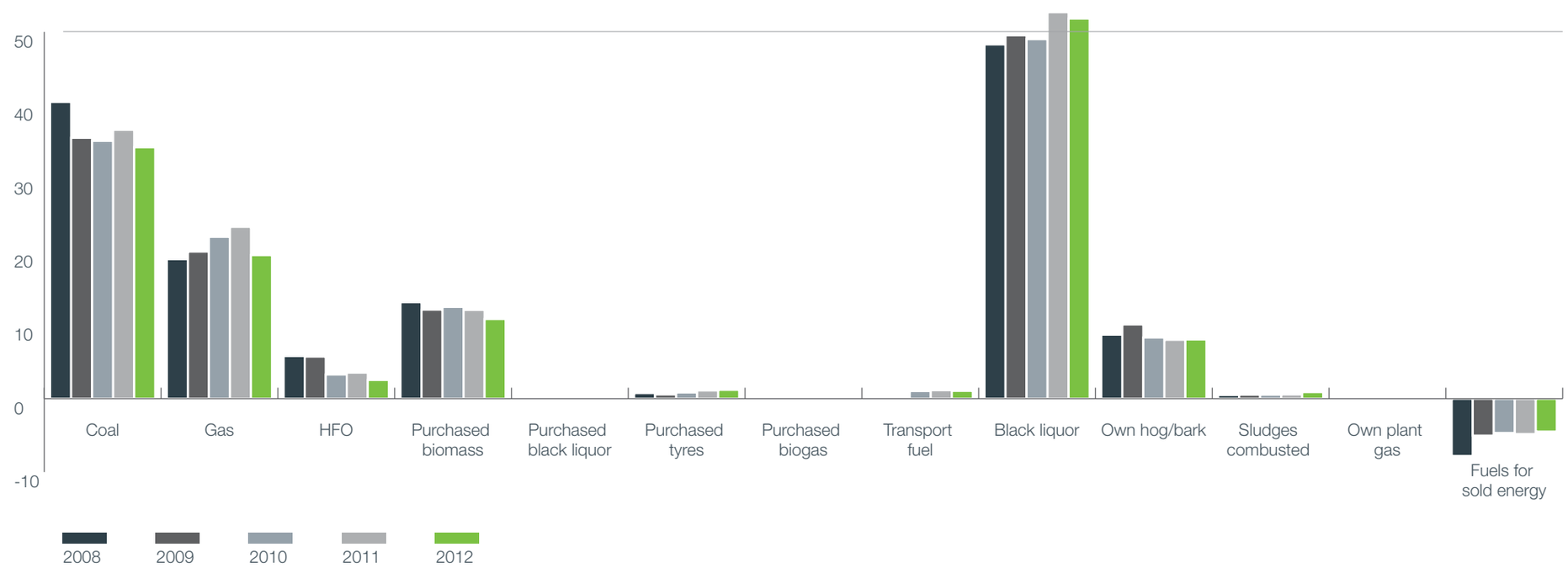
The EN 3 fuels include purchased fuels and fuels generated within our operations.

The fuel for energy that is sold (all electricity) is shown as negative.

Black liquor, resulting from concentrating waste pulping liquors is by far the greatest fuel source. 'Own bark' is fuel from forest residues from trees that are harvested for pulping. Together, with purchased biomass, for 2012 these fuels constitute 50% of the fuel used.

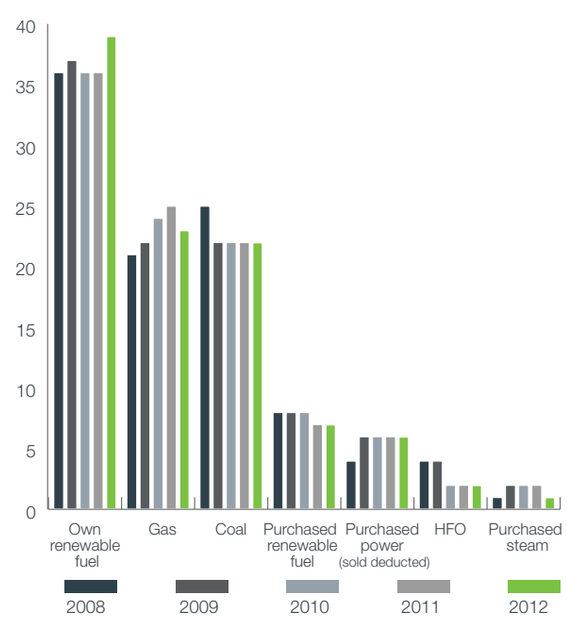
EN 3 Direct energy

Fuels: purchased + own - sold energy



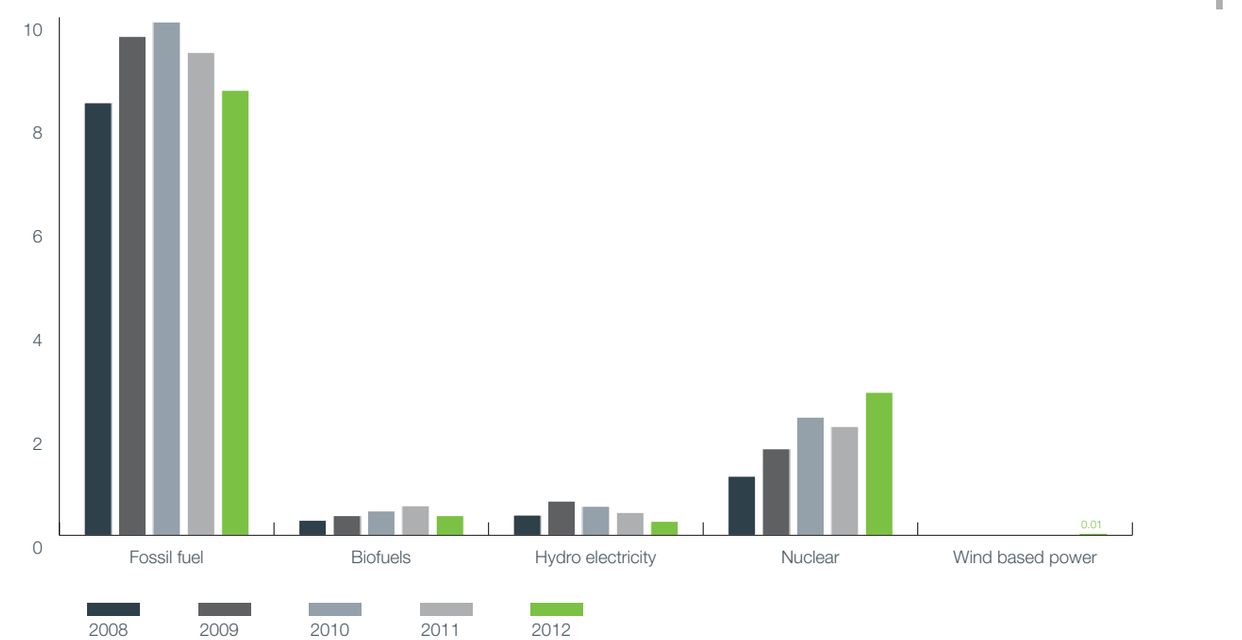
Energy consumption and associated emissions continued

Sources of energy



EN 4 Fuels used for purchased energy

Fuels: purchased + own - sold energy



Sources of energy

Own renewable fuel (sludges, black liquor and biomass) is the predominant fuel for the Sappi group's operations.

Renewable energy as a proportion of total energy use is not a GRI indicator. It is however, an important pulp and paper industry measure — an indicator of how effective we are at reducing purchased energy costs and avoiding the concomitant emissions resulting from the use of fossil fuels.

EN 4

Energy sources used to produce purchased power and steam are shown. Fossil fuel sources predominate (coal, gas fuel and oil). The increase through to 2010 is the result of the acquisition of four new mills and the decline since then is the result of the closure of four mills.

Energy consumption and associated emissions continued

Saving energy and reducing emissions

Emissions reductions are benchmarked against 2007 emissions.

From FY11 onwards, process improvements at Somerset, Gratkorn and Saiccor Mills started to show benefits. The FY12 the restructuring of our Enstra and Tugela Mills and further improvements at Saiccor Mill have resulted in energy savings.

Europe

We operate combined heat and power (CHP) plants in all of our mills.

These plants not only generate electricity but also steam, which is used in the paper machines to dry the paper. Such efficiencies mean our CHP units are twice as energy efficient as conventional power plants.

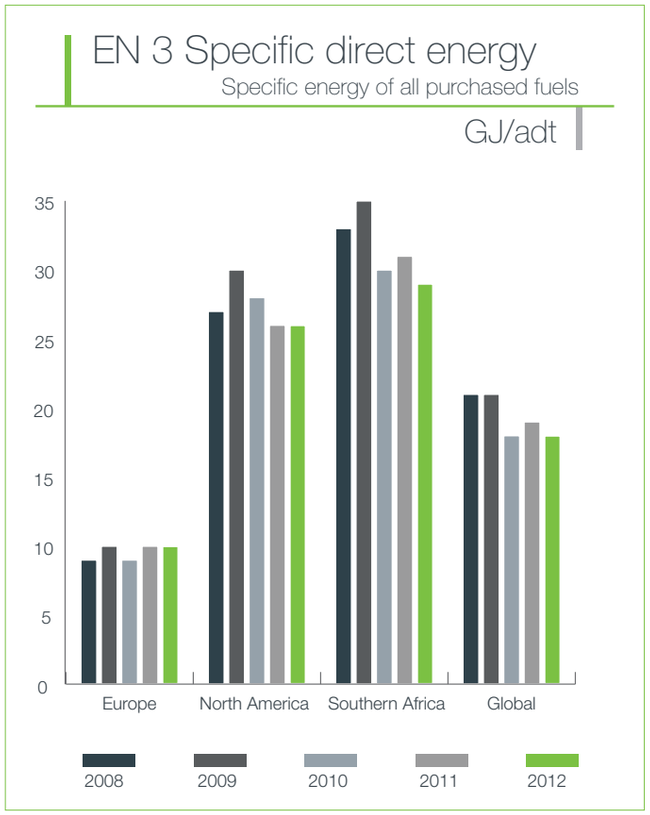
Europe

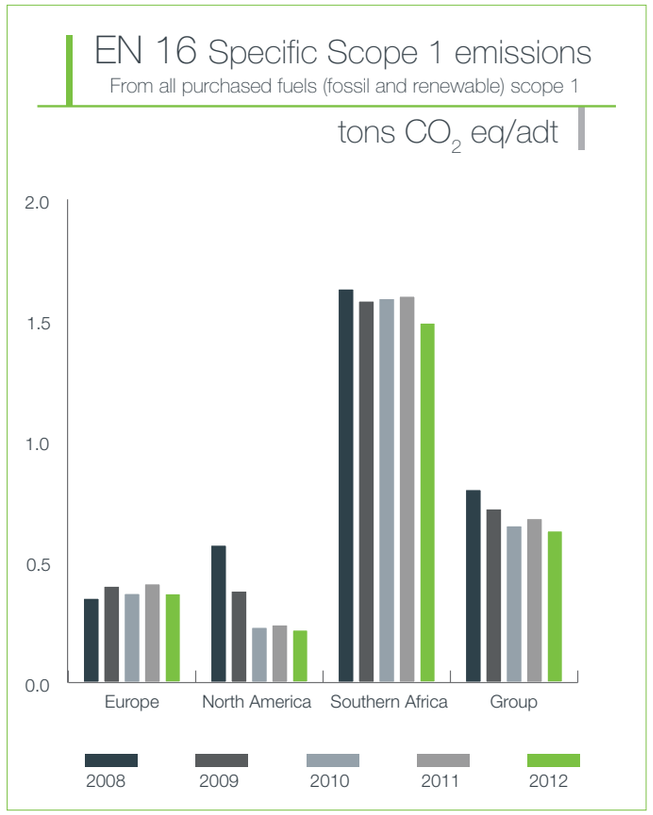
Using on-site generated biogas

Emissions are avoided at our Alfeld, Ehingen, Gratkorn, Lanaken and Stockstadt Mills by replacing purchased natural gas with biogas generated on site.

28,952 tpa CO_2

Estimated emissions avoidance of fossil-fuel carbon dioxide





EN 3 Direct energy consumption

Data include purchased fuels and own fuels such as black liquor, sludges and bark from trees consumed during pulping. Fuels used to produce any sold energy are excluded. FY12 reporting is aligned with the requirements of the Carbon Disclosure Project which excludes renewable fuel emissions.

Europe No significant changes at our mills in Europe.

North America The steep FY09 increase is attributed to a significant decrease in production in that year. Since then production has normalised.

South Africa The FY12 decrease can be attributed to: the cessation of pulping operations at Enstra Mill, a reduction of pulping operations at Tugela Mill and increased efficiencies at Saiccor Mill.

EN 16 Scope 1 emissions

Data represents emissions from all fuels combusted in terms of EN 3, but excludes those from renewable fuels (own and purchased).

Renewable fuels are included for the FY08-FY11 period.

FY12 reporting is aligned with the requirements of the Carbon Disclosure Project which excludes renewable fuel emissions.

Energy consumption and associated emissions continued

Europe

Cogeneration at Gratkorn Mill

Gratkorn Mill in Europe has operated a Combined Heat and Power Generation Plant (CHP) since July 2007. This arrangement has resulted in the replacement of coal with natural gas. Because of this more efficient arrangement, fossil-based CO_2 mill emissions have decreased by nearly 5% to date. The mill has the option of switching between different fuels in the fluidised bed boiler, in response to variations in fuel prices. Natural gas is considered to be the cleanest and most efficient of the three major fossils fuels.

48,800 tpa CO_2

Estimated emissions avoidance of fossil-fuel carbon dioxide

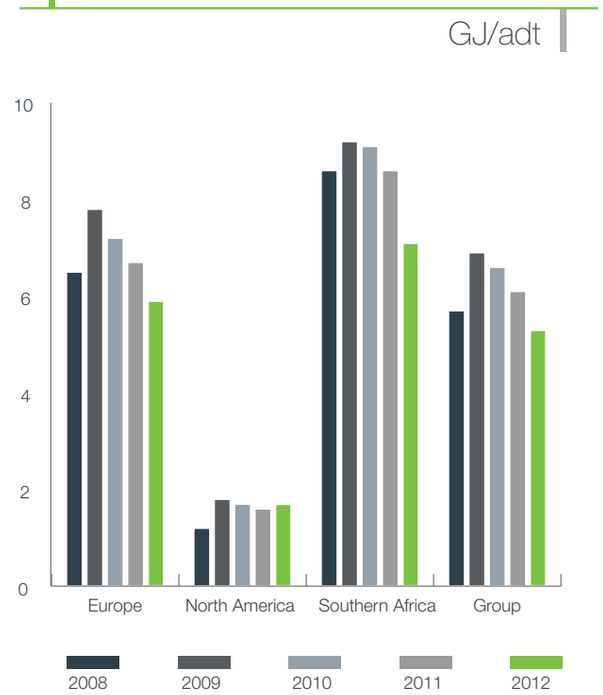
North America

We have utilised PINCH technology and Lean Six Sigma techniques to optimize energy usage in our facilities. We have also made several investments in boiler technology, such as over-fire air modifications, to allow for higher utilisation of biofuels.

2,336 m tons CO_2

Estimated emissions avoidance of fossil-fuel carbon dioxide

EN 4 Specific indirect energy



EN 4 Specific indirect energy

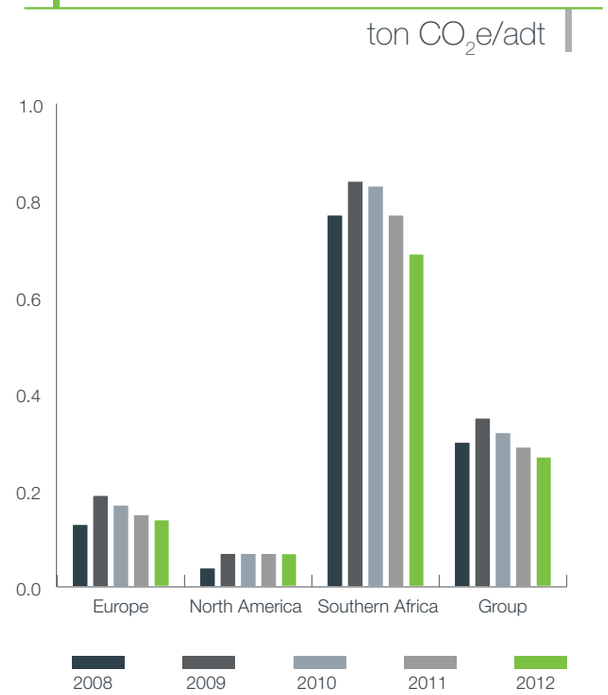
Data includes the energy derived from fuels to produce purchased power, heat and steam, including purchased energy. It also includes purchased energy that does not originate from combustion sources such as nuclear, hydroelectric, wind and solar power.

Europe The FY12 decline is attributed to the closure of Biberist Mill which bought in most if its power needs.

North America No significant change.

South Africa As discussed in EN 3, the FY12 decrease can be attributed to: the cessation of pulping operations at Enstra Mill,a reduction of pulping operations at Tugela Mill and increased efficiencies at Saiccor Mill.

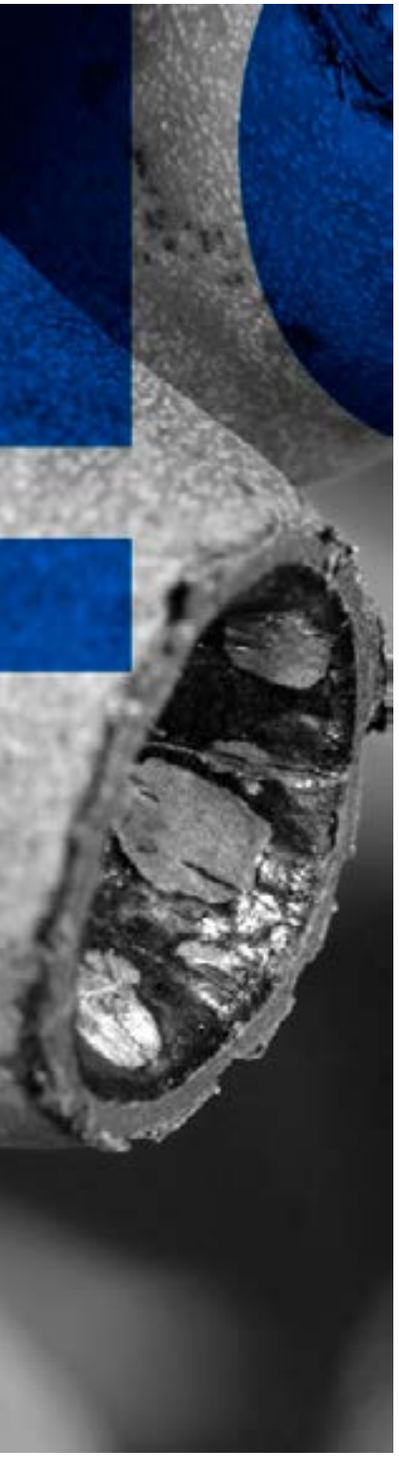
EN 16 Scope 2 emissions



EN 16 Scope 2 emissions

Scope 2 emissions are those emissions released by the fuels combusted to produce indirect energy — EN 4

Energy consumption and associated emissions continued



North America

Somerset Mill recovery boiler upgrade

In 2010, we implemented a US$36m capital improvement project at Somerset Mill to upgrade the mill's evaporators and recovery boiler, enabling us to recover more energy from black liquor produced by the pulping process.

The upgrade resulted in reduced consumption of chemicals and generates renewable energy equivalent to 100,000 barrels of fuel oil per annum. The energy generated is used throughout the operations in the form of steam and electricity.

32,000 tpa CO_2

Estimated emissions avoidance of fossil-fuel carbon dioxide

Europe and North America — use of hydropower

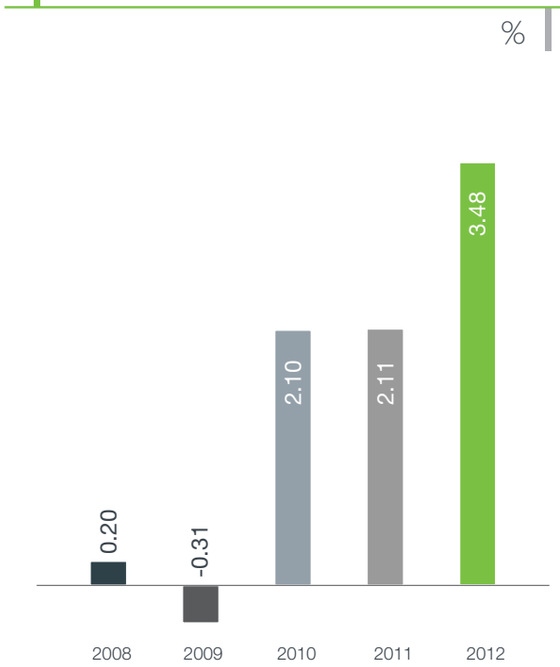
Our Alfeld, Gratkorn, Cloquet and Westbrook mills generate power from their own hydro plants.

10,334 tpa CO_2

Estimated emissions avoidance of fossil-fuel carbon dioxide

EN 7 Indirect energy reduction

2007 base



EN 7 Indirect energy reduction

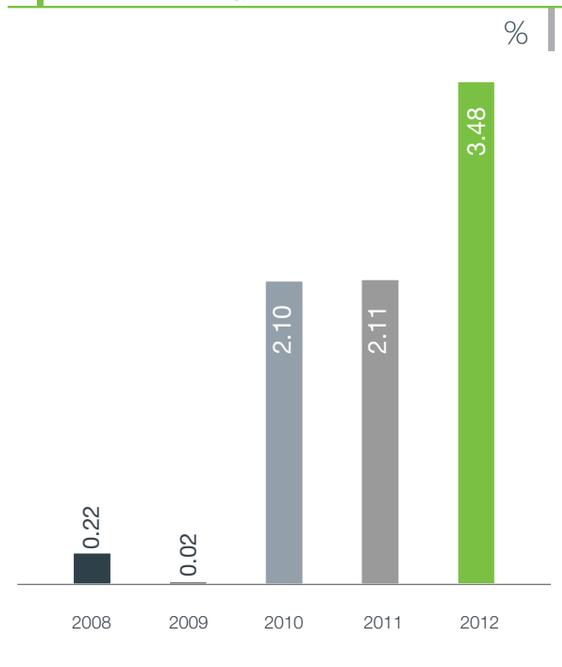
Emissions reductions are benchmarked against 2007 emissions.

Charting our global indirect energy reductions is more meaningful than comparing regional performance as there have been several mill purchases and closures in the period under review.

The activities mentioned under EN 6 all resulted in reduced indirect energy use. As expected, the trend is very similar to that shown in EN 5 as the reduction in EN 5 is the same. In other words, the improvements reduced total energy (EN 3 + EN 4) use.

EN 18 Indirect energy

Indirect energy emission reduction 2007 base



EN 18 Indirect energy reduction

Emissions reductions are benchmarked against 2007 emissions.

Charting our global indirect energy emission reductions is more meaningful than comparing regional performance as there have been several mill purchases and closures in the period under review.

From 2010 onwards, process improvements at Somerset, Gratkorn and Saiccor Mills started to show benefits.

In 2012, the restructuring of the Enstra and Tugela Mills and further improvements at the Saiccor and Ngodwana Mills have resulted in further energy savings.

Energy consumption and associated emissions continued

South Africa

Amakhulu expansion project at Saiccor Mill

Saiccor Mill's Project 'Amakhulu' (which expanded capacity from 600,000tpa to 800,000tpa of dissolving wood pulp) integrated a recovery boiler with a 45MW turbo generator to harness waste energy and convert it into steam and electricity, while also converting waste chemicals into useful chemicals. This increased the use of renewable energy at the mill from 35% to 55%.

64,000 tpa CO_2

Estimated emissions avoidance of fossil-fuel carbon dioxide

Plantations mitigate climate change

The sustainably managed forests and plantations from which our wood is sourced play an important role in mitigating climate change by absorbing CO_2, sunlight and water to produce the carbohydrate energy needed for growth and releasing oxygen as a by-product during the process of photosynthesis.

When trees are harvested, the carbon is not released into the atmosphere; wood products and wood fibre in paper store carbon throughout their lifetime.

Harvesting is not tantamount to deforestation; it is an important part of the cycle of growth, materials manufacture and re-growth. Harvested forests and plantations are replanted — generally within a few months — and consequently the process of absorbing CO_2 continues as the new trees grow. Harvesting trees is balanced with re-growth.

In our plantations in Southern Africa, we currently plant 1.2 trees for every tree harvested; in 2011, 37 million trees were planted.

The wood that we harvest alone accounts for 13m tons of absorbed CO_2 — and more than 8m tons of life-giving oxygen released every year. This avoids emissions equivalent to burning 815,000tons of coal. A significant amount of carbon is also captured within the roots — we do not account for this.

Case study

Galileo

Kirkniemi Mill recently invested in a new technology — Galileo — at the pressurized groundwood mill. Galileo's benefits include:

- 30% energy savings in grinding — about 0.4MWh/t pulp
- 30-50% production increase
- Up to 50% reduction in rejects and associated reject refining energy savings
- Reduced variation in pulp quality.

Changes to the process involved the installation of a new diamond grits surface on the grinding stone. The first stone was installed in August 2012 and indications are that it is successful. The payback time is less than a year.

Case study

Green-e certification

Following the upgrade of the recovery boiler at Somerset Mill, all the electricity used to manufacture Opus web paper is now Green-e certified as on-site generated renewable energy.

Opus web joins the line-up of Sappi Fine Paper North America's current Green-e certified product offerings which have been Green-e certified via renewable energy generated at our Cloquet Mill in Minnesota:

- McCoy web Sheets and digital
- Opus sheets and digital
- Opus 30 web
- Flo sheets and digital

Green-e is the USA's leading, independent, third-party certification and verification programme for renewable energy, ensuring that strict environmental and consumer protection standards are met. Customers who choose one of SFPNA's Green-e certified products and one of the Green-e Marketplace re:print certified printers for their print job can further leverage the fact that they are minimising their environmental footprint through the Green-e Marketplace re:print programme.

Streamlining transport to reduce emissions

As with other industries, Sappi relies heavily on fossil fuels for transportation. We are committed to streamlining our use of transport as this reduces specific emissions and reduces delivery costs. We are achieving this through several initiatives, including the replacement of travelling for meetings with video and teleconferencing.

Europe

We transport approximately four million tons of finished paper every year. We are moving raw material and finished products by rail or canal, rather than road. Investment in rail infrastructure at the mills is playing an important role in driving this shift. Today, 45% of all our finished paper is transported by rail or canal; both comparatively energy efficient means of transport.

North America

We have participated in the USA Environmental Protection Agency's (EPA) SmartWay® Transport Partnership since 2009. SmartWay® is an innovative collaboration between the EPA and companies that provide freight delivery services. As a certified shipper, Sappi has committed to improving performance over three years and tracking progress annually.

The current methodology calculates a SmartWay® 'score' based on the ratio of ton-miles shipped via SmartWay® (truck, rail, intermodal, and third-party logistics providers) to total ton-miles shipped in a calendar year. The calculation is limited to domestic (USA and Canada) outbound shipments of paper reels and sheets originating from Sappi operations (manufacturing, converting, cross-docking, and warehousing facilities). We have consistently improved our overall year-on-year score and exceeded the minimum partnership requirements for each calendar year since 2009.

We have successfully influenced major distribution partners to become SmartWay® certified. The combined goal of SmartWay® partners is to cut CO_2 emissions by 33-66 million tons and nitrogen oxide emissions by up to 200,000tpa by the end 2012.

South Africa

In 2009, Sappi and timber transport contractor Timber Logistic Services (TLS) launched the first revolutionary SMART vehicles specifically designed to transport timber to Sappi's mills. The vehicles have been manufactured and certified for use on South Africa's roads in a first for the South African transport industry.

For a haulier to qualify for SMART truck permits, it has to be accredited by the Road Traffic Management System (RTMS) — a voluntary self-regulating system supported by the National Department of Transport and forms part of their national strategy. All RTMS trucks have to have the RTMS logo displayed on the front of the vehicle and annual external audits are compulsory.

RTMS is based on managing the following:

- Overloading
- Under loading
- Driver wellness

Sappi was the first forestry company in South Africa to commercially benefit from the use of SMART trucks; they offer the following advantages:

- Improved safety record
- 23% increase in payload
- 22% reduction in number of trucks to move the same volume
- 18% less wear on roads

We have 25 SMART trucks (15 in KwaZulu-Natal and 10 in Mpumalanga) hauling timber, with permits approved for an additional 14. The KwaZulu-Natal fleet has been on the road long enough for us to be able to compare greenhouse gas (GHG) emissions data with standard 22m rigs.

The key benefits of the SMART trucks are improved safety, less wear on roads and a reduction in GHG emissions per payload ton.

The KwaZulu-Natal SMART fleet alone reduces GHG emissions by 2,675tpa, a 18% reduction.

Energy self-sufficiency

EN 5

Energy saved due to conservation and efficiency improvements

EN 29

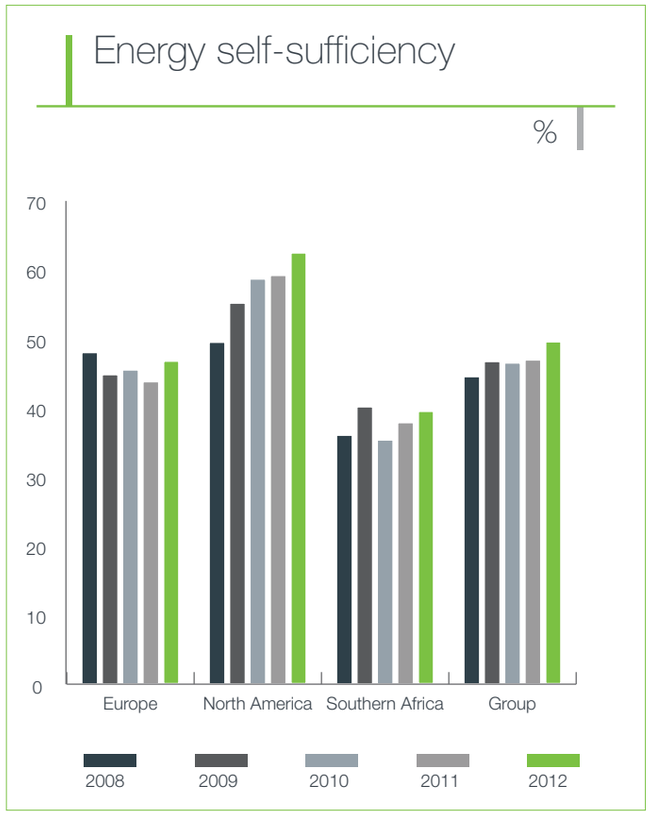
Significant environmental impacts of transporting products and other goods and materials used for the organisation's operations, and transporting members of the workforce

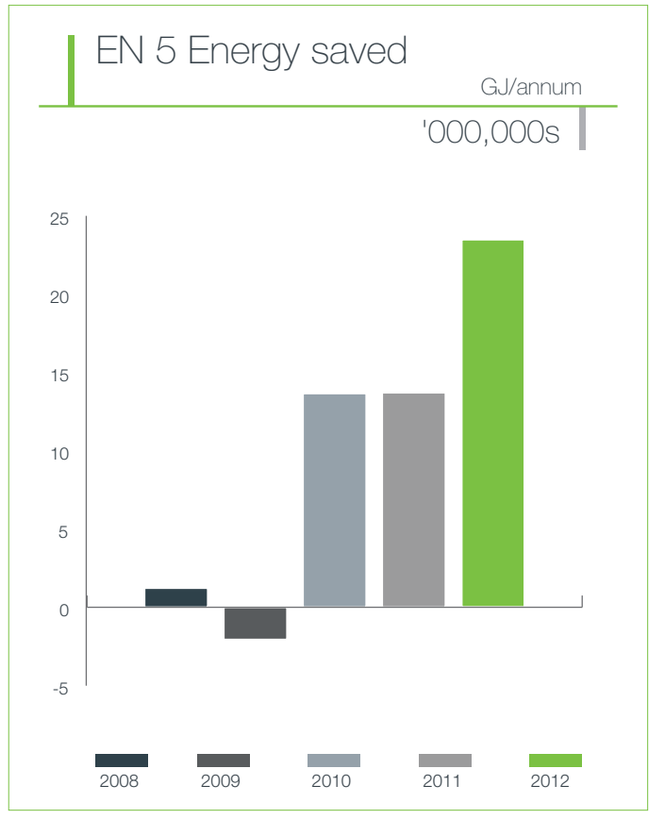
We are steadily becoming more energy self-sufficient through increased self-generation — using internally available biofuels like black liquor, sludges, and own bark — which makes us less reliant on purchased energy.

Reducing our dependence on fossil fuels not only lowers greenhouse gas emissions but helps to isolate our operations from fluctuations in energy prices — making us a more profitable and sustainable business.

12% saving

Our focus on energy efficiency and reduction initiatives has resulted in savings of 12% since 2008.





Energy self-sufficiency

The less energy that is purchased and the more that is generated internally through the use of fuels like black liquor, sludges and own bark, the greater the energy self-sufficiency.

This has significant financial benefits to the company as less fuel needs to be purchased.

Through use of these fuels, we are steadily increasing energy self-sufficiency. Independence from fossil fuels not only lowers greenhouse gas emissions but helps to isolate our operations from fluctuations in energy prices — making us a more profitable and sustainable business.

EN 5 Energy savings

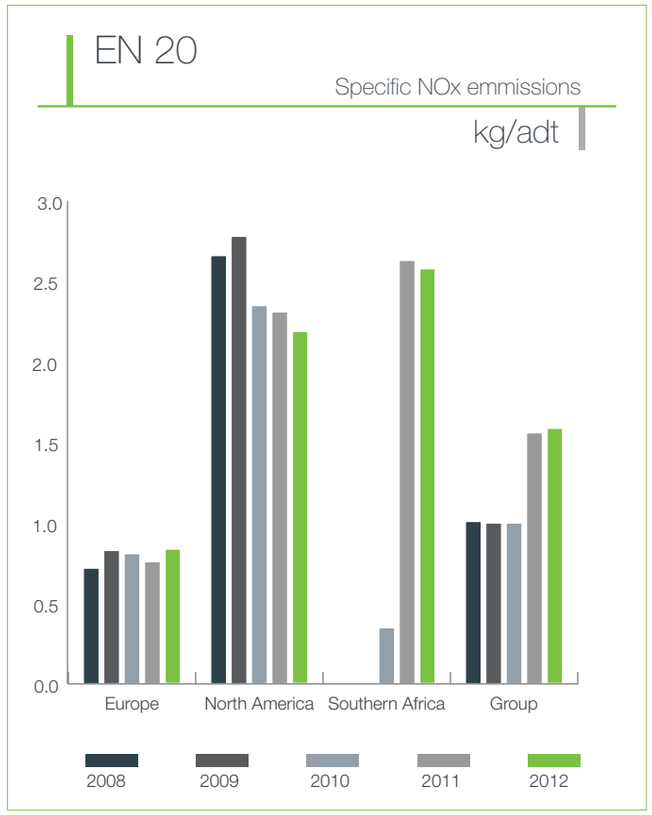
Energy savings are benchmarked against 2007 use.

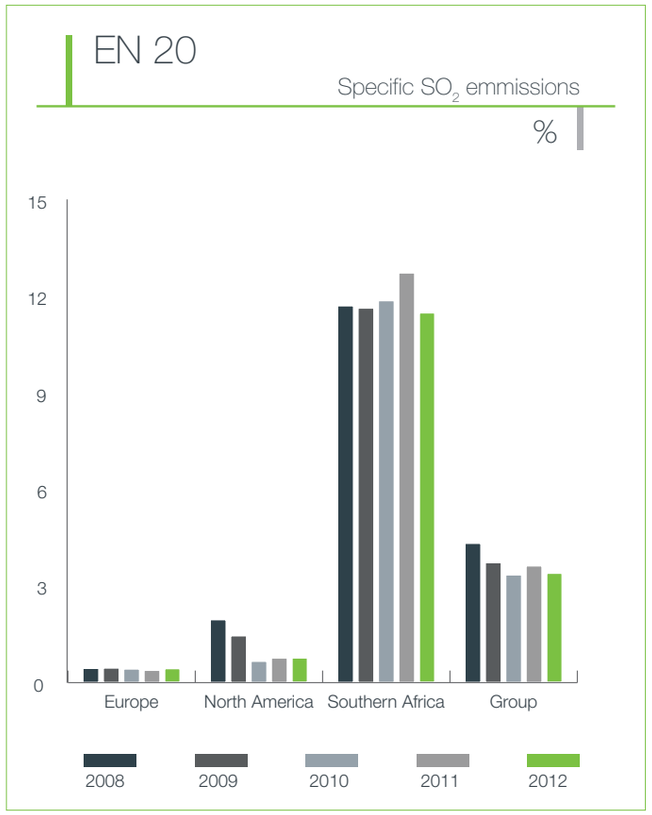
Charting our global indirect energy reductions is more meaningful than comparing regional performance as there have been several mill purchases and closures in the period under review.

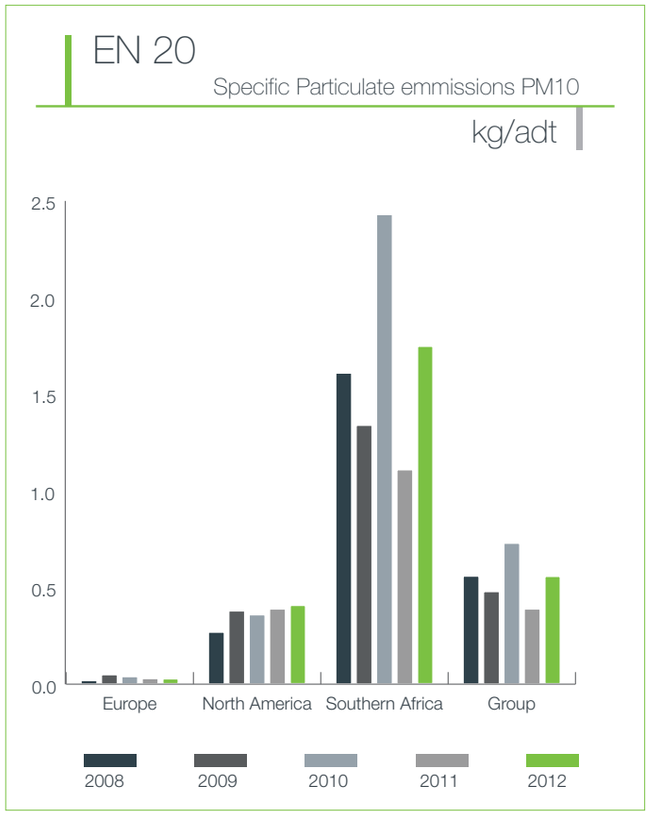
No energy was saved during 2009 — during the economic downturn, operations were not run at full capacity, or were shut and restarted.

From 2010 onwards, process improvements at Somerset, Gratkorn and Saiccor mills started to show energy saving benefits. The 2012 restructuring at Enstra and Tugela Mills and further improvements at Saiccor Mill have resulted in additional energy savings.

Other emissions







EN 20 Nitrogen oxide emissions

Nitrogen oxide in combustion processes is largely a function of temperature. The higher the temperature the more is produced (nitrogen in the air combining with oxygen in the air). Fossil fuels typically combust at higher temperatures than renewable fuels.

Europe No significant trend.

North America The increasing use of renewable fuels in the US has thus resulted in lower nitrogen oxide emissions.

South Africa NOx emission measurements have only been conducted at certain operations in South Africa in recent years. This has resulted from revised emission legislation requiring its measurement. Some mills do not have NOx continuous emissions monitoring equipment so the measurements are taken intermittently.

EN 20 Sulphur dioxide (SO_2) emissions

Sulphur dioxide (SO_2) emissions can be ascertained in two ways: by calculation from knowing the sulphur content of fuels used or by summation of the information from SO_2 continuous emission monitoring (CEM) equipment. Because not all mills have CEM equipment, we use only the calculated emissions.

Europe Only very small quantities of sulphur-containing fuels are combusted. The decline in recent years in SO_2 emissions is attributed to the replacement of sulphur-containing fuels such as coal and oil with purchased and own biomass. Most of the fuel is natural gas which has low sulphur content and the coal that is combusted generally also has a low sulphur content.

South Africa Coal — with a high sulphur content — is the predominant fuel in our South African operations, and accounts for the high SO_2 emissions. From 2010 onwards, process improvements at Saiccor Mill started to show benefits and in 2012, the restructuring of the Enstra and Tugela Mills and further improvements at the Saiccor and Ngodwana Mills have resulted in energy savings.

EN 20 Specific particulate emissions

Europe Coal has become more attractive as a fuel because of its relative cheapness (cost/gigajoule). Gratkorn and Stockstadt Mills, which use more coal than Sappi's other mills in Europe, have gradually increased their coal use, contributing to increased particulate emissions.

North America Only very small quantities of coal and other particulate producing fuels are combusted.

South Africa The high particulate emissions for Sappi's mills in South Africa result from the fact that coal (with high ash content) is by far, the most-used fuel. Measurements are often taken only an annually or biennially, in compliance with legislative requirements.

Managing water use and effluent discharge

EN 8

Total water withdrawal by source

EN 9

Water sources significantly affected by withdrawal of water

Globally, 92% of the process water we use is returned to the environment (after having been recycled many times, cleaned and treated).

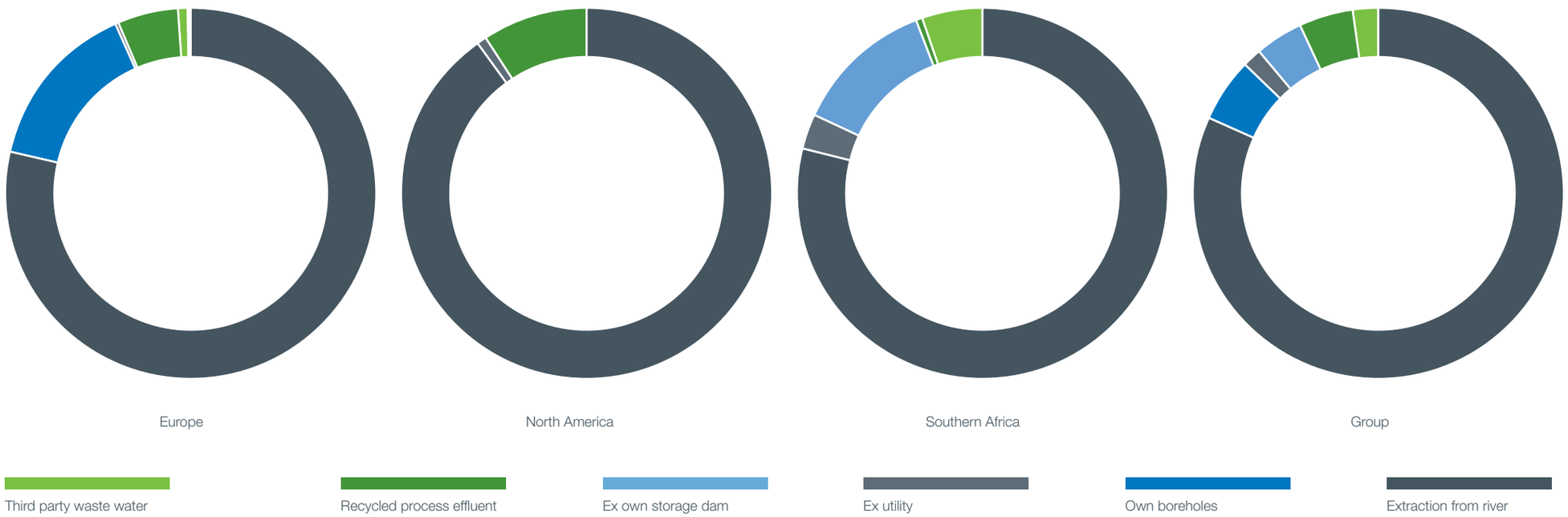
Pulp and paper operations are highly dependent on the use and responsible management of water resources. Water is used in all major process stages, including: raw materials preparation (wood chip washing); pulp cooking, washing and screening; paper machines (pulp slurry dilution and fabric showers). Water is also used for process cooling, generating steam for process use and on-site power generation and various other purposes.

Water used for pulp and paper production is mostly circulated within the system. A closed-loop water system is possible in theory, but usually not the option with the lowest impact. The best option usually requires some make-up water which in turn requires some process water to be released back to the environment — after it is treated in simple or multiple stage waste water treatment processes.

Pulp production has a higher specific water need than paper production. Our water use is lower in Europe where the share of pulp production compared to total production is smaller than in North America and South Africa.

Many of our mills are situated in the vicinity of rivers from which they draw water. Withdrawal from rivers accounts for the largest portion of water drawn. This withdrawal is subject to licence conditions specific to each area where we operate.

Source of water



Managing water-use and effluent discharge continued

Using recycled water

Our Enstra Mill in South Africa does not draw river water, but relies on municipal water, approximately 40% of which originates from treated municipal sewerage effluent.

Water management

Water and effluent testing is routinely conducted at mill sites. Water management is included in our operational environmental management plans, which are reviewed and updated annually. Globally, specific water drawn has decreased by 10.5% over the past five years.

Globally, 92% of the process water we use is returned to the environment (after having been recycled many times, cleaned and treated).

Improved effluent quality

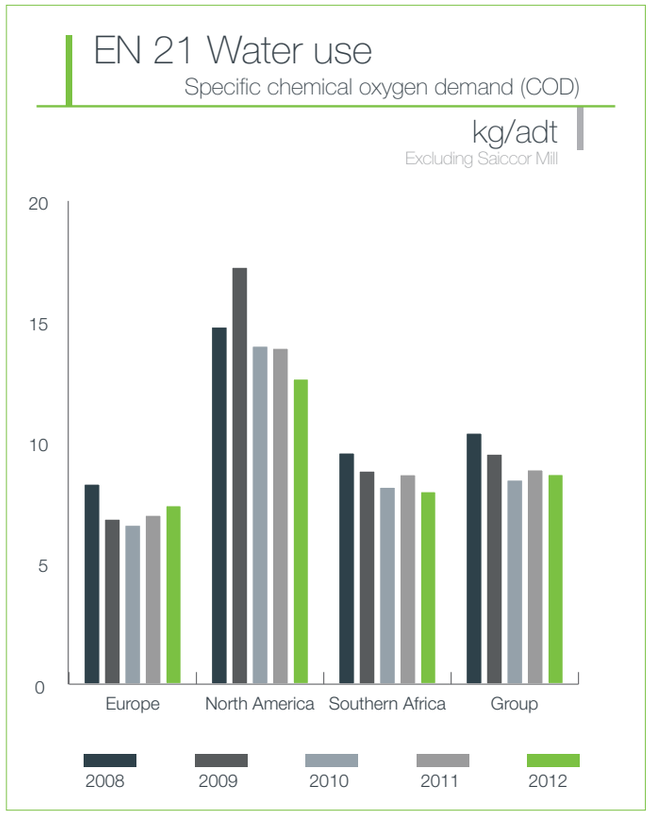
Global chemical oxygen demand (COD) and total suspended solids (TSS) have decreased by 13.6% and 28.7% respectively over the same time period.

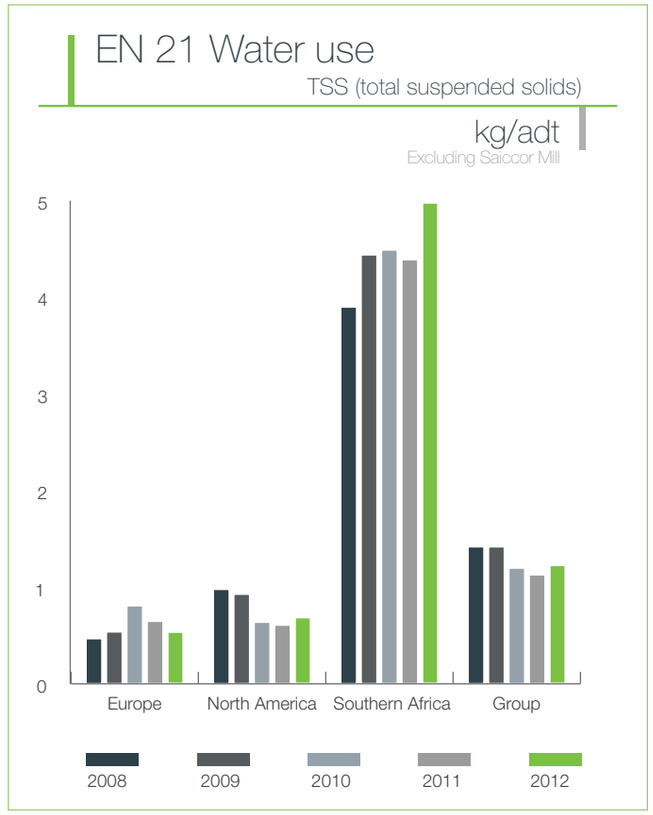
10.5% decline

Globally, specific water drawn has declined by 10.5% over the past five years.

92% returned

Globally, 92% of the process water we use is returned to the environment (after having been recycled many times, cleaned and treated).





EN 21 Specific chemical oxygen demand (COD)

Europe Effluent COD concentrations in the specific effluent increased because of the closure of Biberist Mill in 2011.

North America Effluent COD concentrations in the specific effluent decreased because of improved aerator uptime at Somerset Mill.

South Africa Performance was similar to 2010. During 2012, Ngodwana Mill's focus on minimising COD losses to effluent from the bleach plant, evaporators and the digesters paid off. In addition, the steam stripper uptime improved. It should be noted that Ngodwana Mill is the only mill in South Africa that has the benefit of an extensive biological filter in the form of irrigated fields. As from 2012, COD contribution to the river (as opposed to what is irrigated using the effluent) is being reported on. Saiccor mill excluded.

EN 21 Total Suspended Solids (TSS)

Europe Effluent treatment processes were run at a low concentrations of TSS

North America TSS levels declined due to process improvements that improved oxygen transfer, mixing efficiency and sludge dryness.

South Africa TSS levels increased. A centrifuge failed at the Cape Kraft mill. Enstra Mill did not have the required retention time in their aeration lagoon due to excess solids build up resulting in carry-over of suspended solids. A backwash filter failed at Stanger Mill and effluent treatment trials proved unsuccessful. Compromised clarifier efficiency, coupled with inefficient sludge removal due to mechanical problems on the belt press resulted in suspended solids losses at Tugela mill.

Saving energy and water

Energy savings linked to water reduction

Pulp and paper mills generate hot water and steam which is used for cooking wood chips, pulp washing, drying paper and other applications. Energy savings are therefore closely linked to water-use and effluent release reductions. As with energy, intensively managing our water usage and effluent release presents an economic opportunity.

Each of our operations can be likened to a very large heat exchanger: input water is heated in various ways and locations in each operation — by combusting various fuels — to produce steam.

One of the most effective ways of retaining heat energy within an operation is through maximising water recirculation to minimise effluent discharge — with its significant heat energy content. This reduces energy (fuels) requirements resulting in a reduction of GHG emissions (some of which are fossil fuel derived).

Global Water Tool

Sappi Fine Paper Europe has made use of the Global Water Tool developed by the World Business Council of Sustainable Development which helps organisation map their water use and assess risks relative to their global operations and supply chains. This tool indexes water as abundant at all our mills, except Maastricht and Lanaken, which are indexed as stressed due to the relatively high population living in the area.

Water quality is monitored on an ongoing basis.

Case study

Water membrane capture technology

Water management is becoming increasingly crucial in both arid and water-rich regions. Flue gas discharged through our mill's chimneys contains large volumes of water vapour, carrying with it, a considerable amount of latent heat energy.

Recovering this lost water and heat can potentially yield significant energy and water savings. That is why Sappi is participating in the CapWa project; a consortium of 14 international partners granted funding by the European Union, to develop a water capture model, using water membrane capture technology, ready for industrial use by 2013/14.

Water membrane capture technology separates water molecules from the other molecules present in the flue-gas stream. The captured water is of high quality and ready to be used again in industrial processes or distributed for other purposes. The objective of the project is to ascertain how well CapWa's highly effective membrane technology works in real-world environments.

The water membrane capture technology is currently being trialled at Nijmegen Mill in the Netherlands.

Managing water in our plantations

There are two key issues regarding water use in our plantations in South Africa: water quality and water quantity.

Water quality

Water quality is monitored on an ongoing basis.

Water quality in streams and rivers are typically only affected negatively by pollution or sediment loads resulting from erosion.

We manage water quality by preventing run-off into streams and rivers through regulating drainage and minimising erosion. Our roads are planned and constructed to prevent erosion and ensure water runoff is not directed straight into rivers. Several practices ensure runoff after harvesting is kept to a minimum. These include leaving harvesting residue on the ground and ensuring appropriate harvesting and extraction methods are used.

Water flowing from afforested catchments is largely unpolluted. Silvicultural activities in forestry plantations seldom use chemicals that cause pollution. Fertiliser is only used once in each rotation. We use only short-lived pesticides that have little or no impact on downstream ecosystems.

Erosion is a natural process and occurs in all landscapes. In afforested catchments, poor drainage from road networks and poor stream crossings can increase erosion (above natural levels) which affects water quality. Erosion from burnt compartments (especially after runaway wild fires) frequently lead to heavy sediment loads in streams and rivers which impacts the quality of the water and the health of these systems.

Our stringent management practises keep these sources of sediments in rivers and streams at acceptable levels. Water quality is monitored on an ongoing basis.

Water quantity

Our plantations are not irrigated

Our plantations require no irrigation at all, relying only on rainwater and groundwater. Tree farming (plantation forestry) is the only agricultural activity classified as a streamflow reduction activity and accordingly subject to planting licence requirements.

We optimise water quantity by delineating riparian zones and wetlands and ensure these are kept free of commercial trees. We actively clear alien vegetation and manage wetlands on our land.

Southern Africa is a water stressed region; water resources are becoming increasingly stressed by an accelerated rate of development and changing weather patterns, resulting in the scarcity of water resources.

There is some concern among stakeholders about the conversion of our Ngodwana Mill to produce 170,000tpa dissolving wood pulp (DWP) which will result in the use of hardwood (eucalyptus) instead of softwood (pine).

Although eucalypts do use more water than pine, it should be noted that this species is more water-use efficient at capturing carbon (absorbing CO_2) than most other commercial crops.

Eucalypts are also more land-use efficient than other crops at capturing carbon.

Carbon capture mitigates climate change by removing the greenhouse gas, CO_2.

Water-use efficiency — CO_2 absorption

Rain-fed plant fibre (not irrigated)	Water Ton water required for growth/ton CO2 absorbed	CO_2 Ton CO2 absorbed/ ha/ annum
South African eucalyptus fibre	274	26.9
Cotton fibre	4,866	2.5
Maize	3,943	6.8
Wheat	4,776	5.1
Sugar cane	3,152	2.2

Mitigating and managing climate change

We share the view that collectively, greenhouse gases (GHGs), most notably carbon dioxide (CO_2), and methane (CH_4), are responsible for climate change and that these are generated primarily by human activities such as the burning of fossil fuels and deforestation. While climate change is a natural phenomenon, the pace at which it is occurring is cause for concern.

Our efforts to mitigate our own carbon footprint are evident in the fact that over 50% of our global energy-use is derived from renewable, rather than fossil fuel sources. This is important, as the burning of fossil fuels continually releases 'new' CO_2 previously locked up in the form of oil, gas or coal. When renewable energy like biomass is burned however, the CO_2 released is equivalent to that which was bound from the atmosphere during the process of photosynthesis – so that 'new' carbon is not being introduced.

Paper and paper products lock up carbon during their lifetime.

Climate change can stress forests and plantations through higher mean annual temperatures, altered precipitation patterns and more frequent and extreme weather conditions.

We monitor the fibre situation in Europe and North America continuously.

Europe

According to the Food and Agriculture Organisation (State of Europe's Forests 2011), climate change could well alter the suitability of whole regions in Europe for certain forest types, forcing a shift in natural species distribution and leading to changes in growth of existing stands. Extreme events (storms, forest fires, droughts and heat waves) are expected to become much more common and/or severe.

North America

The mountain pine beetle, *Dendroctonus ponderosae*, a native to the forests of western North America is the most destructive pest of mature pines in North America. Major outbreaks of this pest are ravaging western regions of the USA and British Columbia (Canada). According to the USA Department of Agriculture Forest Service, beetle infestation is at epidemic levels throughout the western United States. The spread and population explosion of the beetles is thought to be as a result of climate change — warmer winters give the beetles the opportunity to complete two breeding cycles, and have allowed the beetles to extend their territories northward.

As our operations in North America source some of their fibre from Canada and the western USA, the impact of the pine beetle could affect long-term supply of softwood fibre if the dead wood is not harvested and the land reforested appropriately.

Definition

Carbon

Carbon storage
Carbon storage refers to the carbon already stored in the ecosystem

Carbon sequestration
Carbon sequestration is the process of capturing and accumulating carbon in the ecosystem.

A significant service
For carbon sequestration to be classified as a significant service, the store of carbon in the systems should be growing. Consequently, to maximise the carbon mitigation effect, it make sense to harvest mature trees, replant and begin the cycle of carbon absorption all over again.

>50%
Energy derived from renewable fuel sources

Mitigating and managing climate change continued

South Africa

Climate change is expected to make the African continent drier, rather than wetter. Water shortages could impact our fibre sources in South Africa, where we own, manage and lease 554,000ha of land. We grow mainly eucalypts and pines.

Our exposure to climate change related risk in Southern Africa is moderated by the diversity of commercial species and hybrids which we currently deploy across a wide range of climatic conditions.

We continually monitor and review forest best practices in the light of changing environmental factors, thus helping to mitigate any increased threat from water shortages or drought.

Our mitigation activities in this area include:

- Maintaining wide genetic variability in our planting material. This enables us to breed trees for a wide range of conditions. The rate of change in conditions is probably slow enough for us to respond in the breeding programme. In other words we will produce better trees as conditions change.
- Permanent eucalypt sample plots are measured annually and pine sample plots are measure biennially to determine the effect of drought on current annual increment as an input to long-term planning.
- Implementing extensive planting of more drought-tolerant eucalypt hybrids.
- Engaging in ongoing research and collaboration with industry and tertiary institutions to develop biocontrol measures and breed genetically more resistant planting stock.

Shaw Research Centre

The Sappi Forest Research department is based at the Shaw Research Centre, Howick, outside Pietermaritzburg, with satellite offices at Kwambonambi and Ngodwana. The staff of 60 manages three research programmes:

- Tree breeding
- Propagation
- Seed orchards.

This research effort is supported by a total of 624 active field trials and 140 seed orchards.

"To date, little is known about how trees will respond to elevated atmospheric CO_2 levels. Growth rates of forests could change, which may impact significantly on forest management and timber markets, requiring an adjustment in forestry policy and planning.

What is known is that the forestry species grown in South Africa are most sensitive to rainfall, and that the hybrids of both eucalypts and pines are relatively more robust to changes in climate than commonly grown species."

South African Risk and Vulnerability Atlas

Reducing solid waste

EN 22

Total weight of waste by type and disposal method

EN 23

Total number and volume of significant spills.

EN 24

Weight of transported, imported, exported or treated waste deemed hazardous under the terms of the Basle Convention Annex 1,11,111 and V111 and percentage of transported waste shipped internationally.

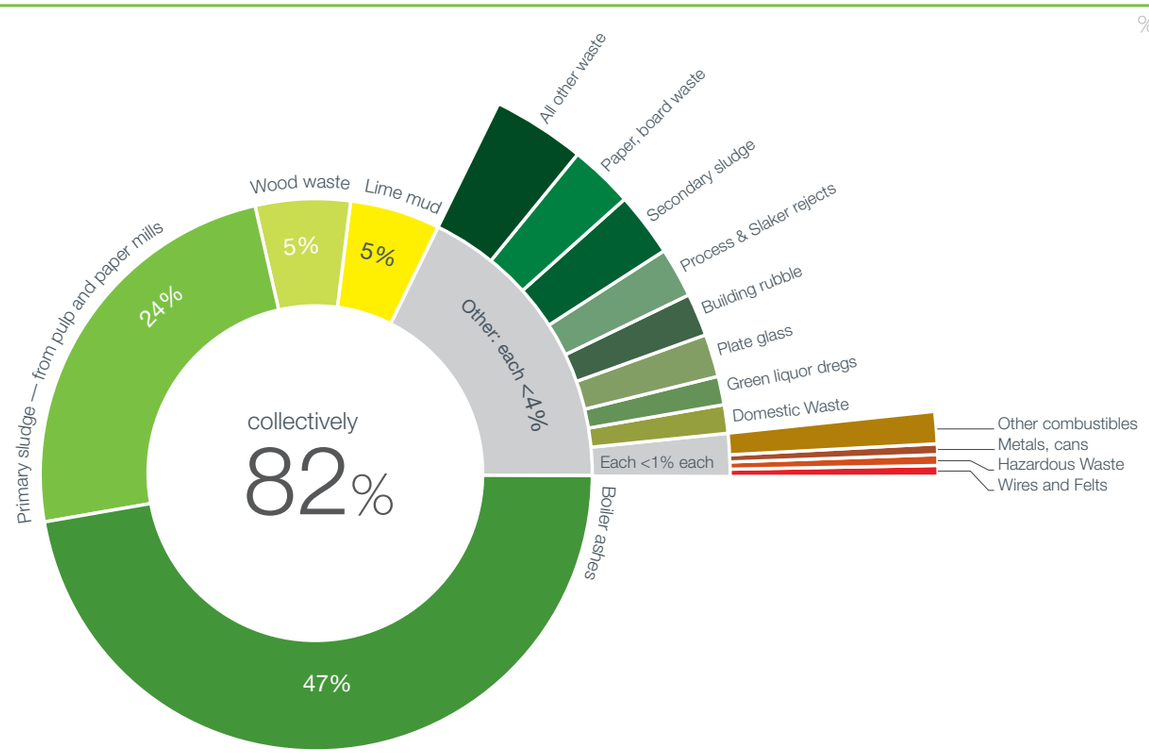
We generate very little hazardous waste, which is closely controlled and carefully managed, both at our operations and the receiving facilities to which it is sent.

We focus on minimising end-of-pipe waste and adding value to by-products. This not only helps to mitigate environmental impacts, but also generates additional revenue. Globally, over the past five years, we have reduced the solid waste we send to landfill by 31.4%.

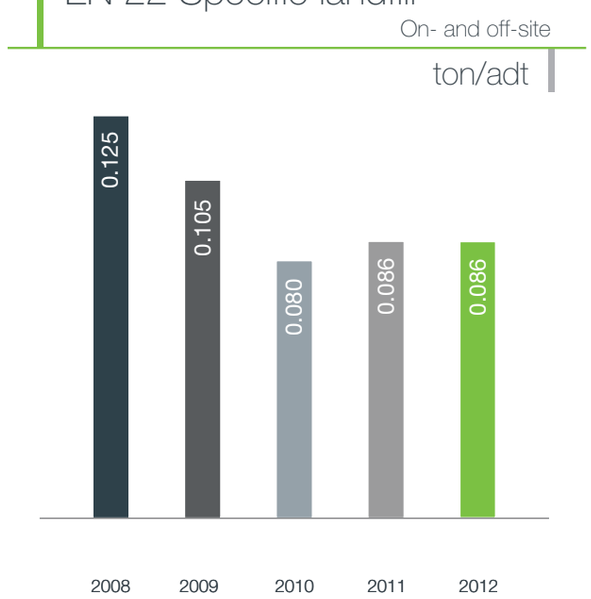
Every ton of product produced, generates approximately 0.13t of solid waste, comprised of: biomass, lime-mud from the pulping process, residuals in wastewater such as plant matter and pigments, and boiler ash. Most of the solid waste generated by our mills is boiler ash — directly correlated with the type and quality of fuel used.

From an environmental perspective, the least desirable method of solid waste disposal is discharging organic waste to a landfill site from where it can emit methane (CH_4) if not managed properly. Methane is a greenhouse gas with approximately 25 times the global warming potential of CO_2.

EN 22 Specific landfilled solid waste



EN 22 Specific landfill



EN 22 Specific landfill

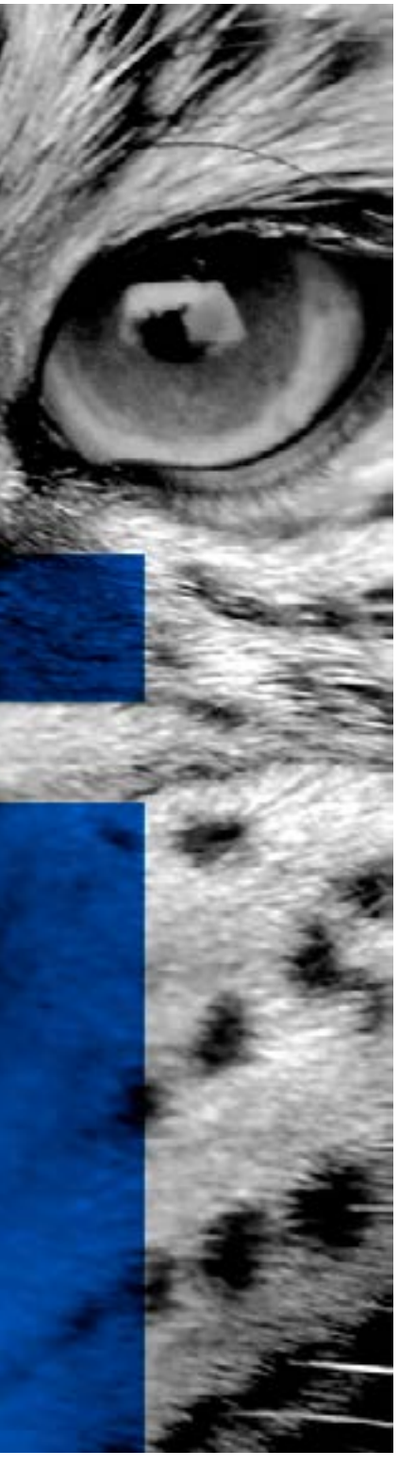
The group's performance was stable during 2012 — note the downward trend since 2008.

Europe Most wastes are used within operations to generate energy, or sold to third parties for use in a variety of purposes. Specific landfill remain unchanged in FY12.

North America Specific landfill increased slightly. Cloquet Mill decreased waste disposal by beneficiating bottom ash, fly ash and dregs. Westbrook Mill burnt less coal, sending less ash to landfill disposal. Somerset Mill increased lime mud volumes sent to landfill.

South Africa Less solid waste was sent to landfill due to the mothballing of the pulp mill at Enstra Mill and the curtailment of pulp production at Tugela Mills More waste was diverted from landfill by finding new markets: Enstra Mill generated revenue from selling paper waste; Stanger Mill sold sugar cane pith (used by sugar cane farmers as a soil enhancer); Ngodwana Mill sold bark, wood waste and ash. Tugela Mill sold lime mud (used for soil enhancement). Some solid waste is given to users free of charge.

Reducing solid waste and adding value



Ideally, both solid and non-solid waste should be used in another value-added process. Investigating the beneficiation of waste streams is an ongoing area of research at our Technology Centre in Pretoria as it offers opportunities for savings and revenue generation.

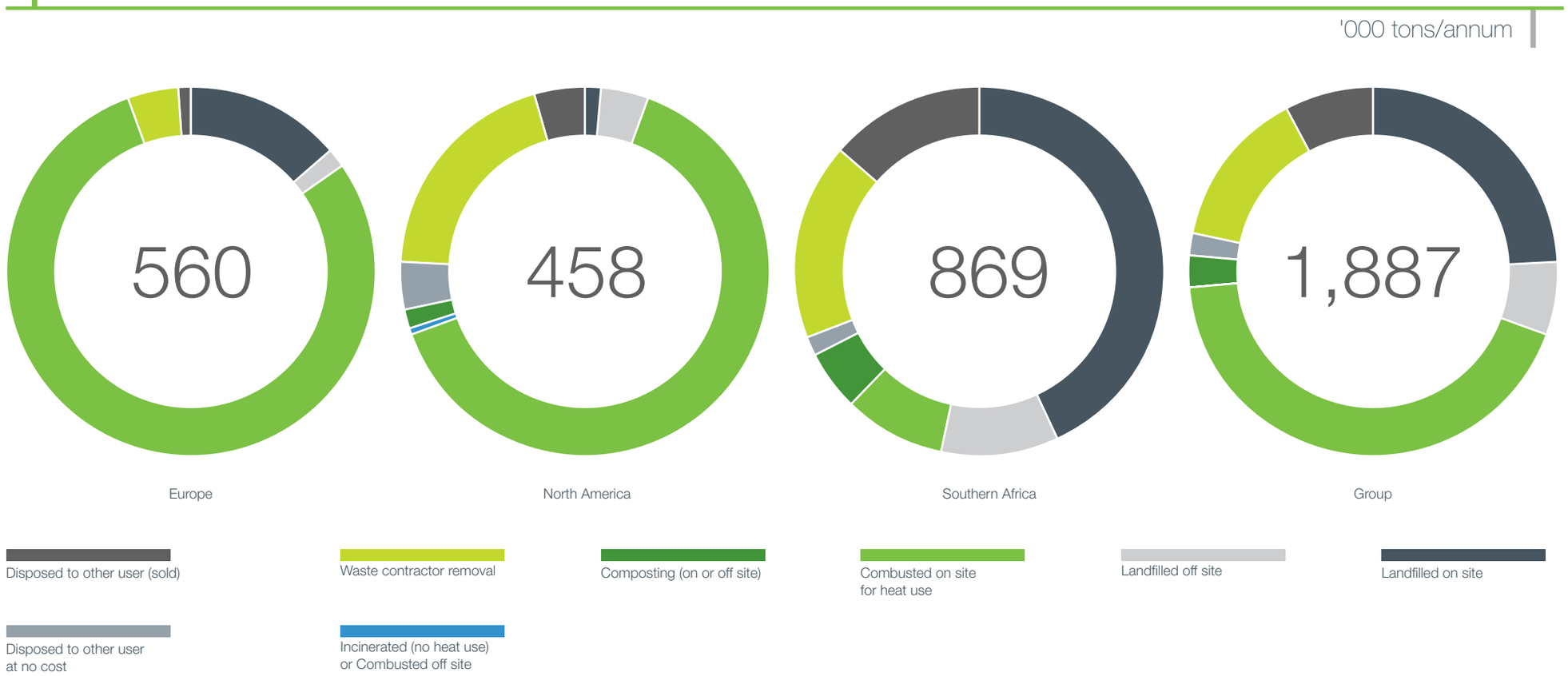
Using solid waste

Many of our mills in Europe and North America use own generated sludge as fuel.

Waste sludge can be used in the production of bricks and cement or household applications such as animal bedding material.

Excess lime mud generated from our liquor recovery process in some of our kraft pulp mills is supplied to farmers for spreading on their fields to enrich the land.

Solid waste disposal methods



Reducing solid waste and adding value continued

Non-solid waste

Waste oil is de-watered, chemically treated, refined and filtered for re-use in various grades of base oils.

At Alfeld Mill in Europe, coarse pigments from re-pulping internal broke are recovered from paper machine effluent and reprocessed to substitute virgin material. In another process, coating colour is recovered from effluent and reprocessed.

Beneficiating by-products

Tall oil (a by-product of the kraft pulping process) is sold to convertors and used to make detergents, lubricants and paint additives.

Lignosulphonates (a by-product of the pulping process) are recovered from spent pulping liquors. These are sold in South Africa to customers for use in a dust suppressant product used in the mining sector and in South Africa and Europe to the cement and fertiliser industries. Tugela Mill in South Africa is conducting trials to the use lignosulphonates in the brick industry.

Gold Certificate

Tugela Mill was awarded a gold certificate in the chemical category of a competition organised by the KwaZulu Natal branch of IWMSA (Institute of Waste Management of Southern Africa) and provincial regulators (DEA&RD). The mill was also declared the winner of the Best New Entrant Award.

Case study

An opportunity to minimise waste and add value

Recovering lignosulphonates (by-products of the sulphate (kraft) pulping process) from spent pulping liquids is an opportunity to minimise waste and add value.

Lignosulphonates act as a dispersant when wet and binders when combined with other fine-grained loose material and dried; consequently, lignosulphonates have a wide variety of applications.

Lignosulphonates as binders

- Lignosulphonates can be used on unpaved roads to stabilise the road surface.
- Lignosulphonates from Tugela Mill are sold to customers for use in a dust suppressant product for the mining industry. This product reduces environmental concerns related to airborne dust particles and also reduces water usage (the conventional method of dust suppression is to use only water). The customer reports that whereas previously excessive dust caused considerable downtime during night shifts, the increased effectiveness of the dust suppression product has meant that most mines supplied have increased their output during night shifts.
- The binding qualities of lignosulphonates makes them useful in a variety of pelleting applications, including fertilisers, briquettes and animal feed. Lignosulphonates are also used as a binder in compressed materials such as gypsum board. Tugela Mill sells small volumes of lignosulphonates to the fertiliser industry and is examining the potential of other applications.

Lignosulphonates as dispersant

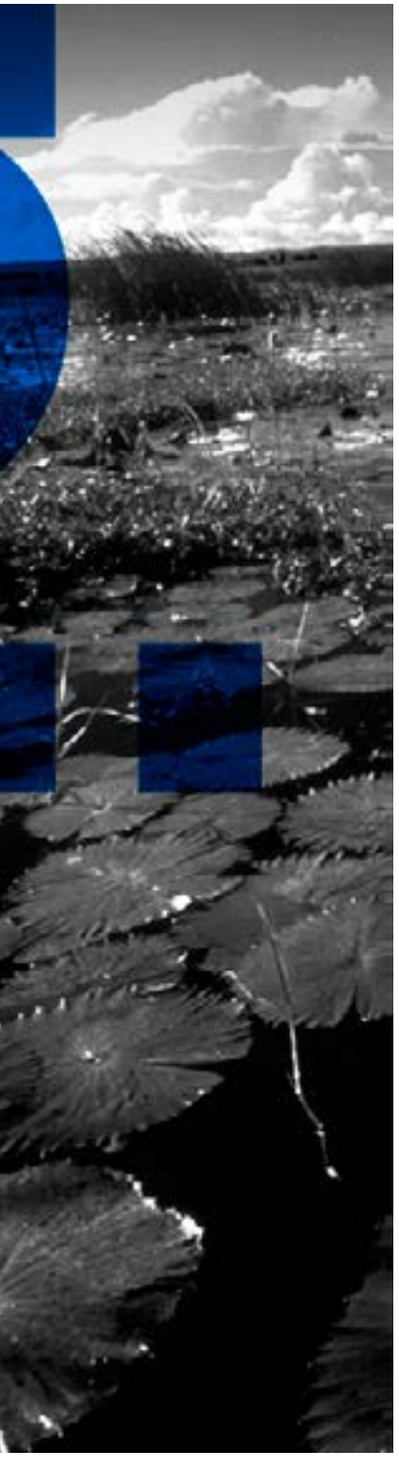
Lignosulphonates are excellent dispersants; they prevent the clumping and settling of undissolved particles in suspensions. By attaching to particle surfaces, they keep particles from being attracted to other particles, reducing the amount of water needed to mix products effectively.

This dispersing property makes lignosulphonates useful as an admixture in cement mixes, allowing concrete to be made with less water — which makes the concrete stronger — while maintaining the ability of the concrete to flow. Lignosulphonates from Tugela mill are sold to concrete manufacturers.

New opportunity

The mill is also conducting trials to use lignosulphonates in the brick industry.

Reducing solid waste and adding value continued



Case study
Alfalfa and dairy

Dairy farmers in Carlton County, Minnesota where our Cloquet Mill is situated were in desperate need of alfalfa hay, which contains more protein than native grasses. The soil in the area is naturally strongly to moderately acidic (pH 5.0-6.3) whereas alfalfa prefers less acidic soils (pH>6.0). The mill had a possible solution — bottom- and fly-ash, by-products of the pulp and paper manufacturing process, traditionally sent to landfill.

The mill partnered with the University of Minnesota's Carlton County Extension Agency to develop a win-win solution. Now, thanks to this partnership, bottom ash and fly ash are being diverted from landfills and used by neighbouring farmers who capitalise on the ash's alkalinity to increase the soil's pH to 6.9 — enabling them to growing alfalfa, which in turn, can be used to feed the local dairy cows.

The partnership helps farmers remain in business during these challenging economic times and Sappi significantly reduces waste to landfill. In addition to providing the ash, Sappi also pays for the hauling and spreading of the material — another boon to a community that is highly dependent on animal agriculture.

Case study
Sugars and lignin extraction

The Sappi Technology Centre, based in Pretoria, has been undertaking extensive bench and pilot plant trials using membrane technology to remove hemicellulosic sugars — mainly xylose — from by-product streams at Saiccor Mill. This opens the opportunity for Sappi to produce higher value chemicals such as xylitol (a sugar replacement), ethanol and furfural, amongst others. Both ethanol and furfural are considered foundation chemicals as they can form the basis for the manufacture of a host of other chemicals.

The membrane trials have also proven that the lignosulphonate stream can be enriched and precipitated for the production of lignin-based higher value products, rather than be used as a fuel or disposed of in a waste stream.

A two-step process to recover high purity lignin from both Saiccor Mill's waste streams was developed at the Sappi Technology Centre in Pretoria. This new technology runs parallel with investigations into the ultrafiltration of the spent liquor streams and could result in two high value products from waste, namely lignin and sugars. Together with our biorefinery teams, these recovered compounds are being tested for possible use as feedstock into high value end products.

Case study
Bio-oil through pyrolysis

Research into the pyrolysis of biomass and solid waste to produce biofuel and biochar are being conducted.

Apart from generating potential new products for Sappi, the process also hold the potential to reduce solid waste. Four Sappi post graduate students (A PhD and three MSc students), have designed, constructed and commissioned a dual-bed fast pyrolysis bench-top reactor at the University of Pretoria.

The first batch of bio-oil was successfully produced and the plant will now be used to assess char, bio-oil and syngas production over a range of operating conditions and raw material feeds.

The plant will also be used to assess the feasibility of up-scaling to a commercial size plant.

Further investigations are in hand to investigate refining the bio-oil into higher value chemicals and using the char as a nutrient replacement in our plantations.

Promoting sustainable forest and plantation management

EN 12

Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas

EN 13

Habitats protected or restored

EN 15

Number of IUCN Red List species and national conservation list species with habitats in areas affected by operations, by level of extinction risk

In Europe and North America we source wood fibre from sustainably managed natural forests and, in South Africa, from owned, leased and managed plantations and from other growers in the region.

Managing our South African landholdings

Approximately one third of our landholdings in South Africa is unplanted and actively managed for biodiversity conservation. Species surveys using aerial photography are conducted on a 3-5 year cycle.

Currently 208 sites on our land are classified as important conservation sites, conserving representative examples of grassland, forest or woodland. Many of the sites are home to rare or threatened species including Oribi, various crane species, the Karkloof Blue butterfly and the very rare mist belt moss frog (*Arthroleptella ngongoniensis*). To date 53 Red Data (rare, threatened or endangered) species have been recorded on Sappi properties, including: 22 plant species, one insect, two frogs, two snakes, six mammals and 20 bird species. In addition, 455 bird species — nearly half of all bird species that occur throughout South Africa — have been recorded on Sappi property. These include 52 red data species. Some plantations have sites dedicated to conserving high profile species.

Prioritising wetlands in South Africa

According to the 2011 National Biodiversity Assessment, South Africa's wetlands — 2.4% of the country's total land area — are the most threatened of all ecosystems. Wetland ecosystems are vital for purifying water and regulating water flows, acting as sponges which store water and release it slowly, filtering pollutants and easing the impact of droughts and floods in the process.

Currently, a total of 2,148ha of Sappi Forests' landholdings are classified as wetlands (excluding rivers and streams). These are all inland wetlands (as opposed to coastal wetlands) and consist of a variety of wetland types, including freshwater marshes, peat-lands, springs, swamp forests and floodplains.

Wetlands have long been a priority for Sappi Forests which ran a wetlands rehabilitation programme, from 1990 to 2005.

More recently, our environmental team has embarked on a programme to assess all the main wetlands on Sappi land using the wetland assessment toolkit, Wet-assess. This toolkit enables us to prioritise the importance of our wetlands, assess their catchment areas and refine their management plans to ensure they are maintained in a healthy sustainable condition and provide all the vital functions a good wetland should, such as a constant flow of good quality water.

A programme to clear alien vegetation from and around river courses on Sappi land by 2010 resulted in approximately 10,000ha of planted land being withdrawn from timber production. This resulted in increased streamflow and had a positive impact on biodiversity.

Withdrawn from timber production

10,000 ha = 3% Fibre producing landholdings

US$ 12.2 m/annum
Opportunity cost

Promoting sustainable forest and plantation management continued

Grasslands in South Africa

The grassland biome is the second largest in Southern Africa after the savannah biome, and occupies approximately 350 000km² or 27% of South Africa, Lesotho and Swaziland. It is estimated that almost 30% of the grassland biome has been permanently transformed. Grasslands are the least protected vegetation type in South Africa, and only about 2% of the biome is conserved within nature reserves.

Among many other vital functions, grasslands are important grazing areas, support pollinator species and act as sponges allowing the slow release of water into catchments.

Protecting grasslands in South Africa

When timber plantations are established, nearly all the animal species in the area are displaced and the vegetation is replaced with commercial tree species. This impact is generally mitigated by the fact that generally only 65% of the land is planted, with about 30% of the unplanted land being managed for the conservation of the natural habitats and the biodiversity they contain. Many of these unplanted areas on our land are important refuges for many rare and/or threatened species.

At the biome level the impacts of plantation forestry are felt in two ways; the specific extent of the impact within the biome and the severity of the impact on the site.

Extent of the impact

In the Grassland Biome (the most affected biome) areas planted under commercial harvested trees cover 991,900ha or 2.87% of the biome. Plantation forestry only makes up 18% of all the grassland that has been transformed by agricultural crops.

Severity of the impact

When compared with other forms of land use, plantation forestry is ranked as second after urban development in terms of impact on biodiversity integrity.

In mitigation of this severe, though not very extensive impact, plantation forest owners own approximately a further 500,000ha of unplanted grassland, some of which consist of the best examples of moist grassland in the country. This constitutes a 50% offset for conservation which significantly exceeds the international norm of 10%.

Grassland stewardship

Despite the rapid destruction of grasslands, there is hope for their survival in the form of grassland stewardship.

Although the term 'stewardship' is not new to the forestry sector — forestry stewardship has been promoted by the international Forestry Stewardship Council (FSC™) for the past fifteen years or so — it is a relatively new concept to other sectors and when applied specifically to grasslands on forestry land.

The task of identifying important grasslands on forestry-owned land has been undertaken as part of the forestry sector's contribution towards the SANBI grassland programme. Twelve sites occur on Sappi's land, the bulk in Mpumalanga.

In KwaZulu-Natal, Clairmont Mountain has been recommended for proclamation as a nature reserve and K Block in Winterton could be proclaimed as a protected environment.

Several of the Mpumalanga sites have already been assessed by the provincial conservation authorities and recommended as nature reserves. The others have not yet been assessed but will most likely be recommended as protected environments.

Biodiversity and community

EN 11

Location and size of land owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas

We may be limited in what we can do about the degradation of biodiversity on land beyond our plantation boundaries, but on our own property we can make a positive impact.

Biodiversity outside protected areas

We do not currently report specifically on protected areas and areas of high biodiversity value because in South Africa, where we own, manage and lease land, there is no official register of areas of high biodiversity. In fact, the entire country is regarded as an area of high biodiversity. We expect to be able to report on this indicator in the long term. In terms of broad aspects of this indicator, our most significant impact lies in the fact that the trees in our plantations reduce water flow to rivers which run through areas of high biodiversity.

Sappi Forests is working with the South African National Biodiversity Institute (SANBI) to make 12 of our grassland areas available for conservation through SANBI's grasslands programme which aims to mainstream biodiversity best practices in terms of grasslands management.

Land of high biodiversity value

Although relevant to South Africa where we own, manage and lease approximately 554,000ha of land, we do not report on this indicator as we are not sure what land adjacent to us is protected and what is not — nor do we know what the level of protection is. Accessing this data is a considerable undertaking; leases vary from month to month. With co-operation from Government we would be able to provide this information in the long term.

Significant impact on biodiversity

We have discussed protected areas on our own land but we do not currently report on this indicator in detail because in South Africa, where we own, manage and lease land, there is no official register of areas of high biodiversity. In fact, the whole country is considered to be an area of high biodiversity. We expect to be able to report on this indicator in the long term. In terms of broad aspects of this indicator, our most significant impact lies in the fact that the trees in our plantations reduce water flow to rivers which run through areas of high biodiversity.

Case study

Working with forest owners in North America

To assist landowners, we established the Sustainable Forestry Programme (SFP). Staffed with a full complement of licensed foresters, the SFP offers education regarding certification, timber value estimates and help with developing and managing harvesting plans. Landowners do not pay for assistance, but we will often negotiate timber purchasing agreements with the landowners.

Case study

Public enjoyment of Sappi's landholdings

In South Africa, Sappi provides extensive support for mountain biking, one of the world's fastest growing sports.

This support was recently extended to Europe, when we hosted the 70km, Royal Challenge mountain bike team time-trial race through the Nijmegen countryside, around Sappi's Nijmegen paper mill. This was the first ever competitive bike race for clients, customers and Sappi employees in Europe.

The team with the best average time won. Former world champion Marc Wauters from Belgium presented the prizes which included as first prize, 10t of Sappi | Royal paper.

Case study

Promoting 'green' thinking in communities

In August 2012, Sappi Fine Paper North America hosted the first annual Green Community Day, a fun, informative and activity-packed day at Sappi Westbrook Mill. Aimed at educating local residents on how they can positively impact the environment, Sappi's Green Community Day.

UN Global Compact

In 2008, we signed the UN Global Compact, a CEO-led strategic policy initiative which gives signatories a platform for advancing their commitments to sustainability and corporate citizenship.

The Compact has two principal objectives: mainstream the 10 principles which businesses commit to and catalyse actions in support of broader UN goals, including the Millennium Development Goals.

The 10 principles to which businesses commit		Our performance against these commitments	GRI G3.1 indicators
1	Support and respect the protection of international human rights within their sphere of influence.	At Sappi, we endorse the principles entrenched in the Universal Declaration of Human Rights and conform to the core labour standards of the International Labour Organisation (ILO). We also conform to — and in many cases exceed — the labour conditions stipulated by the governments of the countries in which we operate. In 2009, we formally published a human rights policy.	HR 1 HR 2 HR 3 HR 4
2	Make sure their own corporations are not complicit in human rights abuses.	We adhere to the standards of the ILO and legal labour conditions. In 2008 we stated that we would look into the protection of human rights in our procurement standards. This has now been included in our supplier policy.	HR 2 HR 3
3	Freedom of association and the effective recognition of the right to collective bargaining.	We recognise the right to freedom of association and collective bargaining. We consult with trade unions and employees on a wide variety of issues such as organisational change and training . Globally, approximately 62% of our workforce is represented by unions, with 66% covered by collective bargaining agreements Disciplined behaviour is essential not only for individual wellbeing, but also to achieve our group goals and objectives. In each region, disciplinary codes ensure disciplinary procedures are applied consistently, while grievance policies entrenches the rights of employees, including the right to raise a grievance without fear of victimization, the right to seek guidance and assistance from a member of the HR department or their representative at any time and the right to appeal to a higher authority, without prejudice.	HR 5 LA 3 LA 4
4	The elimination of all forms of forced and compulsory labour.	All labour is sourced on the open market. In rural areas, forest products companies like Sappi are often the only, or major, employers in the region which makes the local population very dependent on the company. However, Sappi pays market-related wages in accordance with local legislation. In Southern Africa, our plantations are 100% FSC™-certified or controlled and this forest certification system stipulates the protection of indigenous rights.	HR 7
5	The effective abolition of child labour.	This principle is inherent in our labour policies across the group.	HR 6
6	The elimination of discrimination in respect of employment and occupation.	Sappi is an equal opportunity company. Gender diversity is increasing steadily throughout the group and in South Africa we have employment equity targets to promote economic and social transformation among the previously disadvantaged.	HR 4 LA 10 LA 11

UN Global Compact continued

The 10 principles to which businesses commit		Our performance against these commitments	GRI G3.1 indicators
7	Support a precautionary approach to environmental challenges.	The precautionary approach places the onus on Sappi to anticipate harm before it occurs and to take active steps to prevent any harm from occurring. We achieve this by: • Conducting ongoing research into the impact of our activities and investigating methodologies to improve our performance at our research centres around the world • Continuously monitoring our environmental performance • Conducting thorough environment impact or risk assessments before the start of any new activity.	4.13
8	Undertake initiatives to promote greater environmental responsibility.	In each region we sponsor environment-related publications accessible to the general reader. **Europe** • We have planted over 8,000 trees in the Sonian Forest in conjunction with the ANB (Agentschap voor Natuur en Bos), the equivalent of the Department of Forestry. • We are partners in the Treehouse, a platform, both physical and virtual, for like-minded individuals and companies to come together to find ways to embrace sustainability in their daily activities. • We participated in Ecoprint, the world's first exhibition and event 100% focused on sustainable print business. **North America** • We play an active role in Living Lands and Waters, a non-profit, environmental organization focused on cleaning up America's great rivers and forest restoration. • We participate in the River Quest programme. • We held a Green Community Day at our Westbrook Mill. **South Africa** • The Sappi WWF Tree Routes Partnership aims to protect ecologically sensitive areas while establishing sustainable business ventures for communities that help them understand and respect the value of these areas. • We support the Two Oceans Aquarium in Cape Town • We are a member of Birdlife SA and WWF-SA. In South Africa and North America, we work to make forest certification more accessible to farmers. In 2012, we improved our score (based on our carbon disclosure and mitigation strategies) on the South African Carbon Disclosure Project (CDP) from 80 to 88%.	EN 1 EN 2 EN 3 EN 4 EN 5 EN 6 EN 7 EN 8 EN 9 EN 10 EN 11 EN 12 EN 13 EN 14 EN 15 EN 16 EN 18

UN Global Compact continued

The 10 principles to which businesses commit		Our performance against these commitments	GRI G3.1 indicators
9	Encourage the development and diffusion of environmentally friendly technologies.	Our research and development initiatives are focused on technical improvement of processes and products, and on the development of environmentally friendly technologies. It makes sense from both an economic and environmental standpoint to aggressively manage our raw materials and energy usage. For example, while a typical mill may use large quantities of fresh water, this water is re-used, often several times in the process, before it is treated and returned to the environment. Likewise, sources or air emissions are captured and either consumed in the process or scrubbed by pollution control equipment. Many of our mills are nearly energy self-sufficient and derive the majority of their energy from renewable, rather than fossil fuel sources. Globally, in 2012, our use of renewable energy stood at just over 50%. In addition, globally over five years: • Specific (per air dry ton of pulp) purchased energy usage has decreased by 19.6%, • Scope 1 (direct) and 2 (indirect) CO_2 emissions have decreased by 18.5%, • The amount of solid waste we send to landfill offsite has decreased by 31.4%. • Our specific water usage has decreased by 10.5%.	EN 17
10	Work against corruption in all its forms, including extortion and bribery.	Our commitment to combating corruption is embodied in our Code of Ethics which gives very clear guidelines on the behaviour expected of Sappi employees, suppliers and contractors at all times. The Code is reinforced by independently operated hotlines, which guarantee callers complete anonymity. All calls are followed up and reports are submitted to the Audit Committee on a quarterly basis. **IAR12** Generally speaking, corruption is not a key issue for Sappi. The countries in Europe were we operate all score very highly on Transparency International's 2012 Corruption Index, as does the USA which is 19th on the Index. South Africa is ranked 69th out of 174 countries indicating that while the risk is higher than the other countries in which we operate, it is not severe.	SO

Standard disclosures part 1 Profile disclosures

The table that follows details our reporting compliance in respect of the Global Reporting Initiative (GRI) and directs the reader to detailed discussions in various reports published by Sappi.

We follow the G3.1 Content Index.

Referenced documents

The two key documents which we reference are our Integrated Report and our Group Sustainability Report; these are referenced and linked (to the relevant pages) as **IAR12** and **SDR12** (this report) respectively.

Additional information available in our regional sustainability reports are referenced and linked as follows:

Europe	**ESDR12**
North America	**NASDR12**
South Africa	**ZASDR12**

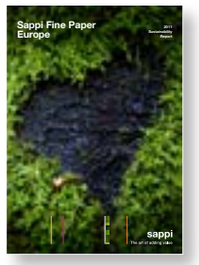
Other Sappi publications, that can be downloaded from the Sappi website at www.sappi.com, are also hyperlinked, eg **FAQ Forest Certification**.

Cross references to information in this report are indicated by this icon.

Integrated Report 2012

Group Sustainability Report 2012

Regional sustainability reports 2012



Europe

North America

Southern Africa

We express our commitment to sustainability not only in the decisions we make every day in running our business, but also through public forums such as the United Nations Global Compact which sets benchmarks that help us improve our governance systems and our performance in terms of Prosperity, People and Planet.

Through our participation in the Global Reporting Initiative™, we aim to ensure that our disclosures are a valid representation of our sustainability strategies, practices, progress and challenges.

Standard disclosures part 1 Profile disclosures

1. Strategy and analysis

Profile disclosure and description		Reported	Cross-reference Direct answer	If applicable, indicate part not reported	Reason for omission	Explanation
1.1	Statement from the most senior decision-maker of the organization.	Fully	SDR12 Message from the CEO, page 3			
1.2	Description of key impacts, risks, and opportunities.	Fully	SDR12 Our Key Sustainability drivers, page 16			

2. Organisational profile

Profile disclosure and description		Reported	Cross-reference Direct answer	If applicable, indicate part not reported	Reason for omission	Explanation
2.1	Name of organisation.	Fully	IAR front cover and throughout SDR12 throughout			
2.2	Primary brands, product and/or services.	Fully	IAR pages 28-29			
2.3	Operational structure of the organisation, including main divisions, operating companies, subsidiaries, and joint ventures.	Fully	IAR pages 4-5			
2.4	Location of organisation's headquarters.	Fully	IAR page 5			
2.5	Number of countries where the organisation operates, and names of countries with either major operations or that are specifically relevant to the sustainability issues covered in the report.	Fully	IAR pages 56			
2.6	Nature of ownership and legal form.	Fully	IAR pages 48-49			
2.7	Markets served (including geographic breakdown, sectors served, and types of customers/beneficiaries).	Fully	IAR pages 24-25			
2.8	Scale of the reporting organisation.	Fully	Document			
2.9	Significant changes during the reporting period regarding size, structure, or ownership.	Fully	SDR12 Revised strategy, page 45			
2.10	Awards received in the reporting period	Fully	SDR12 Accolades in 2012, page 11			

Standard disclosures part 1 Profile disclosures

3. Reporting parameters

Profile disclosure and description		Reported	Cross-reference Direct answer	If applicable, indicate part not reported	Reason for omission	Explanation
3.1	Reporting period (eg, fiscal/calendar year) for information provided.	Fully	SDR12 Scope of this report, page 5			
3.2	Date of most recent previous report (if any).	Fully	2011 — covering the financial year beginning October 2010 to end September 2011			
3.3	Reporting cycle (annual, biennial, etc).	Fully	Annual			
3.4	Contact point for questions regarding the report or its contents.	Fully	Graeme Wild, Group Head Investor Relations and Sustainability			
3.5	Process for defining report content.	Fully	SDR12 Defining report content, page 8			
3.6	Boundary of the report (eg countries, divisions, subsidiaries, leased facilities, joint ventures, suppliers). See GRI Boundary Protocol for further guidance.	Fully	SDR12 About this report, page 5			
3.7	State any specific limitations on the scope or boundary of the report (see completeness principle for explanation of scope).	Fully	SDR12 About this report, page 5			
3.8	Basis for reporting on joint ventures, subsidiaries, leased facilities, outsourced operations, and other entities that can significantly affect comparability from period to period and/or between organisations.	Fully	SDR12 Joint ventures excluded, page 6			
3.9	Data measurement techniques and the bases of calculations, including assumptions and techniques, underlying estimations applied to the compilation of the indicators and other information in the report. Explain any decisions not to apply, or to substantially diverge from, the GRI Indicator Protocols.	Fully	SDR12 Conventions, page 2 Also detailed throughout this report where applicable			
3.10	Explanation of the effect of any re-statements of information provided in earlier reports, and the reasons for such re-statement (eg mergers/ acquisitions, change of base years/periods, nature of business, measurement methods).	Fully	IAR page 50 IAR page 51			
3.11	Significant changes from previous reporting periods in the scope, boundary, or measurement methods applied in the report.	Fully	No significant changes			
3.12	Table identifying the location of the Standard Disclosures in the report.	Fully	GRI Index			
3.13	Policy and current practice with regard to seeking external assurance for the report.	Fully	SDR12 External assurance, page 7			

Standard disclosures part 1 Profile disclosures

4. Governance, commitments and engagement

Profile disclosure and description		Reported	Cross-reference Direct answer	If applicable, indicate part not reported	Reason for omission	Explanation
4.1	Governance structure of the organisation, including committees under the highest governance body responsible for specific tasks, such as setting strategy or organisational oversight.	Fully	**IAR** page 67			
4.2	Indicate whether the Chair of the highest governance body is also an executive officer.	Fully	The chairman of the board is a non-executive director.			
4.3	For organisations that have a unitary board structure, state the number of members of the highest governance body that are independent and/or non-executive members.	Fully	Board members: 14 Executive directors: 2 Non-executive directors: 12 Independent directors: 11			
4.4	Mechanisms for shareholders and employees to provide recommendations or direction to the highest governance body.	Fully	**SDR12** Engaging with our stakeholders page 72			
4.5	Linkage between compensation for members of the highest governance body, senior managers, and executives (including departure arrangements), and the organisation's performance (including social and environmental performance).	Fully	**IAR** pages 73, Compensation Report			
4.6	Processes in place for the highest governance body to ensure conflicts of interest are avoided.	Fully	**IAR** page73			
4.7	Process for determining the composition, qualifications, and expertise of the members of the highest governance body and its committees, including any consideration of gender and other indicators of diversity.	Fully	**IAR** page 67			
4.8	Internally developed statements of mission or values, codes of conduct, and principles relevant to economic, environmental, and social performance and the status of their implementation.	Fully	**SDR12** Engaging with our stakeholders page 72			
4.9	Procedures of the highest governance body for overseeing the organisation's identification and management of economic, environmental, and social performance, including relevant risks and opportunities, and adherence or compliance with internationally agreed standards, codes of conduct, and principles.	Fully	Social, ethics, transformation and sustainability committee **IAR** pages 70			

Standard disclosures part 1 Profile disclosures

4. Governance, commitments and engagement continued

Profile disclosure and description		Reported	Cross-reference Direct answer	If applicable, indicate part not reported	Reason for omission	Explanation
4.10	Processes for evaluating the highest governance body's own performance, particularly with respect to economic, environmental, and social performance.	Fully	Board charter			
4.11	Explanation of whether and how the precautionary approach or principle is addressed by the organisation.	Fully	SDR12 UN Global Compact, Principle 10, page 114			
4.12	Externally developed economic, environmental, and social charters, principles, or other initiatives to which the organisation subscribes or endorses.	Fully	SDR12 Engaging with our stakeholders, page 72			
4.13	Memberships in associations (such as industry associations) and/or national/international advocacy organisations in which the organisation: Has positions in governance bodies; Participates in projects or committees; Provides substantive funding beyond routine membership dues; or Views membership as strategic.	Fully	SDR12 Engaging with our stakeholders, page 72			
4.14	List of stakeholder groups engaged by the organisation.	Fully	SDR12 Engaging with our stakeholders, page 72			
4.15	Basis for identification and selection of stakeholders with whom to engage.	Fully	SDR12 Engaging with our stakeholders, page 72			
4.16	Approaches to stakeholder engagement, including frequency of engagement by type and by stakeholder group.	Fully	SDR12 Engaging with our stakeholders, page 72			
4.17	Key topics and concerns that have been raised through stakeholder engagement, and how the organisation has responded to those key topics and concerns, including through its reporting.	Fully	SDR12 Engaging with our stakeholders, page 72			

Standard disclosures part 2 Disclosures on management approach (DMAs)

GR DMA description		Reported	Cross-reference Direct answer	If applicable, indicate part not reported	Reason for omission	Explanation	To be reported in
DMA EC	**Disclosure on management approach EC**						
Aspects	Economic performance	Fully	**IAR** page 6 **IAR** Financial highlights, page 48-66				
	Market presence	Fully	**IAR** pages 4-5				
	Indirect economic impact	Fully	**SDR12** Adding value, page17				
DMA EN	**Disclosure on management approach EN**						
Aspects	Materials	Fully	**SDR12** Sustainable fibre supply, page 22 **SDR12** Planet overview, page 82				
	Energy	Fully	**SDR12** Energy, page 36 **SDR12** Energy consumption and associated emissions, page 90 **SDR12** Energy self-sufficiency, page 97				
	Water	Fully	**SDR12** Water, page 43 **SDR12** Managing water use and effluent discharge page 99 **SDR12** Saving energy and water, page 101 **SDR12** Managing water in our plantations, page 102				
	Biodiversity	Fully	**SDR12** Biodiversity, page 32 **SDR12** Biodiversity and community, page 111				
	Emissions, effluent and waste	Fully	**SDR12** Emissions, page 40 **SDR12** Energy consumption and associated emissions, page 90 **SDR12** Other emissions, page 98 **SDR12** Managing water use and effluent discharge, page 99 **SDR12** Reducing solid waste, page 105				
	Products and services	Fully	**SDR12** Reducing solid waste and adding value, page 108				
	Compliance	Fully	**SDR12** Monitoring compliance — driving performance, page 84				
	Transport	Fully	**SDR12** Streamlining transport to reduce emissions, page 96				
	Overall	Fully	**SDR12** Planet overview, page 82				

Standard disclosures part 2 Disclosures on management approach (DMAs)

GR DMA description		Reported	Cross-reference Direct answer	If applicable, indicate part not reported	Reason for omission	Explanation	To be reported in
DMA LA	**Disclosure on management approach LA**						
Aspects	Employment	Fully	**SDR12** Our relationships with our employees, page 25 **SDR12** Profiling our people, page 54				
	Labour/management relations	Fully	**SDR12** Our relationships with our employees, page 25 **SDR12** How we engage with our people, contributes significantly to our success, page 53				
	Occupational health and safety	Fully	**SDR12** Employee safety, page 28 **SDR12** Prioritising wellbeing, health and safety, page 62				
	Training and education	Fully	**SDR12** Employee training and development, page 29 **SDR12** Promoting training and development, page 58				
	Diversity and equal opportunity	Fully	**SDR12** Transformation in South Africa, page 27 **SDR12** Change and diversity, page 56				
	Equal remuneration for women and men	Fully	**SDR12** Remunerating fairly, page 61				
DMA HR	**Disclosure on management approach HR**						
Aspect	Investment and procurement practices	Partially	**SDR12** Our management approach to prosperity, page 44 **ZASDR12** Page 7 **FAQ BBBEE**	Investment practices	Proprietary information	Investment practices are viewed as business confidential	
	Non-discrimination	Fully	**SDR12** Our approach to human rights, page 71				
	Freedom of association and collective bargaining	Fully	**SDR12** Our relationships with our employees, page 25				
	Child labour	Fully	**SDR12** Our approach to human rights, page 71				
	Prevention of forced and compulsory labour	Fully	**SDR12** Our approach to human rights, page 71				
	Security practices	Fully	GRI Index			See HR section of this contents index	
	Indigenous rights	Fully	GRI Index			See HR section of this contents index	
	Assessment	Fully	**SDR12** Our approach to human rights, page 71				
	Remediation	Fully	GRI Index			See HR section of this contents index	

Standard disclosures part 2 Disclosures on management approach (DMAs)

GR DMA description		Reported	Cross-reference Direct answer	If applicable, indicate part not reported	Reason for omission	Explanation	To be reported in
DMA SO	**Disclosure on management approach SO**						
Aspect	Local communities	Fully	**SDR12** Corporate social responsibility, page 30 **SDR12** Supporting communities, page 70				
	Corruption	Fully	**IAR** page 94				
	Public policy	Fully	**SDR12** Group corporate social responsibility policy, page 31				
	Anti-competitive behaviour	Fully	**IAR** pages 142				
	Compliance	Fully	GRI Index			See SO section of this contents index	

Standard disclosures part 3 Performance indicators

Economic performance indicators

Performance indicator		Reported	Cross-reference Direct answer	If applicable, indicate part not reported	Reason for omission	Explanation	To be reported in
DMA PR	**Disclosure on management approach PR**						
Aspect	Customer health and safety	Fully	**SDR12** Customers' health and safety, page 69				
	Product and service labelling	Fully	**SDR12** Customers' health and safety, page 69				
	Marketing compliance	Fully	**SDR12** Customers' health and safety, page 69				
	Customer privacy	Not			Not material	The disclosure is not material to our business because we do not operate in an industry where customer privacy is a key issue	
	Compliance	Fully	**SDR12** Monitoring compliance — driving performance, page 84				
Economic performance							
EC 1	Direct economic value generated and distributed, including revenues, operating costs, employee compensation, donations and other community investments, retained earnings, and payments to capital providers and governments.	Fully	**SDR12** Adding value, page 17				
EC 2	Financial implications and other risks and opportunities for the organisation's activities due to climate change.	Fully	**SDR12** Water, page 43 **SDR12** Mitigating climate change, page 89				
EC 3	Coverage of the organisation's defined benefit plan obligations.	Fully	**IAR** Compensation Report, pages 83-91				
EC 4	Significant financial assistance received from government.	Fully	GRI Index			No such financial assistance received	

Standard disclosures part 3 Performance indicators

Economic performance indicators continued

Performance indicator		Reported	Cross-reference Direct answer	If applicable, indicate part not reported	Reason for omission	Explanation	To be reported in
Market presence							
EC 5	Range of ratios of standard entry level wage by gender compared to local minimum wage at significant locations of operation.	Fully	GRI Index			We negotiate salaries with unions and works councils on an ongoing basis	
EC 6	Policy, practices, and proportion of spending on locally-based suppliers at significant locations of operation.	Partially	FAQ BBBEE	Only reported in South Africa, not reported in NA and EU		Only deemed material in South Africa, for purposes of Broad-based Black Economic Empowerment (BBBEE) compliance and so data has only been collected in this region.	
EC 7	Procedures for local hiring and proportion of senior management hired from the local community at locations of significant operation.	Partially	FAQ BBBEE	As above		As above	
Indirect economic impacts							
EC 8	Development and impact of infrastructure investments and services provided primarily for public benefit through commercial, in-kind, or pro bono engagement.	Fully	NASDR12 pages 38-41 ZASDR12 pages 28-33 ZASDR12 pages 40-45				
EC 9	Understanding and describing significant indirect economic impacts, including the extent of impacts.	Fully	SDR12 Adding value, page 17				

Standard disclosures part 3 Performance indicators

Environmental performance indicators

Performance indicator description		Reported	Cross-reference Direct answer	If applicable, indicate part not reported	Reason for omission	Explanation	To be reported in
Materials							
EN 1	Materials used by weight or volume.	Not			Not available	We do not currently report on this indicator as the systems for analysis and acceptance of the data are being constructed. We will be able to report in the long term (2020)	2020
EN 2	Percentage of materials used that are recycled input materials.	Not			Not available	As above	2020
Energy							
EN 3	Direct energy consumption by primary energy source.	Fully	**SDR12** Energy consumption and associated emissions, page 90				
EN 4	Indirect energy consumption by primary source.	Fully	**SDR12** Energy consumption and associated emissions, page 90				
EN 5	Energy saved due to conservation and efficiency improvements.	Fully	**SDR12** Energy self-sufficiency, page 97				
EN 6	Initiatives to provide energy-efficient or renewable energy based products and services, and reductions in energy requirements as a result of these initiatives.	Fully	**SDR12** Renewable energy, page 38				
EN 7	Initiatives to reduce indirect energy consumption and reductions achieved.	Fully	**SDR12** Energy consumption and associated emissions, page 92				

Standard disclosures part 3 Performance indicators

Environmental performance indicators continued

Performance indicator description		Reported	Cross-reference Direct answer	If applicable, indicate part not reported	Reason for omission	Explanation	To be reported in
Water							
EN 8	Total water withdrawal by source.	Fully	**SDR12** Managing water use and effluent discharge, page 99				
EN 9	Water sources significantly affected by withdrawal of water	Fully	**SDR12** Managing water-use and effluent discharge, page 100				
EN 10	Percentage and total volume of water recycled and reused.	Fully	**SDR12** Water, page 43				
Biodiversity							
EN 11	Location and size of land owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas.	Fully	**SDR12** Biodiversity and community, page 111				
EN 12	Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas.	Fully	**SDR12** Promoting sustainable forest and plantation management, page 109				
EN 13	Habitats protected or restored.	Fully	**SDR12** Promoting sustainable forest and plantation management, page 109				
EN 14	Strategies, current actions, and future plans for managing impacts on biodiversity.	Fully	**SDR12** Biodiversity, page 32				
EN 15	Number of IUCN Red List species and national conservation list species with habitats in areas affected by operations, by level of extinction risk.	Fully	**SDR12** Promoting sustainable forest and plantation management, page 109				

Standard disclosures part 3 Performance indicators

Environmental performance indicators continued

Performance indicator description		Reported	Cross-reference Direct answer	If applicable, indicate part not reported	Reason for omission	Explanation	To be reported in
Emissions, effluent and waste							
EN 16	Total direct and indirect greenhouse gas emissions by weight	Fully	**SDR12** Emissions, page 40 **SDR12** Energy consumption and associated emissions, page 90				
EN 17	Other relevant indirect greenhouse gas emissions by weight	Not			Not applicable	We do no report on this point since the disclosure as prescribed by the GRI guidelines is not applicable to our business as Sappi only emits very small quantities of methane from landfill and from biomass decay in our plantations. As these quantities are so small, they are not measured.	
EN 18	Initiatives to reduce greenhouse gas emissions and reductions achieved.	Fully	**SDR12** Energy, page 36 **SDR12** Mitigating climate change, Page 89				
EN 19	Emissions of ozone-depleting substances by weight.	Not	**SDR12** Saving energy and reducing emissions, Page 92		Not applicable	We do not report on this point since the disclosure as prescribed by the GRI guidelines is not applicable to our business. Sappi does not emit ozone-depleting substances	
EN 20	NOx, SOx, and other significant air emissions by type and weight.	Fully	**SDR12** Other emissions, page 98				
EN 21	Total water discharge by quality and destination.	Fully	**SDR12** Managing water-use and effluent discharge, page 100				
EN 22	Total weight of waste by type and disposal method.	Fully	**SDR12** Reducing solid waste, page 105 **SDR12** reducing solid waste and adding value, Page 106 -108				
EN 23	Total number and volume of significant spills.	Fully	GRI Index			No significant spills in the year under review.	

Standard disclosures part 3 Performance indicators

Environmental performance indicators continued

Performance indicator description		Reported	Cross-reference Direct answer	If applicable, indicate part not reported	Reason for omission	Explanation	To be reported in
Emissions, effluent and waste continued							
EN 24	Weight of transported, imported, exported, or treated waste deemed hazardous under the terms of the Basel Convention Annex I, II, III, and VIII, and percentage of transported waste shipped internationally	Fully	SDR12 Reducing solid waste, page 105				
EN 25	Identity, size, protected status, and biodiversity value of water bodies and related habitats significantly affected by the reporting organisation's discharges of water and runoff	Not			Not material	We do not report on this issue as the disclosure is not material to our business. Only one of our operations, Enstra Mill in South Africa, is situated near a Ramsar site; water discharge from the mill does not affect this site.	
Products and services							
EN 26	Initiatives to mitigate environmental impacts of products and services, and extent of impact mitigation	Fully	SDR12 Described throughout Planet section, starting on page 81				
EN 27	Percentage of products sold and their packaging materials that are reclaimed by category	Fully	GRI Index			The majority of our papers are recyclable (the exceptions being wet strength and release papers). Our Cape Kraft Mill in South Africa runs on 100% recovered fibre.	
Compliance							
EN 28	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations	Fully	GRI Index			No such fines or monetary sanctions	

Standard disclosures part 3 Performance indicators

Environmental performance indicators continued

Performance indicator description		Reported	Cross-reference Direct answer	If applicable, indicate part not reported	Reason for omission	Explanation	To be reported in
Transport							
EN 29	Significant environmental impacts of transporting products and other goods and materials used for the organisation's operations, and transporting members of the workforce	Fully	**SDR12** Energy self-sufficiency, page 97				
Overall							
EN 30	Total environmental protection expenditures and investments by type	Partially	**SDR12** Overview, page 82	Detailed by region but not by type	Not available	We currently do not account separately for different types of environmental expenditure, but are working towards being able to do so, beginning with the SA region and working to extend this to other regions by 2020	

Standard disclosures part 3 Performance indicators

Social | Labour practices and decent work performance indicators

Performance indicator description		Reported	Cross-reference Direct answer	If applicable, indicate part not reported	Reason for omission	Explanation	To be reported in
Employment							
LA 1	Total workforce by employment type, employment contract, and region, broken down by gender.	Fully	SDR12 Profiling our people, page 54				
LA 2	Total number and rate of employee turnover by age group, gender, and region.	Fully	SDR12 Profiling our people, page 55				
LA 3	Benefits provided to full-time employees that are not provided to temporary or part-time employees, by major operations.	Fully	SDR12 Performance reviews and benefits, page 60				
LA 15	Return to work and retention rates after parental leave, by gender.	Partially	SDR12 Performance reviews and benefits, page 60	Only reported for Europe,	Not available	The systems for collection of this data in other regions are currently under construction	2016

Standard disclosures part 3 Performance indicators

Social | Labour practices and decent work performance indicators continued

Performance indicator description		Reported	Cross-reference Direct answer	If applicable, indicate part not reported	Reason for omission	Explanation	To be reported in
Labour/management relations							
LA 4	Percentage of employees covered by collective bargaining agreements.	Fully	SDR12 Our relationships with our employees, page 25				
LA 5	Minimum notice period(s) regarding operational changes, including whether it is specified in collective agreements	Fully	SDR12 Change and diversity, page 56				
Occupational health and safety							
LA 6	Percentage of total workforce represented in formal joint management–worker health and safety committees that help monitor and advise on occupational health and safety programmes.	Fully	SDR12 Prioritising wellbeing, health and safety, page 62				
LA 7	Rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities by region and by gender.	Fully	SDR12 Safety performance, page 64				
LA 8	Education, training, counselling, prevention, and risk-control programmes in place to assist workforce members, their families, or community members regarding serious diseases.	Fully	SDR12 Health and wellbeing initiatives, page 68				
LA 9	Health and safety topics covered in formal agreements with trade unions.	Fully	SDR12 Safety management, page 63				

Standard disclosures part 3 Performance indicators

Labour practices and decent work performance indicators continued

Performance indicator description		Reported	Cross-reference Direct answer	If applicable, indicate part not reported	Reason for omission	Explanation	To be reported in
Training and education							
LA 10	Average hours of training per year per employee by gender and by employee category.	Partially	SDR12 Promoting training and development, page 58	By gender	Not available	We do not report on this yet because the systems for gathering the data are still under construction.	2015/16
LA 11	Programmes for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings.	Fully	SDR12 Promoting training and development, page 58				
LA 12	Percentage of employees receiving regular performance and career development reviews, by gender.	Fully	SDR12 Performance reviews and benefits, page 60				
Diversity and equal opportunity							
LA 13	Composition of governance bodies and breakdown of employees per category according to gender, age group, minority group membership, and other indicators of diversity.	Fully	SDR12 Change and diversity, page 56				
Equal remuneration for women and men							
LA 14	Ratio of basic salary of men to women by employee category	Fully	SDR12 Remunerating fairly, page 61				

Standard disclosures part 3 Performance indicators

Social | Human rights performance indicators

Performance indicator description		Reported	Cross-reference Direct answer	If applicable, indicate part not reported	Reason for omission	Explanation	To be reported in
Investment and procurement practices							
HR 1	Percentage and total number of significant investment agreements and contracts that include clauses incorporating human rights concerns, or that have undergone human rights screening.	Not			Not applicable	The disclosure as prescribed by the GRI Guidelines is not applicable to our business because we do not make investments or enter into contracts where human rights might be violated.	
HR 2	Percentage of significant suppliers, contractors and other business partners that have undergone human rights screening, and actions taken.	Not			Not material	The disclosure as prescribed by the GRI Guidelines is not material to our business because human rights compliance is covered by the legislation of the countries where we operate, by FSC™ principles and the UN Global Compact.	
HR 3	Total hours of employee training on policies and procedures concerning aspects of human rights that are relevant to operations, including the percentage of employees trained.	Not			Not applicable	The disclosure as prescribed by the GRI Guidelines is not applicable to our business because we operate in countries where human rights are understood and entrenched not only in legislation, but also in the culture of each country.	
Non-discrimination							
HR 4	Total number of incidents of discrimination and corrective actions taken.	Fully	GRI Index			No such incidents	
Freedom of association and collective bargaining							
HR 5	Operations and significant suppliers identified in which the right to exercise freedom of association and collective bargaining may be violated or at significant risk, and actions taken to support these rights.	Fully	**SDR12** Our relationships with our employees, page 25				

Standard disclosures part 3 Performance indicators

Social | Human rights performance indicators continued

Performance indicator description		Reported	Cross-reference Direct answer	If applicable, indicate part not reported	Reason for omission	Explanation	To be reported in
Child labour							
HR 6	Operations and significant suppliers identified as having significant risk for incidents of child labour, and measures taken to contribute to the effective abolition of child labour.	Fully	GRI Index			No such operations or suppliers	
Forced and compulsory labour							
HR 7	Operations and significant suppliers identified as having significant risk for incidents of forced or compulsory labour, and measures to contribute to the elimination of all forms of forced or compulsory labour.	Fully	GRI Index			No such operations or suppliers	
Security practices							
HR 8	Percentage of security personnel trained in the organisation's policies or procedures concerning aspects of human rights that are relevant to operations.	Not			Not applicable	The disclosure as prescribed by the GRI Guidelines is not applicable to our business because we do not operate in post-conflict zones and there is little tension between Sappi and the communities in which our operations are located. Having said that, human rights considerations cut across a range of disciplines at Sappi, including health, safety, security, community, environmental, human resources, legal and regulatory, ethics, governance and labour relations.	

Standard disclosures part 3 Performance indicators

Social | Human rights performance indicators continued

Performance indicator description		Reported	Cross-reference Direct answer	If applicable, indicate part not reported	Reason for omission	Explanation	To be reported in
Indigenous rights							
HR 9	Total number of incidents of violations involving rights of indigenous people and actions taken	Fully	GRI Index			The rights of indigenous people are protected in terms of the forest certification systems we use. There have, however, been no such incidents to date.	
Assessment							
HR 10	Percentage and total number of operations that have been subject to human rights reviews and/or impact assessments.	Fully	**SDR12** Our approach to human rights, page 71				
Remediation							
HR 11	Number of grievances related to human rights filed, addressed and resolved through formal grievance mechanisms.	Fully	GRI Index			No such grievances	

Standard disclosures part 3 Performance indicators

Social | Society performance indicators

	Performance indicator description	Reported	Cross-reference Direct answer	If applicable, indicate part not reported	Reason for omission	Explanation	To be reported in
Local communities							
SO 1	Percentage of operations with implemented local community engagement, impact assessments, and development programs.	Fully	SDR12 Engaging with our stakeholders — communities, page 75				
SO 9	Operations with significant potential or actual negative impacts on local communities.	Fully	GRI Index			No such operations	
SO 10	Prevention and mitigation measures implemented in operations with significant potential or actual negative impacts on local communities.	Fully	GRI Index			No such operations	
Corruption							
SO 2	Percentage and total number of business units analysed for risks related to corruption	Not			Not material	The disclosure is not material to our business because corruption is not considered an issue for Sappi. The countries in Europe were we operate all score very highly on Transparency International's 2012 Corruption Index, as does the USA which is 19th on the Index. South Africa is 69th out of 174 countries indicating that while the risk is higher than the other countries in which we operate, it is not severe.	
SO 3	Percentage of employees trained in organisation's anti-corruption policies and procedures	Fully	GRI Index			All our employees (and suppliers) receive Code of Ethics training	
SO 4	Actions taken in response to incidents of corruption	Fully	IAR page 94				

Standard disclosures part 3 Performance indicators

Social | Society performance indicators continued

Performance indicator description		Reported	Cross-reference Direct answer	If applicable, indicate part not reported	Reason for omission	Explanation	To be reported in
Public policy							
SO 5	Public policy positions and participation in public policy development and lobbying	Fully	SDR12 Engaging with our stakeholders — general, page 72				
SO 6	Total value of financial and in-kind contributions to political parties, politicians, and related institutions by country.	Fully	GRI Index			As specified in the Code of Ethics, Sappi's policy is not to make political contributions	
Anti-competitive behaviour							
SO 7	Total number of legal actions for anti-competitive behaviour, anti-trust, and monopoly practices and their outcomes.	Fully	GRI Index			No such legal actions	
SO 8	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations.	Fully	GRI Index			No significant fines or non-monetary sanctions. Should these arise, they would be reported in our Annual Report on Form 20-F	

Standard disclosures part 3 Performance indicators

Social | Product responsibility

Performance indicator description		Reported	Cross-reference Direct answer	If applicable, indicate part not reported	Reason for omission	Explanation	To be reported in
Customer health and safety							
PR 1	Life cycle stages in which health and safety impacts of products and services are assessed for improvement, and percentage of significant products and services categories subject to such procedures	Fully	**SDR12** Customer's health and safety, page 69				
PR 2	Total number of incidents of non-compliance with regulations and voluntary codes concerning health and safety impacts of products and services during their life cycle, by type of outcomes	Fully	GRI Index			No such incidents	
Product and service labelling							
PR 3	Type of product and service information required by procedures, and percentage of significant products and services subject to such information requirements	Fully	**SDR12** Customer's health and safety, page 69				
PR 4	Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labelling, by type of outcomes	Fully	GRI Index			No such incidents	
PR 5	Practices related to customer satisfaction, including results of surveys measuring customer satisfaction	Fully	**SDR12** Engaging with our stakeholders — customers, page 76				

Standard disclosures part 3 Performance indicators

Social | Product responsibility continued

Performance indicator description		Reported	Cross-reference Direct answer	If applicable, indicate part not reported	Reason for omission	Explanation	To be reported in
Marketing communications							
PR 6	Programmes for adherence to laws, standards, and voluntary codes related to marketing communications, including advertising, promotion, and sponsorship	Fully	SDR12 Customer's health and safety, page 69				
PR 7	Total number of incidents of non-compliance with regulations and voluntary codes concerning marketing communications, including advertising, promotion, and sponsorship by type of outcomes	Fully	GRI Index			No such incidents	
Customer privacy							
PR 8	Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data	Fully	GRI Index			No such complaints	
Compliance							
PR 9	Monetary value of significant fines for non-compliance with laws and regulations concerning the provision and use of products and services	Fully	GRI Index			No such fines	

Glossary

ABET
Adult basic education and training

adt
Air dry tons — the industry standard is 90% fibre and 10% moisture

AF&PA
American Forest and Paper Association

air dry tons (adt)
Meaning dry solids content of 90% and moisture content of 10%

BBBEE (Broad-based Black Economic Empowerment)
Broad based Black Economic Empowerment – as envisaged in the Black Economic Empowerment (BEE) legislation in South Africa

black liquor
The spent cooking liquor from the pulping process which arises when pulpwood is cooked in a digester thereby removing lignin, hemicellulose and other extractives from the wood to free the cellulose fibres. The resulting black liquor is an aqueous solution of lignin residues, hemicellulose, and the inorganic chemicals used in the pulping process. Black liquor contains slightly more than half of the energy content of the wood fed into the digester.

billion
Sappi follows contemporary 'short scale' convention; defining a billion as one thousand millions

biofuels
Organic material such as wood, waste and alcohol fuels, as well as gaseous and liquid fuels produced from these feedstocks when they are burned to produce energy

bleached pulp
Pulp that has been bleached by means of chemical additives to make it suitable for fine paper production

CEPI
Confederation of European Paper Industries

chemical cellulose — dissolving pulp
Highly purified chemical pulp intended primarily for conversion into chemical derivatives of cellulose and used mainly in the manufacture of viscose staple fibre, solvent spin fibre and filament

COD — Chemical Oxygen Demand
Untreated effluent is generally high in organic matter. COD is the amount of oxygen required to break down the organic compounds in the effluent

chemical pulp
A generic term for pulp made from wood-fibre that has been produced in a chemical process

CHP
Combined heat and power

coated paper
Paper that contains a layer of coating material on one or both sides — the coating materials, consisting of pigments and
binders, act as a filler to improve the printing surface of the paper

coated mechanical
Coated paper made from groundwood pulp which has been produced in a mechanical process, primarily used for magazines, catalogues and advertising material

coated woodfree
Coated paper made from chemical pulp which is made from wood fibre that has been produced in a chemical process, primarily used for high end publications and advertising material

corrugating medium
Paperboard made from chemical and semi-chemical pulp, or waste paper, that is to be converted to a corrugated board by passing it through corrugating cylinders. Corrugating medium between layers of linerboard form the board from which corrugated boxes are produced

COSO
Committee of Sponsoring Organisations of the Treadway Commission

contractor
Refers to an independent employer of self-employed person performing work for Sappi, excludes temporary or fixed-term employees

CSR/CSI
Corporate Social Responsibility — previously referred to as Corporate Social Investment

dissolving pulp
Highly purified chemical pulp derived primarily from wood, but also from cotton linters intended primarily for conversion into chemical derivatives of cellulose and used mainly in the manufacture of viscose staple fibre, solvent spin fibre and filament

dissolving wood pulp
Highly purified chemical pulp derived from wood intended primarily for conversion into chemical derivatives of cellulose and used mainly in the manufacture of viscose staple fibre, solvent spin fibre and filament. Also called chemical cellulose

ECF — elemental chlorine free
Refers to bleaching sequences in which no chlorine is used

EIRIS
A leading global provider of independent research into the ethical governance of companies, as well as their social and environmental performance

EMAS
A voluntary clean citizenship initiative of the European Union, constituting the highest environmental standards in Europe and requiring environmental stewardship, determined continuous improvement and detailed public reporting

energy
Energy is present in many forms such as solar, mechanical, thermal, electrical and chemical. Any source of energy can be tapped to perform work. In power plants, coal is burned and its chemical energy is converted into electrical energy. To generate steam, coal and other fossil fuels are burned, thus converting stored chemical energy into thermal energy

Glossary continued

ETC
Education, Training and Consulting

Exciter
In addition to our more traditional R&D work, we started the Exciter programme in 2005 to deal with the persistent threat of commoditisation in the graphics paper markets. It is aimed at accelerating the development of breakthrough technological competency in our core markets.

fibre
Fibre is generally referred to as 'pulp' in the paper industry. Wood is treated chemically or mechanically to separate the fibres during the pulping process

fine paper
Fine paper is usually produced from chemical pulp for printing and writing purposes and consisting of coated and uncoated paper

Forestry SA
The largest forestry organisation representing growers of timber in South Africa

FSC™ — Forest Stewardship Council™
In terms of the Forest Stewardship Council™ (FSC™) scheme, there are two types of certification. In order for land to achieve FSC™ endorsement, its forest management practices must meet the FSC™'s ten principles and other assorted criteria. For manufacturers of forest products, including paper manufacturers like Sappi, Chain-of-Custody certification involves independent verification of the supply chain, which identifies and tracks the timber through all stages of the production process from the tree farm to the end product

full-time equivalent employee
The number of total hours worked divided by the maximum number of compensable hours in a full-time schedule as defined by law

Green-e®
An independent consumer protection programme created by the Centre for Resource Solutions for the sale of renewable energy and greenhouse gas reduction (www.green-e.org)

greenhouse gases (GHGs)
The GHGs included in the Kyoto Protocol are carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons and sulphur hexafluoride

group
The group comprises Sappi Limited, its subsidiaries and its interest in joint ventures and associates

HFO
Heavy fuel oil

ISO — International Standards Organisation
Developed by the International Organisation for Standardisation (ISO), ISO 9000 is a series of standards focused on quality management systems, while the ISO 14001 series is focused on environmental performance and management

IUCN
The World Conservation Union

joint venture
An economic activity over which the group exercises joint control established under a contractual arrangement

JSE Limited
The main securities exchange in South Africa, previously known as the Johannesburg Stock Exchange

kraft paper
Packaging paper (bleached or unbleached) made from kraft pulp

kraft pulp
Chemical wood pulp produced by digesting wood by means of the sulphate pulping process

Kyoto Protocol
A document signed by over 160 countries at Kyoto, Japan in December 1997 which commits signatories to reducing their emission of greenhouse gases relative to levels emitted in 1990

liquor
White liquor is the aqueous solution of sodium hydroxide and sodium sulphide used to extract lignin during kraft pulping.
Black liquor is the resultant combination of lignin, water and chemicals

LTIFR
Lost-Time Injury Frequency Rate = number of lost time injuries x 200,000 divided by man hours

linerboard
The grade of paperboard used for the exterior facings of corrugated board. Linerboard is combined with corrugating medium by converters to produce corrugated board used in boxes

managed forest
Naturally occurring forests that are harvested commercially

market pulp
Pulp produced for sale on the open market, as opposed to that produced for own consumption in an integrated mill

mechanical pulp
Pulp produced by means of the mechanical grinding or refining of wood or wood chips

NBSK
Northern Bleached Softwood Kraft pulp. One of the main varieties of market pulp, produced from coniferous trees (ie spruce, pine) in Scandinavia, Canada and northern USA. The price of NBSK is a benchmark widely used in the pulp and paper industry for comparative purposes

NGO
Non-governmental organisation

natural/indigenous forest
Pristine areas not used commercially

newsprint
Paper produced for the printing of newspapers mainly from mechanical pulp and/or recycled waste paper

OHSAS
An international health and safety standard aimed at minimising occupational health and safety risks firstly, by conducting a variety of analyses and secondly, by setting standards

packaging paper
Paper used for packaging purposes

PAMSA
Paper Manufacturers Association of South Africa

PEFC™
The world's largest forest certification system, the PEFC™ is focused on promoting sustainable forest management. Using multi-stakeholder processes, the organisation develops forest management certification standards and schemes which have been signed by 37 nations in Europe and other inter-governmental processes for sustainable forestry management around the world

plantation
tree farms

power
The rate at which energy is used or produced

pulpwood
Wood suitable for producing pulp – usually not of sufficient standard for saw-milling

red data list
A global index of endangered species published by the World Conservation Union

release paper
embossed paper used to impart design in polyurethane or polyvinyl chloride plastic films for the production of synthetic leather and other textured surfaces. The term also applies to backing paper for self adhesive labels

sackkraft
Kraft paper used to produce multiwall paper sacks

Scope 1 GHG emissions
The Green House Gas Protocol defines Scope 1 (direct) emissions as follows: direct GHG emissions are emissions from sources that are owned or controlled by the reporting entity

Scope 2 GHG emissions
The Green House Gas Protocol defines Scope 2 (indirect) emissions as follows: indirect GHG emissions are emissions that are a consequence of the activities of the reporting entity, but occur at sources owned or controlled by another entity

silviculture costs
Growing and tending costs of trees in forestry operations

SFI® — Sustainable Forestry Initiative
The SFI® programme is a comprehensive system of objectives and performance measures which integrate the sustained growing and harvesting of trees and the protection of plants and animals

SMMEs
Small, medium and micro enterprises

solid waste
Dry organic and inorganic waste materials

Specialised Cellulose
The new name for the expanded operating division within Sappi which oversees the production and marketing of Sappi's dissolving wood pulp from Saiccor Mill as well as the dissolving wood pulp to be produced from the 2013 financial year at Ngodwana Mill and Cloquet Mill.

speciality paper
A generic term for a group of papers intended for commercial and industrial use such as flexible packaging, metallised base paper, coated bag paper, etc

specific
When data is expressed in specific form, this means that the actual quality consumed during the year indicated, whether energy, water, emissions or solid waste, is expressed in terms of a production parameter. For Sappi, as with other pulp and paper companies, this parameter is air dry tons of saleable product

specific purchase energy
The term 'specific' indicates that the actual quantity during the year indicated, is expressed in terms of a production parameter. For Sappi, as with other pulp and paper companies, the parameter is air dry tons of product

TAPPI – Technical Association of the Pulp and Paper Industry
Technical Association of the Pulp and Paper Industry for the worldwide pulp, paper, packaging, and converting industries

TCF — Total chlorine-free
Refers to bleaching sequences in which no chlorine containing compounds such as chlorine dioxide are used

thermo-mechanical pulp
pulp produced by processing wood fibres using heat and mechanical grinding or refining wood or wood chips

tons
Term used in this report to denote a metric ton of 1,000kg

TSS — Total suspended solids (TSS)
Refers to matter suspended or dissolved in effluent

uncoated woodfree paper
Printing and writing paper made from bleached chemical pulp used for general printing, photocopying and stationery, etc. Referred to as 'uncoated' as it does not contain a layer of pigment to give it a coated surface

woodfree paper
paper made from chemical pulp

World Wide Fund for Nature (WWF)
The world's largest conservation organisation, focused on supporting biological diversity

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