



Sappi Group  
**Sustainability**  
Report 2013

**sappi**  
Inspired by life



# Contents




### More information...

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

**S** Click to read more detailed information available on the Sappi website, [www.sappi.com](http://www.sappi.com). This link will direct you to the relevant web-page or page in a PDF document.

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

Additional or explanatory information is provided in 'pop-up' windows which can be accessed by clicking on this icon. This information is also set out in the 'Notes and references' section at the end of this report.

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

### Best viewed

This sustainability report is best viewed, using Adobe Acrobat's PDF viewer, which can be downloaded for free from Adobe's website. **W** Viewing the report online, using your browser's native built-in PDF-reader may render some of the navigational and interactive functionality unusable.

### Conventions

#### tons

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

#### billion

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

### Units of Measure

Units of measure are described in the glossary.

## Contents

03	Message from the CEO
05	About this report
08	Sustainability governance
09	Accolades in 2013
10	Our process
11	Performance against targets
14	The link between our business and sustainability
24	Our key sustainability issues
36	Prosperity
49	People
84	Planet
120	UN Global Compact
125	Global Reporting Initiative
148	Glossary
151	Notes and references

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# Profitability affects our performance in the People and Planet areas



In the year under review, we continued to balance and integrate the 3Ps of **Prosperity**, **People** and **Planet** into all aspects of our operations. Our sustainability vision is to create value for all our stakeholders; we made steady progress in achieving this goal.

Our sustainability vision is to create value for all our stakeholders.

## Prosperity

Our successful commissioning of two major dissolving wood pulp projects, one in North America and one in South Africa, as well as the conversion of Paper Machine 2 at our Alfeld Mill in Germany, to speciality paper, accelerated our expansion in higher margin growth businesses and helped our strategic drive towards improved profitability.

In our transition to a more profitable Sappi, we have restructured many elements of the business and our people have had to adjust to new operating structures and procedures. This has entailed some level of disruption and I would like to pay tribute to all our people who have remained focused during this process and committed to our goal of being a customer-centric business focused on ongoing product, process and service innovation.

I am pleased that in focusing on **Prosperity**, we have not compromised our commitment to **People** and **Planet**.

## People

People are the key to our achievements and we continued to invest in best-practice training and development programmes, with training spend increasing in FY2013. We also continued to invest in the communities surrounding our operations and have reshaped our investment approach, particularly in South Africa. This has been done in consultation with communities, taking into account their current and future needs.

We have worked very hard to create a culture which prioritises safety for our own employees and contractors at all times.

While there were improvements in reducing fatalities and lost time injuries throughout the Sappi group, I deeply regret having to report one own employee fatality and one contractor fatality in our South African operations.

We will continue to focus on entrenching a strong safety culture with the ultimate target of zero harm.

# Profitability affects our performance in the People and Planet areas continued

## Planet

Energy is one of our major input costs and reducing greenhouse gas emissions is important in helping to mitigate global warming.

Globally, over the past five years, specific purchased energy has reduced by 20.3%, while Scope 1 (direct) and Scope 2 (indirect) CO<sub>2</sub> emissions have decreased by 12.2% and 28.4% respectively. These reductions represent reductions of 584,936tons CO<sub>2</sub> equivalent (Scope 1) and 607,906tons CO<sub>2</sub> equivalent (Scope 2) respectively and highlight the link between sustainability performance and value-add to our stakeholders.

### United Nations Global Compact (UNGC) and internationally recognised standards

We have been a signatory to the United Nations Global Compact since 2008 and the Compact principles underpin our sustainability approach, governance and targets.

We report on the latter internally on a quarterly basis and externally on an annual basis; transparently reporting successes and failures.

We also continue to use internationally recognised standards in quality, environmental and health and safety management. In each region, internationally recognised, independently verified forest certification systems are an integral part of sustainable forestry management.

The use of these principles and standards helps us to benchmark ourselves against our peers and drive performance.

### Looking forward

While excited about the fact that we can now meet 20% of global demand for dissolving wood pulp, we still see opportunities in certain paper markets.

Despite the fact that the world is increasingly relying on electronic media, the printed word and image remains a unique, distinctive and effective medium that adds considerable value to our daily lives, especially when used in conjunction with digital communication.

Our 3P performance in the year under review highlights my long-standing view that sustainability makes sound business sense.

I would like to thank all my colleagues and our other stakeholders who are working hard to entrench sustainability principles into our everyday business management.

**Ralph Boëttger**  
Chief Executive Officer  
Sappi Limited

Our 3P performance in the year under review highlights my long-standing view that sustainability makes sound business sense.

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# About this report



## Scope of this report

This report is aligned with our integrated annual report and covers FY2013, the period from the beginning of October 2012 to the end of September 2013.

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. In the interest of attaining higher levels of transparency and accuracy, we amend or improve our measurement criteria and techniques from time to time.

## 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 now provide a group overview of our sustainability performance in this online report and publish 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 2013 regional reports for our operations in Europe, North America and Southern Africa, will be available in printed form and online, early in 2014.

## Global Reporting Initiative

To date we have reported in terms of the Global Reporting 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, 2011 and 2012. Each year, our self-declared rating has been 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.

Continued...

### Integrated report 2013

**Europe**  
Sustainability  
report

**North  
America**  
Sustainability  
report

**Southern  
Africa**  
Sustainability  
report



Our sustainability vision  
is to create value for all  
our stakeholders

## About this report continued

References to the GRI indicators, for example: EN-1, LA-2 and EC-3 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 report on our performance.

### External assurance

Currently, assurance of sustainability information is conducted by our internal audit team. Their verification process includes reviewing the procedures applied for collecting and/or measuring, calculating and validating non-financial data, as well as reviewing reported information and supporting documentation.

In practice, most of our key operations undergo external verification, including the Eco-Management Audit System (EMAS) in Europe and globally, ISO 14001 environmental certification, ISO 9001 quality certification and OHSAS 18001 certification. We are also assessed in terms of the forest certification systems we use, and in South Africa; our Broad-Based Black Economic Empowerment (BBBEE) performance is assessed by an external ratings agency. In addition, our global governance, social and environmental performance is 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 as well as interaction with our stakeholders give us confidence that our performance indicators are reliable, accurate and pertinent. The Social, Ethics, Transformation and Sustainability (SETS) Committee reviews the efficacy of conducting external assurance annually.

### Management Systems

We use international, independently verified management systems to underpin our approach to sustainable development. These include:

- **FSC®** Forest Stewardship Council® 
- **PEFC™** Programme for the Endorsement of Forest Certification 
- **SFI®** Sustainable Forestry Initiative 
- **EMAS** Eco-Management and Audit Scheme 
- **ISO 50001** Energy Management System 
- **ISO 9001** Quality Management System 
- **ISO 14001** Environmental Management System 
- **OHSAS 18001** Health and Safety Standard. 

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



## 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 issues' and expanded upon in the **Prosperity**, **People** and **Planet** sections — Sappi's '3Ps' of sustainability.

Throughout this report, qualitative information is complemented by quantitative information, generally in the form of graphics illustrating performance over five years between FY2009 and FY2013.

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, customers, communities, governments and regulatory authorities.

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

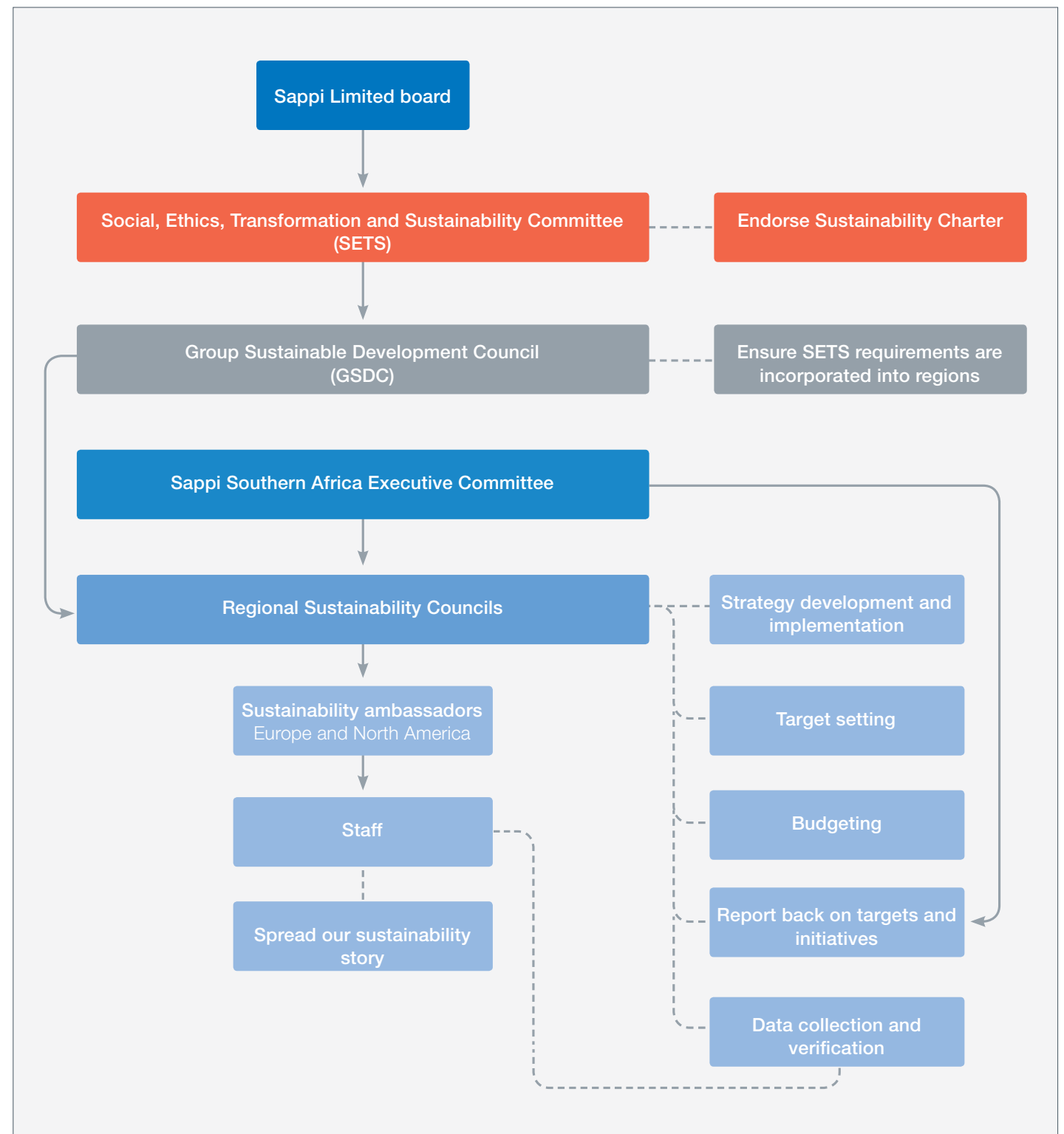
Regional Sustainability Councils (RSCs) operate in Europe, North America and South Africa. Each RSC focuses on key material issues relevant to their specific region and on incorporating sustainability into everyday business processes.

The regional RSCs report to the Group Sustainable Development Council which in turn reports to the newly established Social, Ethics, Transformation and Sustainability Committee (SETS) which in turn reports to the board.

## Sustainability ambassadors

Sustainability ambassadors in Europe and North America help to entrench a holistic approach to the 3Ps of **Prosperity**, **People** and **Planet**.

Sappi  
Sustainability Charter





# Accolades in 2013


## Socially Responsible JSE SRI Index

In 2013, we maintained our listing on the Johannesburg Stock Exchange (JSE) Socially Responsible Investment (SRI) Index.

## Materially best

The Materials Masters and Inventory Optimisation team from Sappi Southern Africa, won the **Most Improved Procurement Operation/Step Change** (Large Organisations) category. The team was also runners up in the Best Cross-functional Team category at the same event. The award was made by the Chartered Institute of Purchasing & Supply (CIPS), an industry body.

## PMR Awards

Sappi Southern Africa received two **Diamond Arrow** awards at the PMR Awards run by PMR.africa in the categories **Companies Doing Most to Protect the Environment** and **Companies Held in High Esteem as Good Corporate Citizens**. 



## Five PPI Awards

Five Sappi projects were shortlisted for the annual Pulp and Paper International (PPI) Magazine awards to be announced 11 December 2013 in Dubai at the first RISI Global Outlook conference.


Sappi Fine Paper Europe was nominated in three categories:

- **Managing Risk & Safety** — Stockstadt Mill
- **What's Next Magazine** — Promotional Campaign of the Year 
- **Advances in Innovation in Specialty Papers** — Alfeld Mill.

Sappi Fine Paper North America was nominated for two awards in the **Promotional Campaign of the Year Award** category:

- Print & 
- Ideas that Matter. 



## Gold SABRE

Sappi Fine Paper North America won a Gold SABRE award for **The Standard 5**, a guide to designing for print. The SABRE Awards celebrate superior achievement in branding and reputation communications. 

## Skills development

Shortly after year end, Enstra Mill in Southern Africa, was presented with an award by the Eastern Gauteng Chamber of Commerce and Industry for **Environmental and Social Skills Development**.

## CIO100 Award

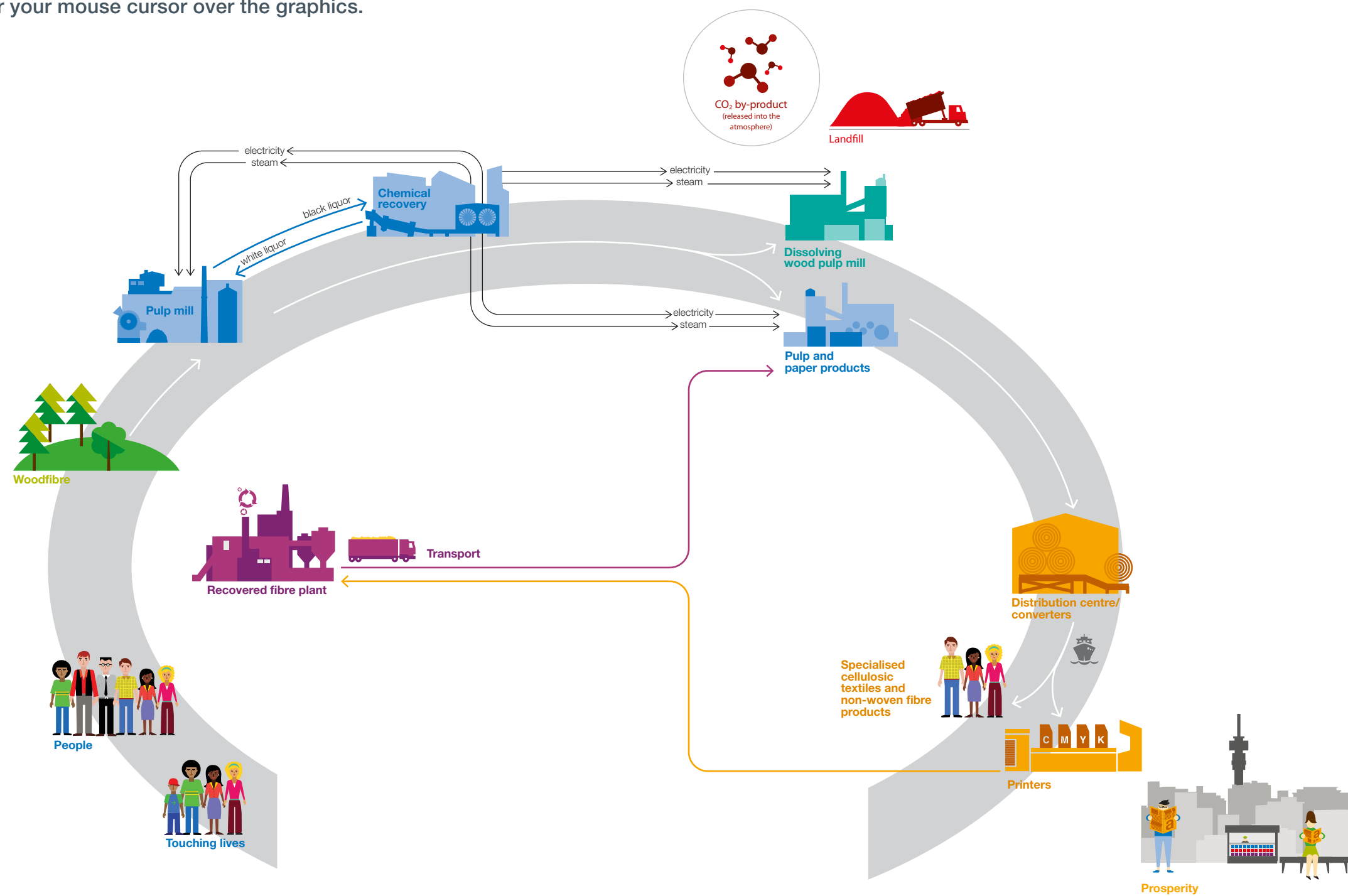
Sappi Fine Paper North America was selected as a recipient of the International Data Group's CIO magazine's 2013 CIO 100 award for the ringer detection system project at Somerset Mill.  

## Positively Print

**GASC**, the Graphic Arts Show Company chose Sappi Fine Paper North America's **Print &** book as the recipient of their 2013 Positively Print Award, a print advocacy programme designed to promote the power of print in today's media mix.

# Our process

Find out more... hover your mouse cursor over the graphics.





# Performance against targets — 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 have set new targets for 2017 with 2012 as a baseline where applicable. The challenging Planet reduction targets listed for 2014 are indicative only as, in each case, they are aimed at a 5% reduction by 2017.

## North America

In 2007, we established seven sustainability goals targeting improvement within five years (by 2012).

Beginning in 2008, the region began tracking performance against these goals, and in the final year of tracking we significantly exceeded all goals except the certified fibre goal.

With the original five-year goals lapsing in 2012, and having over-achieved almost all our goals, we established new five-year goals in 2011 for the period 2012-2016.

Three of the original goals were included again for the 2012-2016 period — with increased targets — as it was felt that 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

Due date for all targets is end 2015; the baseline for all targets is the beginning of 2011 unless otherwise stated.



		2013 Target	2013 Performance	2014 Target
Europe	RONOA (Return on Net Operating Assets) and EBIDTA (Earnings Before Interest, Depreciation, Tax and Amortisation) of 10% by 2017	Specific target for 2013 not disclosed, but monitored internally and reported on quarterly	RONOA 1.3% EBIDTA 5.3%	Specific target for 2013 not disclosed, but monitored internally and reported on quarterly
North America	Achieve or exceed an annual 12% RONO (Return on Net Operating Assets)	12%	6.7%	12%
Southern Africa	RONA (Return on Net Assets) to be equal to or greater than 15% by 2018 on a five-year rolling basis	8%	8%	9.5%

# Performance against targets — People



		Achieved	Exceeded	Not achieved	2013 Target	2013 Performance	2014 Target
Europe	Training hours per employee per annum				30	29.24	30
	LTIFR (own employees)				1.20	0.98	0.95
North America	Training hours per employee per annum to enhance job performance and management skills				75	68	75
	Customer training and education through Sappi ETC (hours) Target: 30,000 hours by 2016				24,000	22,300	26,000
Southern Africa	Achieve Level 3 compliance in Broad-based Black Economic Empowerment (BBBEE)				3	4	3
	80% compliance to the Work Skills Plan (WSP)				70%	77.5%	76%
	Training and development opportunities: average hours per employee per annum				54	81	57
	LTIFR (own and contractors) target: better than 'best ever' achieved on a continuous 12-month basis				<0.27	0.43	<0.27
	Corporate Social Responsibility (CSR) Investment: 1% of NPAT (Net Profit After Tax)				>1%	1.59%	>1%



# Performance against targets — Planet



		2013 Target	2013 Performance	2014 Target
Europe	Reduce specific direct fossil CO <sub>2</sub> emissions (tons CO <sub>2</sub> /ton saleable product), including purchased power emissions (calculated at 400g/kWh) by 5% by 2017; base year: 2012 saleable production	↓ 1% per annum	↑ 0.8%	↓ 5% by 2017
	Reduce specific water use (m <sup>3</sup> /ton saleable product) by 5% by 2017 Base year: 2012	↓ 1% per annum	↑ 1.3%	↓ 5% by 2017
	Maintain a high level of certified fibre delivered to our mills (FSC® or PEFC™ certified, or equivalent)	>70%	71.4%	>70%
North America	Increase total certified fibre content to 65% by 2016	61%	58%	63%
	Reduce specific energy use by 10% by 2016 In 2013 we converted the Cloquet Mill pulping process to manufacture dissolving wood pulp, a process that requires more energy per ton of pulp produced. We have modified our baseline and targets to reflect the changed process.	↓ 3.1%	↓ 0.7%	↓ 4.1%
	Reduce fibre and raw material waste by 10% by 2016	↓ 3%	↑ 2.1%	↓ 6%
Southern Africa	Reduce specific purchased fossil fuel energy by 15% by 2015 Base year: 2000	↓ 9.3%	↓ 23.5%	↓ 9.5%
	Reduce specific fresh water usage by 10% by 2015 Base year: 2007	↓ 7.9%	↓ 4.7%	↓ 8.8%
	Recover 28% of fibre put into the market	26%	25.1%	27%

## Prosperity, People, Planet — an overview of our business' links to sustainability



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



# Prosperity, People, Planet — an overview of our business' links to sustainability

## Key FY2013 numbers

US\$2,599m	Interest bearing debt
US\$385m	Cash and cash equivalents
US\$1,144m	Ordinary shareholders' interest
US\$3,078m	Value of property, plant and equipment
US\$464m	Value of plantations in Southern Africa

Through an **aggressive transformation** strategy, we've made steady progress towards achieving our sustainability vision — adding **value for all our stakeholders**.

**US\$29.5m R&D spend**

Returns on Exciter projects are double the investment spend.

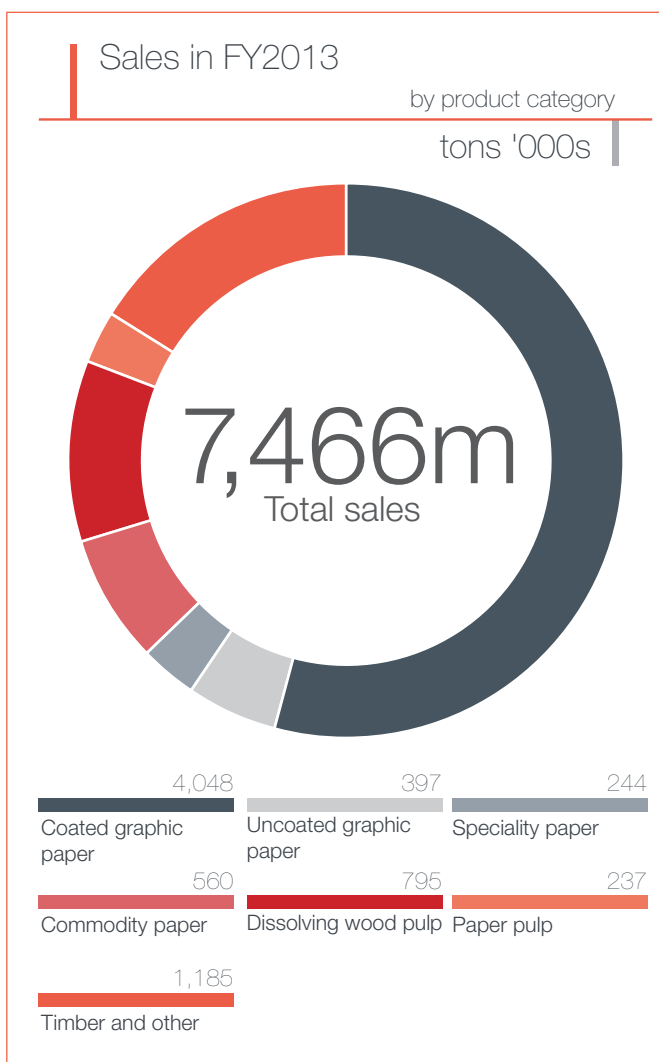
**All mills**  
**ISO 9000**  
Quality Management System certified

## Power sold to third party customers

North America	770,350 GJ
Europe	1,605,360 GJ
South Africa	190,295 GJ

## Employment in 2013

13,665	Employees globally
750	Contractors globally
11,700	People employed by contractors working for Sappi Forests



**OHSAS 18001**  
Certification achieved for all mills

**US\$10.14m Training**  
Investing in our people to learn, grow and to have a productive career with Sappi is a **business imperative**.

**US\$1.4m CSR spend**  
Direct corporate social responsibility  
CSR spend excludes indirect spend on infrastructure and community support.

# Prosperity, People, Planet — an overview of our business' links to sustainability



Globally,  
**51.5%**  
of energy used in our mills is derived  
from **renewable sources**



**4%**  
**Reduction**  
in **specific water usage** over the past  
five years



**33.4%**  
**Reduction**  
in **solid waste to landfill** over the past  
five years



All mills  
**ISO 14001**  
Environmental Management System certified

## Managed plantations and forests

The plantations and forests from which we harvest the timber used in our manufacturing processes are managed through the use of independent, internationally accredited forest certification systems:

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

These internationally recognised, independent auditing procedures mean that it is possible to trace our virgin fibre from source to end-product.

## Sourcing woodfibre

### Europe

Woodfibre is sourced from forests close to each mill. Softwood and hardwood pulp is sourced from Europe and the Americas. Tree species used include spruce and beech.

Lanaken Mill can also process significant volumes of poplar.

**71.4%** of all fibre used is certified.

### North America

Woodfibre is sourced from landowners and commercial loggers operating in temperate forests in Maine, New Hampshire, Michigan, Minnesota and Wisconsin and from the Canadian provinces of New Brunswick, Quebec and Ontario. The tree species used include maple, poplar, aspen, beech and birch (hardwoods) and spruce, pine and fir (softwoods).

**58.7%** of all fibre used is certified.

### South Africa

All timber is sourced from plantations (planted forests) of softwoods and hardwoods. All our own and leased plantations are 100% FSC™ certified

Approximately one-third of our plantations are managed for biodiversity conservation.

**86%** of fibre used is certified.



# Prosperity — our value add



## Sappi Sustainability Charter

*"Our approach to sustainability is based on a holistic view of the 3Ps: Prosperity, People and Planet. Being a sustainable organisation means that we balance and integrate the 3Ps into our business decisions, strategies and processes to help us create added value for all our stakeholders."*

**Manufacturing our pulp, paper and specialised cellulose solutions in a manner that 'does not compromise the ability of future generations to meet their own needs' is the basis for achieving this vision.**

**Sappi  
Sustainability Charter**

## Our products add value

Our products add value to people's lives every day and are used in the following ways:

- **Dissolving wood pulp** Viscose fabrics and textiles, and used in foodstuffs, cosmetics and pharmaceutical products
- **Graphics papers** Commercial printing including magazines, brochures, catalogues, direct mail, corporate reports and calendars
- **Packaging papers** Convenience food, fast food and to protect and transport fresh produce
- **Speciality, security and release papers** Consumer goods, labels, passports and a variety of other applications.

## We contribute...

We contribute to social and economic wellbeing by using labour drawn from local communities, and engaging the services of small and medium enterprises situated in the areas around plantations and production facilities.

We also have a best practice training programme and, through our corporate social responsibility programme together with our enterprise development programme in South Africa, invest in the socio-economic development of the communities in which our workers live.

## Value added

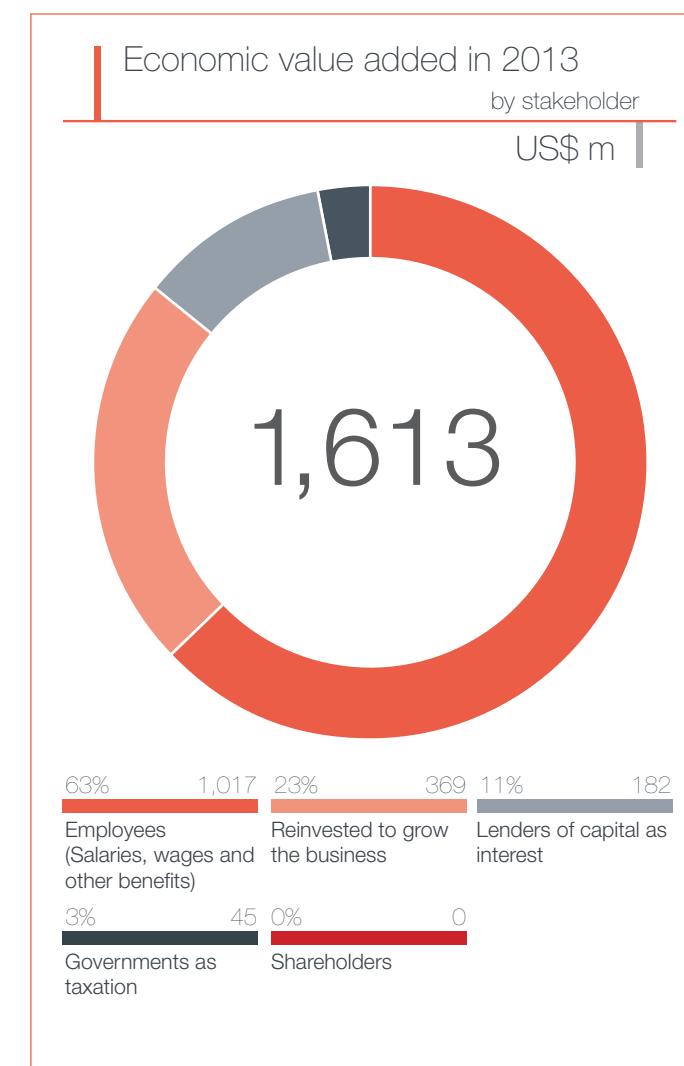
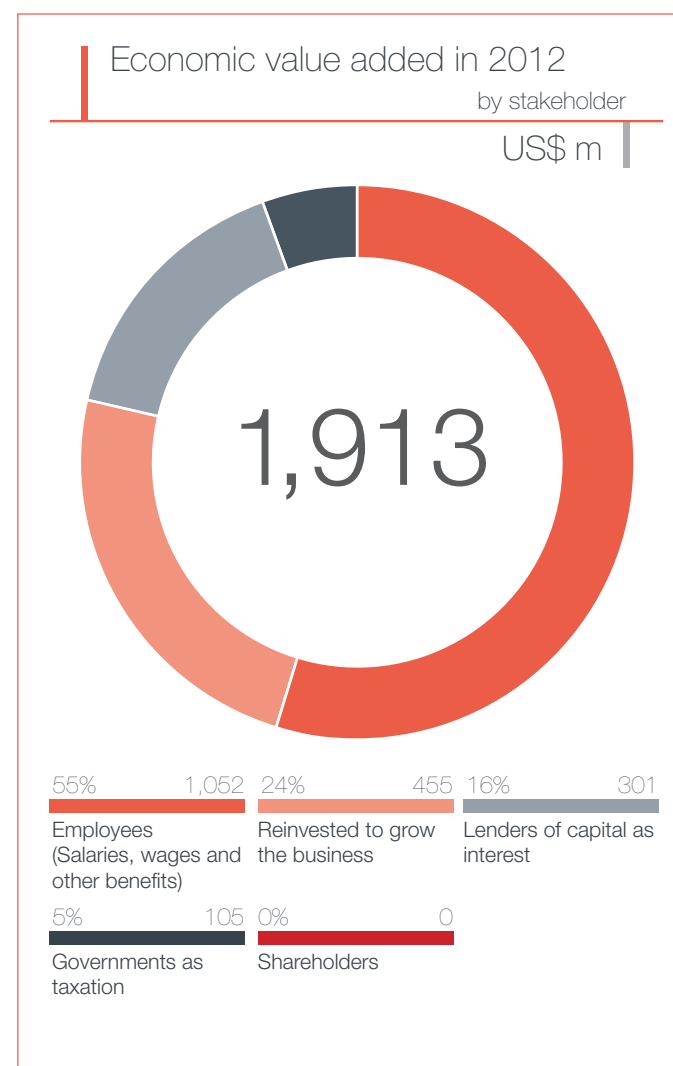
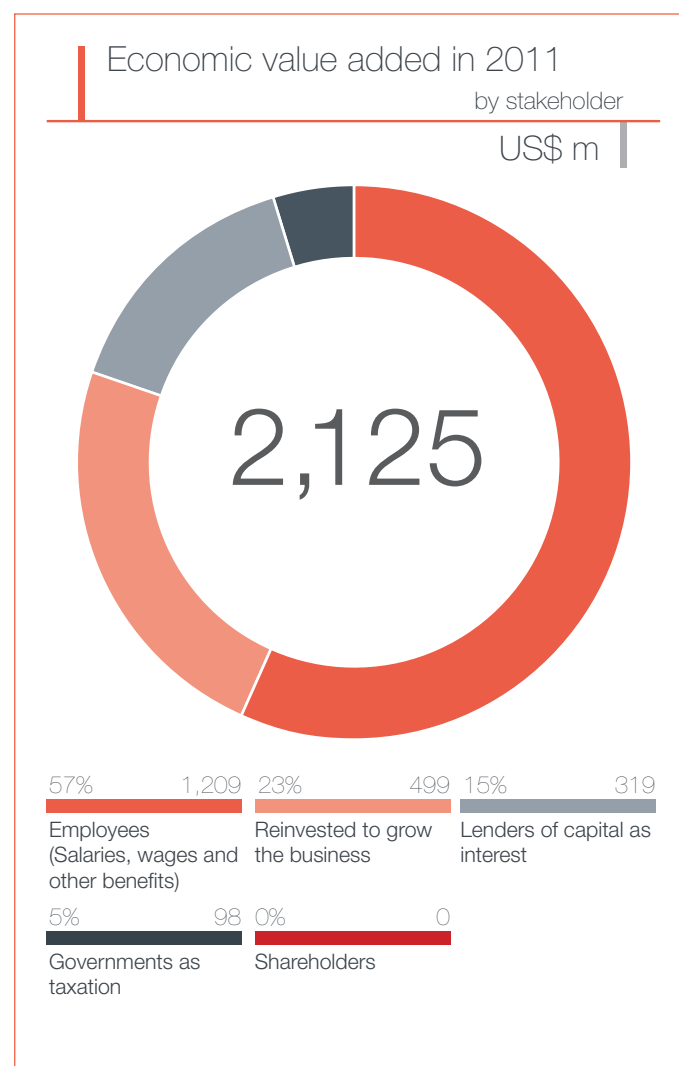
In 2013, we added value to the Prosperity of the regions where we operate:

- By employing:
  - 13,665 employees
  - 750 contractors globally
  - An additional approximately 11,700 people working for contractors engaged by our forestry operations in Southern Africa.
- By creating millions of dollars worth of goods each year. In FY2013 sales per region were:
  - **Europe** US\$3,155 million
  - **North America** US\$1,377million
  - **South Africa** US\$1,393 million.
- By contributing to domestic growth and the balance of payments in each region where we operate by exporting products to over 100 countries around the world.

We enhance our financial capital position by using a high percentage of self-generated energy, selling excess power, reducing our use of water and by minimising waste production and disposal. We are increasingly generating revenue from waste (for an example, please refer to our 2013 sustainability report for Sappi Southern Africa). ↗

Value added distributed amongst our stakeholders and reinvested in the business: US\$1,613 million.

# Prosperity — our value add





# Prosperity — technology and innovation



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

This centrally coordinated approach allows us to pool and leverage our expertise across the regions to ensure that our solutions remain relevant to the needs of our customers in more than 100 countries across the globe.

## Technology centres

Our Technology Centres around the world are focused on product/process improvements and development and are supported by 11 technology clusters.

## Technology clusters

Our technology clusters are comprised of internal experts and focused on aligning technology and R&D expertise. The clusters promote the sharing of ideas, technical excellence and best operation practice across Sappi's business units.

To ensure central coordination, clusters report to the Group Technology Management Team (GTMT) which is responsible for technical management in the group as well as overseeing research activities. The clusters are supported by Centres of Excellence in various fields.

## R&D and Exciter programme

Our total R&D spend in 2013 was US\$29.5 million including US\$8.1 million related to our Exciter programme.

The Exciter programme is focused on creating breakthrough technological competency, which will allow us to develop new and improved products and processes to drive market differentiation.

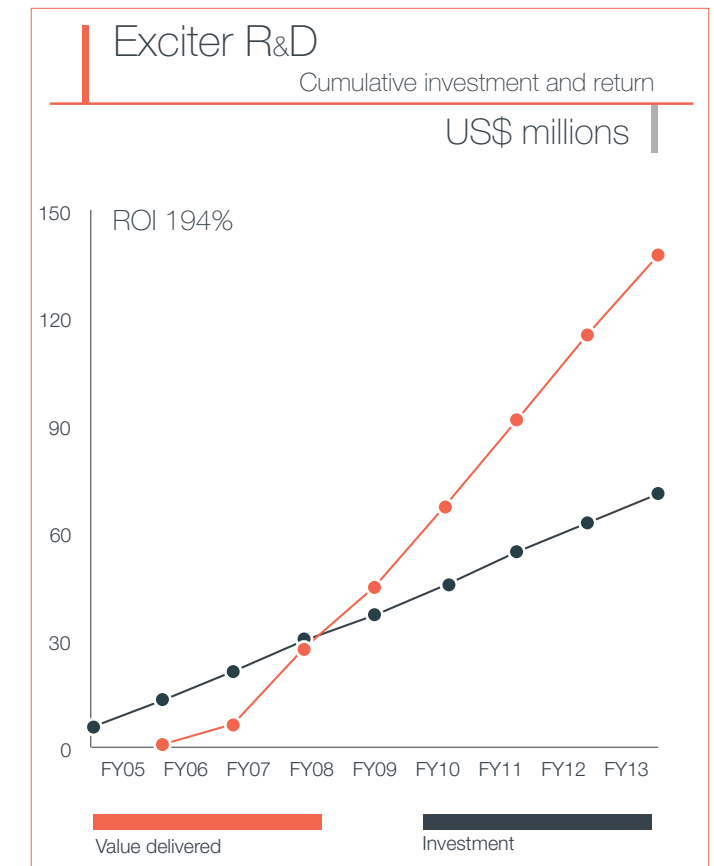
Work takes place in two areas: core business (Exciter I) and new adjacent business (Exciter II).

**Exciter I** is focused on cost reduction, developing new technology to drive down production costs and process improvements, mainly originating from the pilot digester and pilot refiner centres of excellence.

**Exciter II** projects are focused on the development of products for new adjacent markets.

A number of prototypes in the areas of speciality chemicals and fibre composites are ready to be tested in the market and present an opportunity to develop new revenue streams for Sappi in the future.

Exciter value delivery for FY2013 was approximately double investment.



# Prosperity — manufacturing efficiency



In our mills, we use the principles of **Lean Manufacturing** to: **minimise waste in all areas, including raw material and energy usage, and optimise operating efficiencies, product rationalisation and time management.**

## Rigorous measurement

We have a rigorous system of measuring our 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 between mills helps us identify strengths and weaknesses in our operations, and promote the group's best practices and improve our processes, thereby increasing profitability.

We also track the efficiency and reliability of each paper machine and the financial impact thereof throughout the group. As an example, the graph on this page shows production improvement at our Cloquet Mill since 2009.

## Renewable energy

We have a major benefit in our high use of renewable energy (51.5% globally), derived mainly from black liquor, sludges and biomass. This results in a high degree of energy self-sufficiency and lower levels of greenhouse gas emissions from fossil fuels. It also helps cushion us from proposed carbon taxes, emission caps or other limits on fossil fuel use.

In FY2013 we sold power to third party customers:

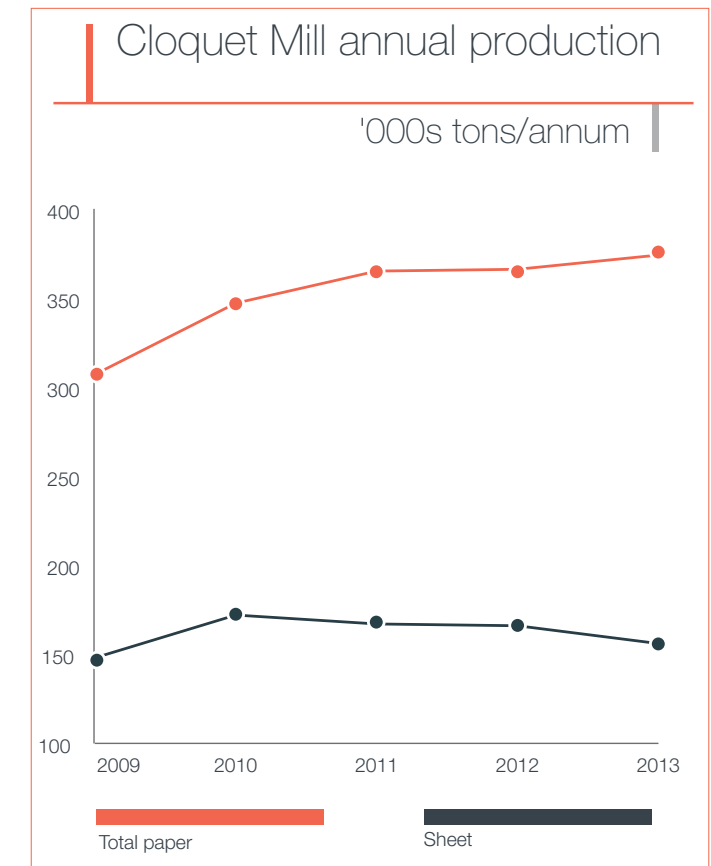
**North America** 770,350 gigajoules (GJ)

**Europe** 1, 605,360GJ

**South Africa** 190,295GJ.

## Cogeneration opportunity in South Africa

Under the Medium-Term Risk Mitigation (MTRM) determination, the Department of Energy (DoE) is seeking to procure 800MW of near-term cogeneration capacity, which could arise from biomass, industrial waste and combined heat and power sources. Through the Paper Manufacturers' Association of South Africa (PAMSA), we have engaged with government about this cogeneration opportunity. The potential for us to increase the electricity we already sell to the national electricity generator, Eskom, looks promising. We have a number of cogeneration and renewable biomass power plant projects in the pipeline that can be implemented relatively quickly should a positive COGEN programme be implemented by government. An announcement regarding the status of the programme is expected early in 2014.





# People — ensuring our sustainability well into the future



## Our people profile

In recent years our business focus has been on improving the profitability of the graphic paper business and growing the higher-margin specialised cellulose division. This has meant that we have undertaken a number of restructuring initiatives which have resulted in machine closures and headcount reductions in Europe and South Africa.

Our current headcount is 13,665 (2012: 14,039) people. ↗

## Recruitment and retention

Ensuring our sustainability well into the future requires us to recruit talented individuals with the right skills sets, retain talent within Sappi and develop employees to reach their full potential so that they contribute fully to our success.

In 2013, our employee turnover rates were 5.4% in **Europe**; 6.06% in **North America**; 16.18% in **South Africa**; and 10.4% in **Sappi Trading**. ↗

During the course of 2013, we recruited 1,082 employees across our businesses, of which: 179 were employed in **Europe**; 181 in **North America**; 705 in **South Africa**; and 17 in **Sappi Trading**. ↗

Women made up 36% of new hires and the majority of our new hires were local residents. ↗

## Skills development ↗

Investing in our people to learn, grow and to have a productive career with Sappi is a business imperative. Each of our business units manage their own training and development based on the operational requirements of the mill and/or region.

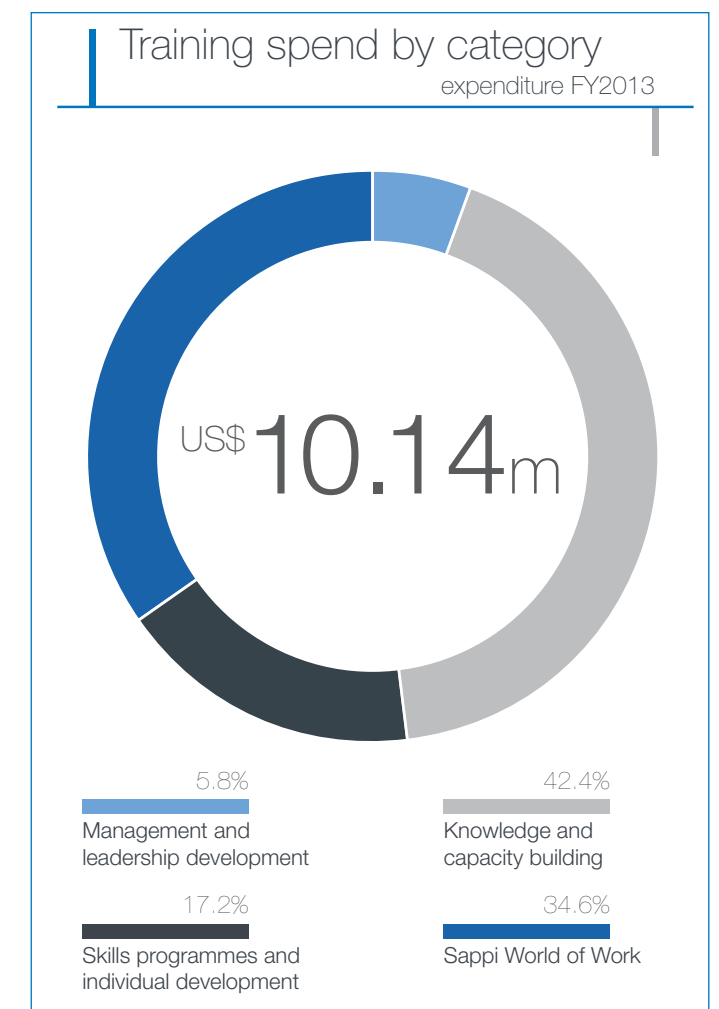
We emphasise employee involvement in all our skills development initiatives. A significant portion of training and development spend is allocated according to needs identified in Personal Development Plans which are in place for many of our employees: **Europe** 65%, **North America** 23% (66% of eligible employees), **South Africa** 77%.

Due to the lack of education and poor skill levels among certain sectors of the South African population, there is a greater focus on, and investment in skills development and training in this region than in our other operations. In South Africa, our Work Skills Plan, submitted annually to the South African Sectoral Education and Training Authority for the Fibre Process and Manufacturing Sector, is compiled together with our union shop stewards.

We conduct annual talent reviews for professional levels and middle management and above, as well as succession planning for lead team roles and mission critical roles. This gives us an indication of our functional bench strengths and an understanding of our promotional and development

opportunity pool.

Recognising the importance of leadership at various levels in the organisation, our leadership development begins at first-line supervisor training all the way to successors for lead team roles. While a defined set of leadership competencies form the basis of our Leadership Academy, senior managers are developed in line with their personal development plans. ↗



# People — communities

## SO-1

Percentage of operations with implemented local community engagement, impact assessments, and development programmes

**Our corporate social responsibility (CSR) initiatives and programmes are in line with, and supportive of, our business strategy and are developed with input from key stakeholder groups.**

Our support is focused on the communities where we have an impact. Our preference is for multi-year programmes which create sustained impact in our communities. The majority of our CSR spend takes place in South Africa, to assist in addressing the development needs of that country. Our spend in South Africa stood at 1.59% of Net Profit After Tax (NPAT), again exceeding our regional target that CSR spend should represent 1% of NPAT.

Sappi's CSR related projects across all regions address four broad themes:

- **Literacy and education** with a particular focus on developing mathematics and science skills.
- **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.
- **Community engagement and upliftment** including projects to improve basic infrastructure and services as well as projects which improve community life.

### Europe — Education and environmental causes

Our European operations continued to support the rebuilding of a school in Haiti — a project initiated after the earthquake in 2010 — and the planting of trees to re-establish natural forests (in partnership with Belgian authorities). 📌

At a community level, mills supported local projects including: youth clubs, community centres, vulnerable groups, sports clubs and environmental education in addition to making paper donations.

### North America — Ideas that Matter

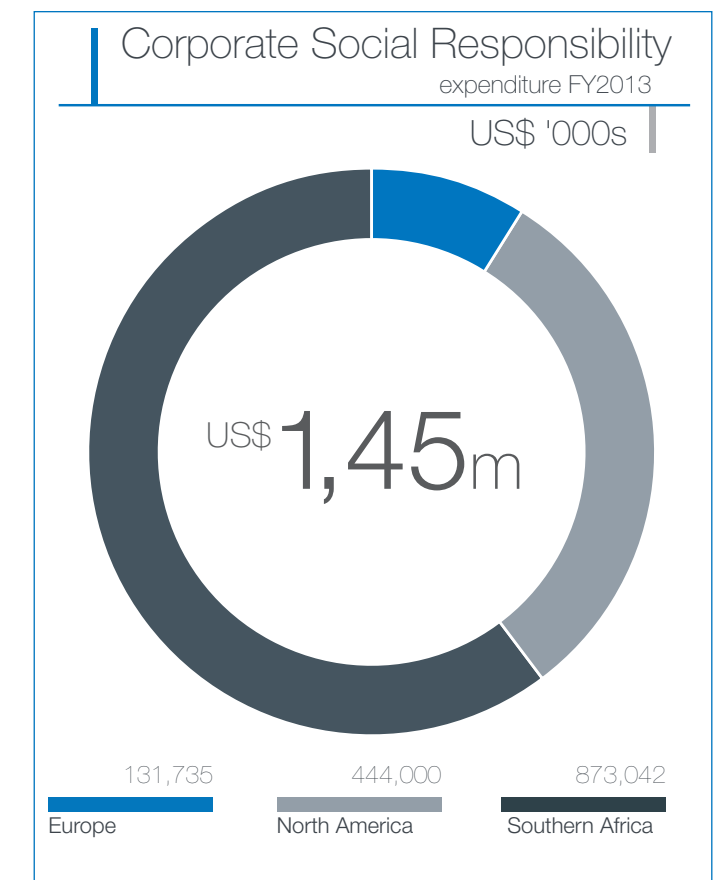
We focus mainly on the Ideas that Matter programme which funds the best paper-based communication campaigns for charities and other worthwhile causes, created by graphic designers — a key target audience for the graphics paper business. 📌

We provide scholarships for high school students to study at the University of Maine (Pulp and Paper Association) 📌 and we support the New England Aquarium. 📌

### South Africa — Education and literacy

Education and literacy make up 45,7% of total CSR spend in this region. This includes eight PROTEC branches in mill communities working with grade 10-12 students. PROTEC (Programme for Technological Careers) is a national independent non-profit educational service provider in South Africa that specialises in maths, science and technology education. 📌

We have identified Early Childhood Development (ECD) as a new focus area to help break the cycle of poor education by investing in the 0-7 age group within our communities, in particular our forestry communities. We are partnering with Penreach, a not-for-profit school development programme focused on creating 'communities of learning', to establish an ECD Centre at Elandshoek close to our Ngodwana Mill. The centre is expected to begin operating in 2014. 📌 In addition, 25 ECD sites will be developed in Sappi's KwaZulu Natal forestry communities through non-profit organisation, Training & Resources In Early Education (TREE).





## Planet — a sustainable, natural renewable resource






One of the greatest benefits of our paper, paper packaging and dissolving wood pulp solutions is that the woodfibre they are derived from is a sustainable, natural, renewable resource.

When managed in accordance with the principles of sustainable forest management, as promoted at Sappi, the use of the products we manufacture drives the growth of plantations and forests; making a valuable contribution to mitigating global warming through carbon sequestration.

### Managed plantations and forests

The plantations and forests from which we harvest the timber used in our manufacturing processes are managed through the use of independent, internationally accredited forest certification systems:

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

These internationally recognised, independent auditing procedures mean that it is possible to trace our virgin fibre from source to end-product.

### Certified fibre

The bulk of the fibre we procure is certified:

**Europe** 71.4%

**North America** 58.7%

**South Africa** 86%.

The rest of the fibre is procured from known and trusted suppliers close to each mill, regularly visited by our buyers.

FSC®-controlled wood and PEFC™ Due Diligence Systems (DDS) requirements are incorporated into our purchasing specifications and contracts and in line with our purchasing policy.

Environmental- and forestry-related information (including wood sources) is obtained from pulp suppliers on a regular basis and this data is then internally evaluated by a team of experts.



## Our key sustainability issues

# Key Sustainability Issues

The issues set out in this section of our group sustainability report are important factors that we believe may have a material impact on our success as a business either by directly impacting our ability to operate profitably or by affecting our reputation and the trust stakeholders have in Sappi





## Sustainability issue

**The downturn in the global economy has accelerated the decline of graphic paper use in the developed world as consumers turn to electronic media to access news and to e-readers for books and magazines.**

## Our response...

**Our response has been to diversify our product portfolio and exposure to the markets we serve.**

### Dissolving wood pulp


One of the cornerstones of our business strategy is growth in profitable specialised cellulose — dissolving wood pulp (DWP) — solutions.

The successful commissioning of our conversion projects at Ngodwana Mill in South Africa and Cloquet Mill in the United States to increase our capacity from 800,000 tons per annum to 1.34 million tons per annum, took us a long way down the road to achieving this strategy.

## Future demand growth

The trends of increasing population growth and affluence in Asia are important for Sappi because currently, the bulk of our DWP production is sold into the Asian market for use in textiles.

With greater affluence, many Asians are already graduating from non-breathable fibres derived from oil, to natural fibres and blends, which include derivatives of DWP.

According to RISI, the leading information provider for the global forest products industry, global DWP consumption grew 9% in 2012, reaching 5.8 million tons. RISI projects world DWP usage at 6.9 million ton in 2014, up 1.1 million tons or 19% on 2012 consumption. 

## Significant growth opportunities

These trends hold significant growth opportunities as Sappi is positioned in the lowest cost quartile of the world's DWP manufacturers. Having the ability to carousel between mills also enhances our service position, enabling faster customer turnaround times and service.

## Primary uses

The dissolving wood pulp principally produced by Sappi is the type used in the manufacture of a variety of cellulose products, including viscose staple fibres or rayon, solvent spun fibres (lyocell) and viscose filament yarns which have a soft, natural feel and excellent breathing properties.

Given their particularly high absorbency properties, these fibres are also used in non-woven applications in the healthcare, industrial and disposable product markets.



**9% Growth**  
in global demand for dissolving wood pulp in 2012



**6.9m tons DWP**  
Anticipated global dissolving wood pulp demand in 2014

### Sustainability issue

The downturn in the global economy has accelerated the decline of graphic paper use in the developed world as consumers turn to electronic media to access news and to e-readers for books and magazines.

### Our response...

Our response has been to diversify our product portfolio and exposure to the markets we serve.

#### Paper and paper packaging

We are countering the trends away from graphic paper, in the developed world, by moving into more specialised paper solutions, including intelligent packaging, security papers, label and food-safe papers and papers designed to meet specific customer needs.

We believe opportunities will grow as consumers increasingly look for alternatives to plastics and as environmental and health regulations become more stringent.

#### Europe — Algo Nature

Algo Nature is a good example of meeting market demand for environmentally friendlier products.


Algo Nature is the first and only one side coated packaging paper that is certified to be composted at home.

In conjunction with Innovia Films, we developed a flexible packaging solution that can convert waste into energy (anaerobic digestion and biomethanisation), or, at a minimum, can be composted by the consumer to reduce the burden on landfills and provide a solution to fight plastic pollution through littering.

#### Europe — two new flexpack grades

In 2013, we launched two new mineral oil barrier flexpack grades: MOB Kraft and MOB Gravure. These innovative speciality papers prevent the migration of mineral oil and other contaminants into food from cardboard packaging containing recycled paper. The mineral oil barrier in the papers protect foodstuffs from mineral oil compounds that are a complex mixture of saturated and unsaturated hydrocarbons, which are suspected to be carcinogenic.

#### Europe — Jaz Book

We also launched Jaz Book, a coated digital paper; the result of our partnership with Hewlett Packard. Available in a lower weight, this paper is specifically targeted at full colour book production and is an ideal choice for the education market. 

#### North America — Lustreprint

We manufacture Lusterprint, a grease proof product with an excellent print surface. Used primarily in pet food packaging, Lusterprint is approved by the US Food and Drug Administration (FDA) for food contact and can also be used in applications such as popcorn bags.

#### South Africa — changing expectations

Our customers are increasingly requesting paper that incorporates recovered fibre, which a number of our mills are capable of processing.

### Variety and recovery...

At Enstra Mill in South Africa, a repulper, commissioned in August 2013, has enabled the mill to supply a wide variety of pulp types to the paper machines, while the recovered fibre plant will process recycled grades.

The capacity to blend recovered fibre into paper grades has given the mill more flexibility in producing competitive products that meet customer requirements and enables the mill to meet increased market demand for products incorporating recovered fibre. 



# Fibre supply and forest certification

## Sustainability issue

The implications of a constrained fibre source would have consequences for our business. Forest certification is an important reputational issue.

## Our response...

### Fibre supply: Europe and North America

Fibre is sourced from forest owners close to each operation, with whom we have long-standing relationships. In these regions, we mitigate fibre supply risk through a combination of approaches which include both short- and long-term wood supply agreements and shareholdings in wood sourcing co-operatives.

#### Europe

In January 2013, Sappi Fine Paper Europe took this one step further by establishing a joint venture, proNARO, with SCA Hygiene Products. The joint venture focuses on the wood sourcing process of pulp operations in Alfeld, Stockstadt, Mannheim and Ehingen.

This move has secured wood supply on a long-term basis for our pulp production in a cost efficient, sustainable manner.

### Biomass diversion threatens fibre supply

In both Europe and North America, the diversion of biomass to energy is threatening the sustainability of fibre supply for our industry.

#### Europe

Our position is that we should take advantage of wood's many versatile and renewable properties to firstly create wood products, pulp and paper, and recycled paper, all of which can then be used for renewable energy after their material use.

By extending the lifecycle of wood before it is ultimately used for energy, we can add value to the economy, create and retain jobs, and in effect use our raw materials more efficiently.

#### North America

A growing number of prospective and existing government mandates and incentives promote the use of biomass for energy, including state and federal Renewable Electricity Standards, climate policies, and the Renewable Fuel Standard. The rapid increase and the combined effect of these mandates could affect the balance between the many users of, as well as the long-term sustainability of the forest resource.

We share the position of the American Forests & Paper Association (AF & PA) that any government policies that encourage additional demand for continued...

## Tree breeding research

Our research centre in KwaZulu-Natal, South Africa, plays an important role in optimising our woodfibre base in this region.

Our tree breeding programme at the centre continuously tests and selects genotypes best suited to the range of sites where we plant 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.

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 breeds.

We also use biotechnology to develop trait-linked molecular markers for breeding and for understanding host defence mechanism to important tree pests and disease such as *Lepitocybe invasa* and *Fursarium circinatum*.



# Fibre supply and forest certification continued

biomass should be coupled with policies that increase the available long-term supply of wood to meet future demand for paper and wood products as well as new and growing energy markets.

Policies also should include safeguards to minimise disruptions in the flow of fibre and related market distortions.

In Southern Africa, we own, manage and lease 561,000ha of land, so have a certain level of control over our fibre sources.

## Own fibre source in Southern Africa

We own, manage and lease 561,000ha of land, so have a certain level of control over our fibre sources.

We continue to invest in developing our low-cost fibre base and are mitigating fibre supply risk.

### Project Grow

We help promote access to and develop the timber farming industry through Project Grow, our enterprise development initiative. 📍

### New community-owned plantations

Forestry is classified as a streamflow reduction activity — the only agricultural activity in South Africa to be classified in this manner — and accordingly, is subject to a water-use licence.

We are working with communities in the Eastern Cape to obtain water-use licences for the establishment of new plantations. To date, we have assisted several communities in the Eastern Cape in obtaining a total of 4,546ha of water-use licences, including 584ha of new licences awarded during 2013.

We are also assisting the communities in the Eastern Cape who have been successful in obtaining water-use licences to secure Recapitalisation and Development Funds (RECAP) from the Department of Rural Development and Land Reform.

## Timber-focused land reform

We are assisting with land reform projects where timber is grown. We have, for example, signed a Service Level Agreement (SLA) with the National Department of Rural Development and Land Reform. As part of the SLA, Government appointed us as a strategic partner to assist land reform beneficiaries with the management of the timber on their property.

### Research

Ongoing research, including collaboration with industry and various research institutes to improve silvicultural practice, develop biocontrol measures and breed genetically more resistant planting stock.

### Breeding

Breeding for specific pulping characteristics to improve process efficiency.

### Lowering costs by improving yield:

Over 15 years, our research efforts have resulted in a 60% improvement in eucalypt plantation yield.

In our Usutu pine plantations we have maintained sample plots to allow comparison of four successive rotations of pine since the first rotation, 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.



# Climate change



## Sustainability issue

**Drought, changing weather patterns, increased risk of fire and pest infestations could potentially impact the sustainability of our fibre supply.**

## Our response...

Climate influences the structure and function of forest and plantation forest ecosystems and plays an essential role in forest health.

A changing climate could exacerbate many of the threats to forests and plantations, such as pest outbreaks, fires, human development, and drought could also have both negative and positive implications for growth.

In all regions, woodfibre could be positively or negatively affected by climate change. In each region where we operate, we monitor the situation very closely.

In Southern Africa, where we have a high degree of control over our fibre resource, we maintain a broad genetic base, comprising many species, populations and trees. This ensures that we are able to respond to new challenges like pests,

diseases, changing markets and global warming while providing continuous genetic improvement over the long term.

Our exposure to climate change related risk in this region is moderated through:

### Genetic variability

Maintaining wide genetic variability in our planting material, enables us to breed trees for a wide range of conditions and the rate of change in conditions is likely to be slow enough for us to respond in the breeding programme. In other words we will produce better trees as conditions change.

### Best practice

Continually monitoring and reviewing forest best practices in the light of changing environmental factors, thus helping to mitigate any increased threat from environmental conditions.

### Drought-tolerance

Implementing extensive planting of more drought-tolerant eucalypt hybrids.

### Mitigating fire risk

Fire risks are mitigated via an integrated Fire Risk Management System comprising a comprehensive risk assessment, monthly compliance checks for monitoring, management procedures, standards, and general back-up information. We also involve our neighbours and communities in fire prevention.

A changing climate could exacerbate many of the threats to forests and plantations, such as pest outbreaks, fires, human development, and drought.

It could have both negative and positive implications for growth.

# Energy and carbon footprint

## Sustainability issue

**As pulp and paper production is highly energy intensive; the cost and availability of energy is a key consideration for Sappi.**

## Our response...

Energy costs as a percentage of operating costs have been rising for several years and currently account for approximately 12% of our cost of sales.

We mitigate this risk by focusing on increasing renewable energy, promoting cogeneration and investigating biofuel opportunities.

We have a major advantage over other industrial companies in our high usage of renewable energy, derived from black liquor, sludges and biomass. This results in a high degree of energy self-sufficiency and lower levels of greenhouse gas emissions from fossil fuels and helps cushion us from proposed carbon taxes, emission caps or other limits in fossil fuel use.

All regions have established energy targets and report on these on a quarterly basis.

Globally, over five years, specific purchased energy

has dropped by 20.3%. This decrease has been largely due to production closures in South Africa, as well as the 'Amakhulu' expansion project at Saiccor Mill, which significantly enhanced energy efficiency.

We continue to focus on reducing our carbon footprint in all regions by improving energy-use efficiency and decreasing our reliance on fossil fuels. We are achieving this by making process changes, installing more efficient equipment, reducing purchased energy (electricity and fossil fuel) and by increasing our use of renewable energy — an approach that ultimately results in a reduction in CO<sub>2</sub> emissions.

In addition, through the use of black liquor, we have been steadily increasing energy self-sufficiency over time.

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.

Globally, over five years, Scope 1 (direct) and Scope 2 (indirect) CO<sub>2</sub> emissions have decreased by 12.2% and 28.4% respectively. These reductions represent reductions of 584,936 tons CO<sub>2</sub> equivalent (CO<sub>2</sub> e) (Scope 1) and 607,906 CO<sub>2</sub> e (Scope 2).

We continue to explore biorefining projects in all regions to reduce exposure to future energy price increases and provide a stable supply of energy.

Further, bio-energy projects may represent important new revenue streams. Our Technology Research Centre in Pretoria, for example, is looking at various conversion technologies for lignin. These include the gasification of lignin.





# Carbon tax

## SO-5


Public policy positions and participation in public policy development and lobbying

### Sustainability issue

**Carbon taxes could have a material impact on our profitability.**

### Our response...

#### Europe

There is considerable regulatory uncertainty regarding emissions allowances. In September 2013, the European Commission announced it would cut free allocation of emission credits to industry with an additional 6% in 2013 — adding up to a startling 18% extra cut by 2020. The Confederation of European Paper Industries (CEPI) has called the decision “very harsh”, saying that “even the most carbon efficient companies in Europe would not receive the credits they need to operate”.  We continue to monitor developments in this region.

#### North America

There are as yet no proposals for federal carbon taxes in North America. However, the states of Oregon and Washington recently announced moves towards a carbon-pricing system similar to the seven-year-old carbon tax in British Columbia. Earlier this year, California introduced a carbon pricing mechanism as part of its carbon cap-

and-trade system. There appear to be no moves towards carbon tax in the states in which we operate in North America. We do, however, believe that we would be cushioned from carbon taxes by our high use of renewable energy, currently standing at over 80% — well above the industry benchmark in this region of 62%.

#### South Africa

The government is proposing to a carbon tax of US\$12.93 per ton of CO<sub>2</sub> emitted. We have made extensive inputs into the submission made to the National Treasury by the Pulp and Paper Manufacturers' Association (PAMSA) submitted before the end of August 2013. We subscribe to PAMSA's view that “climate change will have a significant impact on South Africa, its economy and its people and we recognise the importance of reducing greenhouse gas (GHG) emissions in mitigating the effects of climate change”. We further recognise that the proposed carbon tax is viewed as a means of driving behavioural changes towards low carbon and energy efficient technologies.

However, in line with PAMSA's 2013 submission to Treasury, we maintain that when plantations and the pulping and paper making process are considered as an integrated entity, together with process emissions and plantation absorptions, the net result is GHG absorption. We believe that a tax offset mechanism be developed to recognise the sequestration effect of plantations. In addition,

we believe that carbon taxes would impact on the competitiveness of our industry by adding another layer of costs. This would mean unfair competition from papers imported from countries without carbon taxes.

The sequestration effect can be demonstrated by using the Forest Industries Carbon Assessment Tool (FICAT™) methodology, a GHG accounting tool developed specifically for the forestry and paper industries by the National Council for Air and Stream Improvement, a powerful US environmental NPO.

The use of FICAT™ demonstrates that the trees in Sappi's plantations absorb 12.5 million tons of CO<sub>2</sub> and emit 8 million tons of oxygen annually. The estimation is based on an average absorption of 27 tons of CO<sub>2</sub> per hectare of plantation per year.

### Accounting for carbon

*“The International Council of Forest and Paper Associations (ICFPA) acknowledges that Forest Industry Carbon Accounting Tool (FICAT™) software was designed for circumstances unique to the forest products sector and recognises that it is an appropriate method to measure the overall lifecycle greenhouse gas impact of activities associated with producing forest products”.*

Letter from ICFA to PAMSA, July 15 2013



## Sustainability issue

Ensuring that our people have an overriding culture of safety first in everything they do.

## Our response...

*"We have worked very hard to create a culture which prioritises safety at all times and incorporates contractors into this culture. While there were improvements in reducing fatalities and lost time injuries throughout the group, I deeply regret having to report one own employee fatality and one contractor fatality in our South African operations."*

*"We will continue to focus on entrenching a strong safety culture with the ultimate target of zero harm."*

**Ralph Boöttger**  
Chief Executive Officer  
Sappi Limited

## Safety

Our approach to safety is based on the principles of Project Zero — zero fatalities and zero injuries.

Project Zero is a global initiative that aims to accelerate improved safety performance in areas of concern and to develop a safety awareness culture in all parts of our business.

The initiative includes: integrated health and safety planning and management; training at all levels; participative information and control structures; and adherence to international best practice and safety standards.

In addition to addressing hazards in the workplace by means of the OHSAS 18001 related systems in place at all our pulp and paper mills, we also address 'at risk behaviour' of our employees by means of a behaviour based safety (BBS) system.

Our focus going forward is on further entrenching a sense of ownership and awareness amongst our employees. We are achieving this by involving them in 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 and sharing regular feedback on performance.

## Code of Ethics

Underpinning **Prosperity**, **People** and **Planet** is our Code of Ethics, based on our core values of:

- Excellence
- Integrity
- Respect
- Resourcefulness.

A refreshed Code of Ethics, based on an integrity, rather than a compliance framework, was adopted by the Sappi Limited Board in February 2013.

Various promotional tools including posters, vendor letters and booklets have been translated into various African and European languages to promote the Code of Ethics.

Each region appointed representatives from legal, communication and human resources to assist with the roll out of the refreshed code. Campaigns were designed and implemented with due consideration for cultural and regional dynamics.

We continue to monitor the programme and feedback is that it has been successful. 





## Sustainability issue

Ensuring that we meet our transformation agenda in South Africa and that we maintain mutually respectful relationships with our employees.

## Our response...

### Transformation

We view Broad-based Black Economic Empowerment (BBBEE) as a key requirement for sustainable growth and social development in South Africa.

We have long been committed to participating in the country's transformation and development through

our South African forestry and manufacturing operations. We currently hold a level four BBBEE rating.

We have been restructuring the business over the last two years and this has had a major impact on our ability to improve our rating.

As the scorecard below indicates, greater emphasis needs to be placed on employment equity. To address this, we have adopted a 10-point action plan which includes specific key deliverables and time lines. A more detailed discussion is available in our 2013 sustainability report for Sappi Southern Africa.

### Broad-based Black Economic Empowerment — Empowerdex rating

Elements	Verified rating December 2012	Target score	2013 status September 2013*
Ownership	15.74	20	15.11
Management control	4.49	10	5.99
Employment equity	3.69	15	2.43
Skills development	9.55	15	8.28
Preferential procurement	18.76	10	18.02
Enterprise development	14.96	150	15.00
Socio-economic development	8.00	5	8.00
<b>Overall score</b>	<b>75.19</b>	<b>100</b>	<b>72.83</b>

\*Verification will be conducted in December 2013 by an external ratings agency.

## Case study

### Celebrating 30 years ...

In South Africa, our enterprise development initiative, Project Grow, celebrated its 30th anniversary. In keeping with the South African Government's strategy of promoting forestry as a means of creating sustainable livelihoods in rural areas, the project is aimed at promoting access to and developing the timber farming industry.

From three farmers managing 12 hectares (ha) in 1983, the project has grown significantly. At the peak, 10,000 growers were involved, and many of these have now become self-sufficient, indicating that the model is sustainable. Currently, approximately 4,500 growers are involved, ranging from small individual growers to larger community projects, farming just over 19,257ha. It is estimated that approximately 1,747 people are directly employed in these projects.

Project Grow currently provides us with nearly 238,000 tons of timber per annum, with a total value in excess of US\$13.3 million based on current mill delivered prices.

The volumes provided by Project Grow represent 7.5% of our hardwood woodfibre intake in South Africa.

# Our people continued

## LA-4

Percentage of employees covered by collective bargaining agreements

### Sustainability issue

**Ensuring that our people are engaged with and connect to our business, and that we maintain mutually respectful relationships with our employees.**

### Our response...

#### Industrial relations

Protecting the right to freedom of association and collective bargaining is fundamental to the manner in which we do business. Globally, 56% of our workforce is unionised, with 66.5% of our employees belonging to bargaining units.

#### Europe

The labour relations framework in Europe comprises a combination of Works Councils and collective labour agreement organisations and these differ from country to country.

Works Councils are elected every four to five years at each mill site as well as the sales offices in Germany, Austria and the Benelux countries. Meetings with the Works Councils take place twice a year and are attended by representatives from each manufacturing site, the Chief Executive Officer and the Human Resources Director for the region.

The purpose of the meeting is to share information and consult on topics of interest such as business performance, planned business changes, industry development and pan-European topics.

Because of the number of geographies in which we operate in Europe, we manage relationships with 13 different unions.

#### North America

The majority of our employees are represented by the United Steelworkers (USW), as well as through various craft, guard and railroad unions.

In this region, labour agreements are usually for three years. A new contract with the Cloquet Mill USW was ratified in December 2012 and we successfully concluded a number of other contracts in the region.

#### South Africa

To ensure stability in the complex South African working environment we have established several forums including:

- **The National Employment Equity and Skills Development Forum** which meets quarterly, and is attended by union officials from three unions, shop steward representatives and management representatives. The primary focus of this forum is to consult and mutually agree on the Employment Equity Plan and Workplace Skills Plan and its implementation.

- **Local shop steward committees** at each mill which meet with management to discuss mill-specific issues of mutual interest. In the Forests division, we have established labour liaison committees where we have run in-sourced operations to ensure regular communication between employees and management at local level.
- **The National Partnership Forum**, a joint union and Sappi senior management forum which meets quarterly to share information on business performance, strategy direction, industry developments and union priorities.
- **The Pulp and Paper Chamber**, an industry body that deals with wage negotiations and other employment relations and conditions of employment issues affecting the industry. Currently the chamber has established a work group to investigate a collective bargaining framework in an attempt to enhance the collective bargaining process in our industry.

Protecting the right to  
freedom of association  
and collective bargaining  
is fundamental to  
how we do business.



## Sustainability issue

Climate change is expected to have a profound impact on the world's rainfall patterns, river flows and freshwater reserves. Any decrease in available water supplies could significantly affect our fibre supply and production processes.

## Our response...

Reducing water usage within our mills and improving the quality of water returned to the environment continues to be a key area of focus. We return approximately 89.7% of water drawn to the environment after cleaning and filtering. Between 2009 and 2013, globally, specific water use decreased by 4%. Over the same period, total suspended solids (TSS) and chemical oxygen demand (COD) — both measures of water quality — improved by 7.8% and 1.1% respectively.

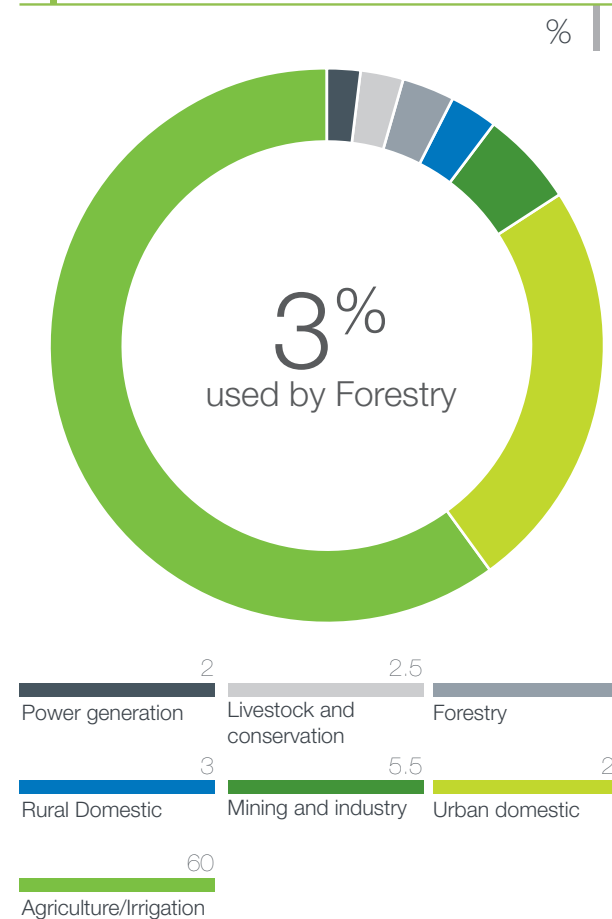
In South Africa, some of our stakeholders have expressed concern that forestry uses large amounts of water.

However, unlike most other forms of agriculture, our plantations are not irrigated and use comparatively little water as shown in the water-use comparison graph.

4%  
**Reduction**

in **specific water usage** over the past five years

Water use per sector in South Africa



Unlike most other forms of agriculture, our plantations are not irrigated and use comparatively little water.

Globally,  
**89.7%**

of the **process water** we use is **returned to the environment**, after having been recycled many times, cleaned and treated



Prosperity



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



# A strategic transformational approach to managing future Prosperity

## GRI-2.9

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

**Operating profit** for the year  
**US\$191m**  
excluding special items

**Conversion** of Ngodwana and Cloquet Mills to produce dissolving wood pulp completed

**Debt levels** maintained in a tight range

We can only create value for stakeholders from a strong foundation of **Prosperity** and our ability to meet our **People** and **Planet** commitments is contingent upon our ongoing profitability. In the context of declining profits over recent years, we've been repositioning ourselves for improved performance.

### Aggressive transformation strategy

Our strategy is to aggressively transform Sappi into a growing and profitable diversified fibre group focused on specialised cellulose, high cash generation profitable paper businesses and other high-margin industrial products which will provide added value to our customers and wealth to our shareholders and people.

### Looking forward

We are confident that, within the next two years, our strategy will result in Sappi becoming a well balanced and robust business, generating good returns with a strong balance sheet based on:

- Maintaining and growing our global leadership position as a low-cost dissolving wood pulp producer
- Growing high-margin speciality paper businesses in all regions
- A smaller, simpler low-cost graphic paper business
- Maximising value from our forestry operations in South Africa
- Emphasising cash generation and debt reduction.

## Develop

We are developing complementary industrial products and processes through:

- Product innovation
- Optimising use of existing facilities
- Investing in complementary business
- Partnering with third parties to develop new products and markets.

## Grow

We are growing our existing high-margin businesses by increasing our customer base and product portfolios in our three key business areas:

- Specialised cellulose
- Packaging
- Speciality paper.



We are optimising and improving the profitability of the mature graphic paper business through:

- Being the lowest cost producer in the markets in which we operate
- Continued capacity management
- Maximising cash generation
- Extracting efficiencies through continuous improvement
- Disposal of non-core assets.

## Optimise

# Growing our specialised cellulose capacity



The basic production processes for paper pulp and specialised cellulose, also known as dissolving wood pulp (DWP) are similar. The process involves wood chipping, dissolution, cooking and bleaching. However, the DWP process is more sophisticated, yielding much more value per tree felled.

Our success in this field has been based on three key elements:

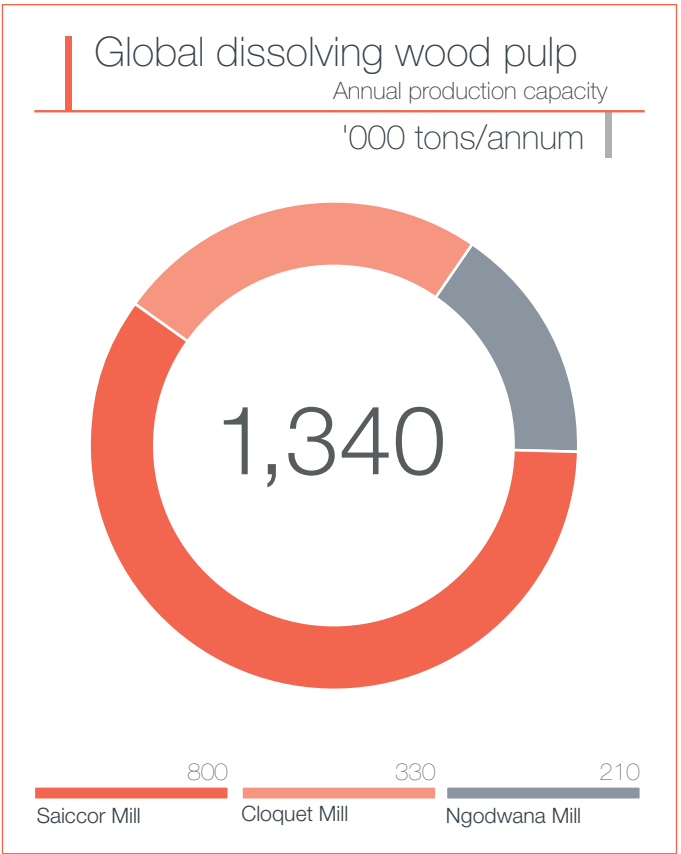
- Low-cost manufacturing and distribution
- Long-term contractual commitments
- Specialised knowledge and customer support.

In FY2013, our projects to raise output of DWP by 63% were successfully commissioned in May (Cloquet Mill – North America) and July (Ngodwana Mill – South Africa).

Total capacity is now 1.34 million tons per annum, positioning us to service global markets more effectively.

Favourable long-term contracts for the increased volumes have been concluded with various customers. ➔

Read more about the many uses for DWP in the 'Our key sustainability issues' section. ➔



### Cloquet Mill

As a result of process changes associated with the conversion project, the mill has reduced sulphur dioxide (SO<sub>2</sub>) emissions and lowered biological oxygen demand (BOD) by nearly 25%.

### Ngodwana Mill

The Ngodwana Mill conversion project achieved 4.5 million hours without a lost time injury. Target quality specifications were achieved ahead of the start-up plan.

### Ngodwana Mill

Environmental benefits associated with the Ngodwana Mill conversion include a reduction in mill odour and improved efficiencies from new equipment which will mean burning 61,000 tons less coal per year which equates to 120,000 tons less CO<sub>2</sub> emissions.

### Cloquet Mill

At peak construction on the Cloquet Mill conversion project, over 1,100 workers were employed on the project with 41 different contractors totalling to over 550,000 man hours.

The project was executed flawlessly resulting in an on-time start up. Targeted quality specifications and production rates were achieved ahead of schedule during the commissioning phase.



# Growing our specialised cellulose capacity continued



## Case study

### Cloquet Pulp Mill Conversion

The Cloquet Mill used to sell two-thirds of its paper pulp production; the balance was used for on-site paper production. With paper pulp demand declining, we converted the mill's kraft fibre production process to a dissolving wood pulp (DWP) process; a strategic US\$170 million investment in the company's future aimed at diversifying our revenue streams. DWP is an in-demand feedstock for textile production and other industrial processes. 🚀 🚀

Although the DWP process yields less pulp per volume of wood processed, textile grade pulp fetches a higher price which far outweighs the yield drop.

The 18-month conversion was completed within hours of its expected start date. Chemical engineer Greg Elton attributes the excellence with which the conversion was executed to a dedicated team that included mill management, Sappi's South African expertise and the many mill employees and contractors.

As one of the largest employers, our investment in the mill is also an investment in the future of the Cloquet community. Says Elton "... and that means everything to the people that live here".

## Case study

### Innovative manoeuvres

The US\$330 million Ngodwana Mill conversion to produce 210,000tpa dissolving wood pulp included modifications to the kraft fibre line to broaden the range of virgin linerboard products it can produce.

The old pulp dryer which had reached the end of its economic life had to be replaced with a new efficient dryer that uses significantly less electricity than its predecessor — an environmental benefit.

The new dryer has been installed in place of the old dryer in the existing building. To contract the typical demolition and installation time-frame from 12-18 weeks down to six weeks required an innovative approach with the new dryer constructed on a steel platform adjacent to the dryer building. A self-propelled modular trailer, comprised of multiple interconnected hydraulic lift units on independently steerable wheels was then used to remove the old dryer in one piece and manoeuvre the newly constructed dryer into place. This innovative approach contracted dryer downtime by 6-12 weeks, and avoided having to replace the existing dryer building.

The dryer has a life span of more than 30 years.

## Case study

### Amakhulu — the big one

In 2009, a US\$480 million Saiccor Mill expansion increased capacity from 600,000tpa to 800,000tpa, enabling us to entrench and grow our global leadership position in dissolving wood pulp (DWP) markets.

Three calcium digesters were replaced by 11 magnesium sulphite digesters, reducing the mill's dependency on fossil fuels by 20% and its dependence on the national power grid by a further 20%. The pulping process change increased lignosulphonate production, resulting in a substantial reduction in effluent solids. Despite the additional 200,000tpa capacity increase, water consumption remained static; dramatically improving specific water consumption.

Effluent from the mill's pulping process is diverted to the adjacent Lignotech, a joint venture between Sappi and Norwegian chemicals company, Borregaard. 🌱 Lignin chemicals are used as additives in concrete, bricks and ceramics and as binding agents in animal feed and dust suppressants. 🚀

The mill uses mostly eucalypts as raw material. These relatively fast growing trees, grown in relatively close proximity to the mill, contributes to Saiccor's position as a low-cost DWP producer.

# Growing our packaging capacity



## Europe

**The graphics paper market is declining while growth in the speciality packaging paper market is expected to be as high as 3.2%.**

### Alfeld Mill

Shortly after year-end, in October 2013, we completed the US\$80 million conversion of PM2 at Alfeld Mill in Germany to focus exclusively on producing speciality paper for packaging labels and technical applications. The conversion has reduced our European graphic paper capacity by 4%; 150,000tpa of coated woodfree paper capacity has been converted into 135,000tpa of higher-margin speciality paper capacity.

The mill can now produce higher volumes of a wide range of paper and packaging products including:

- Coated and uncoated papers for flexible packaging
- Premium SBS (solid bleached sulphate) board for luxury boxes
- Topliner for high quality corrugated packaging
- Label papers for wet glue applications such as can and jar labels, banderols and wrappers, and
- Silicone-based carrier papers for self-adhesive products such as plotter films and stickers.

The mill is now the biggest and lowest cost producer of these one-sided coated speciality grades globally. The converted PM2 is the fastest and most productive speciality paper machine in the world.

The mill's customers will benefit from increased margins, improved quality, increased raw material consumption efficiencies and an optimised fixed cost profile.

## South Africa

### Enstra Mill

In 2012, Enstra Mill's pulp mill was mothballed. A re-pulper capable of re-pulping 450 tons of virgin and recovered pulp grades per day was installed.

In addition, we installed a recovered fibre plant, capable of processing 200 tons of recovered paper per day.

The re-pulper, commissioned in August 2013, enables the mill to supply a wide variety of pulp types to the paper machines. The recovered fibre plant will process recycled grades.

The capacity to blend recovered fibre into paper grades has given the mill greater flexibility in producing competitive products that meet customer requirements. The mill will also be able to meet increased market demand for products that incorporate recovered fibre.

## Coated paper demand

Demand for coated paper is expected to decline by approximately 3% and 6% per annum in North America and Europe respectively.

## Towards specialised products

Because of the anticipated continued decline in the coated paper market, we are driving gains in these businesses through production efficiencies and lower costs; and we are working towards a greater portion of our sales being generated from specialised products.



# Optimising for profitability



**In the year under review, we continued to invest in a number of projects aimed at improving profitability and enhancing our competitive position in global markets.**

## Europe

### Concentrating production at fewer sites

At year-end, we announced that we had undertaken a review of our European production assets and had identified the need to concentrate production at fewer sites. Exhaustive analysis has indicated that the preferred option would be to relocate the entire production of Nijmegen Mill to other Sappi mills in Europe.

We have initiated a process of consultations with our Nijmegen Mill employee representatives and social partners and the Works Council.

### Centralisation

We announced the centralisation of some supply chain and IT functions at our Shared Services Centre in Krakow, Poland. This is subject to a consultation process with employee representatives, which may last several months.

### Investment

Our investment plans over the next three years amount to approximately US\$158 million for Gratkorn and Kirkniemi Mills to significantly reduce the mills' cost base and improve profitability.

### New power plant at Kirkniemi Mill

In May 2014, work will start on a new power plant at Kirkniemi Mill in Lohja, Finland; we envisage start-up in January 2016. Flexible use of solid fuels such as bark from the mill's debarking process, other wood-based fuels and coal will significantly reduce our cost base by reducing energy costs and securing energy supply. With the potential to use only biomass, any additional biomass required will be bought from local suppliers.

### Upgrading pulp production at Gratkorn Mill

Our investment in upgrading pulp production facilities and papermaking capabilities, is aimed at securing sustained cost reductions, increased production flexibility and further improved profitability rather than at increasing capacity.

## North America

### Upgraded paper operations

As part of the DWP conversion at Cloquet Mill, we invested US\$14 million in upgrading our coated papermaking operations. This included a dry fibre handling system as well as new refiners and an upgrade on Paper Machine 4 which can now manufacture the full product portfolio of paper using dry fibre rather than the slush fibre previously used.

### Rebuilt PM3

At Somerset Mill we completed a US\$13 million rebuild of PM3 to upgrade coated paper manufacturing. The rebuilt PM3 can produce a

broader range of products, is expected to have long-term benefits in the form of chemicals and fibre savings, as well as increased paper production.

### Diversification at Westbrook Mill

In line with our diversification strategy, we completed a US\$2.5 million rebuild of a coater in the release paper business. This investment increased productivity, improved quality and operational flexibility.

## South Africa

### Modified kraft fibre line

As part of the conversion of Ngodwana Mill to produce DWP, we modified the kraft fibre line to produce a wider range of virgin linerboard products.

### Restructured

In 2012 and 2013, we restructured our paper and paper packaging business, closing kraft pulp lines at Tugela and Enstra Mills. We also mothballed the 80,000tpa sackkraft machine at Tugela Mill, moving production of many of these products to Enstra and Ngodwana Mills.

### Sale of Usutu Forest Products Company

We announced the sale of our Usutu Forest Products Company to Swaziland's Montigny Investments for US\$101 million. The deal is subject to several conditions, including approval from competition authorities in both countries.

# Optimising for profitability continued



## Share trading in the United States

We voluntarily delisted from the New York Stock Exchange in FY2013 in line with our strategy of reducing costs and improving efficiency.

Our decision to delist was based on low trading volumes and the high cost and administrative complexity associated with maintaining our listing and registration in the United States. We believe that the resulting savings in costs and management time will benefit the company and its shareholders.

American Depositary Receipts (ADRs), in the United States will now be traded through a Level I over-the-counter (OTC) ADR programme.

## Single SAP

Several drivers influenced our decision to consolidate our two SAP landscapes into a Single SAP environment. Some key drivers were:

- Rapidly growing enterprise resource planning (ERP) transactional requirements
- Conflicts with managing two ERP systems
- The need to support the dissolving wood pulp (DWP) conversion programme.

The Single SAP project involved the technical merger of Sappi Southern Africa's SAP system into the Sappi Fine Paper Europe and Sappi Fine Paper North America (EUNA) landscape. The South African system included three SAP business solutions.

### Trident

While the Single SAP merger was taking place, coordinated SAP systems for our specialised cellulose businesses in North America and South Africa were also being implemented. The three-pronged project — referred to internally as Project Trident — was aimed at:

- Facilitating the specialised cellulose cross-regional business processes
- Removing the necessity of building interfaces and reducing the complexity of reporting across two different SAP landscapes

## Case study

The implementation of single SAP cost approximately US\$4.3 million and took only 18 months to implement — a very low cost and a short time frame in SAP terms. The investment makes sound business sense:

- IT savings have been made by consolidating hosting services, support, maintenance and development
- Future upgrades will only have to take place on one system
- Licence fees have been reduced.

### Strategic benefits

Single SAP offers several benefits:

- Provides Sappi Trading with a single point for customer and financial management
- Reduces the complexity of the business processes, thereby reducing the training and skill level requirements
- Potential to support cross regional business processes like imports
- Paves the way for implementing groupwide shared services
- Reduces annual audit costs
- Potential to adapt our business model very quickly
- Enhances service and operating efficiency
- Enables broader eBusiness collaboration with customers for all Sappi mills.



# Optimising for profitability continued



## Case study

### Two-year gestation — 12-day delivery

A team of management, operations and engineering personnel, supported by equipment manufacturers, worked on redesigning, re-engineering and preparing to rebuild Paper Machine 3 (PM3) at Somerset Mill for over two years. The rebuild was executed in just over 12 days.

The rebuild is a classic sustainability win-win, rendering both environmental and economic benefits. It paid instant dividends as PM3 showed a significant improvement in sheet formation. Producing a stronger sheet means PM3 can now handle a wider range of product grades, including the top end of Sappi's product line.

The paper produced on PM3 also showed significant printed-colour improvements especially in the mid-tone mottle — an important characteristic in rendering skin-tone accurately. This is a competitive advantage for the coated paper business which serves the high-end fashion and design magazine segments.

PM3 is now more energy efficient and uses less materials and expensive additives like titanium dioxide. Production increased 4.9% compared the previous year — despite being off-line for two weeks during the rebuild.

## Case study

### De-bottlenecking the pulp mill

After the successful completion of a US\$30 million recovery boiler capacity increase investment at our Somerset Mill, it became apparent that the lime kiln was a bottleneck; limiting pulp production, and wasting resources (energy and chemicals). The lime kiln is a key component in the chemical recovery system. It converts lime mud into re-burned lime, which in turn, is used to blend white liquor with which to cook wood chips in the digester.

Improved lime-mud de-watering, improved control over the lime-mud feed-rate, by balancing mud inventory, and more precise re-burned lime quality tests yielded greater throughput. This resulted in pulp production increases and a reduction of mud being landfilled, reducing make-up chemical demand. The improved feed-rate regime also reduced mud caking in the kiln resulting in fewer kiln maintenance shuts — a costly process that affects pulp production.

The net energy and materials savings is worth over US\$2 million a year. The increased throughput capability of the kiln will further augment the mill's energy efficiency once the pending conversion to natural gas has been implemented. ➔

## Case study

### More than a million samples

Customer service is often the main differentiator between companies in today's competitive environment.

Sappi Fine Paper Europe's sample service covers everything from A4 unprinted to large format sheets for trials, bespoke handmade dummy magazines and real-life printed samples from all over the world. Over a million samples are sent out every year within days of ordering.

Our ability to showcase our products in a variety of formats helps customers make a more informed choice.

Our sample centres are serviced from two locations — Loewe Logistics, our outsourced partner in Germany, and Kirkniemi Mill in Finland.

Loewe Logistics is ideally positioned to service the complex commercial print market.

The Kirkniemi Mill's sample centre, specialises in publication paper products and produces between 500 and 600 dummies a month.

# Developing products and processes



**Innovation — whether it's our products or our processes — is pivotal to profitable sustainable development. Continued investment in our assets and our research and development (R&D) efforts, help to ensure that Sappi remains a globally competitive, sustainable business.**

Our research programmes are driven by the high-priority technical issues of the industry, such as product quality and value, cost competitiveness, environmental management and sustainability.

We continue to capture more value from fibre resources and enhance performance of market pulps. We have also improved wet-end chemistry by designing and developing state-of-the-art end-use properties including advances in surface coating and web structures.

Our technological advances are underpinned and guided by the principles of minimising environmental impact, reducing atmospheric emissions, optimising energy and resource recovery and the development of new forest-derived products.

Read more about the value-add from our research and development activities in the 'Link between our business and sustainability' section of this report.



## Case study

### Four diamonds

We launched Jaz Book, developed in partnership with Hewlett Packard, in 2013. This light-weight digital paper (67g/m<sup>2</sup>) was specifically created for full-colour book production; it is an ideal choice for the education market. Jaz Book offers high dimensional stability and opacity, allowing printers to achieve excellent quality.

Both Jaz Book and Jaz Silk (a double-coated digital paper developed for direct mail and commercial print applications) received four diamonds in Kodak's paper rating programme in 2013. Both these grades provide outstanding image quality on KODAK PROSPER Presses. The four diamond rating means that users will experience consistent, high-quality results.

The Kodak paper rating is based on the collection and analysis of quantifiable data to determine the performance characteristics of printable substrates. Kodak measures printed image quality, using a wide variety of factors and then rates the substrate using a rating system that ranges from one to five diamonds.

The rating helps printers and publishers make informed decisions about the right combination of quality and price when evaluating substrates for each of their print jobs.

## Case study

### It all starts with a seed

Our focus on extracting the most value possible from each tree starts with seed quality. By using our best, high-value seed (available in limited quantities only) efficiently, we reduce the number of seeds with lower genetic value that are sown, leading to increased fibre gain in the seedling crop. Improved seed-use efficiency is a critical measure of our nurseries' success.

#### KEF — Kilogram Effective Factor

We moved from selling seed by weight to a 'per viable seed' basis in 2011 to better manage seed-use efficiency, using the KEF measure — the ratio of actual to expected seedling recovery. We aim to reach a KEF value of one, ie each viable seed sold to nurseries yields a saleable plant. Since introduction, average KEF values have dropped from more than two to approximately 1.5 — a significant increase in seed-use efficiency.

#### Seed coating

Bigger, more uniform seeds are easier to plant. Through a collaborative venture, we're working on coating seed with an inert material to increase uniformity of size and shape. Nutrients and other seed treatments to improve seed performance can be added to the coating which can also be colour-coded to improve visibility. Seed coating will improve seed-use efficiency and nursery management and reduce nursery costs.



# Developing internal innovation



## sappi | technical innovation awards

In 2000, we launched the Sappi Technical Innovation Awards, 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 awards focus on creating new technologies that will deliver noticeable improvements for our customers.

The FY2013 global winner received the award for an initiative which enhances the environmental impact of producing dissolving wood pulp.

TIA Regional Winner 2013

### Simple and safe threading

The European regional winning team developed a new threading system for Paper Machine 7 at our Lanaken Mill. During start-up, a small tail of paper has to be threaded through the pre-dryer section. Over the past ten years, this has become increasingly difficult due to increased machine speeds, the variety of grades produced and the need to reduce costs. The team designed a simple new threading system that not only improved safety, but also increased machine efficiency, reduced stock losses and prevented unnecessary capital expenditure.

TIA Regional Winner 2013

### Online detection

The North American regional winning team invented an online detection system at our Somerset Mill that uses advanced camera technology to detect and proactively prevent calendaring roll failures on the mill's paper machines. The system has significantly decreased the roll failure rate, resulting in significant savings.

TIA Global Winner 2013

### Enzymes replace detergents

The detergent which Saiccor Mill used to control extractives (fatty acids, resin acids and terpenes) were found to have a potentially negative impact on the environment. A variety of environmentally friendlier detergents were tested; none were ideal.

Laboratory evaluations of a wide cross section of enzymes were conducted to determine which would be most effective in breaking down the extractives. Further laboratory work compared the efficacy of lipase enzymes from different suppliers; found the optimum conditions (temperature, pH and incubation time) for the enzymes; and studied their effect on the bleaching processes at Saiccor Mill. The enzyme has now replaced the detergent on all the bleach lines.

This is the only known enzyme application for treating extractives in a dissolving pulp mill — a good example of sustained in-laboratory applied science, coupled with in-plant trials, providing a cost effective and environmentally friendly solution. The research took seven years from inception to application, necessitated by the need to ensure that there were no downstream customer disruptions. There is a strong likelihood of similar commercial applications of this technique being used in Sappi's other mills.

# Developing and maintaining a strong brand presence



**Developing and maintaining a strong brand identity and presence in our targeted market segments is an important aspect of our drive to generate Prosperity.**

## Europe

[www.sappipositivity.com](http://www.sappipositivity.com)

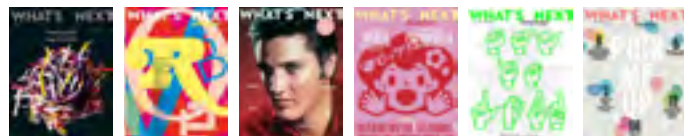
We continued development of our website, aimed at making sustainability an everyday reality. **S**

## FachPack 2013

We participated in FachPack 2013, a packaging solutions trade fair, showcasing our new mineral oil barrier substrates: MOB Kraft and MOB Gravure. These innovative flexpack grades solve the contaminant migration problem whilst allowing the environmentally sustainable use of recycled content in packaging materials. **W**

## What's Next

We launched the sixth edition of What's Next, a creative customer facing magazine, reflecting on the attributes of print. Focused on 'touch', the sixth edition offers a sensory experience with the printed word and provides an in-depth look at how print can support a brand owner's business objectives and deliver return on investment. **W**



## WorldSkills

We participated in the WorldSkills 2013, Print Media Technology Skills Competition, as Skills Sponsor. WorldSkills, the world's largest international skills competition for young people, brings together 1,000 international trainees under 23 years of age to compete for medals in 46 official disciplines in six categories. **W**

## North America

### Sappi etc.®

We launched Sappi etc.® an online microsite. Sappi etc.® as an educational platform that provides access to more than a century's worth of rare historical documents, detailed case studies and expert technical advice as part of our Education, Training and Consulting Sappi etc.® programme.

Free and fully searchable, Sappi etc.® covers everything from paper basics and sustainability resources to advanced print and design techniques, including colour management, technical tips for printers, special effects, varnishes, folding and designing for direct mail. **S**

### Off Register™

We launched two new episodes of our humorous online video series, Off Register™. The series is based on humorous real-life experiences of printers, which people involved in the print industry can relate to, or find entertaining. The ninth and tenth episodes are available to view online. **S W**

## Print &

In support of driving responsible use of print, we launched Print &, a special publication. Rather than a combative defence of print, the publication highlights persuasive research results showing how print drives return on investment when used in combination with alternative media to create effective integrated campaigns. **S**

## Act Now!

At the close of FY2013, we launched Act Now! A Better Response to Direct Mail. This dynamic, educational resource guides readers through the essential principles of creating effective direct mailing campaigns that deliver results.

Act Now! showcases the strategies and techniques behind direct mail's ability to strike a uniquely delicate balance: the ability to package a message that will pique reader interest, and ultimately drive consumer response. **S W**





# Developing and maintaining a strong brand presence continued

**Typek**<sup>TM</sup>  
by sappi



## South Africa

### Typek<sup>TM</sup> Earth Kind<sup>TM</sup>

To promote and reinforce the message that our papers are made from trees grown in sustainably managed plantation forests and manufactured in an environmentally responsible manner, the well-known Typek<sup>TM</sup> brand was repositioned as Earth Kind<sup>TM</sup> in 2012. We also launched a dedicated website for the well-known Typek<sup>TM</sup> brand. **S**

### Miss Earth Africa

We continued to support Miss Earth Africa, a programme that aims to empower young South African women with knowledge and a platform from which to create a sustainable difference in combating the destruction of our natural heritage. **W**

### Mountain biking

We increased our sponsorship to extend our reach in demonstrating our sustainable management of our extensive natural areas and commercial plantations. **S**

### All about birds

We have been extensively involved in supporting bird-related initiatives in this region. In 2013, we sponsored a new book, Sappi Birds of South Africa. The book highlights the synergy between digital devices and printed media, as it incorporates a unique Callfinder. When this device is pointed at a photo, the sound is unlocked, allowing the user to instantly hear the sound of a particular bird. **W**

## Case study

### Building the Sappi brand by supporting conservation

We partnered with Makro, a large national retailer in South Africa, on a brand building drive for Typek<sup>TM</sup> Earth Kind<sup>TM</sup>, specifically focusing on this office paper's green credentials, during January and February 2013.

Anyone who purchased a box of Typek<sup>TM</sup> from any Makro store, qualified to nominate any community greening, tree planting, biodiversity protection, or environmental rehabilitation project. We pledged to donate one Rand (US¢) for every box of Typek<sup>TM</sup> sold, to the selected green cause.

Eye-catching in-store promotional material was used to persuade shoppers to make a responsible choice in their paper purchase and in the process make a difference to the environment. Nominations were promoted on the dedicated Typek<sup>TM</sup> website. **S**

From these, the Kruger National Park's *Warburgia Salutaris* Project was selected as the beneficiary. The project received a US\$10,778 grant during a ceremonial handover in September 2013 at an event hosted by the Lowveld Botanical Gardens with whom Sappi has a long-standing relationship. The presentation was the culmination of the Typek<sup>TM</sup> Earth Kind<sup>TM</sup> promotion.

The Pepper Bark tree, *Warburgia Salutaris* is of medicinal and mythological importance to indigenous African people and medical importance to western homoeopathy. Featured on the Red Data List and classed as endangered, it is a protected tree in South Africa. The tree is heavily poached for the commercial muti (traditional medicine) market and is under armed guard in some areas.

The funding will be used to support various aspects of the project, including:

- Workshops with communities to identify tree custodians
- Increasing the holding of bagged nursery-grown trees in the Kruger National Park Nursery for distribution to identified community-based traditional healers
- Training nursery employees in seed collection, planting and propagation
- Providing bicycle transportation for armed tree guards
- Bulk up supply of seedlings from contracted nurseries.



# Develop a facts-based brand proposition



## Case study

### Premium print more powerful

A recent experiment designed to test the efficacy of premium-print on advertising's impact regarding consumer perceptions and purchasing intentions, highlights the power of premium print.

Two advertisements — one for a household appliance and the other for a luxury watch — were included in a magazine. Both advertisements were printed conventionally and on premium-quality paper. Participants who were kept blind to the study's objectives, were positively influenced by the use of premium quality paper and print technologies (for both advertisements); rating both the product and the brand as more prestigious.

Although ratings do not reflect actual behaviour, participants exposed to the premium-print advertisements did rate significantly higher in

- Willingness to buy
- Likelihood to engage in 'word of mouth promotion'
- Willingness to pay a price premium.

Although specific to the brands used in this experiment, these findings nevertheless point to premium-print potentially being a valuable method for organisations to communicate brand and product attributes more effectively.

## Case study

### Do magazines have a future?

Magazines continue to make an impact according to the 2012/13 **Magazine Media Factbook** and a Deloitte **State of the Media** survey which found that 88% of magazine readers in the United Kingdom still prefer to read articles in print.

The State of the Media survey of 2,276 consumers, aged 14-75, found that although half of the participants owned a smartphone, 35% subscribed to at least one printed magazine in 2011.

Magazine Media Factbook findings:

#### Magazines engage readers

- Magazines continue to score higher than TV or the internet in 'advertisement receptivity' and other engagement measures.
- Readers spend 41 minutes with each issue.

#### Magazines are trusted

Consumers trust and believe magazines — and embrace advertising as a part of the brand experience. Advertisements in magazines rank higher in trust than on television, radio or online.

#### Magazines reach further

The top 25 magazines reach more adults and teens than primetime television.

#### Magazines appeal to young people

Young people are keen magazine readers:

- 96% of adults under 25, read magazines
- Adults under 35 read more magazines per month than older people.

#### Magazines are Influential

Magazine readers are more likely than users of other media to influence friends and family on product purchases across a variety of advertising categories. Magazine readers rank as number one or two super influential consumers across 60 product categories and make an impact in every shopping segment.

#### Magazines are social

Magazines and social media go hand-in-hand — 69% of readers have posted a magazine article on Facebook, and more than 6 in 10 have shared magazine content while chatting with friends.

#### Magazines offer high return on investment

Studies show that allocating more money to magazines in the media mix improves marketing and advertising return on investment across multiple product categories.



## 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 13,665 dedicated employees around the world underpin our business success. We focus on equipping our people and the communities in which we operate with the life and career skills, knowledge and confidence that allow them to build on their own capabilities and further their development. And when it comes to people outside our business, our products play a vital role in promoting development and helping people across the world to communicate.**

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.

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

Our objective is to have a fulfilled and engaged workforce that delivers on our key business drivers. To achieve this, establishing a connection between work and organisational strategy is important. This connection ensures that employees feel that 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.

### 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, we are focusing on transformation, a group commitment to diversity, and changing mindsets in how we conduct business and behave in line with our values.

## Energising our work environment

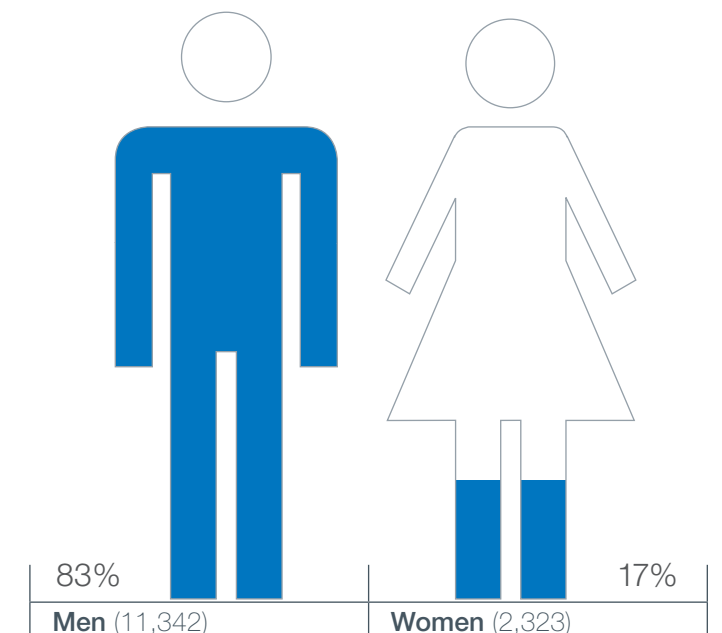
Optimising recognition and reward programmes, giving employees the freedom to act resourcefully in accordance with our values, working collaboratively across geographies, business units and functions.

## Developing a strong human resources function

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

## Our workforce

Total 13,665





# Profiling our 13,665 people

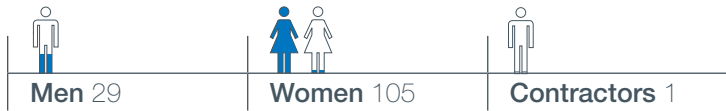
## LA-1

Total workforce by employment type, employment contract, and region

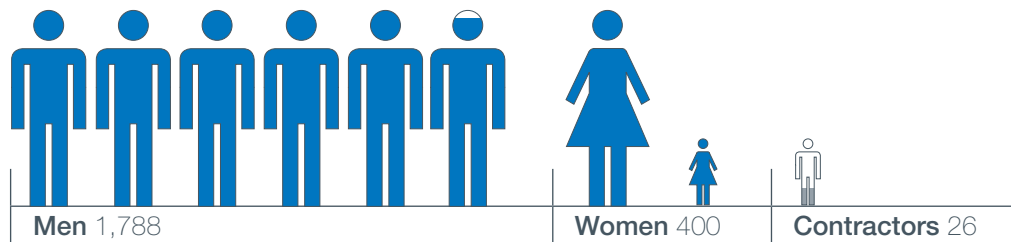
### Sappi Limited workforce 85



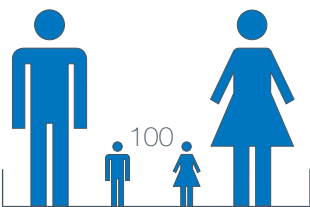
### Sappi Trading workforce 135



### Sappi Fine Paper North America workforce Total workforce 2,214

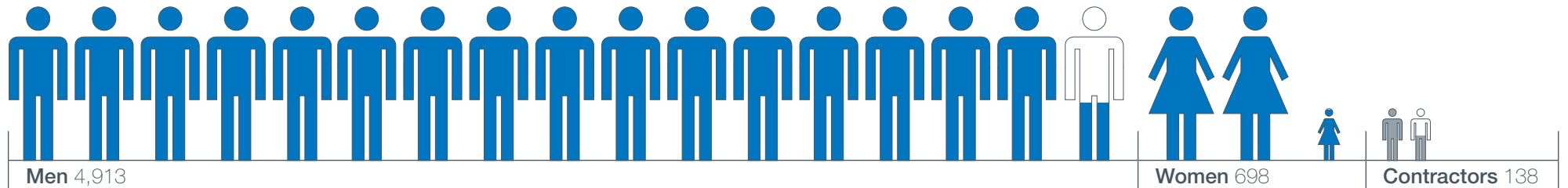


#### Key 300 employees

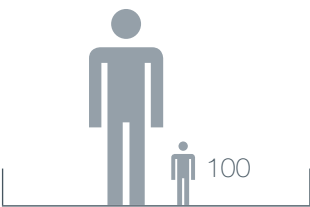


### Sappi Fine Paper Europe workforce

Total workforce 5,749



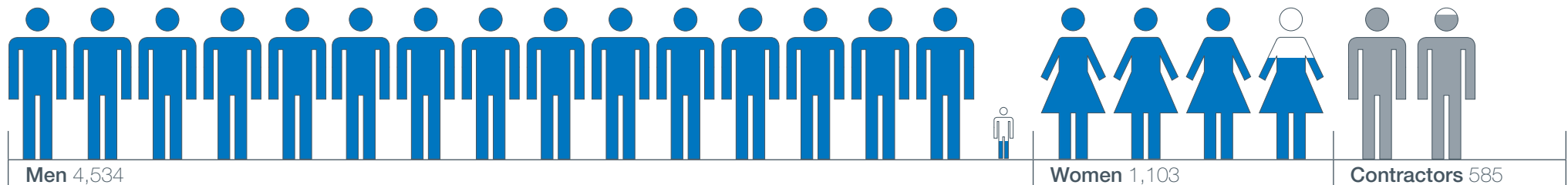
#### Key 300 contractors



Gender not specified  
Includes temps/trainees

### Sappi Southern Africa workforce

Total workforce 6,222



# Operational changes and workplace diversity

## LA-5

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

## EC-7

Procedures for local hiring and proportion of senior management hired from the local community at locations of significant operation

### Women

make up

**17.1%**

of Sappi's total workforce

### Dealing with operational changes

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

A detailed discussion about how we dealt with operational changes in 2013 is included in the 'Our key sustainability issues' section of this report. 

#### Europe

The minimum notice period — regardless of the reason — is defined by law; depending on the length of service, it varies from two to 27 weeks across the different businesses. Notice periods are included in collective labour agreements and in senior managers' employment contracts.

#### North America

The minimum notice period, prescribed by Federal Law is 60 days. Notice periods are not specified in collective bargaining agreements.

#### Southern Africa

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

#### Sappi Trading

A minimum notice period of one month is required for termination of employment.

### Workplace diversity

**We recognise that diversity facilitates interaction with different cultures, colleagues and customers in today's global marketplace.**

By creating an inclusive culture representative of a diversity of people, thoughts and ideas, we can deliver decisions and services to 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 their 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 through 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.

#### South Africa

The retention of women in the workplace and black professionals remains a challenge. A concerted effort is being made to fill positions at these levels where we are under-represented. Our hiring policy is explicit about the recruitment of staff in those areas where under-representation occurs.

Human resources managers and hiring managers are required to recruit according to the employment equity plan in place at their operations.

Emphasis is given to appointing the best person for the job with preference being given to those demographics in which we are under-represented. If skills and competencies are comparable, then previously disadvantaged employees are given preference.



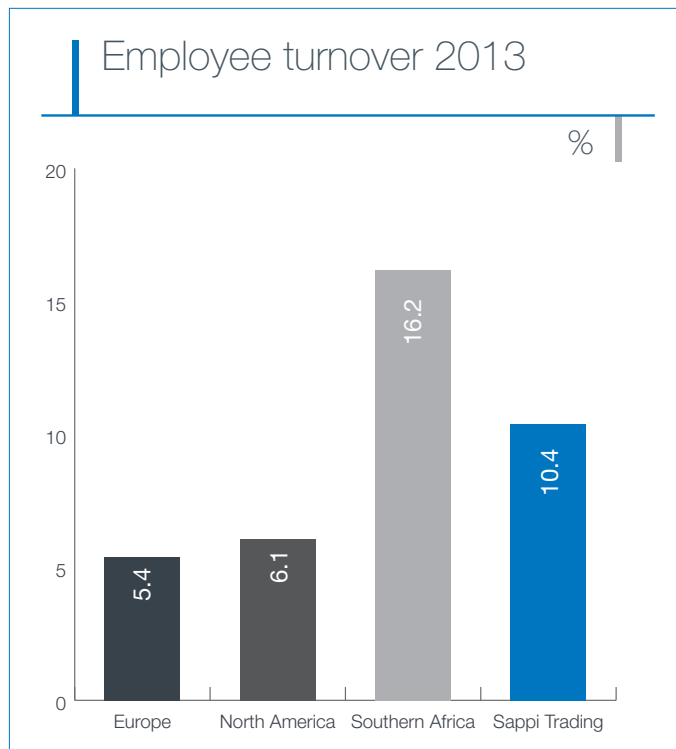
# Workplace diversity continued

## LA-2

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

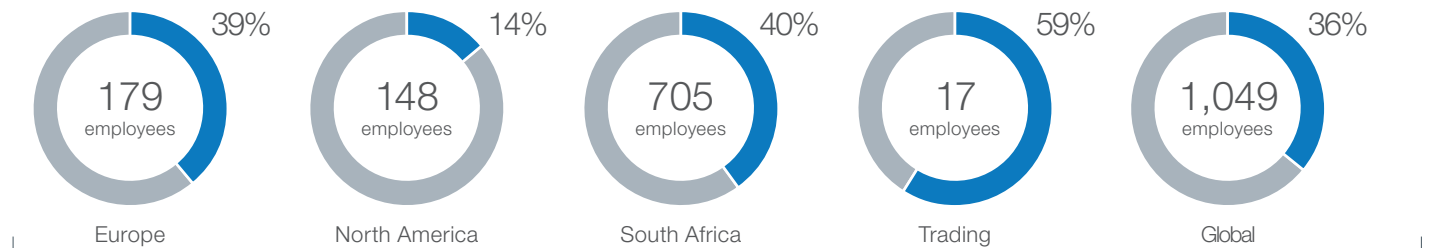
**Women**  
representation  
**Sappi Limited**  
**board**  
**14.3%**

**Women**  
representation  
**senior**  
**management**  
**15%**



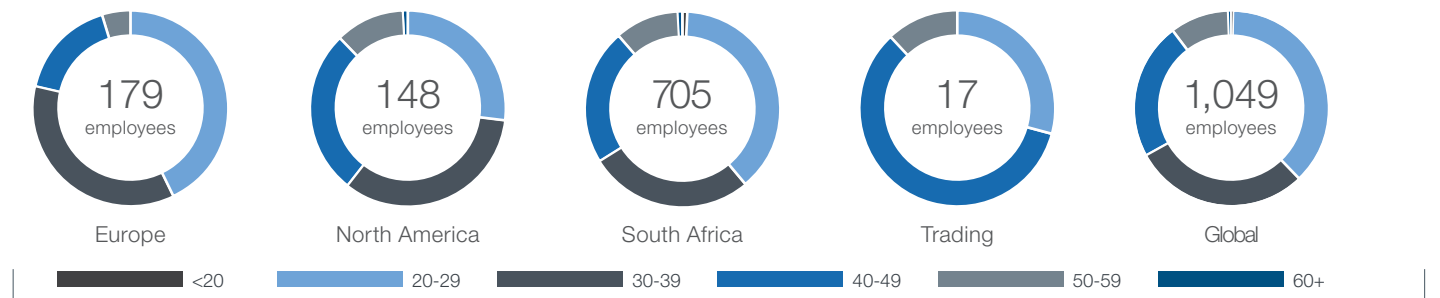
### New employees by gender

380 669



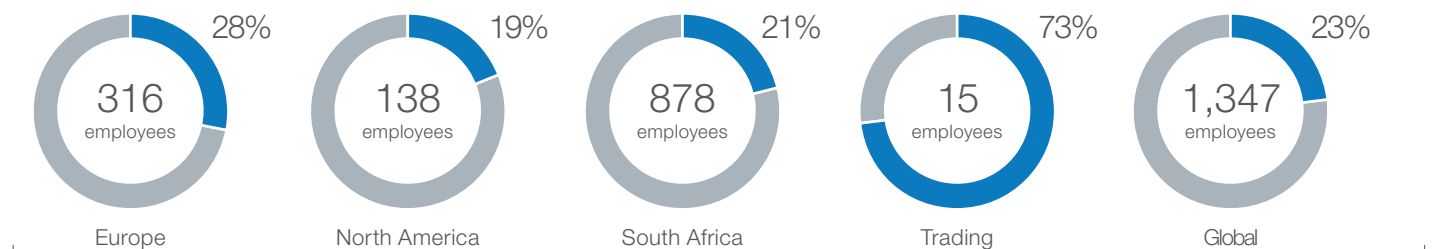
### New employees by age

%



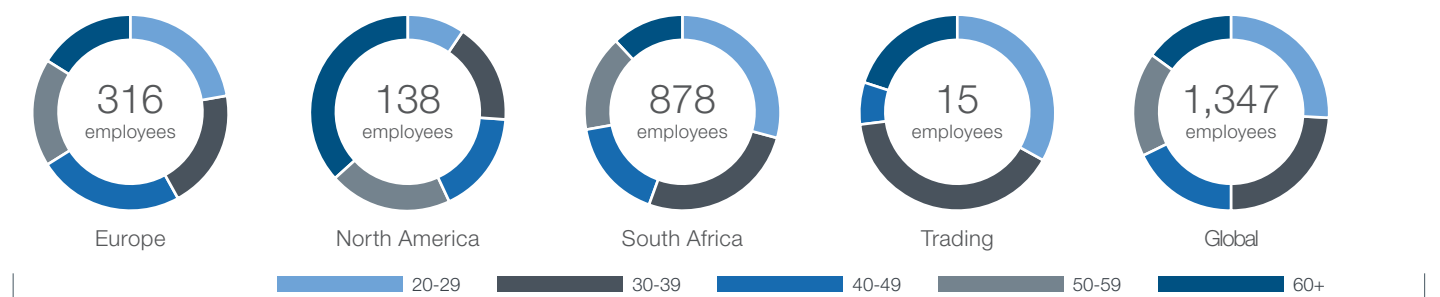
### Employee turnover by gender

313 1,034



### Employee turnover by age

%



# Workplace diversity continued

## 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

### Regulatory developments

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

#### Europe

The European Parliament recently approved proposals to compel large companies to allocate 40% of their non-executive board posts to women. The proposals will now go to the 28 EU member

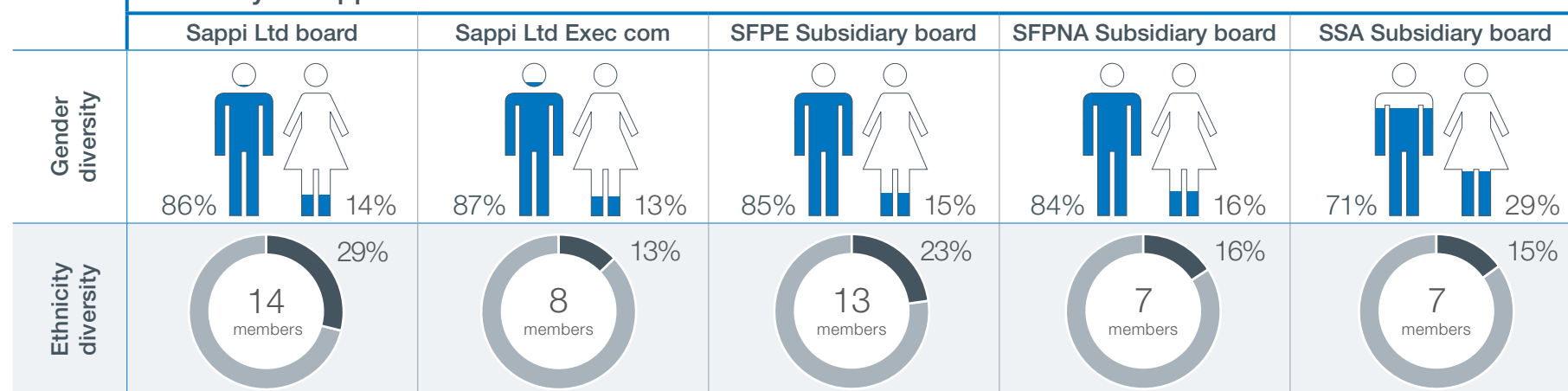
states for approval. Currently, there are no laws in place related to quotas based on gender in the countries in which we operate (Austria, Belgium, Finland, Germany and the Netherlands).

In recent years we have increased our focus on bringing people from different nationalities and backgrounds into management positions.

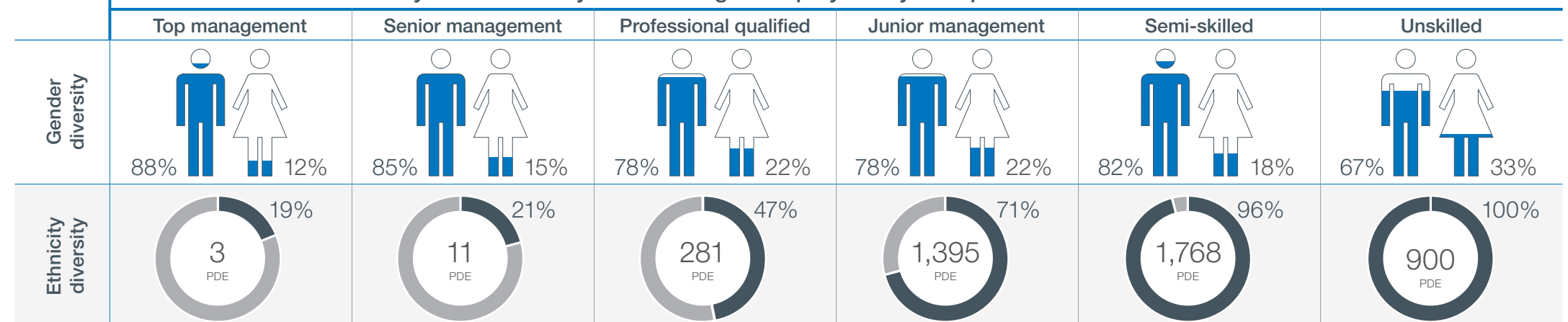
#### South Africa

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 the public and private sectors. It is proposed that gender equality is managed in a similar manner as the Employment Equity Bill.

### Diversity in Sappi boards



### Southern Africa — ethnicity and Previously Disadvantaged Employees by occupation





# 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

## 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

**We endorse the principles entrenched in the United Nations Global Compact, the Universal Declaration of Human Rights and the International Labour Organisation.**

We also conform to, and in many cases exceed, the labour conditions in which we operate. We promote freedom of association and sound labour practices by engaging extensively with representative trade unions. Protecting the right to freedom of association and collective bargaining is fundamental to the manner in which we do business. Globally, 56.7% of our workforce is unionised, and 66.5% of our employees belong to bargaining units.

### Europe

Our European employees are represented by 13 trade unions. Membership of the unions in Europe comprises both blue and white collar employees. Of all the regions in which Sappi operates, Europe is the most unionised, with membership of the bargaining unit standing at approximately 74% of the workforce.

Negotiations occur at the various country and industry-specific Collective Labour Associations, and the contract terms range from one to two years. The labour framework in Europe consists of Works Councils and collective labour agreements which differ from country to country. Works Councils are elected every four to five years at each mill site as well as the sales offices in Germany, Austria and the Benelux countries.

Within the collective labour framework, Sappi is represented by industry employer representatives.

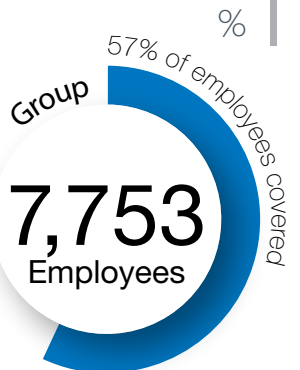
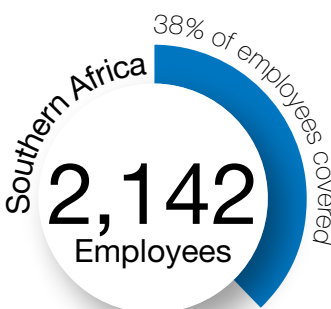
Meetings with the Works Councils take place twice a year with representatives from each manufacturing site and the Chief Executive Officer for the region and regional Human Resources Director. The purpose of the meeting is to share information and consult on topics of interest such as business performance, planned business changes, industry development and pan-European topics.

### North America

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

continued overleaf...

## Employees covered by collective bargaining agreements



# Our relationships with our employees continued



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

A new contract with the Cloquet Mill USW was ratified in December 2012 and we successfully concluded a number of other contracts in the region.

## Southern Africa

Employees in our Southern African operations are represented by four trade unions, with union representation standing at 48%. 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, and our agreements are generally annual.

Recognised trade unions with which we engage:

- **CEPPWAWU** The Chemical, Energy, Paper, Printing, Wood and Allied Workers Union
- **UASA** The United Associations of South Africa
- **FAWU** Food and Allied Workers Union
- **Solidarity**
- **HOCAFAWU** Hospitality, Catering and Farm Workers Union (a new union).

The complexity of the work environment in our South African operations is compounded by the

number of labour legislative requirements. Against this backdrop, 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 as well as 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, attended by union officials from three unions, shop steward and management representatives meets quarterly, primarily to agree on the employment equity and Workplace Skills Plans submitted to the Department of Labour and 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 (union representatives and senior management) meets quarterly to share information on business performance, strategy direction, industry developments and union priorities.
- The Pulp and Paper Chamber, an industry body that deals with wage negotiations and other employment relations and conditions of employment issues affecting the industry. The chamber has established a work group to investigate a collective bargaining framework in an attempt to enhance the collective bargaining process in our industry.

## Disciplined behaviour

Disciplined behaviour is essential not only for individual wellbeing, but also to ensure our group goals and objectives are reached.

In each region, disciplinary codes ensure disciplinary procedures are adhered to, while grievance policies entrench the rights of employees, including the right to:

- Raise a grievance without fear of victimisation
- Seek guidance and assistance from a member of the Human Resources department, or their representative, at any time
- Appeal to a higher body, without prejudice.

## Not exploitive

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.

We have identified no operations and significant suppliers as having significant risk for incidents of child labour.

Similarly, we have identified no operations and significant suppliers as having significant risk for incidents of forced or compulsory labour.



# Promoting training and development

## LA-10

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

**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.**

## 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 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 and productivity and our ability to retain valuable employees. 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.

During 2013, we continued with major business restructuring in our European and South African businesses which resulted in headcount reductions and cost saving initiatives. Nevertheless, training spend in terms of hours per employee increased from 49 hours in 2012 to 56.4 hours in 2013, despite the constrained economic conditions we experienced.

There are five-year training targets in each region.

## Training achievements


### Europe

On average, each employee underwent 29 hours of training against our target of 30 hours per employee for the year.


### North America

We aim to offer, on average, 75 hours of training per employee per year to improve job performance and enhance managerial skills. Although our performance measure is average per capita training hours, we recognise that some positions require higher levels of training.

Training during the year averaged 68 hours per employee — eight hours more than the previous year, but short of our target.

Significant training was conducted in the operations in support of our investments, such as the conversion of the pulp mill in Cloquet Mill. 

### South Africa

Our employees participated, on average, in 81 hours of training per employee, well above our 54 hour target. The type of training was dominated by learnerships particularly apprenticeships and knowledge and capacity building. 

## Skills development and career growth

Across all the Sappi group companies we provide both on-site/internal training and external training to assist employees to do their current jobs better and to develop employees to take on higher levels of work (development for promotions).

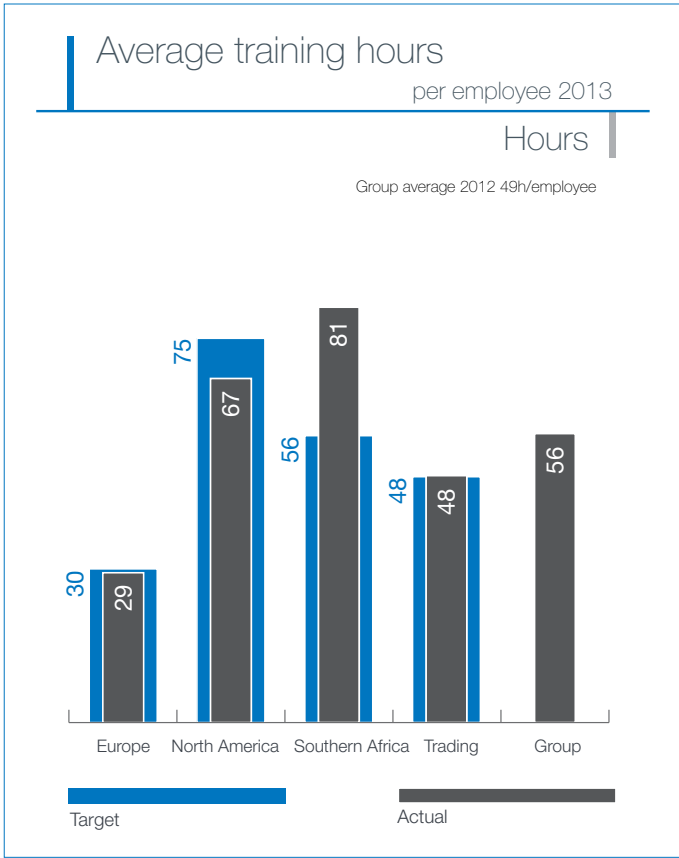
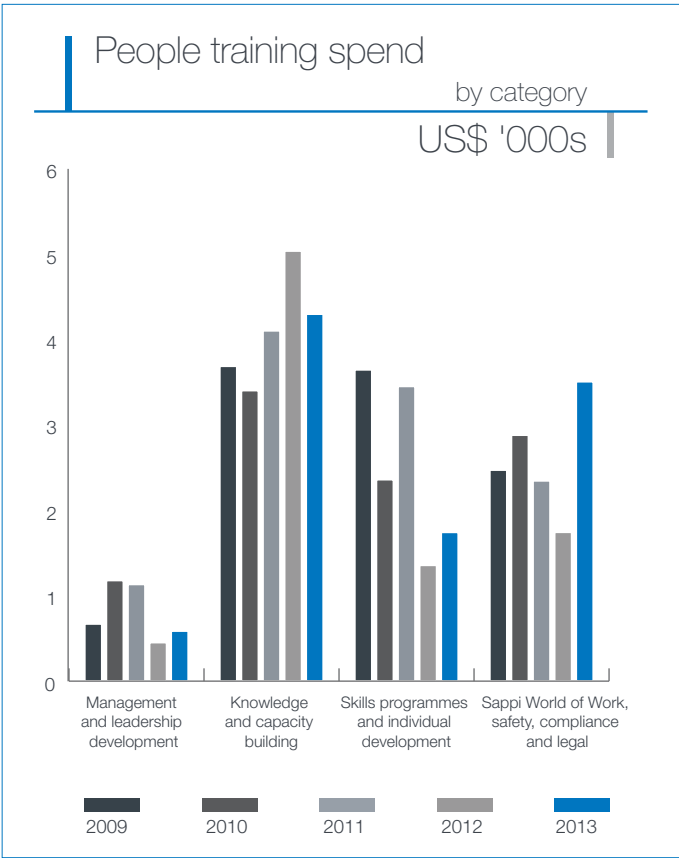
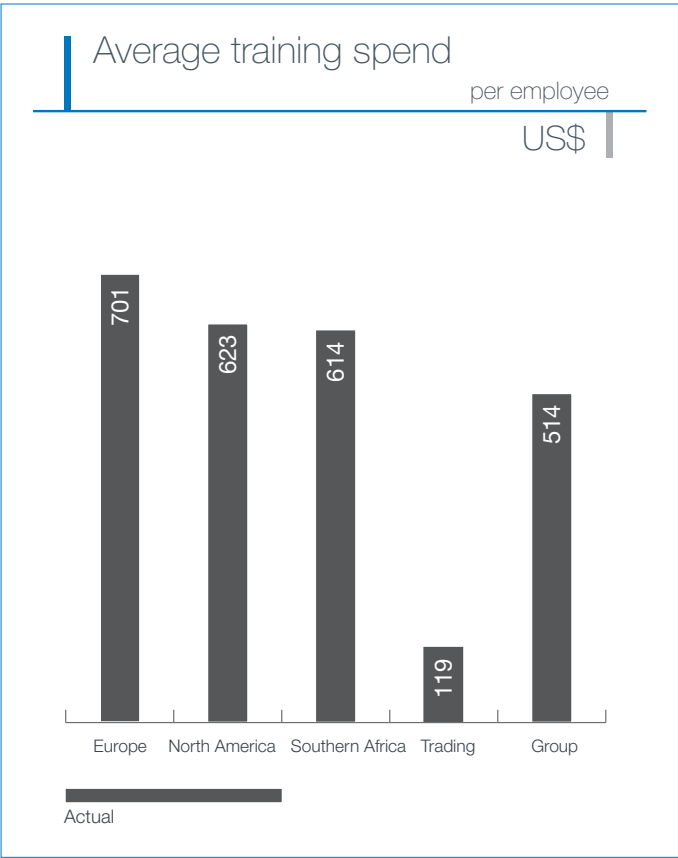
In addition, where appropriate, we offer assessments to employees to identify their work strengths; their motives and to help guide future career growth and aspirations. Going forward, training and skills development opportunities for all employees at all levels, together with performance management,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

We typically do not provide sabbaticals.

## 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.

# Promoting training and development continued



Training hours and spend 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	1.6 hours/US\$38	26.4 hours/US\$199	41.6 hours/US\$256	11.6 hours/US\$120
Europe	2.4 hours/US\$52	15.3 hours/US\$533	2.3 hours/US\$28	9.4 hours/US\$87
North America	2.4 hours/US\$22	9.7 hours/US\$90	5.2 hours/US\$48	50.0 hours/US\$464
Trading	8.0 hours	30.8 hours	5.6 hours	3.80 hours



# Promoting training and development continued



## Case study

### Performance Engine

We launched the Sappi Performance Engine Europe to drive continuous improvement.

The region's top 100 managers were trained in continuous improvement.

Performance Engine Managers appointed at each manufacturing site and central function were tasked with:


- Driving and steering effective implementation of complex, multi-functional projects.
- Challenging mill and central function management teams in their accountability.
- Drive and support continuous improvement implementation and improvement across all operations.
- Drive mindset and methodology to support all continuous improvement activities.
- Closely work together with continuous improvement and organisational development resources to support effective execution of continuous improvement activities.
- Seek out and share best practices within the Sappi community.

## Case study

### Leadership Gift

With the aim to promote external skills development in North America, we pledged US\$100,000 (over four years) to the University of Maine's Pulp and Paper Foundation to establish an endowed scholarship fund for engineers. The Sappi Scholarship Fund is a Leadership Gift to the Foundation's US\$2 million fundraising campaign.

We have supported the Foundation since inception in 1950. As Foundation member we support the Consider Engineering Programme by providing internships and co-op positions for undergraduate engineering students; ultimately we hire qualified University of Maine graduates.

Many former scholarship recipients can be found at all levels of leadership throughout Sappi's Skowhegan and Westbrook Mills based in Maine and also elsewhere in the company throughout North America. 

## Case study

### An EDGE for tomorrow

Our North American workforce is highly skewed toward an older age demographic; more than half of our employees are age 50 or older. We therefore need to work harder than ever to attract college graduates and retain young professionals.

In 2013, we announced EDGE, a new leadership development programme titled Enhancing Development and Growth through Engagement. About 100 of our newest employees have been targeted to receive this training. Participants will have an opportunity to develop self-awareness, acquire valuable coaching skills and learn best practices for project management with the help of our Lean Six Sigma team.

Through EDGE, we have taken a proactive approach to bring development opportunities to the newer members of our salaried team — early on in their careers while they can readily benefit. Newer employees will also learn from a network of experienced mentors as they grow into their roles.

Investing in training and education prepares our employees for the challenges and opportunities we face today and tomorrow.

# Performance reviews, benefits and minimum wages

## 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 calendar 2012, approximately 65% (74.2% of males and 89.3% of females) of our employees, who were eligible, completed their performance reviews. Almost 53% had training and/or development needs identified.

**North America** During calendar 2012, 23% of the salaried workforce (66% of all eligible employees) completed performance reviews and development plans. Women made up 30% and males 70% of the salaried workforce who completed the reviews.

**Southern Africa** Approximately 77% of eligible employees, both male and female, received performance feedback and career development reviews during calendar 2012.

**Sappi Trading** In calendar 2012, all employees completed annual performance reviews.

### Benefits

**Europe** Both full- and part-time employees receive the same benefits, eg healthcare, disability coverage, maternity/paternity leave and 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** Employees who are on part-time or fixed-term contracts do not receive retirement and medical benefits. They also do not participate in bonus incentive schemes. There is pending legislation that, if passed, would result in changes.

**Sappi Trading** Depending upon the duration of the part-time contract, benefits similar to those provided to full-time permanent employees may be provided.

### Minimum wages

**Europe** Minimum wages in Europe across the different countries is set within the Collective Labour Agreements.

**North America** There is no industry minimum wage. Our North American operations pay well above the US mandatory minimum wage of \$7.25 per hour for entry level wages.

**Southern Africa** The minimum wage in South Africa is negotiated at the Pulp and Paper Industry Bargaining Council. The wage rate is the same for both males and females.

**Sappi Trading** No minimum wage applies; wages are set based on the nature of the role.

### 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	21	43	64	3	20	23	41	0	41	1	0	1
Number of employees who did not return to work post parental leave	15	36	51	0	0	0	0	0	0	1	0	1
Number of employees who returned from parental leave and are still employed with Sappi, 12 months after their return	39	4	43	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.


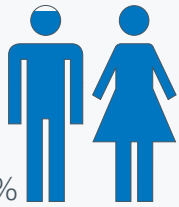
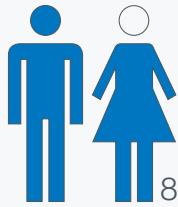

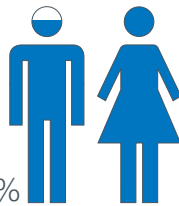



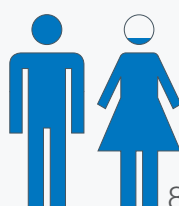
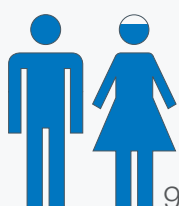
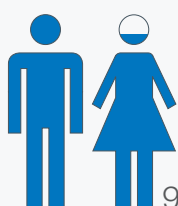
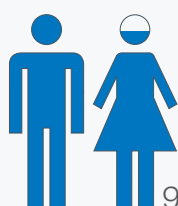

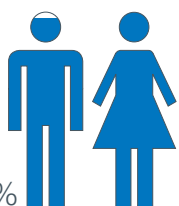


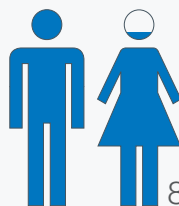
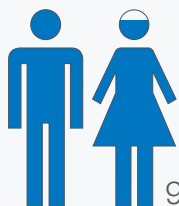
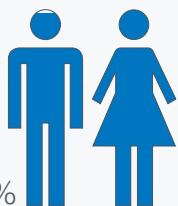
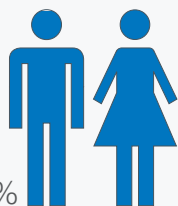
The primary components of pay include base salary, benefits eg medical and retirement, annual incentive awards and long-term incentives.

Compensation levels are set to reflect competitive market practices, internal equity as well as company and individual performance.

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 supervisors	Specialist groups
Europe		 97%	 85%	
North America	 93%	 98%	 99%	 89%
Southern Africa	 88%	 95%	 95%	 92%
Trading		 97%	 97%	 97%
Limited	 89%	 95%	 98%	 99%

# Prioritising wellbeing, 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

**Our approach to safety is based on the principles of — zero fatalities and zero injuries.**

In addition to addressing hazards in the workplace by means of the OHSAS 18001 related systems in place at all our pulp and paper mills, we also address ‘at risk behaviour’ of our employees by means of a behaviour-based safety (BBS) system.

Our safety approach comprises four behaviour-based steps:

### **Behavioural observation and feedback**

Following observation and documenting safe and unsafe behaviours, employees are given positive feedback on safe behaviours and non-threatening feedback on unsafe behaviours and provided with suggestions to correct unsafe behaviour.

### **Formal review of observation data**

Following the step outlined above, data is analysed to determine an employee’s or department’s improvement in safe behaviours and the data is shared with employees.

### **Improvement goals**

Goals are established to increase the effectiveness of the feedback and the success of the behaviour-based safety process.

### **Reinforcement**

Improvement and goal attainment are recognised and reinforced.

*“We have worked very hard to create a culture which prioritises safety at all times and incorporates contractors into this culture. While there were improvements in reducing fatalities and lost time injuries throughout the group, I deeply regret having to report one own employee fatality and one contractor fatality in our South African operations.*

*“We will continue to focus on entrenching a strong safety culture with the ultimate target of zero harm.”*

**Ralph Boëttger**

Chief Executive Officer  
Sappi Limited

## Case study

### Project Zero

Project Zero is a global initiative that aims to accelerate improved safety performance in areas of concern and to develop a safety awareness culture in all parts of our business.



The initiative includes integrated health and safety planning and management; training at all levels; participative information and control structures and adherence to international best practice and safety standards.

## Case study

### “We care ...”

In June 2013, we held our eighth annual Global Safety Awareness Day (GSAD).

GSAD revolves around a series of events at all business units to remind staff about the company’s commitment to safety; to stop and think of ways to improve their personal contribution to making Sappi a safer place to work at.

The 2013 theme ‘We care about our safety’ focused on connecting with employees at the emotional level. We took this approach based on evidence that most employees already know the correct safety processes and procedures, but needed to internalise and own those processes. People will more readily adopt a safe working attitude because they think working safely is the right thing to do; not because they are afraid of being caught and punished for working unsafely.

The theme highlighted the fact that safety is something that all employees should care about; at work and in all areas where they have influence — including their homes. Achieving perfect safety records at home and at work is not an individual goal — it is a collective effort.



# Prioritising wellbeing, health and safety continued

## LA-9

Health and safety topics covered in formal agreements with trade unions

**Health and safety committees are in place at all of our operations. Through these committees, our people are consulted about the development/review of policies and procedures and changes that affect workplace safety or health.**

### Representation

Representation in each region is as follows:

#### 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 our employees are represented by the safety committees.

#### North America

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

#### Southern Africa

The entire workforce is represented by health and safety representatives.

#### Sappi Trading

None.

### Discussion topics

Topics discussed in terms of formal agreements with trade unions are:

#### Europe

There is no region-wide agreement on health and safety topics covered in agreements with any of our trade unions. However, in the Netherlands formal local agreements with trade unions cover health and safety issues in addition to legal requirements and deal with issues such as:

- Personal protective equipment
- Training and education
- Determining the complaints mechanism.

European and local Works Council representatives participate in health and safety discussions; they have a right to:

- Be included in:
  - Site inspections
  - Audits
  - Accident investigations
  - Training and development
- Determine the complaints mechanism
- Support employees' right to refuse to do unsafe work.

#### North America

The majority of our collective bargaining agreements provide for the participation of unions in safety committees.

#### Southern Africa

Our current agreements with the unions do not cover health and safety issues. Health and safety topics form part of the agenda of the National Partnership Forum — a joint management/union forum. Employees are represented at safety committees by safety representatives who are not necessarily union or shop steward representatives — as prescribed by legislation.

# Safety management

LA-7

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

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

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

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

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

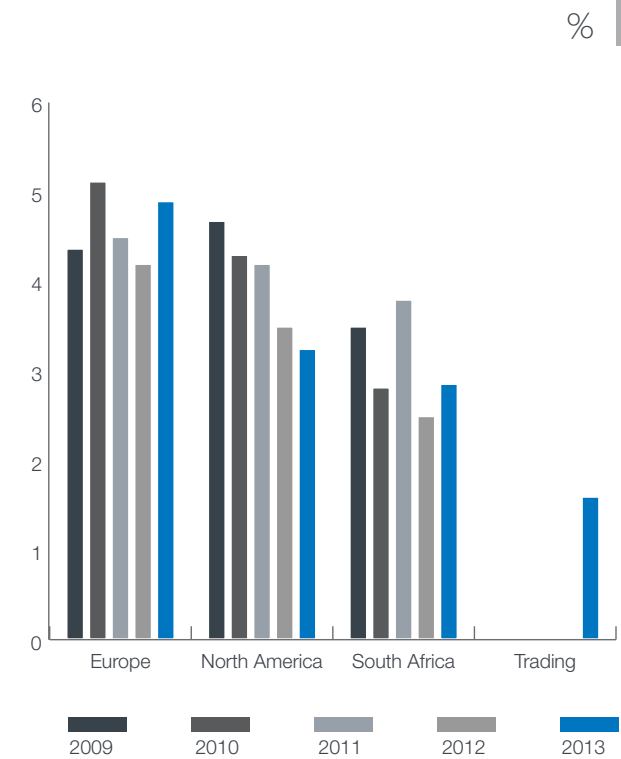
**II** **Injury Index** — provides an overall sense of safety within the measured unit

$$II = LTIFR \times LTISR$$

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

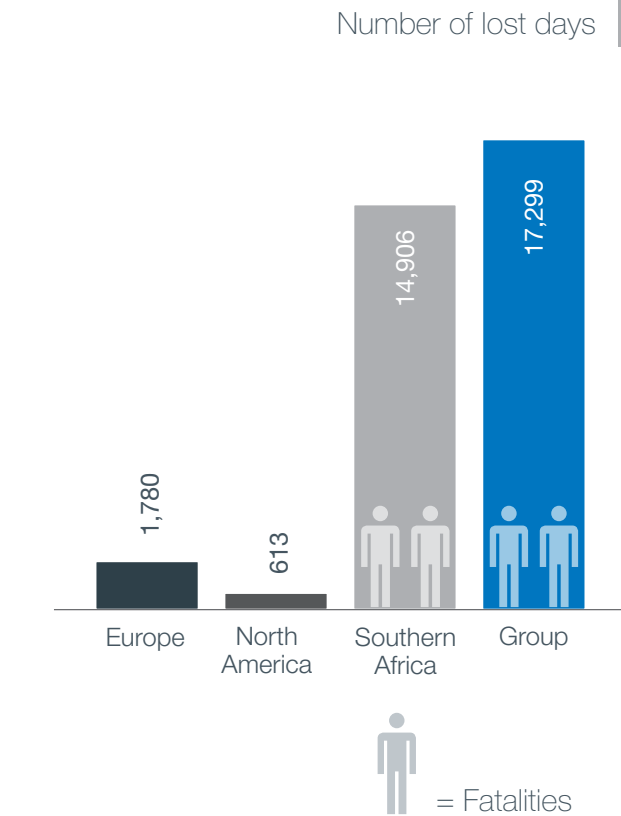
$$AIFR = \frac{\text{All injuries} \times 200,000}{\text{hours of exposure}}$$

Absenteeism



**Absenteeism**  
Absenteeism can have a significant impact on productivity and ultimately on financial performance, which is why it is important to monitor this indicator. Our absenteeism rates are in line with industry trends.

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 death of one own employee and one contractor in the year under review. One death is regarded as 6,000 lost days.

Number of incidences of occupational diseases

Region	Description	Number of cases
Europe	There were no confirmed incidences of occupational diseases.	
North America	Sappi Fine Paper North America has received several workers compensation claims alleging historic exposure to asbestos over a 30-year period.	We believe the cases are without merit
Southern Africa	Number of incidences of occupational diseases: 4 (Respiratory) Noise induced hearing loss and acoustic trauma.	4 1



# Safety performance



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

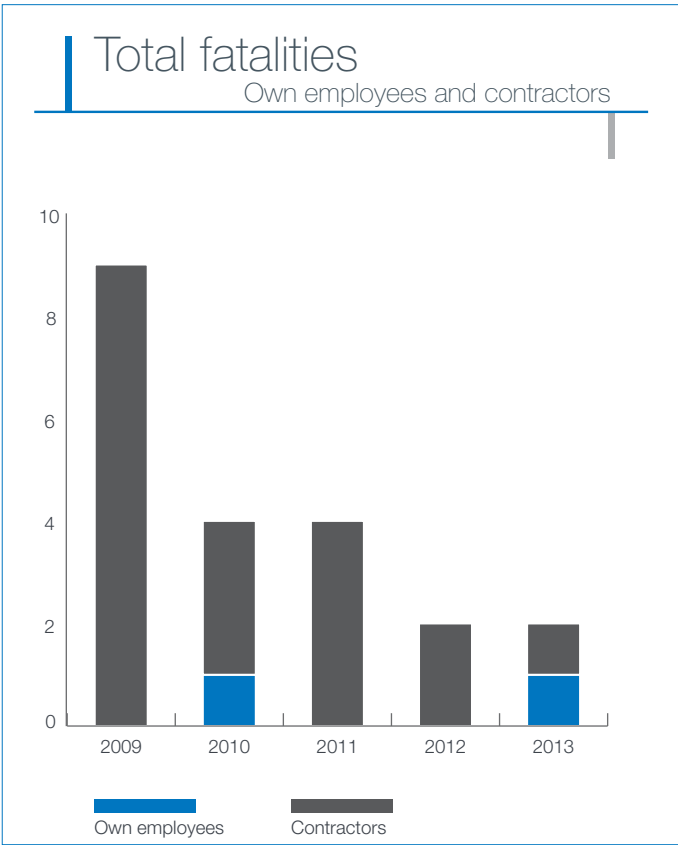
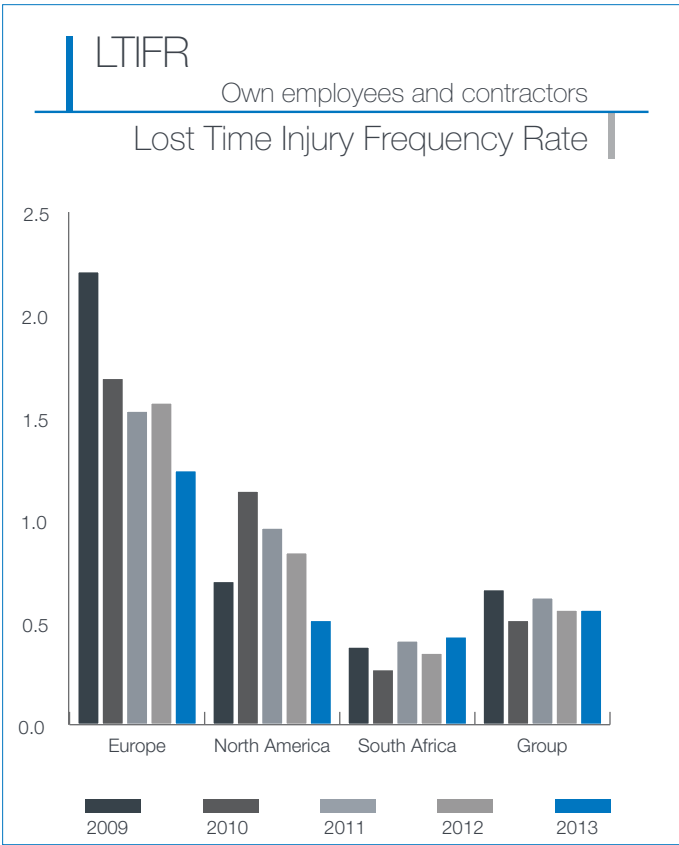
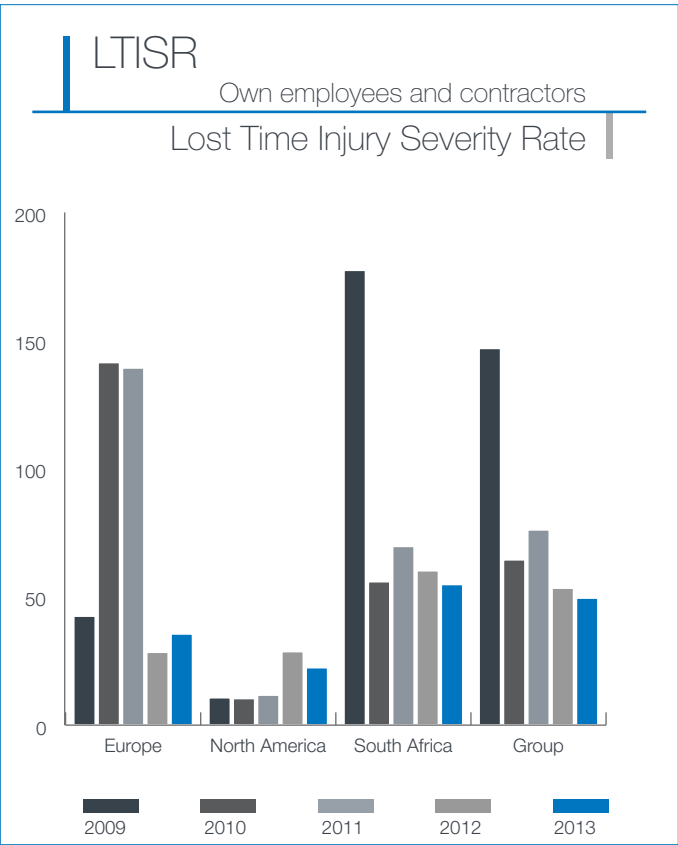
Going forward, we are committed to our goals of eliminating fatalities and lost time injuries by selecting the most appropriate leading performance indicators and identifying the areas of our activities that present the greatest threat to performance or opportunity for improvement.

We have set new objectives for our Group Safety and Risk Cluster where the aim is to ensure that our tools and techniques which have proven to be effective are shared within the organisation. We have no doubt that by empowering our workforce to identify where and how improvements can be made, and to provide and share regular feedback on performance measured against the standards, will instil a sense of ownership and awareness and achieve our objective of zero fatalities.

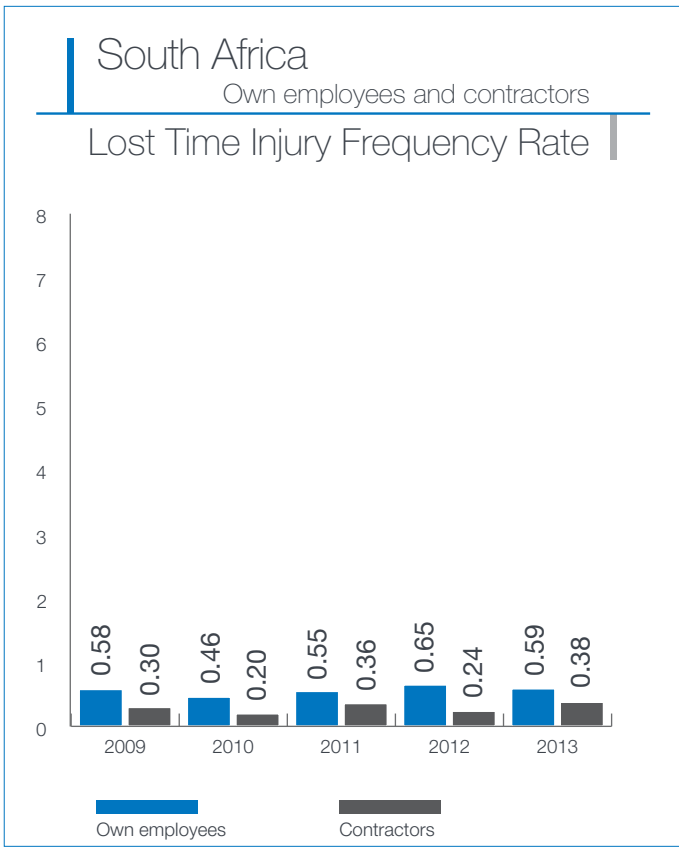
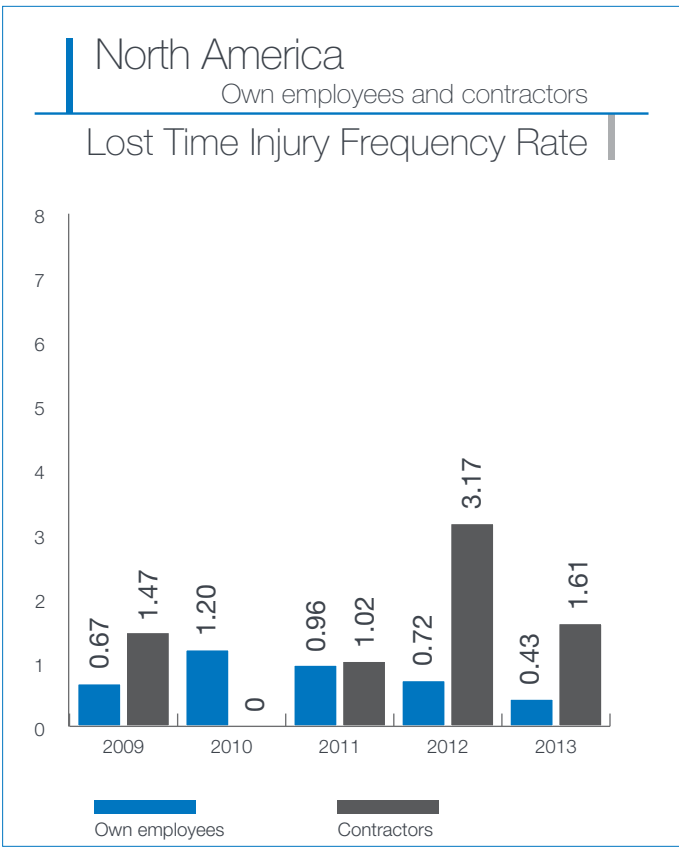
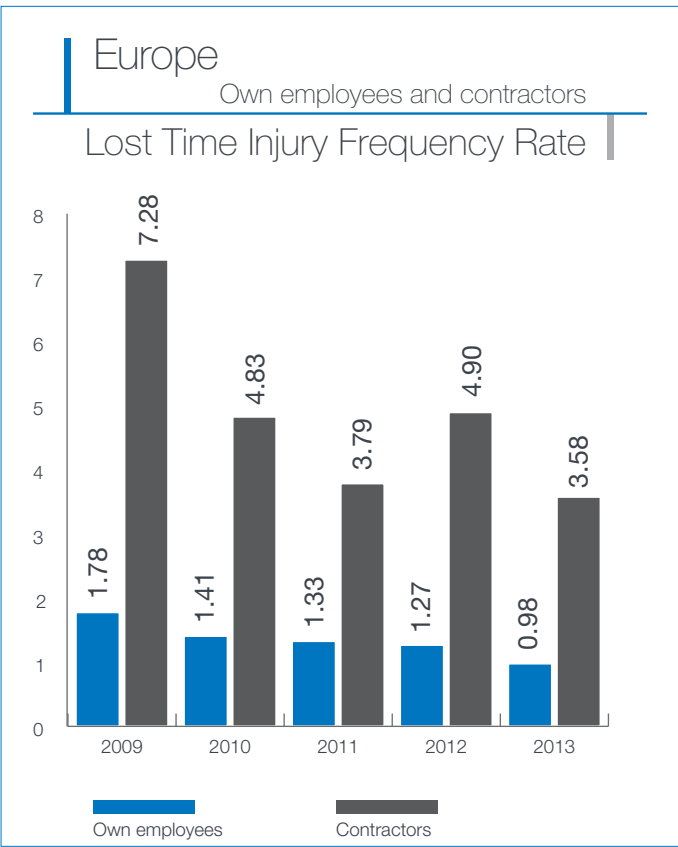
## Detailed regional safety information

An overview of safety performance by region follows on pages 66-67. More detailed information on our safety performance in each region is available in our regional sustainability reports.

- Europe
- North America
- South Africa



# Safety performance by region





## Safety performance by region continued



### Europe

We finished FY2013 with a LTIFR of 0.98 for own employees compared with the FY2012 rate of 1.22; indicating a steady improvement.

Lost time injuries (LTIs) for Sappi employees decreased, from 59 last year to 44 this year. Nijmegen Mill reported a zero own employee LTIFR.

Contractor LTIs increased to 20 from 18 last year. The contractor LTIFR increased to 4.44 against to last year's 3.79. Eningen Mill closed the year with a zero contractor LTIFR.

The overall regional safety performance improvement was mainly due to Alfeld and Stockstadt Mills' performance. Alfeld Mill improved own employee LTIFR by 79% despite the added risk of the conversion project at the mill. With an own employee LTIFR of 0.32, it was also the best performing mill in the region.

This significant improvement can be ascribed to the focus on standards reinforcement, an increase in the number and quality of behaviour-based safety audits, thorough root cause analysis of all incidents and an intensified utilisation of our safety representatives.

During the entire rebuild and conversion period, there was only one own employee lost time injury.

### North America

Our safety performance in North America improved. A 40% own employee LTIFR reduction over last year to 0.43 benchmarks us considerably better than the top quartile LTIFR of 0.80 for our industry. Eleven lost time/restricted incidents occurred during FY2013 compared to 18 the year before.

We use very few contractors; single incidents have a significant impact on the contractor safety statistics for the region. Nevertheless, contractor performance has improved. We continue to benchmark in the upper 20% compared to the North America paper industry (AF&PA).

Actions taken throughout the year to improve safety communications included weekly news and video flashes, tool box talks and website postings to consistently generate and maintain awareness and discussions. Hazard identification and risk assessments are used to identify, quantify and further control the hazards and risks.

### South Africa

Tragically, we suffered two fatal accidents in South Africa; one an own employee and the other a contractor employee.

We ended the year, for all personnel employed, with an LTIFR of 0.43 compared to 0.35 achieved last year. The All Injury Frequency Rate (AIFR) for the year was 4.19. The LTISR for the year was

54.93, which indicates that, although the number of injuries was not well contained, the severity was much less severe than last year when the severity rate was 60.3.

The 20 own employee LTIs that occurred during the third quarter resulted in an own employee LTIFR for the year at 0.60 against a target of 0.42. Although this is an improvement on FY2012's 0.65, it is higher than the best ever 0.46 achieved in FY2010.

### Contractor safety

Contractor safety issues have historically been challenging, given that the majority of contractors are employed by Sappi Forests where a large number of people are spread over an extensive geographical area, making management difficult.

Last year's good performance was not maintained with an LTIFR of 0.38 compared to the 0.24 LTIFR in FY2012.

Contractor statistics do not include hours worked on the GoCell dissolving wood pulp conversion project at Ngodwana Mill. The project achieved an excellent LTIFR of 0.07 with the project ending at 4.5 million man-hours without a lost time incident. This is even more remarkable considering that the total man-hours worked during the project ended at 5.7 million hours with only one LTI recorded.

# Safety priorities by region — 2014



## Europe

Going forward, our main 2014 objectives in Europe are to:

- Improve contractor safety performance by having a common approach on safety activities, rules, standards and safety clauses in purchasing contracts.
- Improve the cooperation and communication between the mills on safety performance and initiatives facilitated by the Sappi Fine Paper Europe Safety Platform.
- Continued focus on:
  - BBS (behaviour-based safety) observations
  - Intensified risk assessments
  - Incident investigations
  - 'Walking the Talk' on safety for Sappi managers, supervisors and employees.

## North America

Our priorities for the year ahead are:

- Develop frontline leaders
- Improve training of new hires
- Capture near miss incidents to learn from them and take actions to avoid recurrence.
- Refine OHSAS 18001 safety management system
- Drive the hazard identification and risk assessments process.

## South Africa

We aim to achieve an LTIFR below 0.28, for all personnel employed, by:

- Maintaining all safety systems in line with the requirements of our OSHAS 18001 certification. This will enable us to address unsafe conditions in our operations proactively, reducing employee and visitor exposure to hazardous situations.
- Engaging our employees and contractors in our safety drives. Engaged people will create a safety culture in our business that ensures the active involvement of everyone in our safety initiatives and drives, with ownership at all levels of the organisation. We plan to conduct mini safety workshops, involving every employee in finding safety solutions.
- Changing the behaviour of all personnel by means of the BBS system. During FY2013, we revitalised this system in all our mills and established steering committees to maintain training momentum. The improved safety performance in the last quarter of the financial year was partially due to this programme.
- Bringing the 'heart and soul' of every employee back into safety so that we improve on our current performance and progress to our ultimate goal of zero injuries.
- Focusing on reducing the severity of the accidents by setting specific Injury Index objectives for every business unit and driving down the Injury Index.



# Health and wellbeing initiatives

## LA-8

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

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

### Europe

There is an increased awareness of stress and burn-out and programmes are in place to assist and support employees in this regard. 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

The company has a number of wellness programmes in place to help educate employees on healthy living and to minimise the risk of serious diseases.

All of our programmes focus on employees, as resources are limited to extending these beyond our own employees. 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 the issue.

### Southern Africa



The health and wellness programme includes occupational health, primary healthcare and employee wellbeing programmes. Occupational health management forms the foundation of our healthcare programmes. The programme focuses on changing behaviours which impact on health risks as they may create future health difficulties. Specific targets are: high blood pressure; high cholesterol levels; low fitness levels; smoking cessation; stress management; weight control and nutritional changes.

Our initiatives to promote financial wellbeing and combat HIV/AIDS are covered in detail in our 2013 regional sustainability report for Southern Africa. 

### Sappi Trading

Health talks are conducted and cover topics such as stress management; kidney disease awareness; spine protection; healthy eating habits; home/work life balance; and emotional intelligence.

### HIV/AIDS

Our HIV/AIDS Policy  together with a FAQ  document detailing efforts to combat HIV/AIDS in Southern Africa, are available on [www.sappi.com](http://www.sappi.com).

Sappi  
HIV/AIDS Policy

Sappi  
HIV/AIDS FAQ

# 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

### 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 36th Recommendation for Paper and Board for Food Contact of BfR (German Federal Institute for Risk Control) 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.

In 2013, in Europe we launched two new mineral oil barrier flexpack grades: MOB Kraft and MOB Gravure. These innovative speciality papers solve the problem of migration of mineral oil and other contaminants into food from cardboard packaging containing recycled paper. The mineral oil barrier in the papers protects foodstuffs from mineral oil compounds that are a complex mixture of saturated hydrocarbons and unsaturated hydrocarbons, which are suspected to be carcinogenic.

### 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). Our papers are also tested for compliance with DIN EN71 (part 3 – Safety in Toys, Migration and Certain Elements).

Tests are conducted both in-house and by accredited third parties to enable us to issue certificates of compliance to our customers.



# Our approach to human rights

UNGC-1

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

UNGC-2

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


UNGC-4

The elimination of all forms of forced and compulsory labour

UNGC-5


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 'Link between our business and sustainability' section of this report ), the eradication of child and forced labour, and non-discrimination.  

We subscribe to the principles 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. 

## Sappi Human Rights Policy

# Supporting communities



## Sappi CSR Policy

**Sappi's Corporate Social Responsibility (CSR) initiatives and programmes are in line with, and supportive of, the company's business strategy. They are developed with input from key stakeholder groups.**

Our support is focused on the communities where we have an impact.

We have prioritised education, environment, health and welfare and community engagement projects. Our preference is for multi-year programmes which create sustained impact in our communities. The majority of Sappi's CSR spend takes place in South Africa, given the development needs of that country.

We promote awareness of, and an appreciation for, the environment. 🌱

More information about our management approach to societal support and selected case studies, are outlined in the Overview section of this report. ➡

Supporting our communities

At a community level, mills support local projects ranging from youth clubs, community centres, vulnerable groups, sports clubs and environmental education to paper donations.

Case study

## Hlaza Innovation Centre

Sappi ReFibre in South Africa recycles recovered board and paper — a valuable resource that can be used to supplement virgin fibre in the paper making process. We procure board and paper sourced from homes, offices, wholesalers and retailers, and from manufacturers in both the formal and informal sectors — through an extensive network of agents across the country.

In August 2013, we partnered with Georgetown University's McDonough School of Business, PETCO and other local business to transform a run-down buy-back centre in Langa, Cape Town's oldest township. The now renamed Hlaza (Green) Innovation Centre will encourage entrepreneurship and demonstrate the value of recyclable commodities by buying recyclables from community members who can collect from their own homes, offices, shebeens (pubs), municipal offices etc.

We have secured a market for all the recyclables the centre will buy in. Our collection partner, K and C Waste, will purchase the bulk of the recyclables from the Hlaza Innovation Centre, uplifting recyclables daily. Benefits to the community include income generation and a cleaner and healthier environment through landfill diversion, ie sustainable livelihoods.

Case study

## Ideas that Matter

Since 1999, the group's Ideas that Matter programme, has granted US\$12 million to student and professional designers who's design ideas, executed on graphics paper, support worthy causes that change lives, communities, and ultimately, our Planet. Over 500 causes around the world have been supported since inception.

Funding for art education in public schools all over the United States has been drastically reduced over the past 25 years. In Philadelphia, for example, only US83¢ per child per year was allocated for art supplies for several years. In 2009, that allocation ended and many art teachers have little or no funds for art supplies.

Fresh Artists, a non-profit organisation, dedicated to saving art-education for all children and creating real opportunities for children to be philanthropic was among the 2013 recipients.

Fresh Artists supplies innovative art programmes and art supplies to art teachers in severely under-resourced public schools, and engages the children being served as full philanthropic partners in the giving process. 🌱

Read more about Ideas that Matter and other 2013 recipients on our website. 📖

# Engaging with our stakeholders

## GRI-4.4

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

## 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

**Our key stakeholders are parties who can affect or be affected by our activities, objectives and policies. **

We recognise that we will not be able to implement our business strategy and achieve our goals without engaging our stakeholders. Building relationships with stakeholders in a spirit of trust and mutual respect helps ensure alignment with our strategic goals, creates value and promotes our overall sustainability.

Accordingly, we engage with a broad range of stakeholders through a variety of formal and informal channels — from ongoing engagement across all our stakeholder groupings, including investors, governments, industry bodies, customers, communities and NPOs, to collective public meetings with stakeholders by our mills, as well as surveys of selected groups such as employees, customers and investors and through audits with suppliers.

All of these engagement activities help us identify and address issues of mutual interest, thereby facilitating our licence to operate and enhancing our organisational effectiveness. We see such engagement as an ongoing dynamic process able to respond to the changing nature of issues and of interested and affected parties.

## Our approach

Our approach to engagement with all stakeholder groupings is based on the principles of:

### Materiality

Identifying the material concerns of stakeholder groupings.

### Relevance

Focusing on those issues of material concern to our stakeholders and to Sappi and identifying how best to address them for our mutual benefit.

### Completeness

Understanding the views, needs, performance expectations and perceptions associated with these material issues and assessing them against prevailing local and global trends.

### Responsiveness

Engaging with stakeholders on these issues and giving regular, comprehensive, coherent feedback.

Sappi's main stakeholder groupings, detailed in our Stakeholder Engagement Policy, are discussed on pages 74-83, along with selected examples of engagement undertaken during the reporting period.

**Sappi  
Stakeholder Policy**



# Engaging with our stakeholders — employees



We focus on building a skilled, engaged workforce where diversity is encouraged and valued, and people are provided with ongoing development opportunities so that they can fulfil their full potential. In so doing, we enhance productivity and our ability to service a global market.

## Areas of mutual interest

- To be informed about, and engage with the strategy, priorities and performance of the company and its components.
- To be informed about the internal and external activities of the company, its staff and its communities.
- To be informed about, and engage with organisational developments, particularly in respect of restructuring.
- Maintaining ethical standards.

## Avenues of engagement

Our Chief Executive Officer (CEO) and regional CEOs engage with staff through site visits, presentations and discussions. Suggestion lines exist at some facilities, and 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
- Operating unit meetings, briefings and workshops
- Various forums (in South Africa)
  - National Employment Equity and Skills Development Forum
  - Shop Steward Forum
  - Partnership Forum
- Global Employee Engagement Survey — every second year — last conducted in 2013
- Wellbeing committees at mills and business units
- Health and safety committees at mills
- Code of Ethics and confidential hotlines.

## Key issues in 2013

### Code of Ethics

Across the group we rolled out a refreshed Code of Ethics that reflects a move away from a compliance-based model to an integrity model of ethics.

Our Code of Ethics is built on our underlying values of Excellence, Integrity, Respect and Resourcefulness. An analysis of hotline calls is detailed in our 2013 Integrated Annual Report.

## Global Employee Engagement Survey

The results and action plans following on the Global Employee Engagement Survey conducted at the end of 2013 will be discussed in the 2014 report.

## Europe

Subsequent to year-end, following the announcement on 30 September 2013 that we have given notice to start consultations about the future of Nijmegen Mill, Sappi Nijmegen BV, the central Works Council of Sappi Netherlands and the Works Council of Sappi Nijmegen entered into an information and consultation agreement.

## North America

Our team of Sustainability Ambassadors launched an internal electronic newsletter to share activities and updates across the region.

## South Africa

Numerous meetings, briefings and workshops were held, including about the restructuring of the business and changes to the areas of production, procurement and sales and marketing, aimed at returning the business to acceptable profitability.

We conducted a Skills Audit to review the level of skills within our professional cadre. In this region the National Employment Equity and Learning Forum established two task teams to work on the elimination of barriers to employment equity and to assess our skills and development initiatives.



## Employee engagement survey

## Sappi Code of Ethics

# Engaging with our stakeholders — unions



**Given today's extremely challenging global economic conditions and the current socio-economic dynamics in the South African labour market, we prioritise our relationship with our employees and their representatives.**

Protecting the right to freedom of association and collective bargaining are fundamental to the way in which Sappi does business.

Globally, approximately 56% of our workforce is represented by unions; 66,5% covered by collective bargaining agreements.

## **Areas of mutual interest**

Wages, working hours and other conditions of service.

## **Avenues of engagement**

### **Europe**

Negotiations occur at the various country and industry-specific collective labour associations. Contract terms range from one to two years. The labour framework in Europe consists of Works Councils and collective labour agreements and differs from country to country.

The European Works Council's meetings take place twice a year and representatives meet with our leadership representatives 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, we are represented by industry employer representatives.

### **North America**

The majority of our hourly employees — generally production unit employees — are represented by the United Steelworkers (USW) union, but 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 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.

### **South Africa**

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. Our agreements are generally annual.

We also engage on broader issues with recognised trade unions at the National Employment Equity and Skills Development Forum, the Shop Steward Forum and the Partnership Forum.

## **Key issues in 2013**

### **Europe**

Wage negotiations were successfully concluded in several countries.

### **North America**

We successfully concluded a number of wage agreements.

### **South Africa**

Wage negotiations were successfully concluded by the Chambers of which Sappi is a member.

# Engaging with our stakeholders — communities



**Having a mutually respectful relationship with the communities in which our business operations are situated is critical to our success.**

Our engagement ranges across the three pillars of sustainability, namely:

## Prosperity

Our contribution to each other

## People

Our support for social cohesion and community needs

## Planet

Working to reduce our combined impact thereby securing the sustainability of the natural resources and ecosystems on which our business depends.

Social projects are reviewed on a case-by-case basis and we encourage projects which facilitate partnerships and collaboration between communities, government and the private sector.

## Areas of mutual interest













Key issues discussed on a regular basis include water usage and quality, effluent quality and air emissions, employment and business opportunities, and community support.

## Avenues of engagement

There are various formats of community engagement meetings held by our mills within

the communities and regions where they operate. These range from broad liaison forums for business, local government and communities to legally mandated environmental forums which form part of the licencing conditions of mills.

We publish FAQs dealing with topics of interest to many of our stakeholders — these are updated as and when information changes. Some of the topics covered are:

- Biofuels 
- BBBEE 
- Eucalyptus Trees 
- Forest Certification 
- Forest Certifications and FSC 
- Forests and Climate Change 
- HIV/AIDS 
- Paper and Plastics 
- Project Grow 
- The Carbon Disclosure Project 
- The JSE SRI Index 
- Tree Genetics — Tree Improvement 
- The Triple Green paper range 
- Water and Commercial Plantations 

We also engage with local communities through support of and sponsorship for local events and initiatives.

## South Africa

We engage in local farmer and community forums regarding our forestry communities.

## Key issues in 2013

Of particular relevance to local communities were the conversion and expansion projects at our Cloquet, Ngodwana and Alfeld Mills; their impacts during the construction phase and thereafter, as well as the local benefits of these projects.

## Europe

Our mills actively maintain an interface with the communities in which we operate. Our Stockstadt Mill, for example, provides a printed periodical titled 'Ihr Nachbar' (Your Neighbour) through which we keep our neighbours updated about the developments in our mill.

## North America

Sustainability Ambassadors help to coordinate community outreach activities at each of our locations. Examples of activities include papermaking demonstrations at local schools, coordinating recycling drives with community partners and the Cloquet Mill employees' ongoing efforts with River Quest, a hands-on learning experience conducted annually for more than 1,000 students in the area.

## South Africa

In association with the South African Institute of Entrepreneurship (SAIE), we developed Forest Biz, which introduces communities to the business management aspects related to managing their own forestry projects.



# Engaging with our stakeholders — customers

## PR-3

Type of product and service information required by procedures, and percentage of significant products and services subject to such information requirements

**We adopt a partnership approach, whereby we develop long-term relationships with global, regional and local customers. We also accommodate more transactional customers.**

We offer customers innovative products and high levels of service that enable them to meet the needs of a rapidly changing world. Where relevant, we will also conduct R&D and develop products to suit the specific needs of a customer.

### Areas of mutual interest

- Information about organisational developments, and the fibre sourcing and production processes behind our brands.
- Technical information and information campaigns to promote print as a communications medium.
- Information and campaigns to promote paper packaging.
- Information about new products.

### Avenues of engagement

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. In North America we also meet annually with the Sappi Merchant Association.

### Customer surveys

The results of our customer surveys are considered confidential and are not published.

### Key issues in 2013

A series of technical brochures, is available on our website [www.sappi.com](http://www.sappi.com). 

We continued to publish region-appropriate marketing material.

We conducted extensive roadshows and participated in trade conferences in the Far East to inform customers about our expanded dissolving wood pulp capacity.

### Europe

We launched two new mineral oil barrier substrates: MOB Kraft and MOB Gravure at FachPack.

The Houston microsite provides technical support to printers. 


Our Positivity website gives details of our sustainability journey. 


### Europe and South Africa

We continued to 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 woodfibre sourcing policies.

### North America

We use GreenBlue'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 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. 

Customers connect with Customer Service in real time via eChat on our eCommerce website.

As part of our Education, Training and Consulting (etc) programme, aimed at customers, we launched the Sappi etc® microsite — an online educational platform providing access to more than a century's worth of rare historical documents, detailed case studies and expert technical advice. 

We have had a Sustainability Customer Council as a branch of our governance since 2007. This group represents each of the major customer segments in the coated papers business. In 2014, we will be adding representation from dissolving wood pulp and specialities business units' customers. The group meets twice annually to discuss ongoing and emerging issues relevant to the supply chain.

# Engaging with our stakeholders — industry bodies



**We partner with industry and business bodies to provide input into issues and regulations that affect the industry.**

## Areas of mutual interest

- Energy issues in general and in particular government moves on carbon taxation.
- The impact of increased regulations on business.
- The benefits of our industry and our economic contribution.

## Avenues of engagement

Sappi is a member of various industry and business associations in each region.

Consultations take place on an ongoing basis with industry and business associations in each region.


## Key issues in 2013

### Two Sides campaign


We supported the launch of the Two Sides industry-driven campaign — which works to debunk myths about the paper, printing and forestry industries — in North America during 2013.

We had previously supported the establishment of Two Sides campaigns in the United Kingdom, and Australia and are currently working on a launch for South Africa during 2014.


### Europe


In Europe our interests were represented through the work programme of our industry body CEPI and its related national organisations. 

### North America

In North America our interests were represented through the work programme of our industry body (AF & PA). 

### South Africa

We engaged with Treasury and the Department of Trade and Industry through our industry representative, PAMSA, regarding the possible exemption from the proposed carbon tax due to the fact that our manufacturing process starts from the planting of trees and that as such our cradle to gate process is not carbon negative but rather carbon positive. 

We engaged through our industry representative, FSA, with the Department of Agriculture and Fisheries regarding their determination of the minimum wage for the agriculture and forestry sectors. The minimum wage has increased by 52% with effect from 01 April 2013. 

# Engaging with our stakeholders — investors



Our aim is to provide investors (shareholders and bondholders) and analysts with transparent, timely, relevant communication that facilitates informed decisions.

### Areas of mutual interest

- Return on investment
- Transparent information about risks and opportunities.

### Avenues of engagement

Our investor relations (IR) team engages with shareholders and analysts on an ongoing basis. Shareholders can attend and participate in the annual general meeting and four quarterly financial results briefings.

The IR team has direct access to the executive directors; any issues raised by shareholders that would be relevant for the board are channelled through the IR team.

Our Chairman also engages with shareholders on relevant issues.

We conduct ad hoc mill visits and roadshows, and issue announcements through:

- Stock Exchange News Services (SENS) 
- The media
- Our website [www.sappi.com](http://www.sappi.com). 



We publish our Annual Integrated Report, three regional and this global sustainability reports on the company website.

Our Chief Financial Officer and Head of Treasury engage with bondholders, banks and rating agencies on an ongoing basis regarding the performance of the company.


We participated in the Carbon Disclosure and Forest Footprint Disclosure projects. 

### Key issues in 2013

#### Conversion projects

The major conversion and expansion projects for dissolving wood pulp at our Cloquet and Ngodwana Mills and speciality paper at our Alfeld Mill.  


#### Restructuring and profitability

Progress with the restructuring of the company and actions to return the group to acceptable levels of profitability and turn around the paper businesses. 

#### Usutu Forest Products Company

In South Africa, we announced the sale of our Usutu Forest Products Company to Swaziland's Montigny Investments for US\$101 million. The deal is subject to several conditions, including approval from competition authorities in both countries.

#### NYSE

We announced our intention to delist from the New York Stock Exchange. Sappi's ADRs will now be traded in the US through a Level I over-the-counter (OTC) ADR programme. 



# Engaging with our stakeholders — suppliers and contractors



**We are committed to establishing mutually respectful relationships with our suppliers and encouraging them to join our commitment to the 3Ps. We aim to build long-term value partnerships.**

We work with our contractors to ensure that they follow Sappi safety systems and rules.

## Areas of mutual interest

- Transparent information
- Forest certification
- Increased value and decreased costs
- Security of fibre supply, income generation and job creation.

## Avenues of engagement

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.

### North America and South Africa

Our foresters work extensively with contractors and communities. Our contractors must adhere to Sappi's safety systems and rules.

### South Africa

We work with rural communities to help them establish and manage timber farms. In terms of Project Grow, our enterprise development initiative, we provide interest-free loans and guaranteed markets. ↗

## Key issues in 2013

In each region we conducted audits of selected suppliers.

### North America

We have been assisting two landowners and a timber mill to adopt FSC® certification in order to obtain higher levels of certified fibre for Somerset Mill. All three sources — providing a combined total of 87,000tpa of wood — will be certified in December 2013.

The procurement team has also been working with another landowner who is planning to adopt the SFI® programme to certify two separate parcels of forests, totalling 40,469 hectares. The net result will be an additional 120,000 tons of SFI® certified wood.

### South Africa

In 2013, Project Grow celebrated its 30th anniversary. The volumes provided by Project Grow represent 7.5% of Sappi's hardwood woodfibre intake in South Africa. ↗

# Engaging with our stakeholders — media and civil society



**We maintain an open relationship with the media, believing that an informed media is better able to serve public reporting and debate on any issue.**

**We engage with civil society organisations on issues of mutual interest, and are members of key organisations relevant to our operations.**

## Areas of mutual interest

- Business developments
- Impact on communities and on the environment.

## Avenues of engagement

- We join key organisations as members
- We develop personal relationships and engage on an ongoing basis.
- We provide support to and sponsorship for key organisations on issues of mutual interest.

## Key issues in 2013

We continued to engage regarding issues of climate change and the positive nature of the forest products industry with regard to CO<sub>2</sub> emissions and our carbon positive footprint, given the renewable nature of the woodfibre that we utilise.

## Europe and North America

We maintain close engagement directly and through our industry bodies CEPI and AF & PA, with the Forest Stewardship Council® (FSC®) and WWF International.

## South Africa

A two-year Birdlife South Africa project will be funded to assess the current avian value of Sappi owned property in southern KwaZulu-Natal in relation to the Important Bird Area (IBA) network, including the implementation of Biodiversity Stewardship.

The ultimate aim is to contribute to Sappi's environmental management objectives and conservation vision while simultaneously improving the conservation of avian species within the grassland biome.

# Engaging with our stakeholders — governments and regulatory bodies



We engage with government departments and regulatory bodies to provide input into issues and regulations that affect our industry.

### Areas of mutual interest

- Energy issues in general and in particular government moves on carbon taxation
- The impact of increased regulation on business
- The benefits of our industry and our economic contribution.

### Avenues of engagement

Consultations take place on an ongoing basis with government departments and regulatory bodies in each region.

### Key issues in 2013

Please refer to the content under Industry bodies. ↗

### South Africa

We submitted an anti-dumping application to the International Trade Administration Commission of South Africa against cheap imported coated and uncoated paper products. This was done to protect local employment as well as all those businesses that are dependent on our paper mills. Preliminary duties have thus far been imposed on coated paper.

## 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

- Code of Ethics
- Sustainability Charter
- Corporate Social Responsibility Policy
- Group Environmental Policy
- HIV/AIDS Policy
- Human Rights Policy
- Stakeholder Engagement Policy

## GRI-4.12

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.



# Engaging with our stakeholders — memberships



## GRI-4.13

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

### Industry associations

#### Global

Pulp and Paper Products Council (PPPC) **W**

#### Europe

- Confederation of European Paper Industries (CEPI) **W**
- Relevant national associations.

#### North America

American Forest and Paper Association Industry (AF&PA). **W**

#### South Africa

- Paper Manufacturers' Association of South Africa (PAMSA) **W**
- Forestry South Africa (FSA) **W**
- Other sectoral bodies.

### Other associations

#### Europe, North America and South Africa

Two Sides **W**

#### Europe

Print Power **W**

#### South Africa

- National Business Initiative (NBI) **W**
- Business Unity South Africa (BUSA) **W**
- South African Chamber of Commerce and Industry (SACCI) **W**
- Manufacturing Circle
- SA Energy Intensive Users Forum
- FSC™ **W**
- The Network for Business Sustainability South Africa (NBS:SA) **W**
- Sappi Limited is a member of
  - WWF-SA **W**
  - Birdlife SA. **W**

#### North America

We are a founding member of the GreenBlue Forest Products Working Group (FPWG), established in October 2011. **W**

### Initiatives to promote design and print

#### Europe

What's Next magazine. **S**

#### North America

- Sappi Printers of the Year (North America) **S**
- Sappi Ideas that Matter (North America) **S**
- Life with Print **S**
- Sappi etc (Education Training and Consulting) programme **S**
- The Standard a series of information guides to designing for print with useful tips, techniques and methods for achieving optimum printing results **S**
- Digital design centre. **S**

#### South Africa

Paper. Here today, Here tomorrow **S**



In a world where natural resources are under increasing pressure, we are achieving our goal of treading more lightly on the Planet

# An overview of our management approach to Planet

## UNGC-7

Support a precautionary approach to environmental challenges

## UNGC-8

Undertake initiatives to promote greater environmental responsibility

## UNGC-9

Encourage the development and diffusion of environmentally friendly technologies

## EN-30

Total environmental protection expenditures and investments by type

**We are advantaged by the fact that our primary resource, woodfibre — derived from sustainably managed natural and plantation forests — is a sustainable, renewable resource.**

Both natural and plantation forests 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 a sustainable economic resource, providing a plentiful, natural material.

By treading more lightly on the Planet we can produce more with less — an approach with obvious economic benefits that involves reducing our use of fossil energy and the associated greenhouse gas emissions across the life cycle of our products. It also necessitates 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.

Forests  
are a sustainable  
economic resource

### Forest certification systems

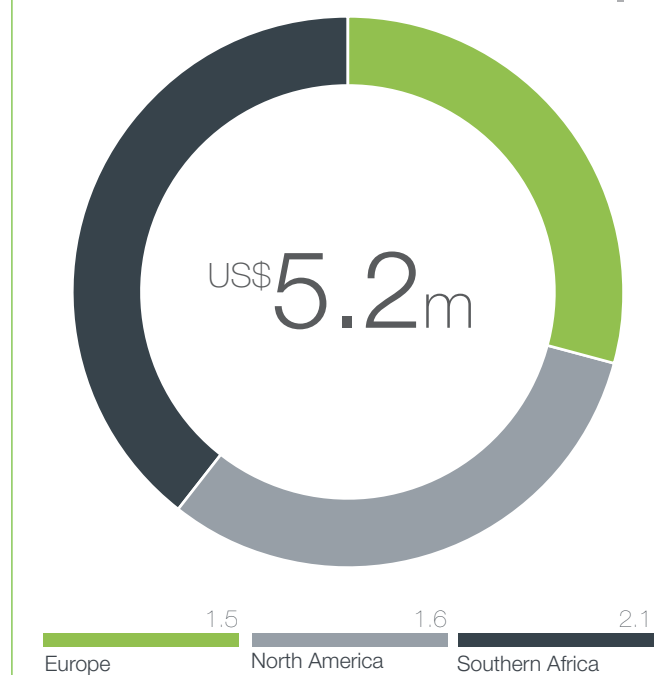
Throughout our operations, we use independently verified forest certification systems, including:

- The Programme for the Endorsement of Forest Certification™ (PEFC™)
- Forest Stewardship Council™ (FSC™)
- Sustainable Forestry Initiative® (SFI®).

### Management systems

We apply internationally recognised environmental and quality management systems such as ISO 14001, ISO 9001 and EMAS (Eco audit and management system). ↗

EN-30 Environmental capital expenditure FY2013  
US\$m



### 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 delivers the following environmental benefits: mill odour and effluent reduced; improved efficiencies from new equipment mean burning 61,000tpa less coal which equates to 120,000tpa fewer CO<sub>2</sub> emissions.



# Sustainability structures — a way of life



**At each of our operations and own plantation forests, environmental legal compliance and other specific company targets are monitored. Appropriate action is taken to improve or mitigate identified environmental risks.**

## Clusters

There are 11 internal technical clusters comprised of experts in various fields who are focused on:

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

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

Key emissions parameters are used as management performance indicators

## Central coordination

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

## E4 Cluster

Based on the premise of *measure, monitor, manage and mitigate*, we can anticipate trends by many years. The E4 Cluster measures greenhouse gas (GHG) emissions, energy-use, energy-costs, and 43 other key energy and environmental parameters (gaseous emissions, solid waste, water). The impetus for this came about from rising energy prices, interest in climate change, increasing the use of renewable energy, reduction in emissions and improvement in effluent quality. Key parameters are used as management key performance indicators (KPIs).

## A way of life

Our sustainability structures play a key role in making sustainability a way of life by allocating responsibilities, setting targets and reviewing progress. To achieve our Planet targets, technical support is provided by the mill 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 are:

- Fibre supply issues
- Disease, fires and biofuel-related risks
- Carbon taxes, even though over 50% of our energy is renewable and biofuel-based
- 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 bio-based products
- The opportunity to increase renewable energy use
- The opportunity to produce lighter-weight products which will meet customers' needs to reduce their own carbon footprints
- 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 with global standards

## Charter commitments

We ensure compliance with our Sustainability Charter commitments 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 and risks associated with 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.

## External benchmarks

In addition to internal standards, we use external benchmarks to monitor environmental performance and ensure compliance with best practice.

In terms of energy, for example, we use best practice energy consumptions indicated by:

- TAPPI** Technical Association of Pulp and Paper Industries in the United States 
- PAPTAC** The Pulp and Paper Technical Association of Canada 
- CEPI** Confederation of European Paper Industries. 

## External management standards and systems

External management standards — audited by external auditors — ensure that our environmental and quality performance is monitored and that our operations comply with global best practice.

- ISO 14001** Environmental management systems
- ISO 50001** Energy management systems
- ISO 9001** Quality management systems
- EMAS** Eco audit and management system.

Sappi  
Sustainability Charter

Sappi  
Environmental Policy

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

We use external benchmarks to monitor environmental performance and ensure compliance with best practice



# Chain-of-custody certification

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

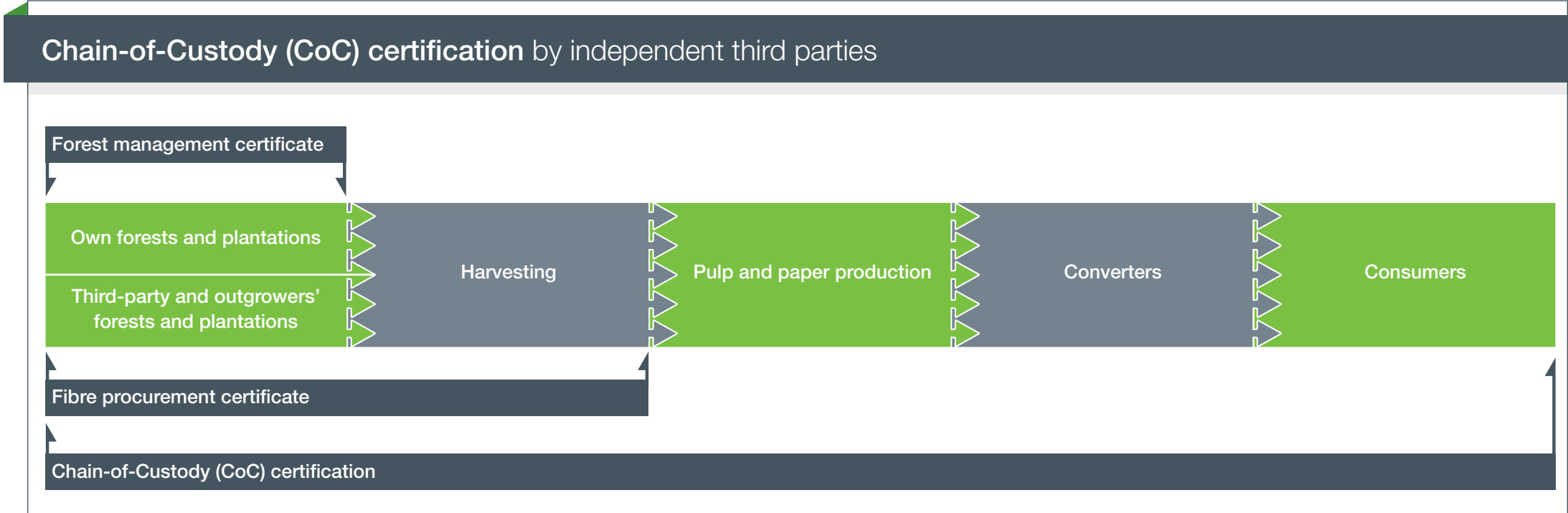
For forest-based industries like ours, certifying the chain-of-custody means verifying that the wood, used at each stage of the production process, originated from a forest or plantation certified as being sustainably managed.

CoC is only valid if each link in the chain is checked. Once a link in the chain is broken, 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 originating 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





# Our certification and management standards



**Destruction of the world’s endangered tropical forests is impacting negatively on biodiversity and climate change. It’s estimated that emissions resulting from deforestation and forest degradation contribute as much as 17-20% to annual global greenhouse gas emissions. Against this backdrop, some consumers are hesitant about using paper and paper packaging.**

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

and that social aspects such as indigenous people’s rights have been taken into consideration.

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

- 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 PEFC™, FSC® and SFI® and have achieved certification from each of these independent, third-party organisations at our manufacturing sites. All our own and leased forest plantations in South Africa are FSC™ certified. By achieving SFI® and PEFC™ Chain-of-Custody (CoC) certifications in addition to FSC™, we are increasing the likelihood that we will be able to offer our products as certified to third-party standards.

	Woodfibre	Mill certification
Europe	Our certified fibre share is 71.4% PEFC™ and FSC®.	<p>All mills are ISO 9001, ISO 14001, OHSAS 18001 and EMAS (Eco Management and Audit System) certified.</p> <p>In 2007, before the acquisition of the M-real mills, we 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). Of the mills acquired from M-real in 2009, Stockstadt Mill was also included into the group certification while Kirkniemi Mill continued with its independent PEFC™ CoC certification.</p> <p>Alfeld, Ehingen, Gratkorn, Kirkniemi, Nijmegen and Stockstadt Mills’ energy management systems are certified to the ISO 50001 standard.</p>
North America	58.7% of our woodfibre is procured from landowners who participate in either the SFI® or FSC® programmes.	<p>Somerset, Westbrook and Cloquet Mills are triple Chain-of-Custody (CoC) certified; to the SFI®, FSC® and PEFC™ standards.</p> <p>Our wood procurement system is SFI® fibre sourcing standard certified.</p> <p>Somerset, Cloquet and Westbrook Mills are ISO 14001 and ISO 9001 certified.</p>
Southern Africa	<p>All the wood grown on our own, leased or managed land is FSC™ certified.</p> <p>Approximately 86% of the wood supplied to us is FSC™ certified.</p>	<p>Enstra, Ngodwana, Saiccor, Stanger and Tugela Mills are FSC™ CoC certified.</p> <p>All pulp and paper mills are ISO 9001 and ISO 14001 certified.</p>


# Promoting transparency

## 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

We provide information on our environmental performance to a wide range of stakeholders, and participate in both the **Carbon Disclosure and Forest Footprint Disclosure Projects**. 

### CDP — Carbon Disclosure Project

The CDP aims to drive sustainable economies, by encouraging companies to measure their carbon emissions as the first step towards mitigating those emissions. The CDP's reporter tools enable companies to benchmark themselves; go beyond reporting and explore ways of integrating carbon, energy and water management into their business strategies. The CDP also provides information to environmentally conscious investors. 

### FFDP — Forest Footprint Disclosure Project

Managed by the CDP, the FFDP is a benchmarking tool that enables companies and investors to recognise the importance of forest ecosystems. The FFDP gives companies the opportunity to disclose their exposure to risks and their commitment to mitigate impacts their own and their supply networks' activities may have on forest ecosystems. 

We publish a series of technical brochures on our website and provide our customers with information about the environmental aspects of our fibre sourcing and production processes.


### Paper Profiles

In **Europe** and **South Africa** we publish Paper Profiles and information sheets for our papers. These provide details about:

- The composition of our papers
- Key environmental parameters related to our pulp and paper production processes
- Our environmental management systems
- Woodfibre sourcing policies.

### EPAT and eQ

In **North America**, we use GreenBlue's Environmental Performance Assessment Tool (EPAT) which enables buyers to evaluate our environmental performance on a mill by mill basis.

Our web-based eQ tool allows users to generate a customised product statement that summarises the environmental benefits of choosing our papers for a print job. 

## Case study

### Working with landowners

Although we do not own any forestland in North America, we do provide active forest management services for landowners within our mills' procurement zones.

Our wood procurement group is staffed with licensed foresters. Their in-depth knowledge enables them to take an active and important role that extends well beyond procurement and certification efforts.

As of 01 July 2009, our Sustainable Forestry Programme became certified as Forest Stewardship Council® (FSC®) Group Managers under the FSC® Small and Low Intensity Managed Forests (SLIMF) certificate. This initiative is designed to help small and private landowners access to and retain FSC® forest management certification on smaller tracts of land. 

Our foresters and other employees are involved in multiple activities ranging from local community outreach to participation in state and national advisory boards.

We have a strong commitment to research activities aimed at improving forest practices.

# Promoting transparency — reporting on our carbon footprint

## Somerset Mill

Kraft pulp carbon footprint

**0.77** kg of

**CO<sub>2</sub>**

per kilogram of pulp

**3,080** tons

**CO<sub>2</sub>**

e/per annum  
for business travel in South Africa (flights, car hire and hotel accommodation)

**Through our participation in the Carbon Disclosure Project (CDP), we publicly disclose our carbon emissions every year.**

We provide Scope 1 (direct) and Scope 2 (indirect) emissions information for our mills, regions and the company as a whole to the CDP.


### Europe

In addition to Scope 1 and Scope 2 we also monitor our Scope 3 emissions and calculate emissions according to the standard developed by the Environmental Working Group of EuroGraph.

### North America

In 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 our reporting to date which has been limited to 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) and purchased pulps. This analysis revealed that our mill generates kraft pulp with a footprint of 0.77kg of CO<sub>2</sub> per kilogram of pulp, which is lower than the reported industry average for kraft pulp.

A comprehensive description of the methodology and results is available online through our eQ Insights whitepaper series. 

### South Africa

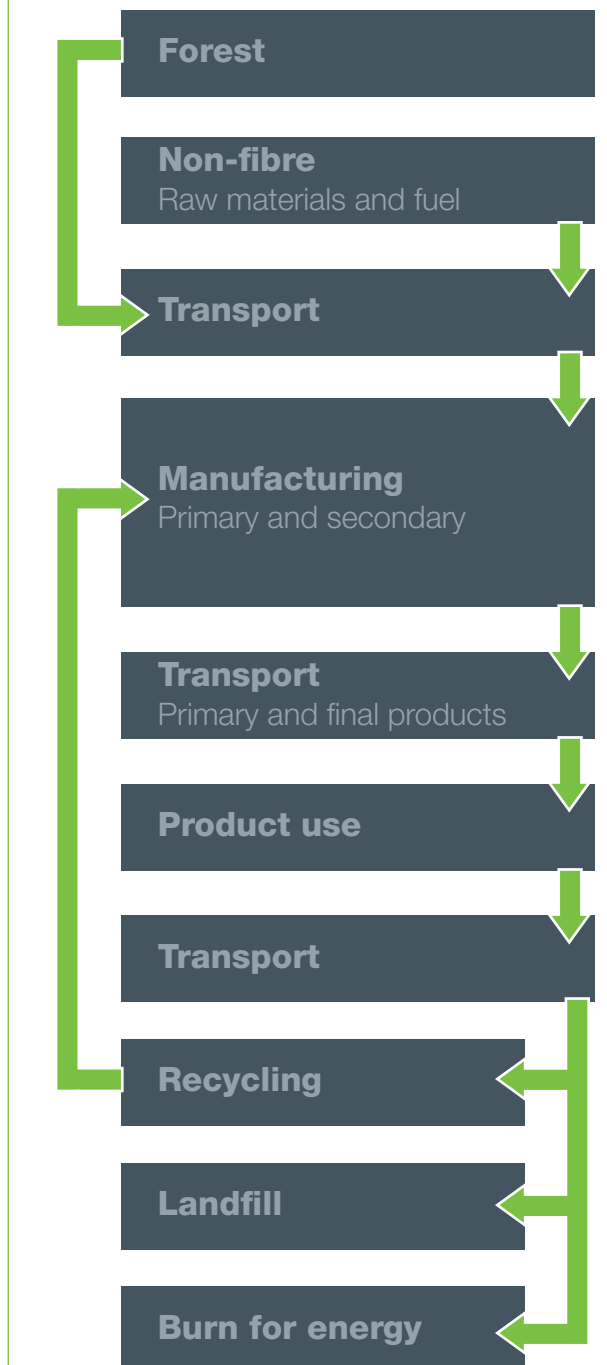
In South Africa, we use the Forest Industry Carbon Assessment Tool (FICAT). This comprehensive methodology was co-developed by the National Council for Air and Stream Improvement (NCASI) and the Confederation for European Paper Industries (CEPI).


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.

## CEPI 10 Toes

T



 Mouse over this icon to learn about each of the Toes for this part of our process

 Show all the Toes at once



# Sustainable fibre supply

**60%**  
improvement  
in South African  
eucalypt plantation  
yield over 15 years

**8%**  
improvement  
in Southern African  
pine plantation yield  
since first rotation

**561,000**<sub>ha</sub>  
Land owned,  
managed or  
leased in  
Southern Africa

**Ensuring a sustainable fibre supply is a key priority for our business; woodfibre, together with energy and water, is our most important production process input.**

In Europe and North America we source woodfibre from sustainably managed natural forests and, in South Africa, from own, leased and managed plantations and from other growers in the region.

## Europe

We do not own plantations or land in this region; woodfibre is mainly sourced from forests in the regions where our mills are located.

Softwood and hardwood pulp is sourced from Europe and the Americas. Wood 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 commercial forests or land. Wood 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 Alberta, Brunswick, Quebec and Ontario. The tree species used include maple, poplar, aspen, beech and birch (hardwoods) and spruce, pine and fir (softwoods).

## Sappi's position

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

## Southern Africa

We source woodfibre from softwood and hardwood plantation forests. The softwoods are all pines including *Pinus patula*, *P. elliottii*, *P. taeda* and some hybrids. The hardwoods are eucalypts (*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 561,000ha of land gives us a high degree of self-sufficiency in woodfibre. We can supply approximately 77% of our own fibre requirements.

Our **fibre supply initiatives** include:

- We are working with communities in the Eastern Cape to establish 30,000ha of plantations, supporting the government's goal of driving rural development in the process
- We are assisting with land reform projects through growing timber
- Project Grow, a small grower initiative — in existence for 30 years — currently provides us with approximately 238,000 tons of timber per annum, with a total value in excess of US\$13.3 million.

The volumes provided by Project Grow represent 7.5% of Sappi's hardwood woodfibre intake in South Africa.

We are **mitigating fire risks** using an integrated Fire Risk Management System comprising a comprehensive risk assessment, monthly compliance checks for monitoring, management procedures, standards, and general back-up information. We have also increased community participation in fire prevention activities.

## Mitigating climate change risk

We are mitigating the risk of climate change in respect of our fibre supply through our tree improvement programmes:

- Over 15 years, our research efforts have resulted in a 60% improvement in South African eucalypt plantation yield
- In our Usutu pine plantations we have maintained sample plots to allow comparison of four successive rotations of pine since the first rotation — planted in the 1950s. The latest measurements taken in 2011 indicate an 8% yield improvement.

# Sustainable fibre supply — tree improvement



**Our tree improvement programmes in South Africa are focused on ensuring 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 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 enables us 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*.

Hybrids contribute to  
maintaining and improving  
the health and productivity  
of our plantations

# Reducing energy usage and mitigating climate change



**Reductions  
over five years**  
**20.3%**  
in specific  
**purchased energy**

**12.2%**  
in specific  
**Scope 1 emissions**

**28.4%**  
in specific  
**Scope 2 emissions**

## Specific

The term **specific** is used as a comparative standardised reference; in this report defined as 'per air dry ton of saleable product'.

In September 2013, the IPCC released its fifth Assessment Report. The report confirms warming of the atmosphere is unequivocal and that human influence on climate systems is clear, concluding that more than half of the warming that had occurred since 1951 was due to the emissions of greenhouse gases. It also reiterates the need to urgently reduce greenhouse gas emissions.

We have long been aware of this imperative, having instituted a system for measuring greenhouse gases (GHGs), based on the premise of *measure, monitor, manage and mitigate* as far back as 2000.

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
- Using a high proportion of renewable energy, most of it self-generated in the form of black liquor
- Identifying further cogeneration opportunities.

Over time, 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 and has positive economic implications. As pulp and paper production is highly energy intensive, the cost and availability of energy is a key consideration for us.

Energy costs currently account for approximately 12% of operating costs. We mitigate this risk by: focusing on reducing specific purchased energy, increasing our use of renewable energy, improving the energy efficiency of our mills, using cogeneration and selling surplus electricity.

## About greenhouse gases

The US Environmental Protection Agency has found that the current and projected concentrations of the following six key GHGs in the atmosphere have an effect on the planet and threaten the public health and welfare of current and future generations: carbon dioxide (CO<sub>2</sub>), hydrofluorocarbons (HFCs), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), perfluorocarbons (PFCs) and sulphur hexafluoride (SF<sub>6</sub>).



### CO<sub>2</sub> capture

CO<sub>2</sub> is absorbed by the plantation trees which we use as a raw material, capturing carbon during photosynthesis. Most of the carbon remains sequestered in our products.

Carbon sequestration

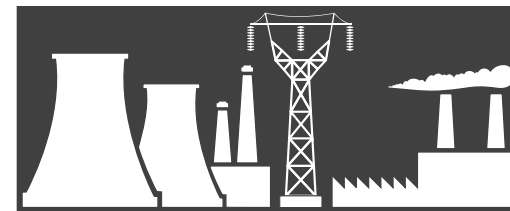


### Scope 1 direct emissions

Direct GHG emissions — from sources that are owned and controlled by the reporting entity. In our case, coal, production of process material, oil, renewable fuels and gas.

CO<sub>2</sub> emissions

CH<sub>4</sub> emissions



### Scope 2 indirect emissions

Indirect GHG emissions from consumption of purchased electricity, heat or steam.



### Scope 3 purchased goods and service emissions

GHG emissions from the extraction and production of purchased materials and fuels; transport-related activities (employee commuting, business travel, and transport of goods); outsourced activities; use of sold products; end-of-life treatment of sold products; and waste.



# Mitigating and managing climate change



**We share the view that collectively, greenhouse gases (GHGs), most notably carbon dioxide (CO<sub>2</sub>), and methane (CH<sub>4</sub>), 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 reduce 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 releases 'new' CO<sub>2</sub> previously locked up in the earth's crust in the form of oil, gas or coal. When renewable energy like biomass is burned, the CO<sub>2</sub> released is equivalent to that which was bound from the atmosphere during the process of photosynthesis – so, no 'new' carbon is being introduced.

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 on an ongoing basis.

## Europe

According to the Food and Agriculture Organisation (State of Europe's Forests 2011), climate change could well alter the suitability of entire 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

Climate change affects ecosystems and creates the potential for the spread of pests and diseases. While it is not clear whether the spread of the emerald ash borer beetles is the result of climate change, this invasive species from China has killed millions of trees in Michigan, Indiana, Ohio and Illinois over the last decade. The presence of the beetles has been confirmed in Wisconsin, an area from which Cloquet Mill sources fibre.

The mill mixes in a small percentage of ash with aspen and maple to produce dissolving wood pulp, and also buys chips and slash to fuel the biomass boilers. Buying ash from the quarantined area in Wisconsin means we will now have to enter into a compliance agreement with the federal government. We already buy wood from several Wisconsin counties under a gypsy moth quarantine, another invasive pest.

We are monitoring the situation.

## 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 system should be growing. Consequently, to maximise the carbon mitigation effect, it makes sense to harvest mature trees, replant, and begin the cycle of carbon absorption all over again.

## 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<sub>2</sub>, 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 woodfibre in paper store carbon throughout

# Mitigating and managing climate change continued



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<sub>2</sub> continues as the new trees grow. Harvesting trees is balanced with re-growth.

In Southern Africa, we plant 1.2 trees for every tree harvested. In FY2013, between 33–37 million trees were planted, with an additional 12 million planted by outgrowers.

The wood we harvest accounts for 12.5 million tons of absorbed CO<sub>2</sub> — and more than eight million tons of oxygen released every year. This avoids emissions equivalent to burning 815,000 tons of coal. A significant amount of carbon is also captured within the roots — we do not account for this.

## 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 561,000ha 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 measured 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.

## Case study

### Shaw Research Centre

Our South African Forest Research department is based at the Shaw Research Centre, Howick, near 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.

### Risk and Vulnerability Atlas

The South African Risk and Vulnerability Atlas has this to say about climate change: “To date, little is known about how trees will respond to elevated atmospheric CO<sub>2</sub> 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.”



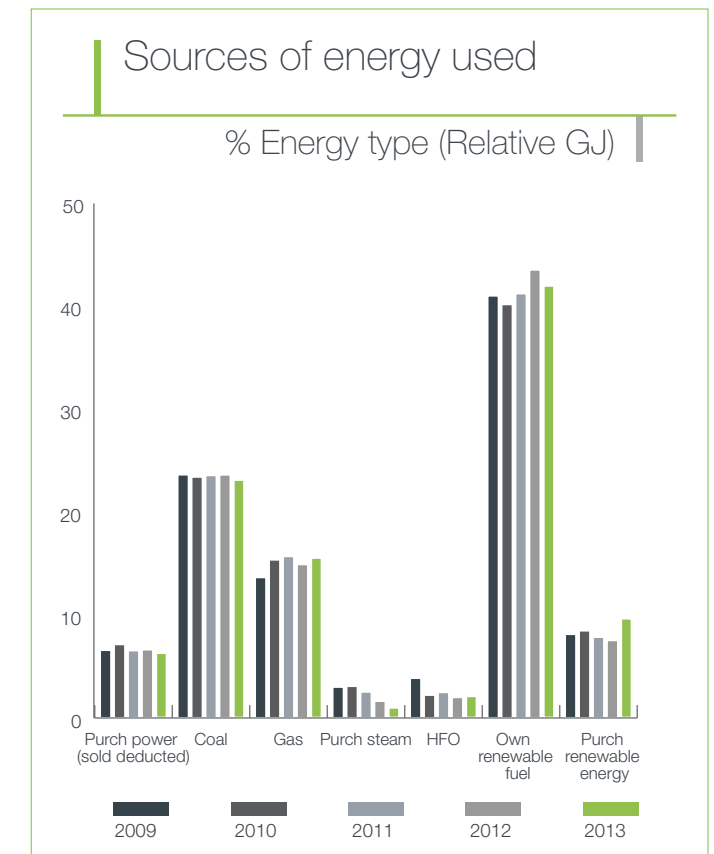
# Reducing specific purchased energy — increasing our use of renewable energy

Globally,  
**51.5%**  
of energy used  
in our mills is  
derived from  
**renewable  
sources**

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

## Black liquor

Together with coal, black liquor (resulting from concentrating process liquors) is our most significant fuel source. 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. It is also significant because black liquor is classified as a biofuel — we lower our fossil fuel emissions by using more black liquor.



## Sources of energy

The slight decline for coal is due to the decrease in coal used in SA due to previously mentioned curtailed operations at Tugela and Enstra Mill.

Own renewable energy includes black liquor, mill combustible sludges and hydro power generated by mill owned facilities.

Own renewable energy dropped slightly for 2013 due to the conversion at Cloquet and Ngodwana Mills to specialised cellulose resulting in less of their own renewable fuels (black liquor) being produced.

Reducing our dependence on fossil fuels lowers greenhouse gas emissions and helps to isolate our operations from fluctuations in energy prices — making us more profitable and sustainable



# Reducing specific purchased energy — increasing our use of renewable energy continued


## 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

## Roadmap to a bio-economy

The Confederation of European Paper Industries (CEPI) published a roadmap for moving towards a competitive low carbon bio-economy — an exploratory discussion document about the future of climate change policy.

The roadmap defines policies needed to reduce CO<sub>2</sub> emissions by 80% by 2050 while staying profitable and having the raw material to do so. We support the roadmap but believe we need to retain a level playing field with other regions in the world. The environmental standards in place throughout the European Union are already very high.

To achieve the 2050 targets envisaged by the roadmap, our European R&D team is participating in the TwoTeams Project, a cross-industry initiative. 

## Hydropower

Our Alfeld and Gratkorn Mills in Europe and our Cloquet and Westbrook Mills in North America generate power from their own hydro plants.


Case study

## Using biogas in Europe

The waste water at some of our mills in Europe goes through an anaerobic digestion process. The methane generated during this process is used to generate steam and power. Sludge generated in the waste water treatment process is dried and then, recycled, burnt or used as fertiliser. Alfeld, Eningen, Gratkorn, Lanaken and Stockstadt Mills generate their own biogas reducing our need for fossil fuels.

Case study

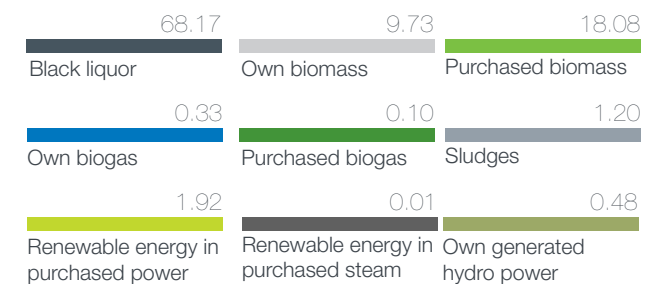
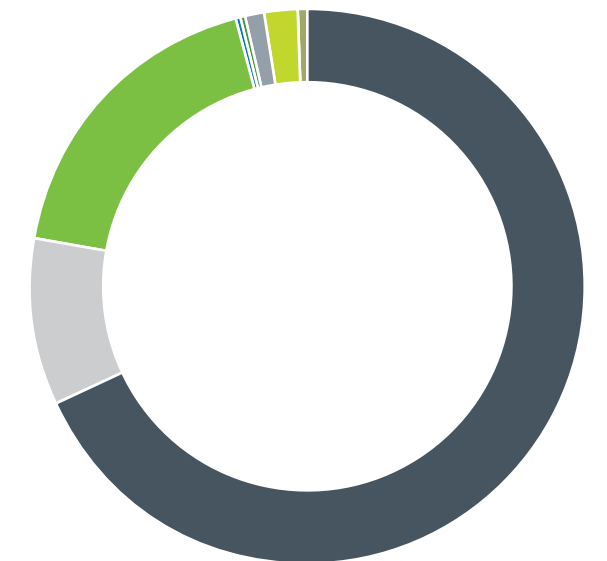
## Competitive advantage

In Sappi Fine Paper North America, use of renewable energy currently is over 80% — a significant competitive benefit not just in terms of costs, but also in terms of customers choosing papers with a lower environmental footprint. See our 2013 regional sustainability report for further details. 

## Global renewable energy breakdown

% type GJ-based

%



# Energy consumption and associated emissions

## EN-3

Direct energy consumption by primary energy source

## EN-16

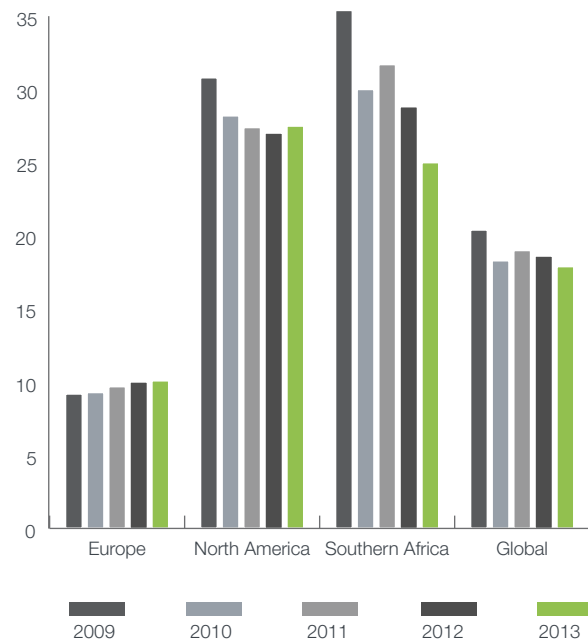
Total direct and indirect greenhouse gas emissions by weight

## GHGs

The graph for EN-3 direct specific energy (Scope 1) is accompanied by the equivalent EN-16 GHG emission graph

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

EN-3 Specific direct energy  
Specific energy of all fuels  
GJ/adt



### EN-3 Specific direct energy consumption

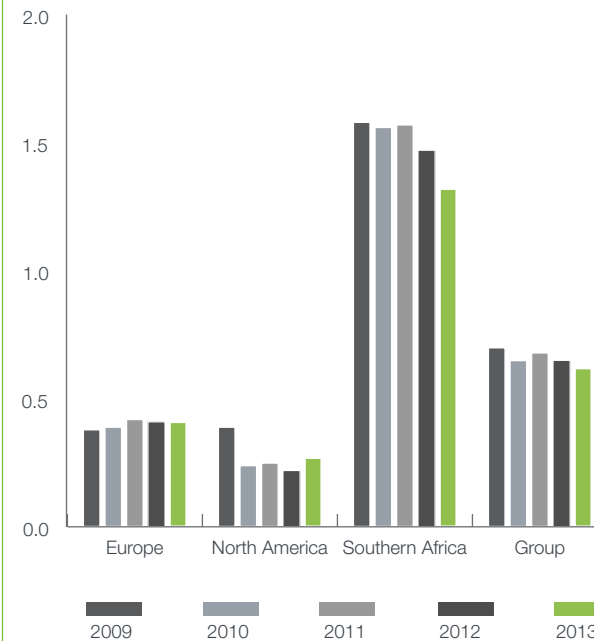
Data include purchased fuels and own fuels such as black liquor, sludges and bark from trees, consumed during pulping, but exclude the fuels used to produce any energy that is sold.

**Europe** Overall level maintained.

**North America** Somerset Mill increased production and initiated a number of energy saving initiatives.

**South Africa** Consumption decreased due to the cessation of pulping operations at Enstra Mill and curtailed operations at Tugela Mill. The downtime during the conversion period to dissolving wood pulp at Ngodwana Mill also resulted in reduced energy usage.

EN-16 Specific Scope 1 emissions  
From all fuels (fossil and renewable) scope 1  
tons CO<sub>2</sub> eq/adt



### EN-16 Specific Scope 1 emissions

Data includes specific emissions from all fuels combusted in terms of EN-3, but excludes those from renewable fuels (own and purchased) as from FY2012 as reporting was aligned with the requirements of the Carbon Disclosure Project which excludes renewable fuel emissions. Renewable fuels are included for the FY2009-FY2011 period.

## Case study

### Saving gas at Maastricht Mill

PM6 at Maastricht Mill produces woodfree coated paper and board in a basis weight range of 180-400g/m<sup>2</sup>. Since autumn 2012, the mill has been using the energy-efficient Voith qDry Pro concept for non-contact drying. Savings of approximately 50% were realised almost directly after start-up.

To avoid deposits forming on the turning rolls after the last applicator unit and the resulting colour defects on the paper, the turning rolls were replaced with an HCB-Turn. This allows contactless web turning, while ensuring energy-efficient hot air drying of the coated web at the same time. As a result of the rebuild, broke has been reduced. The HCB-Turn also allows higher final moisture while maintaining coating quality.

The existing infrared dryers were modified and thermally connected to the HCB dryer; so the HCB-Turn is now heated entirely by the waste heat of the infrared dryers.

# Energy consumption and associated emissions continued

## EN-4

Indirect energy consumption  
by primary energy source

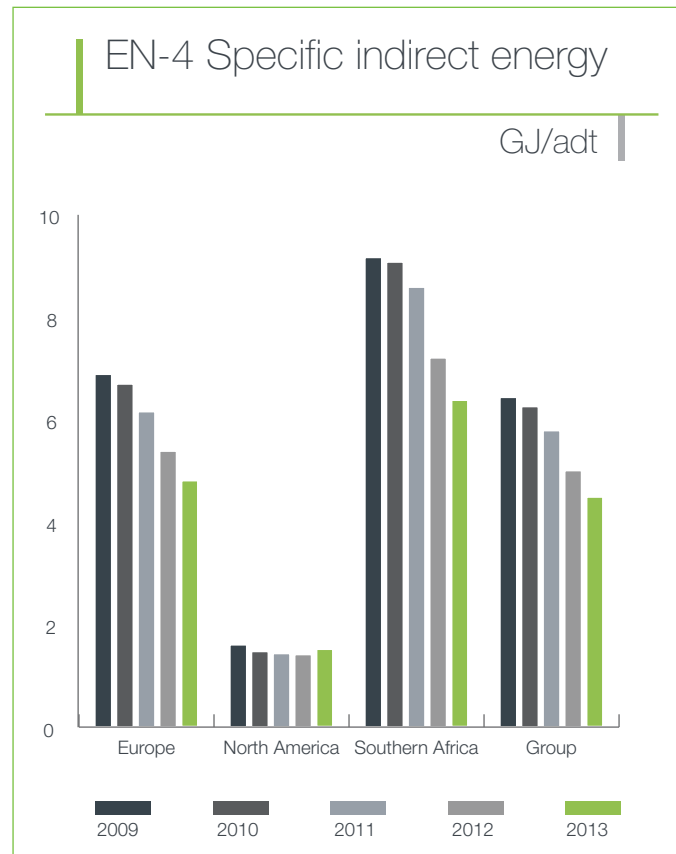
## EN-16

Total direct and indirect  
greenhouse gas emissions  
by weight

## GHGs

The graph for EN-4  
indirect energy (Scope 2)  
is accompanied by the  
equivalent EN-16 GHG  
emission graph.

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



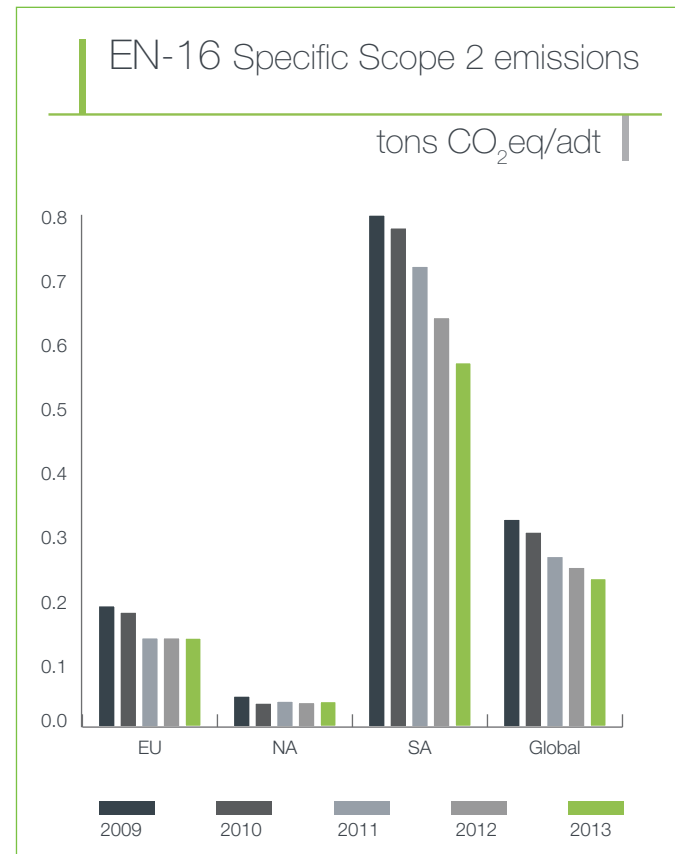
### EN-4 Specific indirect energy

EN-4 includes energy from fuels (including non-emitting sources such as nuclear, hydroelectric, wind and solar power), used to produce purchased power, heat and steam.

**Europe** Maastricht and Lanaken Mills increased their own power generation. Pulp production at Alfeld Mill reduced due to the rebuild of PM2.

**North America** Increased purchased power and reduced power generation driven by the Cloquet pulp mill conversion and low purchased electrical cost.

**South Africa** Decreased due to curtailed operations at Tugela Mill, the closure of pulping operations at Enstra Mill, extensive exports of power to the national grid from Ngodwana Mill and downtime during the mill's conversion to dissolving wood pulp production.



### EN-16 Specific Scope 2 emissions

Scope 2 emissions relate directly to those produced by the fuels combusted in the energy in EN-4.

## Case study

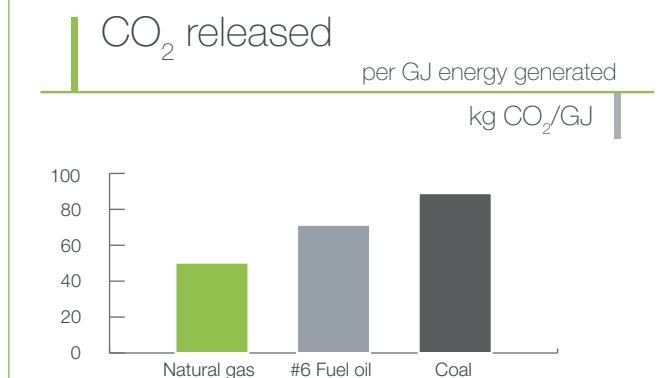
### Reducing CO<sub>2</sub> emissions

During April 2013, we announced an agreement with Summit Natural Gas to establish a natural gas supply to our Somerset Mill in Skowhegan, Maine. Summit's US\$350 million investment in the 88km pipeline and related infrastructure is one of the largest gas distribution projects of its kind in the recent history of Maine.

In turn, we will be investing in changes to the pulp mill's lime kiln and one of our hog-fuel boilers to take advantage of the new fuel source.

Displacing the #6 fuel oil we currently use, with natural gas, reduces the mill's CO<sub>2</sub> emissions. On an equivalent energy basis, CO<sub>2</sub> emissions from natural gas are 30% lower than from #6 fuel oil.

The pipeline will also provide gas to 17 communities, creating the opportunity for significant savings in energy costs with associated reductions in CO<sub>2</sub> emissions.





# Optimising energy-use efficiency

## 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

**Optimising energy-use efficiency has both financial and environmental benefits, and is an important aspect of our over energy-use profile.**

Through improving our energy-use efficiency, we can reduce our dependence on third-party supplied energy from non-renewable sources.

### 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 to dry paper. Our CHP units are twice as energy efficient as conventional power plants.

### North America

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

### South Africa

Saiccor Mill's Project 'Amakhulu', expanded capacity from 600,000tpa to 800,000tpa of chemical cellulose. The expansion 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. Renewable energy use increased from 35% (2008) to 58% (2013).

## Streamlining global transport

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

### Europe

We transport around four million tons of finished paper every year. In this region, we have been working on moving raw materials 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 — 45% of all our finished paper is transported by rail or canal; both comparatively energy efficient means of transport.

In Europe, the transport of our raw materials is covered in our Scope 3 assessment of our carbon footprint.

### North America

We utilise third-party logistic providers for our outbound shipment planning. Product from our new specialised cellulose business is transported by rail to the west coast and then by ocean vessel to customers abroad. We are a certified SmartWay® Transport Partner, a collaboration between the US Environmental Protection Agency (EPA) and

## Combined heat and power plants

Most conventional power generation plants are based on burning a fuel to produce steam. The pressure of the steam turns the turbines, generating power. Cogeneration, or combined heat and power (CHP) makes use of more than one form of energy provided by a combustion source — most commonly excess heat, usually in the form of relatively low-temperature steam exhausted from the power generation turbines. This steam is suitable for a wide range of heating applications and effectively displaces the combustion of carbon-based fuels. We have cogeneration power plants at 14 of our mills.

the freight transportation industry. SmartWay® provides guidance and support to freight carriers, logistic services providers, and shippers to continuously improve performance resulting in reduced emissions and cost savings.

### 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.

# 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.

## Generating power and steam

### 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.

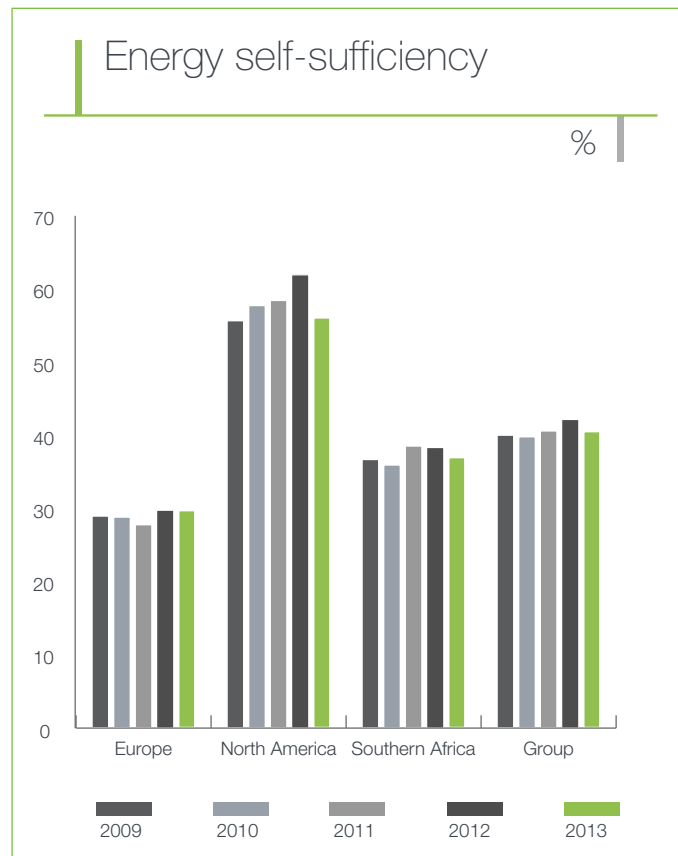
# Energy self-sufficiency

## EN-5

Energy saved due to conservation and efficiency improvements

**Direct energy**  
**12%**  
**saving**

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



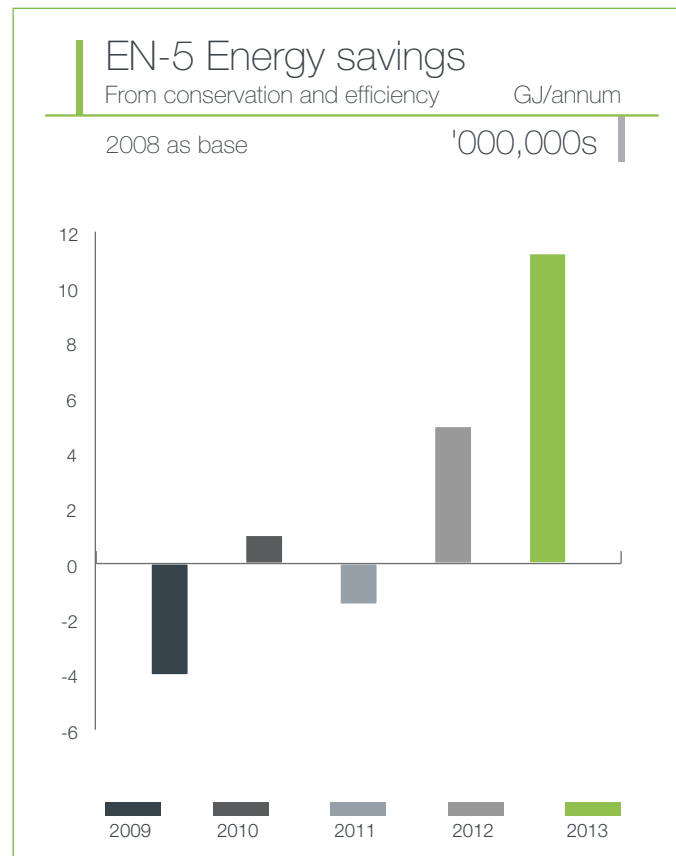
### Energy self-sufficiency

Energy self-sufficiency is improved when energy is generated internally through the use of biofuels like black liquor, sludges and own bark, negating the need to purchase third-party fossil fuel derived energy.

**Europe** Performance was steady.

**North America** The reduction is attributed to an extended outage in the Cloquet pulp mill and lower electricity costs.

**South Africa** The reduction is attributed to Tugela Mill using less renewable fuels following curtailed pulping operations.



### EN-5 Energy savings

This information is not effectively displayed by region due to mill purchases and closures and is best viewed globally.

Savings have been compared using 2008 as a basis.

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

In 2012 and 2013, the process restructuring and changes at Enstra, Tugela and Ngodwana Mill also contributed to saving energy.

## Case study

### Cogeneration at Gratkorn Mill

Since July 2007, Gratkorn Mill in Europe has operated a Combined Heat and Power Generation (CHP) plant, replacing coal with natural gas. Because of the efficiency improvement, fossil-based CO<sub>2</sub> emissions have decreased by nearly 5%. The CHP plant can combust several fuels in the fluidised bed boiler. This means fuel-use can be optimised to accommodate fuel price variations. Natural gas is considered to be the cleanest and most efficient of the three major fossil fuels (coal, crude oil and natural gas).

## 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 Green-e certified as on-site generated renewable energy. 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.





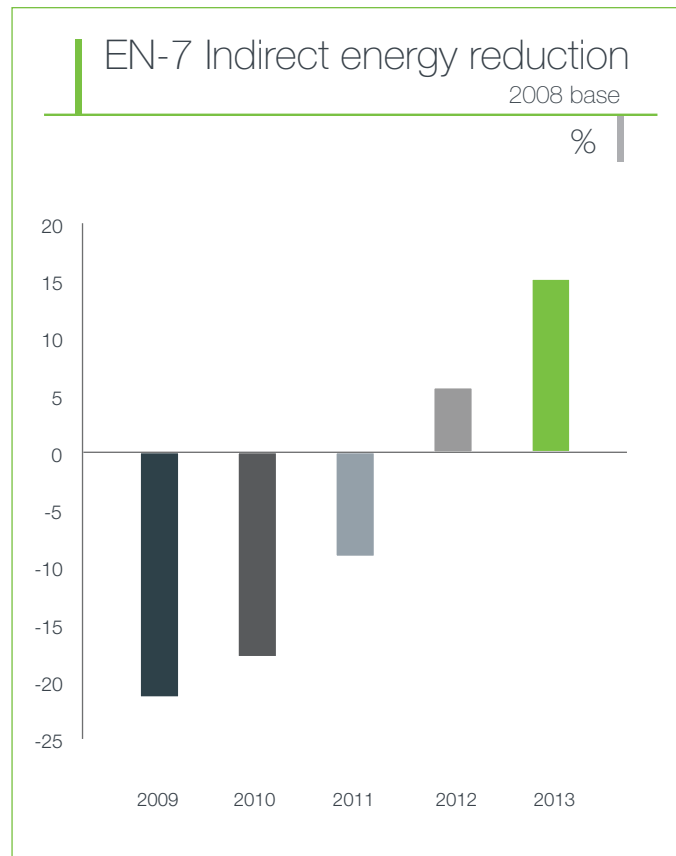
# Energy self-sufficiency — consumption reduction and associated emissions

## EN-7

Initiatives to reduce indirect energy consumption and reductions achieved

## EN-18

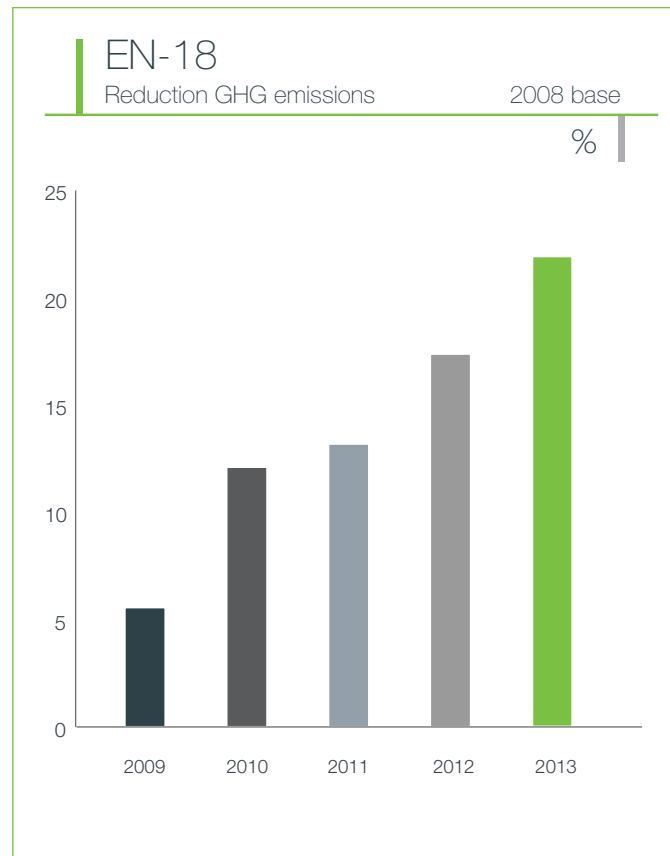
Initiatives to reduce greenhouse gas emissions and reductions achieved



### EN-7 Indirect energy reduction

There was a big increase (21.4% deterioration) in specific indirect energy consumption from 2008 to 2009 largely attributed to the acquisition of four mills. The proportion of purchased power and steam in the overall energy mix in these mills is significantly higher than the group's prior to the acquisition, resulting in a significant increase (deterioration) in indirect energy consumption from 2008 to 2009. Subsequent years showed significant improvement, particularly from 2012 to 2013.

Because of the nature of our energy reduction initiatives, it is not possible to distinguish between renewable and indirect energy reductions. For example, improved black liquor recovery increases the use of renewable energy. Because this energy is used to produce more power from steam, the operations purchase less power, ie a reduction in indirect energy.



### EN-18 Indirect energy GHG reduction

This graph shows the effect of energy reduction initiatives on Scope 1 and Scope 2 emissions from fossil fuels. Scope 3 emissions, which we do not measure to any great extent across the group yet, are not included.

The reduction in Scope 1 fossil emissions was the result of:

- Increasing the use of renewable fuels such as black liquor and sludges
- Increasing purchases of biomass for fuel
- Reduced purchases of fossil fuel.

These initiatives reduced power and steam purchases. As these forms of energy largely originate from fossil fuel combustion, Scope 2 fossil fuel emissions were reduced.

## Case study

### Lignin conversion technologies

Our Technology Centre in Pretoria is examining various conversion technologies for lignin. These include the gasification of lignin to give producer gas.

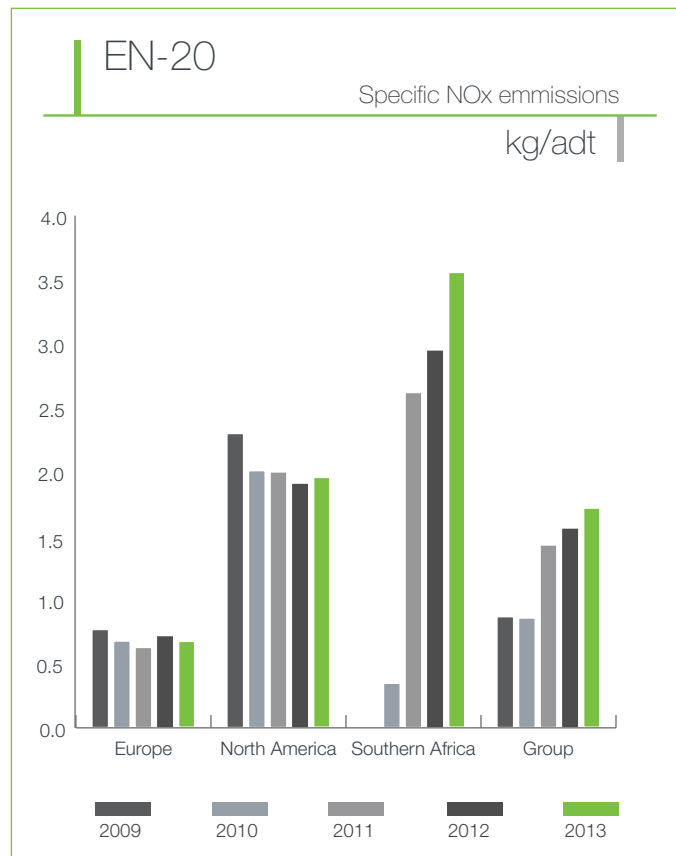
The torrefaction of lignin produces biochar, while pyrolysis of lignin produces bio-oil, biochar and producer gas. In collaboration with the Chemical Engineering Department at the University of Pretoria, the Technology Centre has built and run a bench scale dual-stage pyrolysis reactor. Among other things, this has allowed the construction of a mass balance of raw materials and end-products as well as a thorough evaluation of the resulting syngas, biochar and bio-oil. The next step is to improve on the design and then to scale up.

## Case study

### Galileo

The installation of a new diamond grit surface on the grinding stone at Kirkniemi Mill's pressurised groundwood mill reduced grinding energy-use by 30% or — 0.4MWh/t pulp. The investment also yielded a 30-50% production increase with less variation in pulp quality. Reducing rejects by 50% avoids associated refining energy-use.

## Other emissions



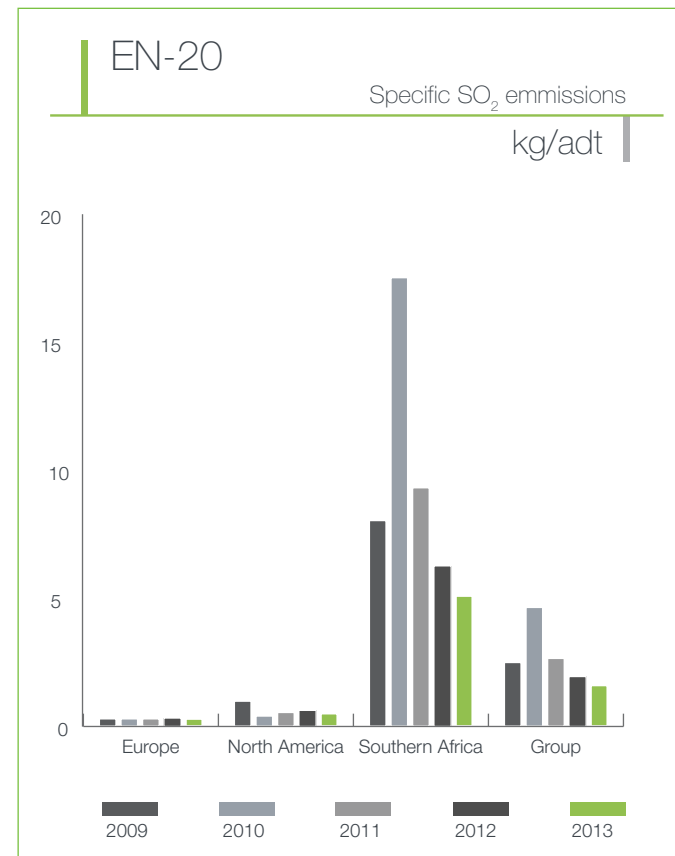
### EN-20 Nitrogen oxide emissions

Nitrogen oxide (NO<sub>x</sub>) formation in combustion processes (nitrogen in the air combines with oxygen in the air) is largely a function of temperature and fuel type. Higher temperatures produce more NO<sub>x</sub>. Fossil fuels typically combust at higher temperatures than renewable fuels.

**Europe** No significant change.

**North America** The increasing use of renewable fuels in recent years has been driving NO<sub>x</sub> emissions down. Emissions further reduced due to lower fuel combustion in the No 1 hog fuel boiler at Somerset Mill.

**South Africa** NO<sub>x</sub> emissions monitoring has only taken place at certain operations in recent years. Some mills do not have continuous NO<sub>x</sub> monitoring equipment, which means measurements are taken intermittently. This explains the wide variation of values in SA and these impact on the global NO<sub>x</sub> values.



### EN-20 Sulphur dioxide (SO<sub>2</sub>) emissions

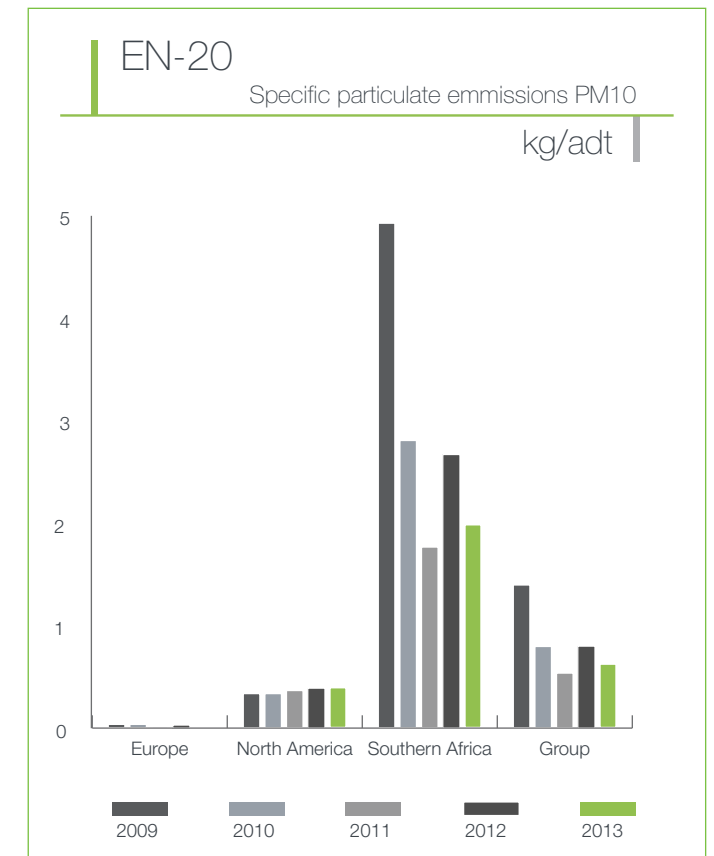
Sulphur dioxide emissions can be determined in two ways:

- Calculation based on the sulphur content of fuels
- Summation of continuous emission monitoring (CEM) equipment readings.

**Europe** All mills use CEM equipment. Only very small quantities of sulphur-containing fuels are combusted; most of the fuel is natural gas with low sulphur emissions.

**North America** All mills use CEM equipment. Somerset Mill reduced SO<sub>2</sub> emissions due to lower No 6 oil combustion in the paper mill. At Cloquet Mill the lower sulphidity in the pulping liquor as a result of the specialised cellulose conversion has reduced the emissions from combustion of non-condensable gas. Recovery boiler SO<sub>2</sub> emissions have reduced for the same reason.

**South Africa** Saiccor Mill uses CEM equipment; other mills in this region calculate SO<sub>2</sub> emissions.



### EN-20 Specific particulate emissions

**Europe** Particulate emissions are generally low as gas is the main fuel being used. Advanced emission control systems improve control.

**North America** Emissions were steady.

**South Africa** Enstra and Tugela Mills combusted less coal due to curtailed operations. Particulate emissions in South Africa are much higher than the other regions because coal is the predominant fuel combusted in the mill boilers.

# Managing water use

## EN-8

Total water withdrawal by source

## EN-9

Water sources significantly affected by withdrawal of water

## EN-10

Percentage and total volume of water recycled and reused

## EN-21

Total water discharged by quality and destination

**4%**  
**Reduction**  
in specific water usage over the past five years

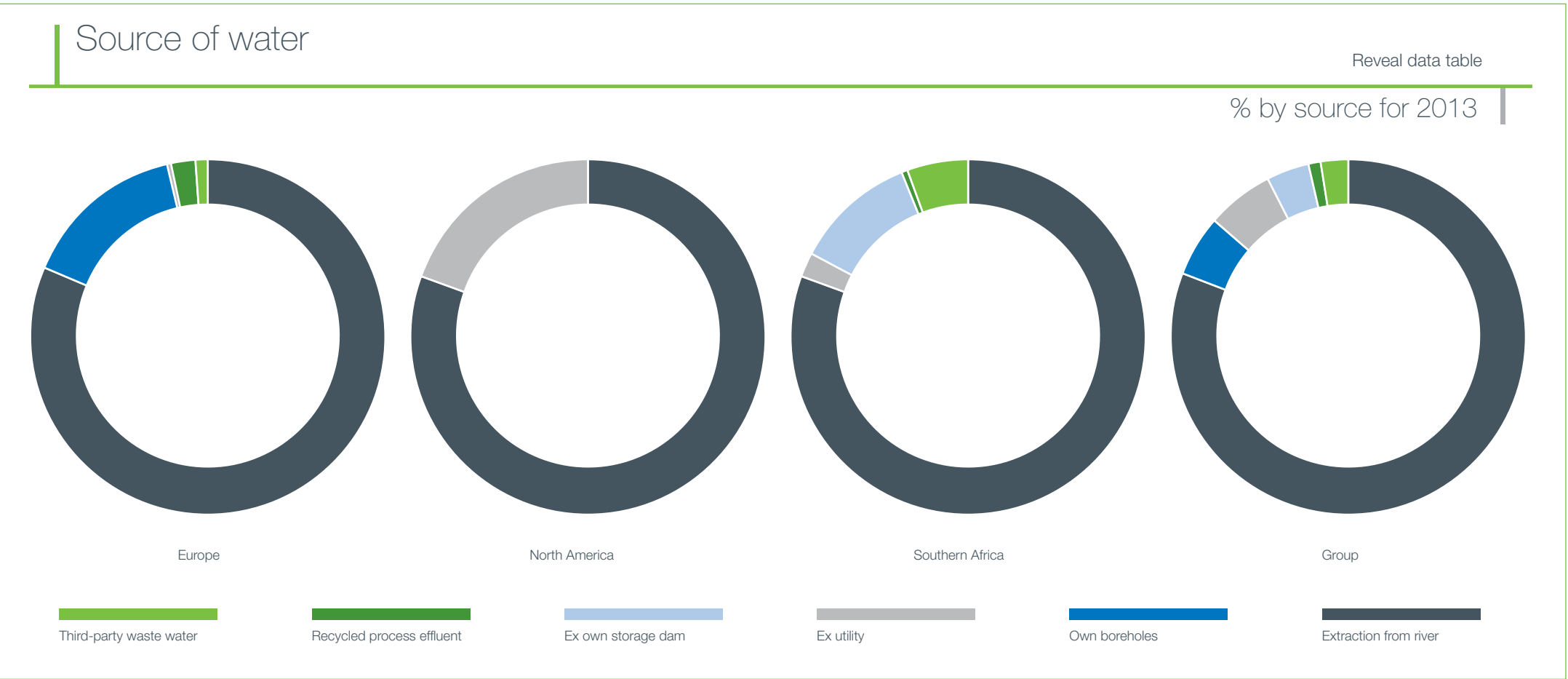
Water issues have been identified as one of the most serious sustainability challenges facing the Planet, partly due to the impacts of climate change. Increasing population, urbanisation, per capita demand, and pollution damage to supplies, will put even greater pressure on this limited resource going forward.

Globally, 89.7% 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; and 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 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.





# Managing water use continued

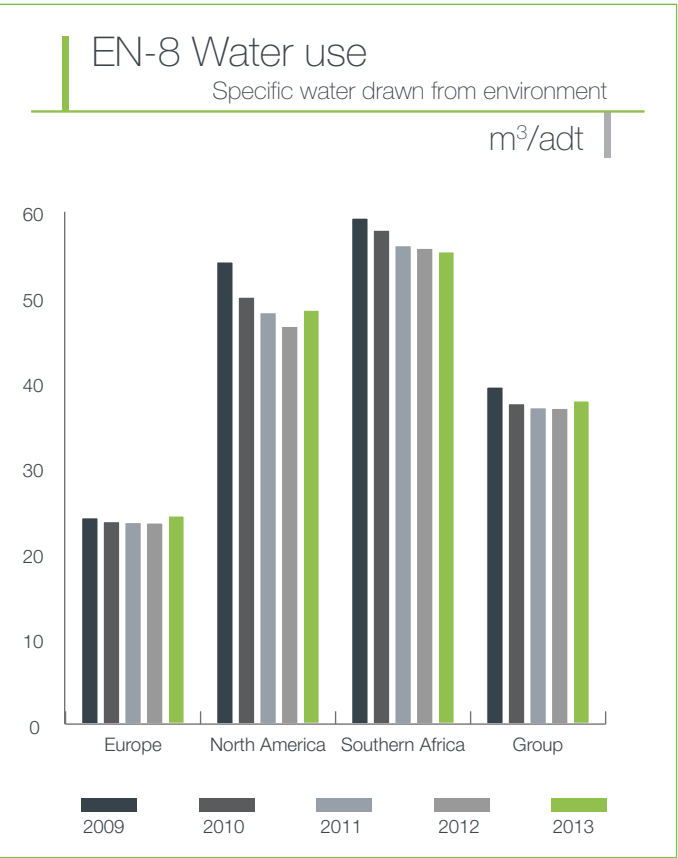
Globally,  
**89.7%**  
of the **process water** we use is returned **to the environment**, after having been recycled many times, cleaned and treated

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.

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

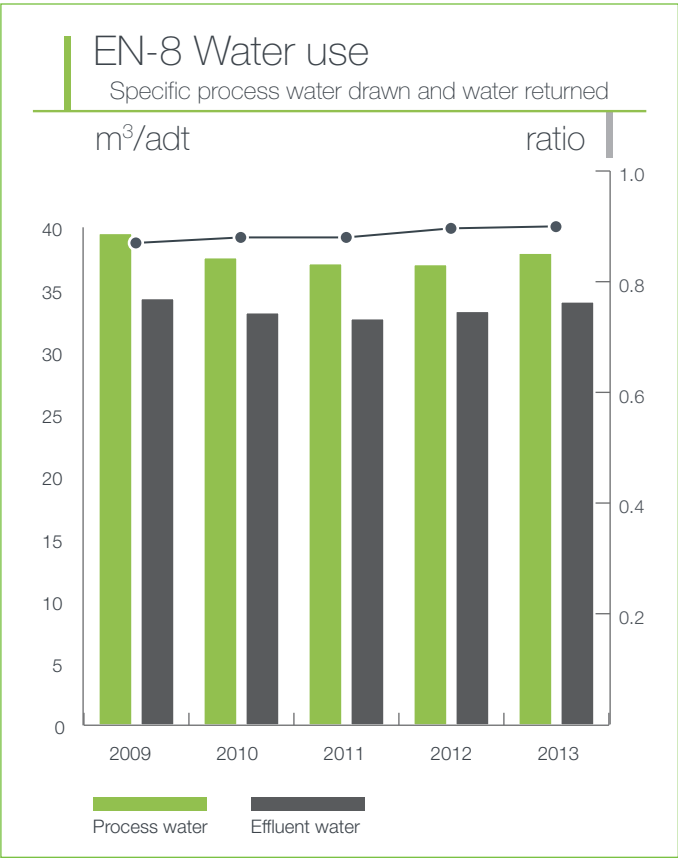
## Using recycled water

In 2013 in South Africa, our Enstra and Cape Kraft Mills used 63% and 56% recycled water respectively.



EN-8 Specific water drawn from the environment

**Europe** No significant change.  
**North America** The slight increase is attributable to downtime during the conversion to dissolving wood pulp at the Cloquet Mill.  
**South Africa** No significant change.



Ratio of water returned to process water drawn

The ratio of water returned to process water drawn is an important parameter on how well water is used in operations. The higher this ratio (the closer to 1), the less water is consumed.

# Managing effluent discharge



## 4%

### Reduction

in specific water usage over the past five years



## 10.5%

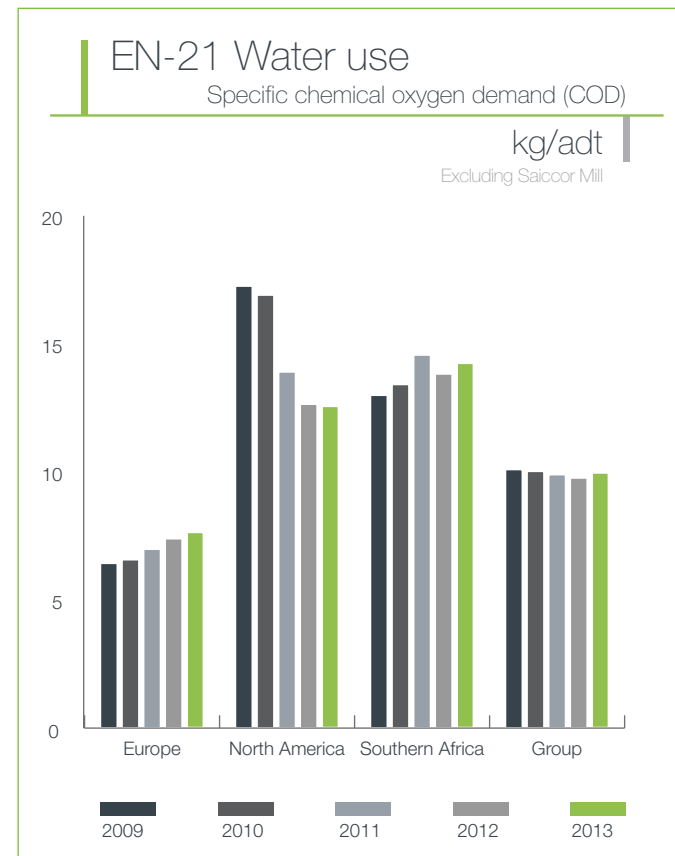
### decline

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

Water and effluent testing is conducted routinely at all mill sites. Water management is included in our operational environmental management plans, which are reviewed and updated annually.

### Improved effluent quality

Globally, chemical oxygen demand (COD) has reduced by 1.1% over the past five years, but total suspended solids (TSS) have increased by 7.8%. These figures exclude Saiccor Mill in South Africa.

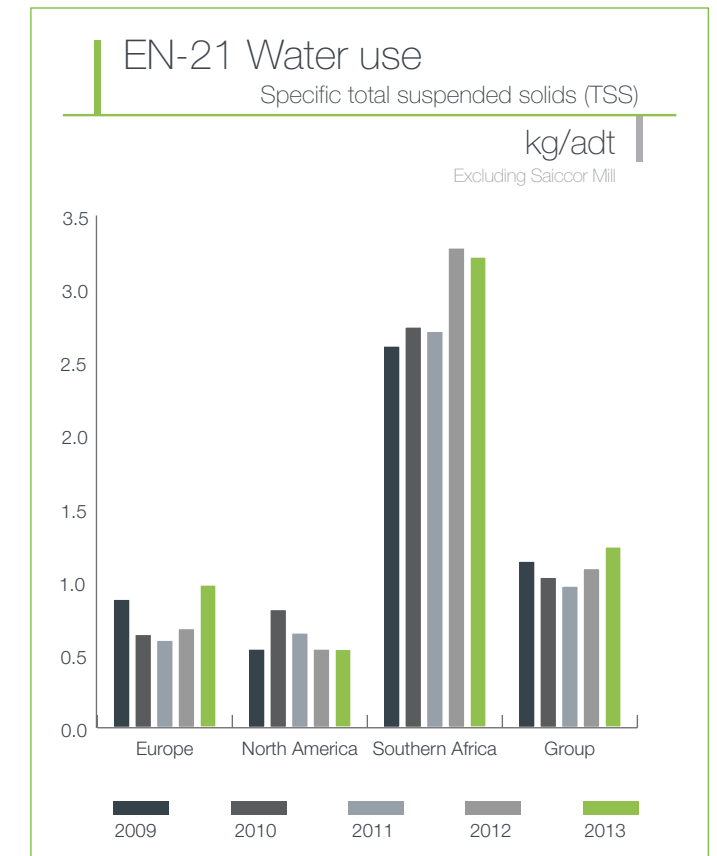


### EN-21 Specific chemical oxygen demand (COD)

**Europe** The increase is attributed to COD at Alfeld Mill going up due to an increased integration of own pulp and reduced paper production.

**North America** The reduction is attributed primarily to the Cloquet Mill conversion to dissolving wood pulp which significantly lowered COD in the effluent during the shutdown and since commissioning.

**South Africa** The reduction is attributed to a change in production at Tugela Mill to include more fluting which resulted in higher COD levels. This was compounded by aeration equipment failures at Stanger Mill.



### EN-21 Specific total suspended solids (TSS)

**Europe** Reduced efficiencies in the anaerobic sections of the effluent treatment systems at Alfeld and Lanaken Mills lead to increased suspended solids losses.

**North America** No significant change.

**South Africa** Although still high, TSS decreased slightly in 2013. Cape Kraft, Stanger and Tugela Mills were the main contributors. Cape Kraft commissioned a new centrifuge but more optimisation needs to be done. Stanger Mill had key effluent equipment failures. Tugela Mill's focus on TSS losses are starting to pay off.

# Managing water in our plantations



**Water quality**  
is monitored on an ongoing basis



Our plantations are **not irrigated**

There are two key issues regarding water-use in our Southern African plantations: **water quality and water quantity.**

**Water quality**

Water quality is monitored on an ongoing basis.

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

**Sediment loads**

Erosion is a natural process which 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) can lead to heavy sediment loads in streams and rivers which impact the quality of the water and the health of these ecosystems.

Our stringent management practices keep these sources of sediments in rivers and streams at acceptable levels.

We manage water quality by preventing runoff into streams and rivers through regulating drainage and minimising erosion. Our roads are planned and constructed to prevent erosion and ensure that water runoff does not flow directly 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.

**Pollution**

Water flowing from afforested catchments is largely unpolluted.

Silviculture activities in forestry plantations seldom use chemicals that cause pollution. Fertiliser is used once only in each rotation. We use only short-lived pesticides that have little or no impact on downstream ecosystems.


**Water quantity**

Our plantations require no irrigation at all, relying entirely on rainwater and groundwater.

Tree farming (plantation forestry) is the only agricultural activity classified as a streamflow reduction activity and accordingly, is subject to a water use licence.

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. ↗

**Water and eucalypts**

South Africa is a water stressed country and its water resources are becoming increasingly stressed due to an accelerated rate of development and changing weather patterns resulting in the scarcity of water resources. 

Eucalypts, the primary fibre source used in the production of dissolving wood pulp in South Africa, is more efficient at using water and capturing carbon (absorbing CO<sub>2</sub>) than most other commercial crops. Eucalypts are also more land-use efficient at capturing carbon than other crops. Carbon capture mitigates climate change by removing the greenhouse gas, CO<sub>2</sub>.

**Water-use efficiency — CO<sub>2</sub> absorption**

Rain-fed plant fibre (not irrigated)	Water Ton water required for growth/ton CO <sub>2</sub> absorbed	CO <sub>2</sub> Ton CO <sub>2</sub> 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



# Reducing solid waste and adding value

## EN-22

Total weight of waste by type and disposal method

## EN-23

Total number and volume of significant spills

There were no significant spills in the year under review

## EN-24

Weight of transported, imported, exported or treated waste deemed hazardous under the terms of the Basle Convention Annex I, II, III and VIII 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

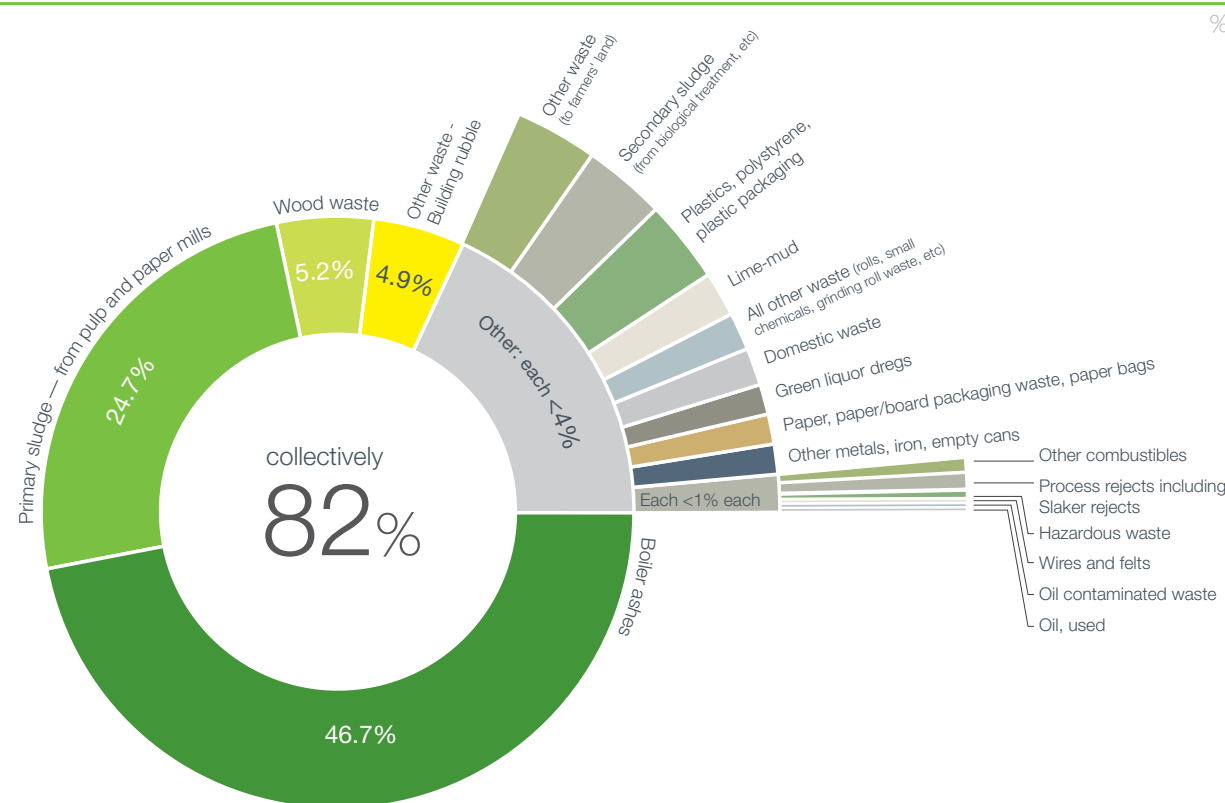
Globally, over the past five years, we have **reduced the solid waste sent to landfill by 33.4%. Focusing on minimising waste and adding value to by-products mitigates environmental impacts and generates additional revenue.**

We generate approximately 0.13t of solid waste per ton of product produced, 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. In North America, some of the waste products are put to good use; ash and lime-mud are used in land spread applications as a soil amendment.

From an environmental perspective, the least desirable disposal method for organic waste is discharge to landfill from where it can emit methane (a greenhouse gas with approximately 25 times the global warming potential of CO<sub>2</sub>) if not managed properly.

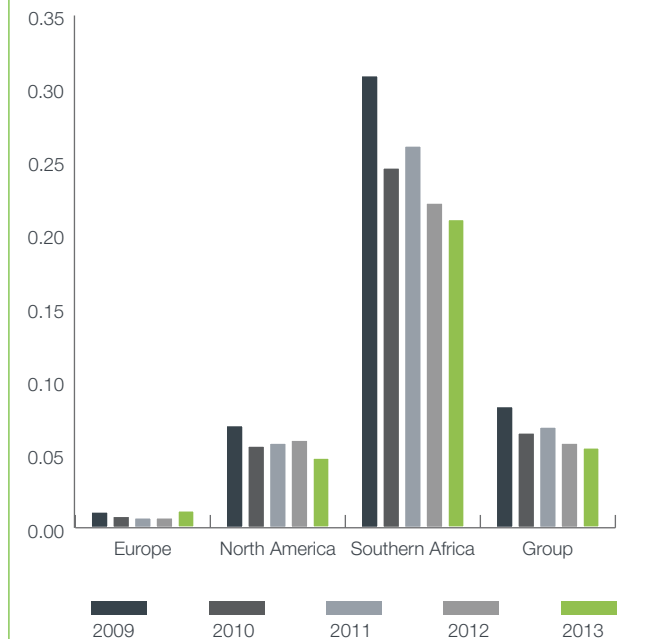
EN-22 Solid waste by type



EN-22 Specific landfill

On- and off-site

ton/adt



### EN-22 Specific landfill

There has been a gradual downward trend for the group over the last five years.

**Europe** Our mills either use their residues within operations (as a source of energy), or sell them to outside users for a variety of purposes. Performance in this region was stable.

**North America** Cloquet Mill maintained its continuous improvement in landfill performance. Somerset Mill reduced biomass consumption which resulted in less boiler ash and improved lime kiln throughput, which in turn means that lime-mud is reduced.

**South Africa** Specific landfill is higher than in the other regions because of the relatively large quantities of coal ash (generated by combusting coal) that is landfilled. Ngodwana Mill was the main contributor to the continuous positive downward trend as less waste was generated due to lower volumes produced.

# Reducing solid waste and adding value continued

Over five years, solid waste to landfill has **reduced** by **33.4%**

## Solid waste as fuel

A large portion of the sludge generated at our North American and European mills is used as a fuel.

## Solid waste as new products

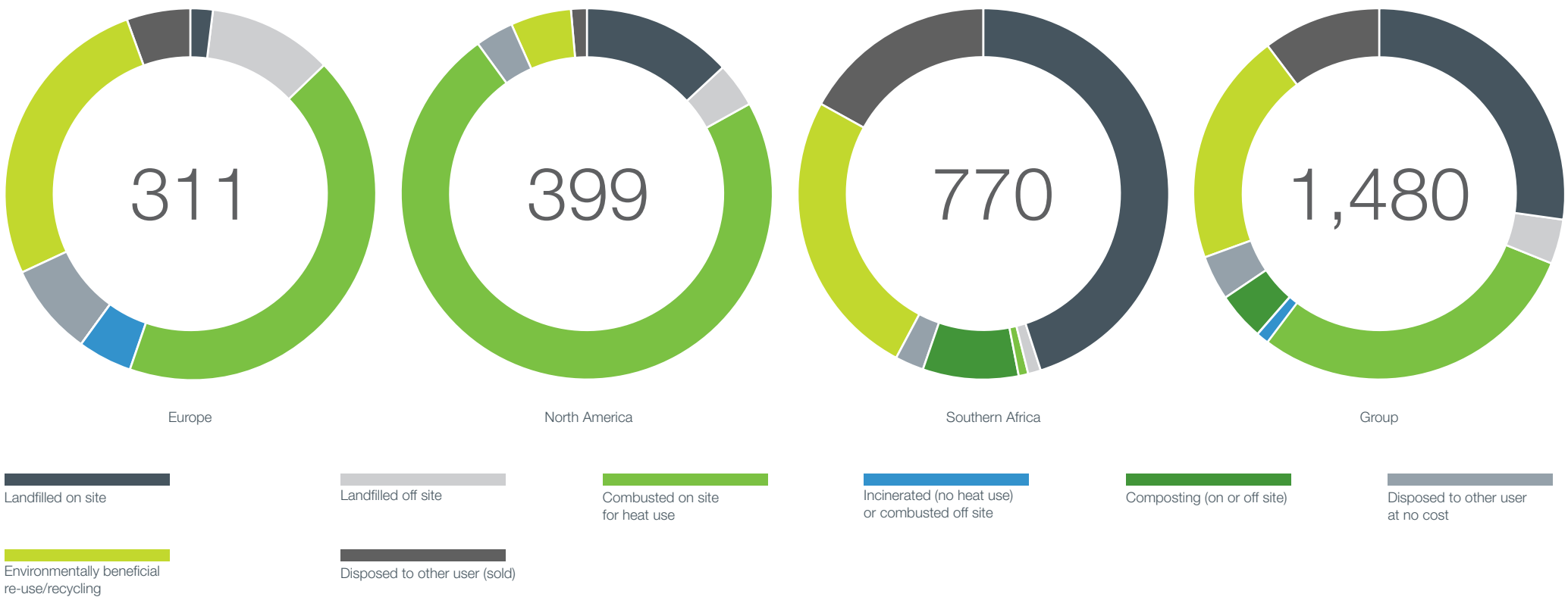
Waste sludge can also be recycled into new products such as animal bedding material or used in the production of building material such as bricks or cement.

## Solid waste as soil amendment

Excess lime-mud generated from our liquor recovery process in some of our kraft pulp mills is provided to farmers for spreading on their fields as a soil amendment (pH adjustment of acidic soils). ↗

## Solid waste disposal methods

'000 tons/annum for 2013



# 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 and Ehingen Mills 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 also recovered from effluent and reprocessed.

## Beneficiating by-products

### Tall oil

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

## Lignosulphonates

Lignosulphonates (a by-product of the pulping process) are recovered from spent pulping liquors, and sold to customers for use in other products. This reduces waste and adds value.

In South Africa, lignosulphonates are sold to customers for use in a dust suppressant product used in the mining sector.

In South Africa and Europe, lignosulphonates are sold to the cement and fertiliser industries.


## Case study

### Lignosulphonates at Tugela Mill

Tugela Mill produces sodium lignosulphonate from the hardwood pulping processes, also referred to as Neutral Sulphite Semi-Chemical (NSSC) black liquor. Previously, this black liquor was burned in Copeland fluidised bed reactors as an energy source. After some process modifications, the mill developed saleable products that are currently finding application in the dust suppression, concrete additive, ceramic and brickmaking markets.

Every ton of lignosulphonate (at 50% solid) used in making concrete, eliminates the need for 26.6 tons of cement. By reducing the amount of cement needed in concrete production, lignosulphonates help reduce greenhouse gas emissions.

Cement manufacturing accounts for approximately 5% of current global man-made CO<sub>2</sub> emissions.

Cement reduction in the concrete industry is increasingly accounting for a greater percentage of Tugela Mill's lignosulphonate sales, with dust suppression anticipated to account for 25% and cement reduction expected to account for 75% of sales in 2014. 

## About

### Lignosulphonates — many uses

Lignosulphonates act as a dispersant when wet and as a binder when combined with fine-grained loose material and dried.

#### Lignosulphonates as dispersant

Lignosulphonates are excellent dispersants. By attaching to particle surfaces, lignosulphonates keep undissolved particles in suspension, from being attracted to each other, preventing clumping and settling. Dispersants reduce the volume of water needed to mix products effectively. Used as an admixture in cement mixes, lignosulphonates reduce the volume of water used in preparing concrete — which makes the concrete stronger — without compromising the concrete's flowing characteristics.

#### Lignosulphonates as binders

Lignosulphonates can be used on unpaved roads to stabilise the road surface and in dust suppressant products used in the mining industry; reducing the use of water as a dust suppressor.

The binding qualities of lignosulphonates make 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.



# 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 moderately to strongly acidic (pH 5.0-6.3). 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- and fly-ash is 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 grow 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, while we significantly reduce the waste we send to landfill. In addition to providing the ash, we also pay 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 us to produce higher value chemicals such as xylitol (a sugar replacement), 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.

## Case study

### Recovered fibre put to good use

Ngodwana Mill loses approximately 6% of fibre annually in the production process that ends up on our landfill. In conjunction with a customer, the mill pursued the opportunity of displacing an expensive imported fibre and using this recovered fibre in their process which will result in a significant saving for them.

The customer has subsequently conducted a commercial trial with the recovered fibre and successfully managed to replace a certain percentage of their fibre requirement without a negative impact on their strength and quality specifications. This will ensure a significant cost saving for the customer and an equal benefit for us where we not only benefit from the revenue generated but also save landfill space and the costs associated with managing the volumes to the landfill site.

The project is awaiting legislative approval. If successful, this undertaking will ensure a significant cost saving for the customer and an equal benefit for us in terms of revenue generation, saving landfill space and the associated landfill costs.

# Promoting biodiversity

## EN-14

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

## 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

**87%**  
**semi natural**  
**Forests**  
EEA countries

**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 woodfibre. 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 PEFC™, SFI® and FSC®, 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. Although harvested, these forests are managed to retain their natural characteristics, including biodiversity. Practices to promote biodiversity in Europe's managed forests include:

- Thinning weaker trees selectively strengthens the wood stand so that it can offer continuity of habitat for species and makes the stand fitter to withstand sickness and calamity. It also protects and creates habitats for species dependent upon older large diameter trees and deadwood
- Avoiding soil compaction which protects the habitat of soil inhabiting bacteria, insects, worms, fungi, and animals. It also ensures the unrestricted growth and penetration of the roots of remaining trees and plants while minimising the risk of runoff and erosion
- Logging-site planning identifies the key elements for biodiversity that must be considered during harvesting. The most common features identified for biodiversity are water, sensitive soils, valuable biotopes, deadwood, natural forest remnants (eg oak, ash and elm in pine/spruce plantations), and rare, threatened or endangered species. Precautionary measures are taken to protect these features and protection buffer zones are left intact. Seasonal timing can be crucial, especially with sensitive soils and species such as nesting birds.

## About

### Convention on Biodiversity

The Convention on Biodiversity defines biodiversity as: "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."

## Definition

### IUCN Red List in Europe

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.

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 (including four bat species), five bird species, 12 amphibians, nine reptiles, eight gastropods, 12 insects and seven plants. 



# Promoting biodiversity continued



## 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.



### No rare, slow growers

We do not harvest rare or slow-growing species like Giant Sequoia or Coastal Redwood in North America

## Case study

### Forêt de Soignes

Since 2010, Sappi Fine Paper Europe employees have planted over 8,000 trees in the Forêt de Soignes, a 4,400ha forest located in the south-eastern part of Brussels which has been designated as a special conservation area under the EU Habitats Directive.

Planting is conducted in conjunction with the ANB (Agentschap voor Natuur en Bos), the equivalent of a Department of Forestry. This organisation is responsible for the planting of approximately 30,000 trees every year as part of the National Forest Management Plan (Belgium).

By planting trees we are helping to mitigate global warming and promote diversity within the forest.

Species planted by the Sappi team include beech, hawthorn, and hornbeam as well as shrubs to create a more diverse and dynamic environment. The smaller plants allow more light through, which attracts insects and butterflies.



## Case study

### Living Lands and Waters

Sappi Fine Paper North America has sponsored Living Lands and Waters since 2007. 

Spending up to nine months a year living and traveling on the barge, the Living Lands and Waters' crew hosts river clean-ups, watershed conservation initiatives, workshops, tree plantings and other key conservation efforts.

This organisation aims to:

- Aid in the protection, preservation and restoration of the natural environment of the United States' major rivers and watersheds
- Expand awareness of environmental issues and responsibility related to rivers
- Create desire and opportunity for stewardship and responsibility for a cleaner environment.



# Promoting biodiversity continued



## Southern Africa

Although our plantations consist of single species stands of exotic trees, the surrounding natural habitats, including indigenous forests — comprising approximately 30% of the land — is managed for their conservation value and the biodiversity they harbour.

## Mainstreaming biodiversity

Through Forestry South Africa, 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. **W**

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™ standards.

## Assessing ecosystem services

Biodiversity underpins the supply of ecosystem services on which the world's population depends. Most people are unaware of the extent of their dependence on these services and their contribution to the formal economy is undervalued and not priced or paid for.

In 2012, our forestry division in South Africa undertook an analysis of the supply of ecosystem 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. **S**

Going forward, understanding which ecosystem services our 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 we interact with the various user groups.
- The way in which Sappi promotes plantation forestry as a land-use.

# Promoting sustainable forest and plantation management

## 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.**

### EN-11 — Biodiversity outside protected areas

This indicator is particularly relevant to South Africa where we own, manage and lease approximately 561,000ha of land. We do not report on this indicator as we are not sure of 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, especially considering the fact that leases vary from month to month and that thousands of leases are involved. With cooperation from government we would be able to provide this information in the long term.

## 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

**In Europe and North America we source woodfibre 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.

#### Conservation sites

The 53 Red Data (rare, threatened or endangered) species recorded on our properties include 22 plant species, one insect, two frogs, two snakes, six mammals and 20 bird species. Some 455 bird species – nearly half of all bird species that occur in South Africa – have been recorded on our plantations.

#### Important conservation areas

Our forestry division in South Africa manages over 115,000ha for conservation purposes.

We have used systematic conservation planning to identify important conservation areas (ICAs) — areas that are important at the local level and classified using a systematic conservation planning approach based on the presence of both plant and animal Red Data species, the size, connectedness, condition and aesthetic and recreational value of the area.

There are 166 sites on our own land classified as ICAs, covering more than 30,000ha.

These sites, which include important grassland, wetland, forest and woodland habitats, are managed with the aim of enhancing their specific values. All sites are in good condition and make a valuable contribution to habitat and species conservation, providing protection to many rare and threatened species including various crane species, the Karkloof Blue Butterfly and the very rare Mistbelt Chirping Frog (*Anhydrophryne ngongoniensis*).

#### Grasslands stewardship

We participate in a Grasslands Stewardship Programme steered by the South African National Biodiversity Institute.

One of the key objectives of the programme is to facilitate the declaration of grassland sites as protected areas with the aim to mainstream biodiversity best practices in terms of grasslands management. We are in the process of getting an initial five sites declared as nature reserves through the programme. These protected areas will hopefully forge a path for additional sites to enter the process.

Continued overleaf...

# Promoting sustainable forest and plantation management continued



In the province of **KwaZulu Natal**, we are custodian of a very important Blue Swallow breeding site, a number of large mistbelt forest patches, grasslands which conserve important species and wetlands that form important sites for crane conservation.

In the **Mpumalanga** province there are at least another five large grassland sites that will be a valuable contribution to the growing network of protected areas in the country.

The **Clairmont Mountain Nature Reserve** is a 940ha site on the Marwaqa (Bulwer) Mountain near the town of Bulwer in KwaZulu-Natal, which includes vulnerable Drakensberg Foothill Moist Grassland and near threatened Eastern Mistbelt Forest. This site was declared a nature reserve shortly after year end.

The **Ngodwana River Valley Nature Reserve** is a 1,309ha unplanted portion of our Nooitgedacht plantation in Mpumalanga. It conserves representative portions of Northern Escarpment Quartzite Grassland, Northern Escarpment Dolomite Grassland (both endangered vegetation types), Legogote Sour Bushveld and a small part of Lydenburg Montane Grassland.

The **Mount Morgan Nature Reserve** is an unplanted portion (640ha) of our Glenthorpe and Twello plantations. The site conserves representative portions of Barberton Montane

Grasslands (vulnerable), Barberton Serpentine Sourveld (vulnerable) and Northern Mistbelt Forest (least threatened) and Serpentine outcrops, with associated endemic species.

The **Oosterbeek Nature Reserve** and **Angle Ridge Nature Reserve** are both located on the Highlands Management unit of Sappi's Twello plantation and together cover an area of 2,754ha. The value of these areas lies primarily in the fact that they are areas of outstanding natural beauty and are part of the Barberton Centre of Endemism and Barberton Mountainlands (classified as a vulnerable ecosystem).

We are custodians of 53 Red Data, and numerous other species, with habitats on the 115,000ha managed for conservation purposes

## Case study

### Mountain biking

As a significant land owner in South Africa, we recognise the important role we have to play in promoting multiple land uses of our landholdings, including mountain biking, so that people can experience and better understand how we manage our extensive natural areas and commercial plantations. We have partnered with mountain biking clubs and event organisers, granting access to our plantations and natural areas in Mpumalanga and KwaZulu-Natal. We have provided sponsorship and/or land access to several events, including the Sappi Howick Classic, Sappi Karkloof MTB Festival, Sappi Mankele Challenge, Isuzu 3 Towers Stage Race, MTN Barberton Classic, SANI2C and Joburg2C and DCSR Misty Valley Challenge.

We recently launched a mountain biking app that provides details of South Africa's top mountain biking trails. The app aims to help riders make the most of their mountain biking experience on our property. It currently features the Karkloof and Mankele trail networks, which are widely regarded as two of the top mountain biking trail destinations in the country. This planning tool is aimed at enhancing the riders' experience on the trails and also includes additional information on restaurants and accommodation. More trails will be added in the future.



# Promoting sustainable forest and plantation management continued

## 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

**Managed natural forests from which we harvest timber in Europe and North America, are biological systems rich in biodiversity (consisting of a variety of genetically diverse tree species and many other organisms) that rely on biotic processes to be sustained.**

However, in South Africa plantation forests consist of single species stands of exotic trees planted into habitats, such as grasslands, woodlands and fynbos, that are generally not naturally dominated by trees.

### Stand level

At the stand-level plantation forests have a significant negative impact on the indigenous biodiversity. By over-planting the naturally occurring vegetation-cover of the stand, with a homogeneous stand of trees (same species, age, size etc), nearly all the plant and animal species in the natural habitat are displaced and replaced.

### Plantation forest estate level

At the plantation forest estate or farm level, the impact is generally mitigated by the fact that it is seldom that more than 65% of the land is planted.

About 30% of the unplanted land is managed for the conservation of the natural habitats and the biodiversity they contain. Many of these unplanted areas are well managed and form important refuge areas for many rare and/or threatened species.

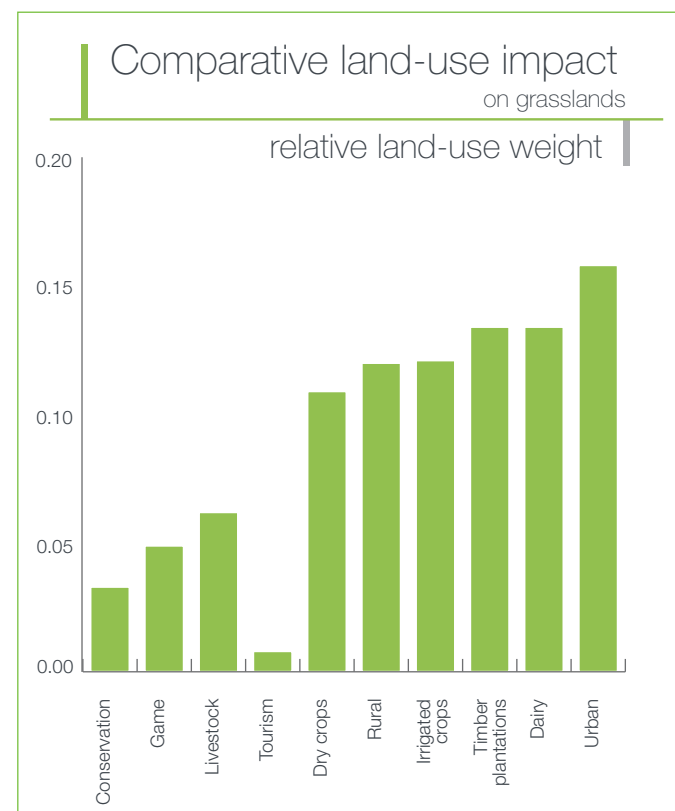
### Biome level

At the biome level the impacts of plantation forestry are felt in two ways:

- Spatial extent of the impact within the biome
- Severity of the impact on the site.

### Perspective


The planted area of all forestry plantations in South Africa cover 991,900ha of grasslands (the most affected biome); less than 2.87% of the biome. Forestry plantations makes up 18% of all grasslands transformed by agricultural crops. When compared with other forms of land use, plantation forestry has been ranked as having the second most severe impact on biodiversity integrity.




### Mitigation

In mitigation of the severe, though not very extensive impact, plantation forest owners own a further approximately 500,000ha of unplanted grassland, some of which consist of the best examples of moist grassland in the country.

These unplanted grasslands constitute a 50% offset for conservation by the forestry industry in South Africa, which far exceeds the international norm of 10%.

Furthermore, in partnership with the South African National Biodiversity Institute (SANBI), plantation forest owners have identified several sites, comprising 45,000ha, which will be proclaimed as protected areas and nature reserves as part of the Grassland Stewardship Programme. 

We are working with SANBI to proclaim five sites, totalling 5,643ha as nature reserves. The **Clairmont Mountain Nature Reserve** was recognised shortly after year-end. 

UNGC — United Nations Global Compact



# United Nations Global Compact


*“We have been a  
signatory to the  
United Nations  
Global Compact  
(UNGC) since 2008.*

*The Compact  
principles underpin  
our sustainability  
approach,  
governance  
and targets.”*


**Ralph Boëtter**  
Chief Executive Officer  
Sappi Limited





# UNGC — United Nations Global Compact

**We have been a signatory to the United Nations Global Compact (UNGC) since 2008. The Compact principles underpin our sustainability approach, governance and targets.**

The UNGC is a CEO-led strategic policy initiative which gives signatories a platform for advancing their commitments to sustainability and corporate citizenship. The UNGC has two principal objectives: mainstream the 10 principles which businesses commit to and catalyse actions in support of broader United Nations goals, including the Millennium Development Goals. Our CEO has publicly stated Sappi's commitment to the UNGC. 

Our Human Resources Policy requires all our employees to uphold the 10 principles of the UNGC set out below.

In addition to the table below, the UNGC principles are set out in relevant sections of this online 2013 Sappi Group Sustainability Report to demonstrate our commitment to the UNGC and reflect our current standing. The GRI indicators in the table are linked to the GRI table and from there, linked to relevant discussions in this report. These two symbols link to additional online discussions available on the Sappi and third-party websites: 






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.	<p>At Sappi, we endorse the principles entrenched in the Universal Declaration of Human Rights and conform to the principles of the International Labour Organisation (ILO) which promotes: • Freedom of association • Non-discrimination • Abolition of forced and child labour.</p> <p>The right to freedom of association is set out in our Human Resources Policy. </p> <p>We conform to – and in many cases exceed – the labour conditions stipulated by the governments of the countries in which we operate.</p>	<a href="#">HR-1</a> <a href="#">HR-2</a> <a href="#">HR-3</a> <a href="#">HR-4</a>
2	Make sure their own corporations are not complicit in human rights abuses.	<p>According to the 2013 Maplecroft Human Rights Risk Index, the countries in which we have manufacturing operations in Europe are ranked as 'Low Risk'; the United States of America is ranked as 'Medium Risk'; and South Africa is ranked as 'High Risk'.  According to Human Rights Watch, the factors that have increased South Africa's Human Rights risks are, amongst others: labour unrest in the mining sector in 2012; uncertainty about women's rights; and the rights of farmworkers in terms of remuneration and land reform. </p> <p>We recognise the complexity of the labour situation in South Africa and have established a number of structures to enhance engagement. </p> <p>Our Human Resources Policy specifically prohibits discrimination on the grounds of gender, race, ethnicity, age, religion, sexual orientation, union membership, political affiliation, physical disability or HIV/AIDS status.</p> <p>We work actively with the authorities and communities on land reform projects. In 2013, we made it a contractual obligation for our forestry contractors to pay their workers in accordance with the minimum wage stipulated by government for the agricultural sector. Further details are provided in our 2013 regional sustainability report for Sappi Southern Africa.</p>	<a href="#">HR-2</a> <a href="#">HR-3</a>










# UNGC — United Nations Global Compact continued

The 10 principles to which businesses commit		Our performance against these commitments	GRI G3.1 indicators
3	Freedom of association and the effective recognition of the right to collective bargaining.	<p>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 56.7% of our workforce is represented by unions; 66.5% are covered by collective bargaining agreements. Details for each region are available in the People section of this report. ↗</p> <p>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 victimisation, 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.</p>	<a href="#">HR-5</a> <a href="#">LA-3</a> <a href="#">LA-4</a>
4	The elimination of all forms of forced and compulsory labour.	<p>All labour is sourced on the open market. In rural areas, forest product companies like Sappi are often the only, or a major, employer in the region which makes the local population very dependent on the company.</p> <p>Sappi nevertheless 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.</p>	<a href="#">HR-7</a>
5	The effective abolition of child labour.	This principle is inherent in our labour policies across the group.	<a href="#">HR-6</a>
6	The elimination of discrimination in respect of employment and occupation.	<p>Sappi is an equal opportunity company.</p> <p>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.</p>	<a href="#">HR-4</a> <a href="#">LA-10</a> <a href="#">LA-11</a>
7	Support a precautionary approach to environmental challenges.	<p>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:</p> <ul style="list-style-type: none"> <li>• Conducting ongoing research into the impact of our activities and investigating methodologies to improve our performance at our research centres around the world.</li> <li>• Continuously monitoring our environmental performance.</li> <li>• Conducting thorough environment impact or risk assessments before the start of any new activity.</li> </ul>	<a href="#">4.13</a>

# UNGC — United Nations Global Compact continued

The 10 principles to which businesses commit	Our performance against these commitments	GRI G3.1 indicators
<p><b>8</b> Undertake initiatives to promote greater environmental responsibility.</p>	<p><b>Carbon Disclosure</b> We provide information to the <b>Carbon Disclosure Project</b> (CDP) and the <b>Forest Footprint Disclosure Project</b> (FFDP) every year and make our submission publicly available.</p> <p><b>Environmental publications</b> In each region we sponsor environment-related publications accessible to the general reader.</p> <p><b>South Africa</b> The Sappi WWF <b>TreeRoutes</b> Partnership aims to protect ecologically sensitive areas while establishing sustainable business ventures for communities that help them to understand and respect the value of these areas.</p> <p>In 2012, we undertook an analysis of the supply of <b>ecosystem services</b> from our 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. </p> <p>We partner with the South African National Biodiversity Institute (SANBI) to mainstream biodiversity into the forestry sector. We are currently in the process of having an initial five sites declared as nature reserves through the <b>Grasslands Stewardship Programme</b>, which aims to mainstream biodiversity best practices in terms of grasslands management. </p> <p>As a major land owner in South Africa, we recognise that we have an important role to play in promoting <b>multiple use of our landholdings</b>, including the development of mountain biking, so that people can experience and better understand how we manage our extensive natural areas and commercial plantations. We have partnered with mountain biking clubs and event organisers, allowing access to our plantations and natural areas in Mpumalanga and KwaZulu-Natal.  </p> <p>We sponsored the publication of <b>Sappi Birds of South Africa</b>, which highlights the synergy between digital and print through the use of an electronic Callfinder.</p> <p>Our Cape Kraft Mill has adopted nearby <b>Intaka island</b>, a unique, multi-purpose wetland and bird sanctuary, as their key Corporate Social Responsibility (CSR) initiative.</p> <p>Read more about our initiatives in this region on our website. </p> <p style="text-align: right;">Continued overleaf...</p>	<p><a href="#">EN-1</a></p> <p><a href="#">EN-2</a></p> <p><a href="#">EN-3</a></p> <p><a href="#">EN-4</a></p> <p><a href="#">EN-5</a></p> <p><a href="#">EN-6</a></p> <p><a href="#">EN-7</a></p> <p><a href="#">EN-8</a></p> <p><a href="#">EN-9</a></p> <p><a href="#">EN-10</a></p> <p><a href="#">EN-11</a></p> <p><a href="#">EN-12</a></p> <p><a href="#">EN-13</a></p> <p><a href="#">EN-14</a></p> <p><a href="#">EN-15</a></p> <p><a href="#">EN-16</a></p> <p><a href="#">EN-18</a></p>

# UNGC — United Nations Global Compact continued

The 10 principles to which businesses commit	Our performance against these commitments	GRI G3.1 indicators
<b>8</b> Undertake initiatives to promote greater environmental responsibility.	<p>...Continued from previous page</p> <p><b>South Africa and North America</b> We work in both these regions to make forest certification more accessible to farmers. </p> <p><b>North America</b> We play an active role in <b>Living Lands and Waters</b>, a non-profit, environmental organisation focused on forest restoration and cleaning up America's great rivers. </p> <p>We installed a <b>fishway</b> near Westbrook Mill, enabling natural fish passage through a portion of the Presumpscot River for the first time in more than 150 years. </p> <p><b>Europe</b> We have planted over 8,000 trees in the <b>Sonian Forest</b> in conjunction with the ANB (Agentschap voor Natuur en Bos), the Belgium equivalent of a Department of Forestry. </p> <p>We are partners in the <b>Treehouse</b>, 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. </p>	<a href="#">See previous page</a>
<b>9</b> Encourage the development and diffusion of environmentally friendly technologies.	<p>Our research and development initiatives are focused on the technical improvement of processes and products, and on the development of environmentally friendly technologies.</p> <p>Globally, in 2013, specific (per air dry ton of saleable product) purchased energy decreased by 20.3%; specific Scope 1 emissions decreased by 12.2% and specific Scope 2 emissions decreased by 28.4%.</p> <p>Globally, over the past five years: specific water usage has declined by 4%; and specific waste to landfill declined by 33.4%.</p> <p>Our Technology Centre in Pretoria is currently examining various conversion technologies for lignin. These include the gasification of lignin to give producer gas. </p>	<a href="#">EN-17</a>
<b>10</b> Work against corruption in all its forms, including extortion and bribery.	<p>Our commitment to combating corruption is embodied in our Code of Ethics, refreshed in FY2013, which gives very clear guidelines on the behaviour expected of Sappi employees and suppliers 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. </p> <p>Refer to our 2013 Integrated Report for further details.</p>	<a href="#">SO</a>





# Global Reporting Initiative™

Our sustainability report follows the Global Reporting Initiative's™ G3.1 guidelines. Following submission of our FY2013 sustainability report, we have once again been recognised as an A-level reporter; for the fifth consecutive year.

# Standard disclosures part 1 Profile disclosures



We follow the G3.1 Content Index.


The tables that follow detail our reporting compliance in respect of the Global Reporting Initiative (GRI) and directs the reader to detailed discussions in this and various other publications.


**Referenced documents**

The two key documents which we reference are our annual Integrated Report and our annual Group Sustainability Report; these are referenced and linked (to the relevant pages) as **IR13** and **SDR13** (this report) respectively.

Additional information available in our regional sustainability reports are referenced as follows:

- Europe **ESDR13**
- North America **NASDR13**
- South Africa **ZASDR13**

Other Sappi publications, that can be downloaded from the Sappi website at [www.sappi.com](http://www.sappi.com), are also hyperlinked. 

Cross references to information within this report are indicated by this icon. 

**Integrated Annual Report 2013**

**Group Sustainability Report 2013**



**Regional sustainability reports 2013**

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 organisation.	Fully	<b>SDR13</b> Profitability affects our performance in the People and Planet areas — page <a href="#">3</a>			
1.2	Description of key impacts, risks, and opportunities.	Fully	<b>SDR13</b> Prosperity, People, Planet — an overview of our business' links to sustainability — page <a href="#">14</a>			
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	<b>SDR13</b> Sappi Group Sustainability Report 2013 — page <a href="#">1</a>			
2.2	Primary brands, product and/or services.	Fully	<b>IR13</b> Our products — pages <a href="#">24-25</a>			
2.3	Operational structure of the organisation, including main divisions, operating companies, subsidiaries, and joint ventures.	Fully	<b>IR13</b> Our business — pages <a href="#">14-15</a>			
2.4	Location of organisation's headquarters.	Fully	<b>SDR13</b> Profitability affects our performance in the People and Planet areas — page <a href="#">3</a>			
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	<b>IR13</b> Map of world with key sites — pages <a href="#">14-15</a>			
2.6	Nature of ownership and legal form.	Fully	<b>IR13</b> Nature of business — page <a href="#">87</a>			
2.7	Markets served (including geographic breakdown, sectors served, and types of customers/beneficiaries).	Fully	<b>IR13</b> Our business — pages <a href="#">14-15</a> and Our products — pages <a href="#">24-25</a>			
2.8	Scale of the reporting organisation.	Fully	<b>SDR13</b> Profiling our 13,665 people — page <a href="#">51</a>			
2.9	Significant changes during the reporting period regarding size, structure, or ownership.	Fully	<b>SDR13</b> Operational changes and workplace diversity — page <a href="#">52</a>			
2.10	Awards received in the reporting period	Fully	<b>SDR13</b> Accolades in 2013 — page <a href="#">9</a>			



# 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	<a href="#">SDR13</a> Scope of this report — page <a href="#">5</a>			
3.2	Date of most recent previous report (if any).	Fully	<a href="#">SDR13</a> Scope of this report — page <a href="#">5</a>			
3.3	Reporting cycle (annual, biennial, etc).	Fully	Annual, <a href="#">SDR13</a> Scope of this report — page <a href="#">5</a>			
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	<a href="#">SDR13</a> Defining report content — page <a href="#">7</a>			
3.6	Boundary of the report (eg countries, divisions, subsidiaries, leased facilities, joint ventures, suppliers). See GRI Boundary Protocol for further guidance.	Fully	<a href="#">SDR13</a> Scope of this report — page <a href="#">5</a>			
3.7	State any specific limitations on the scope or boundary of the report (see completeness principle for explanation of scope).	Fully	<a href="#">SDR13</a> About this report — page <a href="#">5</a>			
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.	Not			Not relevant	
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	<a href="#">SDR13</a> Defining report content — page <a href="#">7</a> <a href="#">SDR13</a> Conventions — page <a href="#">2</a> 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	<a href="#">IR13</a> CFO's report, page <a href="#">63</a> <a href="#">IR13</a> CFO's report, pages <a href="#">67</a>			
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	<b>GRI Index</b>			
3.13	Policy and current practice with regard to seeking external assurance for the report.	Fully	<a href="#">SDR13</a> External assurance — page <a href="#">6</a>			

# 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	<b>IR13</b> Corporate Governance — pages <a href="#">48-52</a>			
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. <b>IR13</b> Our leadership — page <a href="#">44</a>			
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: 10 <b>IR13</b> Our leadership — pages <a href="#">44-47</a>			
4.4	Mechanisms for shareholders and employees to provide recommendations or direction to the highest governance body.	Fully	<b>IR13</b> Corporate governance — pages <a href="#">48-52</a> and Our key stakeholders — pages <a href="#">26-31</a>			
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	<b>IR13</b> Compensation report — pages <a href="#">53-58</a>			
4.6	Processes in place for the highest governance body to ensure conflicts of interest are avoided.	Fully	<b>IR13</b> Conflict of interests — page <a href="#">52</a>			
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	<b>IR13</b> Corporate Governance — page <a href="#">48</a>			
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	<b>SDR13</b> Code of Ethics — page <a href="#">32</a>			
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. <b>IR13</b> Social, Ethics, Transformation and Sustainability Committee — page <a href="#">49</a>			

# 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 available at <a href="http://www.sappi.com">www.sappi.com</a>			
4.11	Explanation of whether and how the precautionary approach or principle is addressed by the organisation.	Fully	<b>SDR13</b> Support a precautionary approach to environmental challenges. — page <a href="#">122</a>			
4.12	Externally developed economic, environmental, and social charters, principles, or other initiatives to which the organisation subscribes or endorses.	Fully	<b>IR13</b> Application of King III principles — pages <a href="#">48-62</a> <b>SDR13</b> Described throughout this report, for example in the discussion on Human Rights in the People section, page <a href="#">71</a>			
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	<b>SDR13</b> Engaging with our stakeholders — memberships — page <a href="#">83</a>			
4.14	List of stakeholder groups engaged by the organisation.	Fully	<b>IR13</b> Our key stakeholders — pages <a href="#">26-31</a>			
4.15	Basis for identification and selection of stakeholders with whom to engage.	Fully	<b>SDR13</b> Identifying stakeholders — page <a href="#">7</a>			
4.16	Approaches to stakeholder engagement, including frequency of engagement by type and by stakeholder group.	Fully	<b>IR13</b> Our key stakeholders — pages <a href="#">26-31</a>			
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	<b>IR13</b> Our key stakeholders — pages <a href="#">26-31</a>			



# 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
<b>DMA EC</b>	<b>Disclosure on management approach EC</b>						
<b>Aspects</b>	Economic performance	Fully	<b>IR13</b> CFO's report — pages <a href="#">63-83</a>				
	Market presence	Fully	<b>IR13</b> Our products — pages <a href="#">24-25</a>				
	Indirect economic impact	Fully	<b>SDR13</b> Prosperity — our value add — page <a href="#">17</a>				
<b>DMA EN</b>	<b>Disclosure on management approach EN</b>						
<b>Aspects</b>	Materials	Fully	<b>SDR13</b> An overview of our management approach to Planet — page <a href="#">85</a> <b>SDR13</b> Chain-of-custody certification — page <a href="#">88</a>				
	Energy	Fully	<b>SDR13</b> Reducing energy usage and mitigating climate change — page <a href="#">94</a>				
	Water	Fully	<b>SDR13</b> Managing water use — page <a href="#">106</a>				
	Biodiversity	Fully	<b>SDR13</b> Promoting biodiversity — page <a href="#">114</a>				
	Emissions, effluent and waste	Fully	<b>SDR13</b> Reducing solid waste and adding value — page <a href="#">110</a> <b>SDR13</b> Managing effluent discharge — page <a href="#">108</a> <b>SDR13</b> Energy consumption and associated emissions — page <a href="#">99</a>				
	Products and services	Fully	<b>SDR13</b> An overview of our management approach to Planet — page <a href="#">85</a>				
	Compliance	Fully	<b>SDR13</b> Monitoring compliance with global standards — page <a href="#">87</a>				
	Transport	Fully	<b>SDR13</b> Streamlining global transport — page <a href="#">101</a>				
	Overall	Fully	<b>SDR13</b> An overview of our management approach to Planet — page <a href="#">85</a>				
<b>DMA LA</b>	<b>Disclosure on management approach LA</b>						
<b>Aspects</b>	Employment	Fully	<b>SDR13</b> Profiling our 13,665 people — page <a href="#">51</a>				
	Labour/management relations	Fully	<b>SDR13</b> Our relationships with our employees — page <a href="#">55</a>				
	Occupational health and safety	Fully	<b>SDR13</b> Prioritising wellbeing, health and safety — page <a href="#">62</a>				
	Training and education	Fully	<b>SDR13</b> Promoting training and development — page <a href="#">57</a>				
	Diversity and equal opportunity	Fully	<b>SDR13</b> Workplace diversity — page <a href="#">52</a>				
	Equal remuneration for women and men	Fully	<b>SDR13</b> Remunerating fairly — page <a href="#">61</a>				

# 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
<b>DMA HR</b>	<b>Disclosure on management approach HR</b>						
<b>Aspect</b>	Investment and procurement practices	Partially	Procurement practices are discussed in: <a href="#">ZASDR12</a> , page <a href="#">18</a> <a href="#">ZASDR13</a> , pages <a href="#">37</a> — <a href="#">39</a> <a href="#">BBBEE FAQ</a> 	Investment practices	Proprietary information	Investment practices are viewed as business confidential	
	Non-discrimination	Fully	<b>Group Human Resources Policy</b>				
	Freedom of association and collective bargaining	Fully	<b>Group Human Resources Policy</b>				
	Child labour	Fully	<a href="#">SDR13</a> Not exploitive — page <a href="#">56</a>				
	Prevention of forced and compulsory labour	Fully	<a href="#">SDR13</a> Not exploitive — page <a href="#">56</a>				
	Security practices	Fully	<b>GRI Index</b>				
	Indigenous rights	Fully	<a href="#">SDR13</a> Not exploitive — page <a href="#">56</a>				
	Assessment	Fully	<a href="#">SDR13</a> Our relationships with our employees — page <a href="#">55</a>				
	Remediation	Fully	<b>GRI Index</b>				
<b>DMA SO</b>	<b>Disclosure on management approach SO</b>						
<b>Aspect</b>	Local communities	Fully	<a href="#">SDR13</a> Supporting communities — page <a href="#">72</a> <b>Group Corporate Social Responsibility Policy</b>				
	Corruption	Fully	<a href="#">SDR13</a> Sustainability governance — page <a href="#">8</a> <a href="#">IR13</a> Internal controls — page <a href="#">50</a>				
	Public policy	Fully	<a href="#">SDR13</a> , pages <a href="#">15</a> and <a href="#">71</a>				
	Anti-competitive behaviour	Fully	<a href="#">Sappi 2013 Corporate Governance Principles</a> , page <a href="#">5</a> , covered under our application of Chapter 6 of King III principles				
	Compliance	Fully	<b>GRI Index</b>				

# 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
<b>DMA PR</b>	<b>Disclosure on management approach PR</b>						
<b>Aspect</b>	Customer health and safety	Fully	<b>SDR13</b> Customers' health and safety — page <a href="#">70</a>				
	Product and service labelling	Fully	<b>SDR13</b> Engaging with our stakeholders — customers — page <a href="#">77</a>				
	Marketing compliance	Fully	<b>SDR13</b> Engaging with our stakeholders — investors — page <a href="#">79</a>				
	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	<b>GRI Index</b>				
<b>Economic performance</b>							
<b>EC-1</b>	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	<b>SDR13</b> Prosperity — our value add — page <a href="#">17</a> <b>SDR13</b> People — communities — page <a href="#">22</a>				
<b>EC-2</b>	Financial implications and other risks and opportunities for the organisation's activities due to climate change.	Fully	<b>SDR13</b> Climate change — page <a href="#">29</a>				
<b>EC-3</b>	Coverage of the organisation's defined benefit plan obligations.	Fully	<b>IR13</b> Compensation Report — pages <a href="#">53-58</a>				
<b>EC-4</b>	Significant financial assistance received from government.	Not			Not applicable	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
<b>Market presence</b>						
<b>EC-5</b> Range of ratios of standard entry level wage by gender compared to local minimum wage at significant locations of operation.	Fully	We negotiate salaries with unions and Works Councils on an ongoing basis.				
<b>EC-6</b> Policy, practices, and proportion of spending on locally-based suppliers at significant locations of operation.	Partially	<b>FAQ BBBEE</b> 	Only reported in South Africa, not reported in NA and EU.	Not material	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.	
<b>EC-7</b> Procedures for local hiring and proportion of senior management hired from the local community at locations of significant operation.	Partially	<b>SDR13</b> Southern Africa — ethnicity and Previously Disadvantaged Employees by occupation — page <a href="#">54</a>	As above	Not material	As above	
<b>Indirect economic impacts</b>						
<b>EC-8</b> Development and impact of infrastructure investments and services provided primarily for public benefit through commercial, in-kind, or pro bono engagement.	Fully	In South Africa, there is significant indirect spend on infrastructure such as roads, from which forestry communities benefit. We do not currently account separately for this indirect investment, but plan to do so going forward.				
<b>EC-9</b> Understanding and describing significant indirect economic impacts, including the extent of impacts.	Fully	<b>SDR13</b> Prosperity — our value add — page <a href="#">17</a>				

# 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
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	<a href="#">SDR13</a> Energy consumption and associated emissions — page <a href="#">99</a>				
EN-4	Indirect energy consumption by primary source.	Fully	<a href="#">SDR13</a> Indirect energy consumption by primary energy source — page <a href="#">100</a>				
EN-5	Energy saved due to conservation and efficiency improvements.	Fully	<a href="#">SDR13</a> Energy self-sufficiency — page <a href="#">103</a>				
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	<a href="#">SDR13</a> Reducing specific purchased energy — increasing our use of renewable energy continued — page <a href="#">98</a>				
EN-7	Initiatives to reduce indirect energy consumption and reductions achieved.	Fully	<a href="#">SDR13</a> EN-7 Indirect energy reduction — page <a href="#">104</a>				
Water							
EN-8	Total water withdrawal by source.	Fully	<a href="#">SDR13</a> Managing water use — page <a href="#">106</a>				
EN-9	Water sources significantly affected by withdrawal of water	Fully	<a href="#">SDR13</a> Managing water use — page <a href="#">106</a>				
EN-10	Percentage and total volume of water recycled and reused.	Fully	<a href="#">SDR13</a> Ratio of water returned to process water drawn — page <a href="#">107</a>				

Environmental performance indicators continued

# Standard disclosures part 3 Performance indicators

Performance indicator description		Reported	Cross-reference Direct answer	If applicable, indicate part not reported	Reason for omission	Explanation	To be reported in
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	<b>SDR13</b> Promoting sustainable forest and plantation management — page <a href="#">117</a>				
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	<b>SDR13</b> Managing our South African landholdings — page <a href="#">117</a>				
EN-13	Habitats protected or restored.	Fully	<b>SDR13</b> Important conservation areas — page <a href="#">117</a>				
EN-14	Strategies, current actions, and future plans for managing impacts on biodiversity.	Fully	<b>SDR13</b> Promoting biodiversity — page <a href="#">114</a>				
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	<b>SDR13</b> IUCN Red List in Europe — page <a href="#">114</a> <b>SDR13</b> Mainstreaming biodiversity — page <a href="#">116</a>				



# 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							
<b>EN-16</b>	Total direct and indirect greenhouse gas emissions by weight	Fully	<b>SDR13</b> Energy consumption and associated emissions — page <a href="#">99</a>				
<b>EN-17</b>	Other relevant indirect greenhouse gas emissions by weight	Not			Not applicable	We do not report on this point since the disclosure as prescribed by the GRI guidelines is not applicable to our business as Sappi does not emit greenhouse gases other than the ones already reported on.	
<b>EN-18</b>	Initiatives to reduce greenhouse gas emissions and reductions achieved.	Fully	<b>SDR13</b> EN-18 Indirect energy GHG reduction — page <a href="#">104</a>				
<b>EN-19</b>	Emissions of ozone-depleting substances by weight.	Not			Not applicable	We do not report on this point since the disclosure as prescribed by the GRI guidelines is not applicable to our business as Sappi does not emit ozone-depleting substances.	
<b>EN-20</b>	NOx, SOx, and other significant air emissions by type and weight.	Fully	<b>SDR13</b> Other emissions — page <a href="#">105</a>				
<b>EN-21</b>	Total water discharge by quality and destination.	Fully	<b>SDR13</b> Managing effluent discharge — page <a href="#">108</a>				
<b>EN-22</b>	Total weight of waste by type and disposal method.	Fully	<b>SDR13</b> Reducing solid waste and adding value — page <a href="#">110</a>				
<b>EN-23</b>	Total number and volume of significant spills.	Not			Not applicable	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
<b>Emissions, effluent and waste</b> <i>continued</i>						
<b>EN-24</b> 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	<b>SDR13</b> 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 — page <a href="#">110</a>				
<b>EN-25</b> 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 as only one of our operations is situated near a Ramsar site, namely Enstra Mill in South Africa, but water discharged from the mill does not significantly affect this site.	
<b>Products and services</b>						
<b>EN-26</b> Initiatives to mitigate environmental impacts of products and services, and extent of impact mitigation	Fully	Described throughout the Planet section, starting on page <a href="#">84</a> .				
<b>EN-27</b> Percentage of products sold and their packaging materials that are reclaimed by category	Fully	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. In Europe we offer collection and recycling of packaging waste (of our products) in certain countries: Germany, Belgium and Austria.				
<b>Compliance</b>						
<b>EN-28</b> Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations	Not			There were no such fines or sanctions in the year under review.	Not applicable	

# 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						
<b>EN-29</b> Significant environmental impacts of transporting products and other goods and materials used for the organisation's operations, and transporting members of the workforce	Fully	<b>SDR13</b> Streamlining global transport — page <a href="#">101</a>				
Overall						
<b>EN-30</b> Total environmental protection expenditures and investments by type	Partially	<b>SDR13</b> An overview of our management approach to Planet — page <a href="#">85</a>	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 Southern African region and are working to extend this to other regions by 2020.	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
<b>Employment</b>						
<b>LA-1</b> Total workforce by employment type, employment contract, and region, broken down by gender.	Partially	<b>SDR13</b> Profiling our 13,665 people — page <a href="#">51</a>	Reported by region, but not by employee category	Not material	We do not report gender per category of employee as it is not material to our business because we do not discriminate on the basis of gender, as set out in our Group Human Resources Policy.	
<b>LA-2</b> Total number and rate of employee turnover by age group, gender, and region.	Fully	<b>SDR13</b> Workplace diversity continued — page <a href="#">53</a>				
<b>LA-3</b> Benefits provided to full-time employees that are not provided to temporary or part-time employees, by major operations.	Fully	<b>SDR13</b> Benefits — page <a href="#">60</a>				
<b>LA-15</b> Return to work and retention rates after parental leave, by gender.	Fully	<b>SDR13</b> Parental leave — page <a href="#">60</a>				
<b>Labour/management relations</b>						
<b>LA-4</b> Percentage of employees covered by collective bargaining agreements.	Fully	<b>SDR13</b> Our relationships with our employees — page <a href="#">55</a>				
<b>LA-5</b> Minimum notice period(s) regarding operational changes, including whether it is specified in collective agreements	Fully	<b>SDR13</b> Dealing with operational changes — page <a href="#">52</a>				
<b>Occupational health and safety</b>						
<b>LA-6</b> 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	<b>SDR13</b> Representation — page <a href="#">63</a>				
<b>LA-7</b> Rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities by region and by gender.	Fully	<b>SDR13</b> Safety management — page <a href="#">64</a>				
<b>LA-8</b> Education, training, counselling, prevention, and risk-control programmes in place to assist workforce members, their families, or community members regarding serious diseases.	Fully	<b>SDR13</b> Health and wellbeing initiatives — page <a href="#">69</a>				
<b>LA-9</b> Health and safety topics covered in formal agreements with trade unions.	Fully	<b>SDR13</b> Discussion topics — page <a href="#">63</a>				

# 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	<b>SDR13</b> Promoting training and development continued — page <a href="#">58</a>	Reported by employee category, but not by gender.	Not material	The disclosure as prescribed by the GRI guidelines is not material to our business because, as set out in our Human Resources Policy, we do not discriminate on the basis of gender.	
LA-11	Programmes for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings.	Fully	<b>SDR13</b> Skills development and career growth — page <a href="#">57</a> <b>SDR13</b> Career endings — page <a href="#">57</a>				
LA-12	Percentage of employees receiving regular performance and career development reviews, by gender.	Partially	<b>SDR13</b> Performance reviews — page <a href="#">60</a>	Not reported by gender.	Not material	The disclosure as prescribed by the GRI guidelines is not material to our business because, as set out in our Human Resources policy, we do not discriminate on the basis of gender.	
Diversity and equal opportunity							
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.	Fully	<b>SDR13</b> Diversity in Sappi boards — page <a href="#">54</a> <b>SDR13</b> Southern Africa — ethnicity and Previously Disadvantaged Employees by occupation — page <a href="#">54</a>				
Equal remuneration for women and men							
LA-14	Ratio of basic salary of men to women by employee category	Fully	<b>SDR13</b> Remunerating fairly — page <a href="#">61</a>				

# 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.	Not			Not applicable	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	SDR13 Not exploitive — page <a href="#">56</a>				



# 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	<b>SDR13</b> Not exploitive — page <a href="#">56</a>				
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	<b>SDR13</b> Not exploitive — page <a href="#">56</a>				
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.	
Indigenous rights							
HR-9	Total number of incidents of violations involving rights of indigenous people and actions taken	Not			Not applicable	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.	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.	
Remediation							
HR-11	Number of grievances related to human rights filed, addressed and resolved through formal grievance mechanisms.	Not			Not applicable	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						
<b>SO-1</b> Percentage of operations with implemented local community engagement, impact assessments, and development programmes.	Fully	<b>SDR13</b> People — communities — page <a href="#">22</a>				
<b>SO-9</b> Operations with significant potential or actual negative impacts on local communities.	Fully	All our operations could have a negative impact on local communities - for example, if there were to be a gas leak in one of our mills, or, in Southern Africa, if there were to be a fire on one of our plantations. Each operation has full management plans and protocols to deal with both major and minor events. All plantations have stringent fire measures in place and communities are closely involved in our fire mitigation strategies.				
<b>SO-10</b> Prevention and mitigation measures implemented in operations with significant potential or actual negative impacts on local communities.	Fully	As above				
Corruption						
<b>SO-2</b> 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 where 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.	
<b>SO-3</b> Percentage of employees trained in organisation's anti-corruption policies and procedures	Fully	All our employees and suppliers receive Code of Ethics training.				
<b>SO-4</b> Actions taken in response to incidents of corruption	Fully	<b>IR13</b> Social, Ethics, Transformation and Sustainability Committee report — pages <a href="#">59-61</a>				

# 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
<b>Public policy</b>						
<b>SO-5</b> Public policy positions and participation in public policy development and lobbying	Fully	<b>SDR13</b> Carbon tax — page <a href="#">31</a> <b>SDR13</b> Engaging with our stakeholders — industry bodies — page <a href="#">78</a>				
<b>SO-6</b> Total value of financial and in-kind contributions to political parties, politicians, and related institutions by country.	Fully	As specified in our Group Corporate Social Responsibility Policy, we do not contribute to political parties, politicians or related institutions.				
<b>Anti-competitive behaviour</b>						
<b>SO-7</b> Total number of legal actions for anti-competitive behaviour, anti-trust, and monopoly practices and their outcomes.	Not			Not applicable	No such legal actions	
<b>SO-8</b> Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations.	Not			Not applicable	No significant fines or non-monetary sanctions.	



# 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	<b>SDR13</b> Chain-of-custody certification — page <a href="#">88</a>				
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	Not			Not applicable	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	<b>SDR13</b> Engaging with our stakeholders — customers — page <a href="#">77</a>			No such incidents	
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	Not				No such incidents	
PR-5	Practices related to customer satisfaction, including results of surveys measuring customer satisfaction	Fully	<b>SDR13</b> Engaging with our stakeholders — customers — page <a href="#">77</a>				

# 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	<b>SDR13</b> Engaging with our stakeholders — media and civil society — page <a href="#">81</a>				
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.	Not			Not applicable	No such incidents	
Customer privacy							
PR-8	Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data.	Not			Not applicable	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.	Not			Not applicable	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 woodfibre 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](http://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

# Glossary continued

## 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

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 quantity 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

# Notes and references

**Additional information and references are included throughout this sustainability report in pop-up windows and as links to Sappi and third-party websites.**

Information in pop-up windows will print while open (but obscure underlying information). The notes that follow, replicate the content of the pop-up windows, to allow the report to be printed, complete with the additional information and references.

We also provide a list of referenced third-party website addresses. Sappi specific information can be found at [www.sappi.com](http://www.sappi.com).

## Third-party websites referenced

AF&PA — American Forest and Paper Association — [www.afandpa.org](http://www.afandpa.org)

Borregaard/Lignotech — [www.lignotech.com](http://www.lignotech.com)

CEPI — Confederation of European Paper Industries — [www.cepi.org](http://www.cepi.org)

EMAS — [www.ec.europa.eu](http://www.ec.europa.eu)

Fachpack — [www.fachpack.de/en](http://www.fachpack.de/en)

Fresh artists — [www.freshartists.org](http://www.freshartists.org)

FSC® — Forest Stewardship Council® — [www.ic.fsc.org](http://www.ic.fsc.org)

Global Pulp and Paper — [www.pppc.org](http://www.pppc.org)

GreenBlue — [www.greenblue.org](http://www.greenblue.org)

Human Rights Watch — [www.hrw.org](http://www.hrw.org)

ISO — International Organisation for Standardisation — [www.iso.org](http://www.iso.org)

JSE — Johannesburg Stock Exchange — [www.jse.co.za](http://www.jse.co.za)

Living Lands and Waters — [www.livinglandsandwaters.org](http://www.livinglandsandwaters.org)

Miss Earth South Africa — [www.missearthsa.co.za](http://www.missearthsa.co.za)

NBI — National Business Initiative — [www.nbi.org.za](http://www.nbi.org.za)

New England Aquarium — [www.neaq.org](http://www.neaq.org)

PAMSA — Paper Manufacturers Association of South Africa — [www.thepaperstory.co.za](http://www.thepaperstory.co.za)

PAPTAC — The Pulp and Paper Technical Association of Canada — [www.paptac.ca](http://www.paptac.ca)

PEFC™ — Program for the endorsement of Forest Certification™ — [www.pefc.org](http://www.pefc.org)

Penreach — [www.penreach.org.za](http://www.penreach.org.za)

PMR Africa — [www.pmr africa.com](http://www.pmr africa.com)

Print Power — [www.printpower.eu/en](http://www.printpower.eu/en)

Protec — [www.protec.org.za](http://www.protec.org.za)

Reliefweb — [www.reliefweb.int](http://www.reliefweb.int)

RISI — [www.risiinfo.com](http://www.risiinfo.com)

SANBI — South African National Biodiversity Institute — [www.sanbi.org](http://www.sanbi.org)

Sappi Birdguide — [www.brizabirdguide.co.za](http://www.brizabirdguide.co.za)

SFI® — Sustainable Forestry Initiative — [www.sfiprogram.org](http://www.sfiprogram.org)

TAPPI — Technical Association of Pulp and Paper Industries — [www.tappi.org](http://www.tappi.org)

The Holmes Report — [www.holmesreport.com](http://www.holmesreport.com)

The treehouse — [www.the-treehouse.be](http://www.the-treehouse.be)

Two sides — [www.twosides.info](http://www.twosides.info)

Typek — [www.typek.co.za](http://www.typek.co.za)

United States Environmental Protection Agency — [www.epa.gov](http://www.epa.gov) — <http://www.epa.gov/greeningepa/ghg/>

University of Maine Pulp & Paper — [www.maineulpulpaper.org](http://www.maineulpulpaper.org)

World Skills — [www.worldskills.org](http://www.worldskills.org)

WWF — World Wide Fund for Nature — [www.wwf.org.za](http://www.wwf.org.za)



# Notes and references — Popup — windows

## Page 10

### Touching lives

Our pulp, paper and dissolving wood pulp solutions touch the lives of millions of people around the world, create direct employment for 13,665 people and indirect employment for thousands of others, have a positive impact on communities and generating significant economic benefits.

### People

- 13,665 employees globally
- 750 contractors globally (plus 11,700 people employed by contractors working for Sappi Forests)
- OHSAS 18001 certification achieved for all mills
- US\$1.4 million direct corporate social responsibility (CSR) spend (excludes indirect spend on infrastructure and community support)

### Planet

**Southern Africa:** All timber is sourced from plantations (planted forests) of softwoods and hardwoods. All our owned and leased plantations are 100% FSC™ certified; 86% of fibre used is certified. Approximately one third of our plantations are managed for biodiversity conservation.

**Europe:** Woodfibre is sourced from forests close to each mill. Softwood and hardwood pulp is sourced from Europe and the Americas. Tree species used include spruce and beech. Lanaken Mill can also process significant amounts of poplar; 71.4% of fibre used is certified through FSC® and PEFC.

**North America:** Woodfibre is sourced from landowners and commercial loggers operating in temperate forests in Maine, New Hampshire, Michigan, Minnesota and Wisconsin and from the Canadian provinces of New Brunswick, Quebec and Ontario. The tree species used include maple, poplar, aspen, beech and birch (hardwoods) and spruce, pine and fir (softwoods). 58.7% of fibre used is certified through FSC® and SFI®.

### Paper pulp and dissolving wood pulp

Some of our paper mills buy in pulp, while others are integrated. The pulping process for paper involves the use of cellulose and hemicellulose in woodfibre for its physical properties. The pulping process for dissolving wood pulp, however, uses only cellulose for its chemical properties, making the process more expensive, but resulting in a highly specialised product with high added value.

### Lean Manufacturing

We use the principles of Lean Manufacturing to reduce energy, re-use resources and minimise waste throughout our mills.

### Greenhouse gas emissions and carbon capture

By burning fossil fuels to generate energy (power and heat) in our production processes, we release CO<sub>2</sub>, a greenhouse gas into the atmosphere. Over the past five years, we have reduced our specific energy consumption by 20.3% which in turn reduced our CO<sub>2</sub> emissions. Read more about our efforts to reduce our CO<sub>2</sub> emissions on pages 99-104

The forests and plantations from which we source our woodfibre, absorbs CO<sub>2</sub>. Read more about greenhouse gas emissions on page 94.

### Solid waste

We generate 0.13 tons of solid waste per ton of product produced, in FY2013, we sent 0.055 tons (55kg) of solid waste per ton of product produced, mostly boiler ash, to landfill. We have reduced our solid waste to landfill by 33.4% over the past five years. Read more about our solid waste reduction and beneficiation efforts on pages 110-113.

### Our products add value

Our products add value to people's lives every day and are used in the following ways:

### Dissolving wood pulp

We produce 1.34 million tons of dissolving wood pulp per annum. The dissolving wood pulp principally produced by Sappi is the type used in the manufacture of a variety of cellulose products, including viscose staple fibres or rayon, solvent spun fibres (lyocell) and viscose filament yarns which have a soft, natural feel and excellent breathing properties.

Given their particularly high absorbency properties, these fibres are also used in non-woven applications in the healthcare, industrial and disposable product markets.

### Dissolving wood pulp

In 2013 we increased capacity of dissolving wood pulp (DWP) by more than 65%. DWP is used in the manufacture of cellulosic textiles and non-woven fibre products used in the fashion, pharmaceutical and consumer markets.

### Our products add value

Our products add value to people's lives every day and are used in the following ways:

- Graphics papers Commercial printing including magazines, brochures, catalogues, direct mail, corporate reports and calendars
- Packaging papers Convenience food, fast food and to protect and transport fresh produce
- Speciality, security and release papers Consumer goods, labels, passports and a variety of other applications.

### Paper

Paper is transported to regional distribution centres, merchants and printers. Designers specify paper which printers convert into products such as books, magazines, brochures and labels.

### Prosperity

- Interest bearing debt: US\$2,598 million
- Cash and cash equivalents: US\$385 million
- Ordinary shareholders' interest: US\$1,144 million
- US\$29.5 million R&D spend
- Returns on Exciter (innovation) projects are double the investment spend
- Value of property plant and equipment: US\$3,078 million; plantations in Southern Africa: US\$464 million
- Sales in FY2013:
  - coated graphic paper: 4,048,000 tons
  - uncoated graphic paper: 397,000 tons
  - speciality paper: 244,000 tons
  - commodity paper: 560,000 tons
  - dissolving wood pulp: 795,000 tons
  - paper pulp: 237,000 tons
  - other: 1,185,000 tons
- Power sold to third party customers in FY2013:
  - North America: 770,350 gigajoules (GJ)

**Europe** 1,605,360GJ

**South Africa:** 190,295GJ.

Percentage renewable energy: 51.5%

Decrease in solid waste to landfill over five years: 33.4%

Decrease in specific water usage over five years: 4%

All mills ISO 9000 and ISO 14001 certified

### Transport

We streamline our transport processes wherever possible.

# Notes and references — Popup windows

## Recycling

Recovering and recycling paper and board helps to minimise the emissions associated with landfill.

## Page 11

### Prosperity targets

We do not publicly disclose our Prosperity targets for 2013; these are reported internally and monitored quarterly.

### Forward looking financial statements

Forward looking financial statements, such as financial performance targets are based on our current expectations and assumptions, including factors beyond Sappi's control; the disclosure of which is governed by various entities and jurisdictions wherein which we conduct business.

For more detailed information, please consult our:

- FY13 Annual Integrated report
- Our quarterly results

## Page 12

### Level 3 compliance

Between 75 and 85 points on the BBBEE scorecard.

Prior to FY2012, this target only included own employees.

## Page 42

**R/3** A three-tiered information system used to coordinate resources, information and activities.

**APO** Advanced Planner and Optimiser

**BW** Business Information Warehouse

## Page 48

Is An Advertisement Worth the Paper it's Printed On? The impact of premium print advertising on consumer perceptions, Hampel S, Heinrich D, Campbell C, Journal of Advertising Research, March 2012, Volume: 52 Issue: 1 pp.118-127.

## Page 51

This figure represents contractors directly paid by Sappi. There are approximately a further 14,100 contractor employees within Sappi.

## Page 53

Turnover in Southern Africa was higher than other regions in FY2013, due to the extensive restructuring changes we initiated in order to return the business to profitability.

## Page 72

PETCO aims to minimize the environmental impact of post-consumer PET on the South African landscape and supported through the PET industry, strives to contribute to the sustainable growth of the PET plastic recycling industry, supporting existing and encouraging new PET collection and recycling networks.

## Page 94

Specific measurements are calculated with air dry tons (adt) of saleable production as parameter.

## Page 94 Diagram

### Carbon sequestration

Paper and paper products lock up carbon during their lifetime.

The sustainably managed forests and plantations from which our wood is sourced play an important role in mitigating climate change by absorbing CO<sub>2</sub>, 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 woodfibre in paper store carbon throughout their lifetime.

A significant amount of carbon is also captured within the roots — we do not account for this.

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<sub>2</sub> continues as the new trees grow. Harvesting trees is balanced with re-growth.

## South Africa

In our plantations in Southern Africa, we plant more trees than we harvest. The wood that we harvest alone accounts for 13m tons of absorbed CO<sub>2</sub> — and more than 8m tons

of life-giving oxygen released every year. This avoids emissions equivalent to burning 815,000tons of coal.

This more than offsets the CO<sub>2</sub> emissions from our manufacturing and forestry operations. Taking into account all our CO<sub>2</sub> emissions (own biofuels, coal, oil, gas, purchased power, steam, transport, goods and services and plantation decay, our absorptions exceed our emissions by 0.5m tons of CO<sub>2</sub>.

## Methane emissions

We emit very little methane (CH<sub>4</sub>).

## Forests

Some methane is emitted by decomposing organic matter (fallen leaves, harvesting residue etc) in the forests and plantations from which we source our woodfibre.

## Landfill

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<sub>4</sub>) if not managed properly.

We focus on minimising end-of-pipe waste by adding value to by-products that might otherwise go to landfill. 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.

## CO<sub>2</sub> emissions

### Reducing emissions

Reducing our specific purchased energy consumption is a financial imperative, with the added benefit of reducing emissions. We continue to focus on energy efficiency to reduce the specific energy required to produce our products.

Our continued focus on energy efficiency and efforts to reduce the specific energy required to produce our products have resulted in savings of 12% since 2008

# Notes and references — Popup windows

## Renewable energy

Our efforts to mitigate our own carbon footprint are further evident in the fact that over 50% of our global energy-use is derived from renewable, rather than fossil fuel sources. We are steadily becoming more energy self-sufficient through increased self-generation — using internally available biofuels like black liquor, sludges, and own bark.

This is important, as the burning of fossil fuels continually releases ‘new’ CO<sub>2</sub> previously locked up in the form of oil, gas or coal. When renewable energy like biomass is burned however, the CO<sub>2</sub> released is equivalent to that which was bound

from the atmosphere during the process of photosynthesis — so that ‘new’ carbon is not being introduced.

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.

## Page 104

Torrefecation - Involves heating biomass in the absence of oxygen to a temperature of 250-320°C. At these temperatures, a dry, torrefied product is obtained, which is stable, brittle and water resistant. This makes it much easier to grind than the parent biomass material and reduces biological degradation in storage. By combining torrefaction with pelletisation or briquetting, biomass materials can be converted into a high-energy-density commodity solid fuel or bioenergy carrier with improved behaviour in long-distance transport, handling and storage, and also with superior properties in many major end-use applications.

## Page 108

### EN-21 Specific chemical oxygen demand (COD)

Saiccor Mill is excluded as the mill’s effluent chemical oxygen demand (COD) concentration is considerably higher (±840kg/adt) and would reduce the scale variance for the remaining regions. This effluent is discharged — permitted by the mill’s water licence — directly into the Indian Ocean.

## Page 108

### EN-21 Specific total suspended solids (TSS)

Saiccor Mill is excluded as the mill’s effluent total suspended solids (TSS) concentration is considerably higher (±17.7kg/adt) and would reduce the scale variance for the remaining regions. This effluent is discharged — permitted by the mill’s water licence — directly into the Indian Ocean.

## Page 109

A comparison of the biophysical and economic water-use efficiencies of indigenous and introduced forests in South Africa.

## Page 109 Source

Russell M Wise, Peter J Dye, Mark B Gush, A comparison of the biophysical and economic water-use efficiencies of indigenous and introduced forests in South Africa, Forest Ecology and Management, Volume 262, Issue 6, Pages 895 – 1165, (Elsevier, 2011)

## Page 112

Cement Technology Roadmap 2009: Carbon emission reductions up to 2050, published by the World Business Council for Sustainable Development (WBCSD) and the International Energy Agency (IEA).



# Notes and references — Popup — diagrams

## Page 54

### Gender and ethnicity diversity Sappi boards

		Sappi Limited Board	Sappi Limited Executive Committee	Sappi Fine Paper Europe Subsidiary Board	Sappi Fine Paper North America Subsidiary Board	Sappi Southern Africa Subsidiary Board
Gender	Male	85.7%	87.5%	84.0%	71.0%	84.6%
	Female	14.3%	12.5%	16.0%	29.0%	15.4%

Ethnicity	Caucasian	71.4%	87.5%	84.0%	85.0%	76.9%
	African/Asian	28.6%	12.5%	16.0%	15.0%	23.1%

Age	31-40 years	-	1	1	1	1
	41-50 years	1	1	1	1	2
	51-60 years	6	6	5	5	10
	61-70 years	7	-	-	-	-

## Page 106

### Source of water (% by source for 2013)

	Europe	North America	Southern Africa	Group
Extraction from River	81.64	80.64	80.67	81.02
Own boreholes	15.01	0.00	0.00	5.61
Ex Utility	0.20	19.36	2.35	5.99
Ex own storage dam	0.00	0.00	10.94	3.99
Recycled process effluent	2.09	0.00	0.77	1.06
Waste Water from outside operation	1.06	0.00	5.28	2.33