Reader’s guide

Getting around

This Group Sustainability Report makes use of in-document navigation tools, allowing you to navigate to the subjects that interest you most. The navigation bar at the top of the page will keep you apprised of where you are in the report.

Click on the icons to:

- Move to the contents page
- Move forward one page
- Move back one page, or
- Move back to the previous page you were reading.

Access additional/explanatory information, including data to the Prosperity and Planet graphs. Where appropriate, this information is also set out in the ‘References’-section at the end of this report.

Related information within this report is cross-referenced.

This report also makes use of Adobe Acrobat’s bookmark tools.

More information...

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


More detailed discussions are provided in our regional Sustainability Reports for Europe, North America and South Africa, which are published in hard copy format and also available online at www.sappi.com. These reports will be available early in 2016.

Read more detailed information available from third-party websites.

Certification bodies

Certification bodies, eg FSC® and PEFC™, are referenced throughout this report, without providing detailed information about each of our operations’ certification status in each instance, to ensure ease of reading.

Certificate numbers are published in detail in our FAQ ‘Our certifications’, available online.

Intellectual property

Various, websites, research reports, trademarks, registered trademarks and other forms of intellectual property are referenced in this report. All of these, whether marked or unmarked, are without exception, acknowledged as the legal property of their respective owners.

Sappi’s own brands are protected by various copyright provisions; they include: Algro Sol®, Algro® Design, Algro® Finess, Algro® Guard M, Algro® Nature, Algro® Sol, Algro® Thermo, atelier™, Flo®, Fusion®, Leine® Guard M, LusterPrint® and LusterCote®, McCoy®, Opus®, Opus® DX, Parade® Prima A, G and HP, Somerset®, Typek®, Ultraflute™, Ulratest™.

Conventions

Billion

We follow contemporary ‘short scale’ convention; defining a billion as one thousand millions.

Specific

As with other companies, when data is expressed in specific form, this means that the actual quantity consumed (energy, water etc) or emitted (emissions, solid waste etc) is expressed in terms of a production parameter for the period indicated. For Sappi, as with other companies, the parameter is air dry tons of product.

Tons

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

Exchange rates

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<th>FY2015 Average</th>
<th>FY2015 Close</th>
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<td>ZAR/US$</td>
<td>11.9641</td>
<td>13.9135</td>
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<tr>
<td>US$/EUR</td>
<td>1.1501</td>
<td>1.1195</td>
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Version 01, 08 January 2016
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Leadership messages

Unlocking our sustainable future

The rapidly changing world around us is having a widespread impact on just about everything: global economies, industries, markets, consumer trends and our planet’s resources. As a company, we are embracing this reality with a focused strategy and some very clear objectives.

Our way of living, and ultimately Sappi’s future, is being impacted by a number of megatrends, including shifts in demographics, technology, climate, the drivers of the global economy, as well as the reality of adjusting to a carbon-constrained future. As a company we understand these changes and are embracing them by adapting our business accordingly.

Our ultimate goal, within this changing world, is to maintain our position as a global forest products leader. We will achieve this through the power of One Sappi — committed to collaborating and partnering with stakeholders — focused on being a trusted and sustainable organisation with an exciting future in woodfibre.

The quality of our people, their dedication, resourcefulness and drive has made it possible to overcome the transformative challenges in our industry. Today, we are in a much stronger position to move ahead, thanks to our optimism and pragmatic approach in running a leaner, more productive and efficient business.

We now have the opportunity to further transform and diversify as a business.

To do this, we have identified numerous exciting prospects for which we are uniquely positioned to take a lead industry role. As a natural renewable resource company, Sappi is in an excellent position to help drive the renewal of the forestry industry towards a low-carbon future. We will make full use of this opportunity.

Our approach is encapsulated in our 2020Vision. Within the next five years, we want to maximise the returns from our mature businesses, expand our existing high-growth businesses and enter new businesses in adjacent fields as we unlock and commercialise the potential of plantation- and forest-derived bioproducts.

The fact that we operate in a carbon-constrained world as a natural renewable resource company has opened up many exciting opportunities to expand and diversify. Our business is based on woodfibre derived from trees — and it is in these fibres that we have found the key to unlock our sustainable future in a fast-changing world.

Finally, how we reach our strategic goals as a business is as important as reaching those goals. Our new group value statement defines our operating ethos going forward — “At Sappi we do business with integrity and courage, making smart decisions which we execute with speed.”

Steve Binnie  
Chief Executive Officer, Sappi Limited

An ongoing process — not an event

Entrenching sustainability in its broadest sense — the 3Ps of Prosperity, People and Planet that are essential to business sustainability — into our everyday operations is an ongoing process and not an event. The board and management continue to focus on all facets of sustainability and we have seen considerable improvements in all our sustainability targets.

The board’s approved strategy to diversify our business into adjacent opportunities will further enhance our financial sustainability.

Jock McKenzie  
Chairman, Social, Ethics, Transformation and Sustainability (SETS) Committee
Intentional evolutionary strategy responsive to megatrends…

Our way of living, and ultimately Sappi’s future, is being impacted by a number of megatrends shaping our world — we are embracing these with a focused strategy and some very clear objectives.

To reshape Sappi’s future, our 2020Vision draws on the power of One Sappi as we move beyond pulp and paper to unlock and commercialise the potential of woodfibre derived bioproducts.

Our strategic evolution is underpinned by a commitment to collaborating and partnering with our stakeholders, and aims to position Sappi as a trusted and sustainable organisation with an exciting future in woodfibre.
Scope of this report

This report is aligned with our Annual Integrated Report and covers FY2015, the period from the beginning of October 2014 to the end of September 2015.

We report on a regional and global basis, wherever possible 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.

Commentary is provided on graphs to enhance understanding and explain specific measurement criteria. It is clearly pointed out where measurement criteria have changed.

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).

Aligned with King III’s recommendation for integrated reporting, our Annual Integrated Report provides a very clear link between sustainability and strategy and gives a broad view of our overall sustainability performance.

In response to stakeholders’ needs for more in-depth information pertinent to their specific region, we publish region-specific Sustainability Reports in addition to this Group Sustainability Report.

Our 2015 regional Sustainability Reports for our operations in Southern Africa and Europe, together with an updated summary for North America, will be available in 2016.

Joint ventures excluded

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

Sold mills included

Data relating to our Cape Kraft and Enstra Mills is included in the graphs and related commentary. Sales of both mills were concluded shortly after year-end.

Identifying stakeholders

We have identified the stakeholders we expect to use our report on the basis of our ongoing engagement with them — formal and informal. The various ways in which we engage our stakeholders are set out in detail in the ‘Stakeholders’-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.

Global Reporting Initiative

We have reported in terms of the Global Reporting Initiative’s (GRI’s) G4 Sustainability Reporting Guidelines (Core).

We have included a GRI Index and a separate document communicating our progress in terms of the United Nations Global Compact (UNGC).
About this report continued

Determining materiality

We consider material matters to be those matters that could facilitate or inhibit our One Sappi strategy and that could substantively affect — either positively or negatively — our ability to create stakeholder value over the short-, medium- and long-term.

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 the opportunities, challenges and prevailing trends in our industry and the global economy.

These trends occur in the broader context of a world where climate change concerns and resource scarcity are raising expectations to make more and better with less and where sustainably manufactured products derived from renewable resources are more important than ever before.

Based on this context, we have realigned our strategy to maintain our position as a global forest products leader and developed a global vision based on the power of One Sappi.

Throughout the report, qualitative text is backed up by quantitative information, generally in the form of graphs illustrating performance over five financial years from FY2010 to FY2015.

Employee numbers are reported on a full time equivalent (FTE) basis; employment equity numbers are reported as headcount on 30 September 2015.

We aim to present information that is material, accurate, 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 established new group goals in 2015 and will report on progress (or lack thereof) against these in 2016. We publish our performance against targets in our regional Sustainability Reports, transparently reporting on success or lack thereof in achieving these targets.

Prioritising content

This report is structured along Sappi’s well-established 3Ps of sustainability: Prosperity, People and Planet. It covers material sustainability focus areas that affect the long-term success of our business, and that relate to any significant impacts we have on the economy, environment or communities in which we operate.

While we do cover economic (Prosperity) issues to some extent, these are dealt with in detail in our Annual Integrated Report.

External assurance

Internal audit

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.

External verification

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.

Forest certification systems

We are also assessed in terms of the forest certification systems we use.

BBBEE Performance

In South Africa, our Broad-based Black Economic Empowerment (BBBEE) performance is assessed by an external ratings agency.

Indices

Sappi Limited is a constituent of the FTSE/JSE Responsible Investment Index and the FTSE/JSE Responsible Investment Top 30 Index. Being included in these indices means that our sustainability performance has been externally assessed.

Confidence

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.

External verification

The Social, Ethics, Transformation and Sustainability (SETS) Committee reviews the efficacy of conducting external assurance annually.

The committee considered external verification in the year under review, but is satisfied that the sustainability information presented in this report has been provided with a reasonable degree of accuracy.
In context

By 2030, almost half the world will live under conditions of high water stress.
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 the Code of Ethics and our group value statement: “At Sappi we do business with integrity and courage, making smart decisions which we execute with speed.”

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

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

Sustainability ambassadors help to entrench an holistic approach to the 3Ps of **Prosperity**, **People** and **Planet** throughout the group.
Global sustainability goals

Continued improvement

Our targets reflect issues that are important to our sustainability as a business and are a key element in our work to continually improve our performance in terms of the 3Ps.

Progress — or lack thereof — against our targets is monitored and reported on regularly to: management, the Regional Sustainability Councils, the Global Sustainable Development Council and ultimately, to the SETS Committee, a fully constituted board committee.

2020Vision targets

In line with our 2020Vision and One Sappi strategic approach, in 2015 we established global sustainability targets.

Regional five-year (2016-2020) targets, all with FY2014 as a base-year, are aligned to our global goals — see pages 10 to 12.

Capital spend budget over these five years will be used to determine targets in various elements.

Regional performance against previously established FY2015 targets in Europe and South Africa, and performance against 2016 targets in North America, are reported in our regional Sustainability Reports. 

<table>
<thead>
<tr>
<th></th>
<th>ROCE</th>
<th>FY2014</th>
<th>FY2015</th>
<th>FY2015</th>
<th>FY2020</th>
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<td></td>
<td>Target</td>
<td>Baseline</td>
<td>Achievement</td>
<td>Performance</td>
<td>Goal</td>
</tr>
<tr>
<td>Prosperity</td>
<td>ROCE return on capital employed</td>
<td>10.8%</td>
<td>12.4%</td>
<td>15% improvement</td>
<td>12% minimum</td>
</tr>
<tr>
<td>People</td>
<td>LTIFR own and contractor employees combined</td>
<td>0.53</td>
<td>0.48</td>
<td>9% improvement</td>
<td>10% minimum year-on-year improvement Target: 0</td>
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<tr>
<td></td>
<td></td>
<td>measured every alternate year</td>
<td></td>
<td></td>
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<tr>
<td>Planet</td>
<td>STE specific total energy efficiency</td>
<td>21.05 GJ/adt</td>
<td>20.18 GJ/adt</td>
<td>4% improvement</td>
<td>5% improvement over period</td>
</tr>
<tr>
<td></td>
<td>Fibre certified</td>
<td>79%</td>
<td>79%</td>
<td>Maintained</td>
<td>≥79%</td>
</tr>
</tbody>
</table>
Our regional sustainability goals and 2020 targets — Europe

**Prosperity**
- Produces 49% of group sales
- 10% EBITDA improvement based on turnover
- Stay at level or ahead of European Trading Scheme (ETS) cost increase.

**People**
- 6 paper mills
- 1 speciality paper mill
- 16 sales offices
- 5% overall machine efficiency improvement by 2020

**Planet**
- Engagement of employees (combination of participation rate and % sustainably engaged, survey every two years), participation from 71% (2015) to 75% (2020), % of sustainably engaged: 80%.
- LTIFR — SEU 2016: 0,8 - annual reduction of 10% the following years
- Total certified fibre content: >70%
- Specific CO₂ reduction: >5%
Our regional sustainability goals and 2020 targets — North America

- Produces 26% of group sales
- 1 paper mill
- 1 specialty paper mill
- 1 paper and specialised cellulose mill
- 4 sales offices

- ≥12% annual return on net assets

- Achieve zero workplace injuries (LTIFR)
- Offer 60 hours training and education per employee annually (hrs/employee)

- Achieve 60% total certified fibre content
- Offer 5% reduction in energy intensity (total energy per saleable ton)
- Offer 5% reduction of pulp mills’ specific raw material waste
- Offer 10% reduction of paper mills’ specific raw material waste
Our regional sustainability goals and 2020 targets — South Africa

Properly

Produces 25% of group sales

1 sawmill

1 specialised cellulose mill

4 paper mills

100% certified own timber

70% certified purchased timber and pulp

Level 4 BBBEE compliance in respect of the new forestry codes

>20% EBITDA margin

10% reduction in specific purchased fossil energy

10% reduction in specific purchased fresh water usage

10% reduction in specific solid waste landfilled

Sustainable cut above four million wet white tons per annum.

Combined Lost Time Injury Frequency Rate (LTIFR) for own employees and contractors to be better than best-ever achieved on a continuous 12-month basis and Lost Time Injury Severity Rate to be below 25.

Engaged employees participation, commitment and issues closed out.
### Accolades in 2015

<table>
<thead>
<tr>
<th>Global</th>
<th>Europe</th>
<th>North America</th>
<th>South Africa</th>
</tr>
</thead>
</table>
| ![FTSE JSE](image) We were included in the FTSE/JSE:  
  • Responsible Investment Index, and  
  • Responsible Investment Top 30 Index.  
  These indices replace the JSE SRI Index. | ![PPI](image) Innovation in Specialty Papers Award finalist in the 2015 Pulp and Paper International awards. | ![PPI](image) In October 2014, we won two categories in the 2014 PPI awards: Managing Risk and Safety and Mill Manager of the Year awards. The 2015 PPI awards were announced on 28 September 2015 and our Cloquet Mill Manager was a finalist in the Mill Manager of the Year award. | ![Top 10](image) Sappi was recognised as a top-ten finalist in the 2014 Massmart Environmental Awards, designed to promote responsible environmental practices in Massmart’s supply chain. |
| ![99C](image) We achieved a score of 99 in the 2015 Carbon Disclosure Project for disclosure and were placed in performance band C. | | ![P+](image) The 2015 promotion, Haptic Brain, Haptic Brand: A Communicator’s Guide to the Neuroscience of Touch, won the sixth-annual Positively Print award, co-sponsored by the Graphic Arts Show Company and Two Sides North America. | ![6th](image) Sunday Times Best Green Companies Award. |
| ![Abashintshi](image) The research component of the Abashintshi community project received a gold quill from the International Association of Business Communicators (IABC). | | | ![Lomati Sawmill](image) Lomati Sawmill won the Kruger Lowveld Chamber of Business and Tourism’s Large Business Enterprise Award. |

Our Marketing Communications Director was recognised by the OutputLinks Communications Group as a Woman of Distinction for 2015.
Our papers and boards give designers and converters who use them, a winning edge.

Pro Carton Awards

Advertising agency Leo Burnett was a finalist in the non-food category of the Pro Carton Awards for their packaging design for ITEM m6, printed on Algro Design. The packs can be opened like books and are easy to close again with a click. Soft-touch varnish gives a satin impression. The product can be used flexibly at Point of Sale and can be presented both suspended and standing.

Pro Carton/ECMA Award 2014

CD Cartondruck (Germany) used Algro Design to develop the winning entry — Issey Miyake’s Pleats Please L’Elixir ladies perfume — in the Beauty & Cosmetics category of the Pro Carton/ECMA Award 2014.
To realise our vision and strategy, we have to rethink our value chains, forge new partnerships and develop new networking behaviours. Connecting flexibly to one another, to better share knowledge and innovative ideas…
Proactive, constructive stakeholder engagement is at the heart of our drive to integrate sustainability into our everyday business processes.
Our key relationships

Building relationships with stakeholders in a spirit of trust and mutual respect enables more tangible business value creation: by understanding stakeholder rights, needs and expectations; integrating their inputs; as well as measuring and monitoring our activities; so as to ensure alignment with our strategic goals.

Recognising the strong link between stakeholder inclusiveness and materiality, we use stakeholder engagement as a tool to assist in the identification and prioritisation of material issues. Materiality takes into account substantial economic, environmental and social factors in addition to financial factors.

By determining our most material issues through stakeholder engagement, we clarify and confirm the strategic themes that pertain to our most significant risks and opportunities and manage expectations and priorities, thereby facilitating our licence to operate, enhancing our organisational effectiveness and ultimately, driving the long-term success of our business.

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; government, industry bodies, customers; communities and NGOs; to collective public meetings with stakeholders by our mills, as well as surveys of selected groups such as employees, customers and investors and audits with suppliers.

We view stakeholder engagement not as a once-off annual intervention but as an ongoing dynamic process able to respond to the changing nature of issues of interested and affected parties.

Our principles of stakeholder engagement

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 set out across pages 18 to 33 together with selected examples of engagement undertaken during the reporting period. 📖

Strategic shift

As a global business, with our products sold into more than 100 countries, our ability to connect with stakeholders as **One Sappi**, motivated by our revised mission, strategy and shared values, gives us a clear advantage and for our stakeholders a connection they can trust to add value.
Our key relationships — Employees

Management approach

We will continue to invest in future talent while challenging our people so that they are able to seize the opportunities presented by a changing global environment.

We make resources available to enable our people to grow intellectually, fulfil their potential and bring new ideas to fruition.

Areas of mutual interest

- Strategy, priorities and performance of the company
- Internal and external activities of the company, our staff and our communities
- Organisational developments, particularly in respect of restructuring
- Ongoing training and skills development
- Creation of a dynamic and encouraging environment through a focus on safety, health, wellness and recognition programmes
- Commitment to sustainability, and
- Group values and Code of Ethics.

Ongoing avenues of engagement

Management engagement

We encourage full engagement between managers and their staff.

Our group and regional Chief Executive Officers engage with staff through regular site visits, road-shows, presentations and discussions.

Unions have formal channels through which they engage with management.

Suggestion lines exist at some facilities.

Engagement fora

Meetings, committees and fora enable direct two-way communications and include:

- Operating unit meetings, briefings and workshops
- Various forums in South Africa
- National Employment Equity and Learning Forum
- Shop Steward Forum, and
- Partnership Forum
- Transformation Steering Committee
- Global Employee Engagement Survey — every alternate year
- Wellbeing committees at mills and business units, and
- Health and safety committees at mills.

Training

- Ongoing training and development initiatives, training targets in each region, and
- Targeted training and engagement programmes in each region regarding sustainability.

Recognition and award

- Global
  - Technical Innovation Award
  - Chief Executive Officer Award for Excellence
- Europe
  - The annual Coryphaena outstanding achievement award
- North America
  - Quarterly Risk Taking and Ingenuity awards
- South Africa
  - Excellence in Achievement Awards (EAA).

Other communications tools

- Global, regional and local newsletters
- Our Global Intranet, and
- Letters, brochures, videos, posters, screensavers etc.

Berry Wiersum — 2020Vision staff briefing.
Our key relationships — Employees continued

Key issues and engagement in 2015

One Sappi
After a review of the company’s strategy by the Group Executive Committee, the group Chief Executive Officer in August 2015 launched the group’s revised strategy as well as new mission, vision and value statements. Taken together these elements provide the group’s targets for 2020, the strategic actions to achieve these targets as well as the value system setting out how the targets are to be achieved. They also enable the group, which has a wide geographic footprint, to better coordinate efforts and act as one company.

The roll out of this initiative was supported by a robust communications campaign which included desk drops of relevant communication material, posters, letters and articles in both global and local newsletters.

Values
In December 2015, we will begin a process of reinforcing and entrenching the values through focus-group sessions with all employees. This will be integrated, where possible, with feedback sessions on the Global Employee Engagement Survey conducted in September 2015.

Global Employee Engagement Survey
The 2015 Global Employee Engagement Survey was conducted during September 2015.

Initial indicators point to a global participation rate of 73%, which is 1% more than in 2013.

The results are in the process of being collated by the service provider.

Training
Globally, average FY2015 training spend per employee amounted to US$644.

Europe
We continued to drive the Sappi Performance Engine focusing on embedding of the PDCA (Plan, Do, Check, Act) mindset across the business.

Europe
We rolled out a new Eco-effectiveness campaign, which, in part, involves the telling of personal stories of our people demonstrating their personal commitment to sustainability. This approach has helped to migrate sustainability, as a concept, throughout the business.

North America
We continued with our EDGE (Enhancing Development and Growth through Engagement) and LEADS (Leadership Excellence and Development) programmes.

North America
As a result of several new collective bargaining agreements, more than 1,110 of the company’s hourly employees will transition from a low deductible to a high deductible health plan at the beginning of 2016. The new plan includes a health savings-account feature, with a contribution from the company to partially offset the higher deductible. We are rolling out an education campaign with respect to this change.

South Africa
Many of our high-potential employees participated in the Sappi Leadership Academy. We also operate bursary programmes and Engineers in Training and Foresters in Training programmes, and support FET (Further Education and Training) colleges.

Sustainability
We have sustainability ambassadors in Europe and North America.

South Africa
Our employees have access to the Earthkind Agent eLearning game which the public can access via an App for iPad and Android tablets. The game exposes players to Sappi’s sustainability information on a new, innovative platform. To date, almost 800 of our employees have played the game.

Safety
The Lost Time Injury Frequency rate continued to decline year-on-year, despite three tragic contractor fatalities in South Africa, which we deeply regret.

Brand integrity
Our brand ambassadors in South Africa, and the Regional Communications Managers in Europe and North America are tasked with ensuring in-house brand integrity.

Value add
- Greater levels of employee engagement
- Alignment with our strategic direction enables our people to contribute more positively to the business and their personal and career development
- Engaged employees are pivotal to the success of our business
- Enhanced productivity and ability to service global markets
- Build our human capital, helping to enable delivery of our 2020 Vision, and
- Build a base of the technical skills needed by our industry.
## Our key relationships — Unions

### Management approach

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 manner in which Sappi does business.

Globally, approximately 63% of our workforce is represented by unions, with 69% covered by collective bargaining agreements.

### Areas of mutual interest

In addition to meeting with local union leadership for the purposes of remuneration, working hours, and other conditions of service as well as resolving grievances, the company relies on local unions to help with safety and wellness initiatives, as well as various forms of community outreach.

### Ongoing avenues of engagement

#### Europe
Negotiations occur at the various country and industry-specific Collective Labour Associations, and the contract terms range from 1-2 years. The labour framework in Europe consists of Works Councils and collective labour agreements and differs from country to country.

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

#### 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 the recognised trade unions at the National Employment Equity and Skills Development Forum, the Shop Steward Forum and the Partnership Forum.

### Key issues and engagement in 2015

Overall, FY2015 was characterised by amicable, but tough, negotiations and relatively good relationships with organised labour across the regions.

#### Europe
Our Chief Executive Officer and Human Resource Director attended biannual union meetings. The main purpose of these meetings is to inform and consult on business results, market developments and pan-European organisational topics.

#### North America
We settled labour agreements with the majority of our hourly production workers through negotiations with the United Steelworkers (USW) union at the Westbrook, Cloquet and Somerset Mills on economic terms consistent with the industry.

#### South Africa
Our engagement structures were reviewed and a new recognition and threshold agreement was concluded with the majority union, the Chemical, Energy, Paper, Printing, Wood and Allied Workers Union (CEPPWAWU). This agreement regulates the relationship with the Union and most importantly sets the criteria for any new trade union wishing to claim for organisational rights at any of our operations or business units. The other recognised trade unions, which are party to the Bargaining Council for the Wood and Paper Sector, are also covered by this agreement and enjoy certain organisational rights where they have membership.

We developed and adopted a new engagement and dialogue framework that clearly defines the terms of reference for these engagement structures, at national and business unit level.

We successfully concluded wage negotiations without industrial action in all sectors: Forestry, Pulp and Paper and Sawmilling.

A collective bargaining-process review is currently underway. This is to establish whether South Africa should continue to be part of the central – or industry-based wage negotiations in this chamber, or revert back to company – or plant-level negotiations, given the complexity of a central process.

We formally consulted with all recognised trade unions regarding the sale of Cape Kraft and Enstra Mills.

These consultations were in accordance with sections 189 and 197 of the Labour Relations Act 66 of 1995, as amended respectively.

Consulting parties reached consensus to use the combination of voluntary severance packages and redeployment to other South African business units, as mitigating factors to avoid or minimise forced retrenchments.

### Value add

- Meaningful engagement on a number of issues affecting both business and employees
- Improved relationships
- More stable labour force, and
- Enhanced productivity.
Our key relationships — Communities

Management approach

Having a mutually respectful relationship with the communities within which our businesses are situated is critical to our success.

We work to incorporate the communities close to our operations into our journey of intentional evolution, which recognises the importance of conserving natural resources, uplifting people so that they are well positioned to thrive in our increasingly inter-connected world.

Social projects are reviewed on a case-by-case basis and we encourage projects that 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
- air emissions
- employment
- job creation
- business opportunities
- economic and social impacts
- contributions and community support.

Global  Ongoing avenues of engagement

There are various formats of community engagement meetings held by our mills in the 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 licensing conditions of mills.

We also engage with local communities through support of and sponsorship for local events and initiatives and we encourage employees to participate in outreach and community projects.

South Africa  Ongoing avenues of engagement

Local farmer and community forums regarding our forestry communities in South Africa.

We work with local government and communities to accelerate afforestation in the northern region of the Eastern Cape. This allows Sappi to secure valuable hardwood timber resources close to Saiccor Mill in KwaZulu-Natal.

In addition to our own plantations we continue to identify ways to ensure access to pulpwood in the wood baskets close to key operations, by means of land or timber delivery swaps.
Europe  Key issues and engagement in 2015

Internships
We have established extensive internship programmes at our all our mills. Kirkniemi Mill offers training material for schools and all mills host schools on mill tours.

Paper sponsorships
All mills offer paper and financial sponsorships to local schools, sport and hobby clubs, forest industry students, local safety and environmental organisations. We also support local charities.

Partnering with communities
Active corporate citizenship programmes relevant to the needs of the communities where we operate ensure that we promote socio-economic development in these communities. While each mill takes a different approach, ongoing engagement is a common denominator.

Further details of community activities can be found in our regional Sustainability Report.

Alfeld Mill  Connecting with education
Alfeld Mill is closely connected with schools and universities. The Managing Director of the mill is also a member of local county committees, staying connected to other industry representative and politicians.

Ehingen Mill  Recognising 625 years
In 2015, the German paper industry celebrated its 625th anniversary. To mark this occasion, Sappi’s Ehingen Mill opened its doors to the public with a series of monthly mill days which included guided tours and presentations.

Ehingen Mill  Student engagement
Throughout the year, the mill actively engages in the community by giving job presentations to school children and inviting students to participate in mill tours.

Ehingen Mill  Sport
They also sponsor local sports events with paper for brochures.

The mill has a running team who participate in the annual Ulm marathon.

In 2015, Sappi supported a group of Eritrean runners, who are also asylum seekers, welcoming them to their team and providing them with running gear.

Lanaken and Maastricht Mills  Open house
Both Maastricht and Lanaken Mills organise open house activities every three to five years whereby local residents are invited to the mills to try out papermaking. The open house programme also involves safety-related activities and initiatives related being ‘green’. The mills also provide local societies with paper sponsorships.

Gratkorn Mill  Public consultation
In the first half of 2015, Gratkorn Mill undertook the rebuilding of their liquor boiler. Six months before the start of work on the site, the project team invited neighbours from the area to an information session about the build. They kept in regular contact with neighbours throughout, distributing leaflets and organising a celebratory barbecue at the end, to which partner companies involved in the project were also invited.

Gratkorn Mill  Running event
In June 2015, the third edition of the Gratkorn Mill running event took place. The initiative has been a great opportunity to experience the mill from a different perspective (the running track is safeguarded by our fire brigade). The event, which is open to employees, relatives, friends and neighbours, usually attracts around 200 participants.

Kirkniemi Mill  Community engagement
Kirkniemi Mill holds regular meetings with neighbouring communities to give them mill updates. Family members of employees, together with local residents are also invited to the annual Global Safety Awareness Day at the mill. These events have proved to be very popular.

In addition, Sappi school ambassadors make it their business to visit local schools to them about professions in forest and paper industry.

In an effort to promote work safety in the Lohja area, Kirkniemi Mill challenged local companies to improve work place safety through a competition. The Lohja city and local Member of Parliament supported the initiative which succeeded in raising awareness about safety in the work place.

Kirkniemi Mill  Safety promotion

In an effort to promote work safety in the Lohja area, Kirkniemi Mill challenged local companies to improve work place safety through a competition. The Lohja city and local Member of Parliament supported the initiative which succeeded in raising awareness about safety in the work place.

Lanaken and Maastricht Mills  Open house
Both Maastricht and Lanaken Mills organise open house activities every three to five years whereby local residents are invited to the mills to try out papermaking. The open house programme also involves safety-related activities and initiatives related being ‘green’. The mills also provide local societies with paper sponsorships.

Stockstadt Mill  Ihr Nachbar
The Stockstadt Mill produces a biannual mill magazine — Ihr Nachbar (Your Neighbour) — which is distributed to every resident in Stockstadt and Mainaschaff, the city across from the mill on the other side of the river Main. The magazine aims to keep local communities informed about mill-related topics.
## Key issues and engagement in 2015

### North America

We have long-term relationships with intern and co-op programmes and offer positions that give undergraduate and graduate students work experience at our mills and the Westbrook Technology Centre.

In addition to hosting interns, we also held a two-day Career Academy at which students interacted with Sappi employees in finance, customer service, inside sales, research, production, information technology and human resources.

We also hosted a camp where Somerset Mill employees introduced high school students to engineering roles.

Further details of community activities can be found in our regional Sustainability Report. [NA](#)

### South Africa

We determined the success of a community engagement programme launched in 2014 to improve relations and better understand community development needs with selected forestry communities in the southern region of KwaZulu-Natal.

The Abashintshi (the ‘changers’ in Zulu) training programme involved training two young people from each of the nine communities selected in our pilot programme. These community change-agents received one week of skills training and development each month, with a view to sharing the training with their peers.

Key to the programme is the engagement with youth, as we had previously engaged primarily with traditional leaders and councillors.

The Abashintshi were charged with implementing four key projects during 2015:
- Implement a youth life-skills project (various modules dealing with decision making and choices, amongst others). The programme reached 1,800 youth across nine communities.

### Global

**Value add**

- Enhance our licence to operate
- Promote socio-economic development which could in the long term, lead to increased demand for our products, and
- Initiate real social mobilisation and change for the better.
Management approach

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 the rapidly changing world of tomorrow. We also review our go-to-market strategy where relevant to ensure that we align our interests and the interests of our end-users.

Where relevant, we will also conduct R&D and develop products to suit the specific needs of a customer.

Areas of mutual interest

- High service levels
- Information and campaigns to promote print as a communication medium
- Information and campaigns to promote paper and paper packaging
- Provision of technical information and support to our paper and specialised cellulose (SC) customers
- Information about organisational developments, and the fibre sourcing and production processes behind our brands, and
- New products that meet rapidly changing market demand.

Ongoing 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.

Global

Targeted communication campaigns help to promote the value of paper-based communication and support the efforts of marketers and communicators in their search for responsible choices. Examples include support for the:
- Two Sides organisations in Europe, North America, South America, South Africa and Australia, and
- Print Power campaign in Europe.

Trade shows and exhibitions

We participate in various tradeshows and exhibitions, detailed in the ‘Prosperity’-section of this report.

Education

Online, print education and technical platforms include:
- Europe The Sappi Houston online knowledge platform
- North America Environmental Quotient (eQ) Education, Training and Consulting (etc), and
- South Africa Our paper and paper pulp product offerings are supported by strong technical teams at each mill and the Technology Centre in Pretoria.

Ongoing avenues of engagement — Technical support

Global

A series of technical brochures is available on our website www.sappi.com.

We annually host customer and investor visits to the mills.

Europe and South Africa

We publish Paper Profiles and information sheets for our papers. These give details regarding the composition of our papers, as well as key environmental parameters related to our pulp and paper production processes and information on environmental management systems and 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.

Specialised Cellulose

Technical Centres of Excellence are located at Saiccor and Cloquet Mills.

Speciality papers

Following the completion of the US$69 million upgrade of PM2 at Alfeld Mill in 2013, the mill has now become a Sappi Centre of Excellence for speciality papers. In 2015, we expanded the Competence Centre for Speciality Papers at the mill with a new Paper Laboratory.

Casting release papers

These products are primarily used to impart texture on other decorative surfaces such as synthetic fabrics and laminates. Our paper is part of the production process, not the final product, and is designed for multiple re-use.

Scientists at our Westbrook Technology Centre constantly look for ways to improve release paper products so that reuse is maximised, with many of our release grades providing customers dozens of reuse cycles.
Global
Key issues and engagement in 2015

Disclosure
We participated in the CDP Supply Chain survey and the Forest Footprint Disclosure survey at the request of some of our customers.

Europe
Key issues and engagement in 2015

Nordic Ecolab certification
Kirkniemi, Gratkorn, Maastricht, Ehingen and Alfeld Mills (SBS only) were awarded the Nordic Ecolab certification status.

Ecolabel certification
Kirkniemi, Maastricht, Gratkorn and Ehingen Mills achieved EU Ecolabel certification status.

Eco-effectiveness campaign
We rolled out a new Eco-effectiveness campaign. Part of the campaign involves personal stories from our people demonstrating their commitment to sustainability stories in which they have demonstrated their personal commitment in their field. This approach has helped to bring the concept of sustainability from management levels and board room meetings to the shop floor while enabling us to also engage with our customers on these topics.

Sustainability ambassadors
We launched a sustainability ambassador programme at our sales offices.

Sappi Football Cup
We held the sixth annual Sappi Football Cup, which challenges our customers to show their skills in table football. Participating countries were: Austria, Belgium, Czech Republic, France, Germany, Hungary, Italy, Poland, Serbia, Slovakia, Spain, Switzerland, Turkey and the United Kingdom. Qualifying matches follow the rules issued by the International Table Soccer Federation. Three winning teams won a ticket to the UEFA Champions League Final in Berlin on 06 June 2015.

WeForest
We encouraged customers to help support the forestry rehabilitation charity WeForest.

Trade shows
Examples of trade shows where we showcased our packaging papers from Europe and North America include:
- Labelexpo
  Brussels, 29 September – 02 October 2015
- FachPack
  Nuremberg, 29 September – 01 October 2015
North America
Key issues and engagement in 2015

New packaging group
We launched a dedicated packaging group in North America and in Europe and North America, also launched a number of new products. 

Sustainability Customer Council
Our Sustainability Customer Council continued to provide valuable input on emerging issues. The Council comprises Sappi customers, representing multiple customer segments of the coated papers and casting release papers business, including merchants, printers, publishers, corporate paper buyers and graphic designers.

Check-off Board
The Paper and Paper-based Packaging Check-off Board, to which Sappi belongs, launched the US$20 million How Life Unfolds™ consumer campaign. The cross-platform campaign is designed to slow the decline in paper usage and grow demand for packaging.

The Standard
We completed the sixth edition of our ‘The Standard’-series on binding techniques and held workshops beginning in April on this new material.

Haptics
We developed new print collateral on neuroscience and the haptics (science of touch) of paper. The piece features case studies from Apple, BMW and WWF on how they used haptics to enhance communications. We enlisted a leading neuroscientist to present this collateral at a series of conference events starting in May and continuing throughout the remainder of the year and into 2016.

Trade shows
Examples of trade shows where we showcased our packaging papers from Europe and North America include: • Pack Expo Las Vegas, 28-30 September 2015 • Graph Expo Chicago, 13-16 September 2015.

South Africa
Key issues and engagement in 2015

Gold Pack Awards
In October 2014 we were a primary sponsor of the graphic design category in the Student Gold Pack Awards held under the auspices of the Institute of Packaging SA.

Trade shows
We exhibited at Propak Africa, a prestigious packaging exhibition in Cape Town.

In September 2015, we presented a paper on artificial and intelligent packaging and exhibited at the Packaging and Labelling Expo in Johannesburg.

Global
Value add
• Meet customers’ needs for products with an enhanced environmental profile
• Promote our customers’ own sustainability journeys
• Heightened awareness of the importance of sustainability
• Keep abreast of market developments
• Meet customers’ needs
• Showcase our products, and
• Demonstrate the power of print.
Management approach

We partner with industry and business bodies to provide input into issues and regulations that affect and are relevant to our businesses and industries.

We also support and partner with industry initiatives aimed at promoting the use of our products.

Areas of mutual interest

- Issues that affect the sustainability of our industry: woodfibre base, carbon taxes, energy, emissions etc.
- Energy issues in general and in particular government proposals on carbon taxation
- The impact of increased regulations on business
- The benefits of our industry and our economic contribution to society, and
- Social and environmental credentials of our products.

Ongoing avenues of engagement

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

Global Two Sides

Two Sides — a global graphics communications industry forum — works to dispel myths about the environmental impact of print, paper and paper packaging and promote the sustainability credentials of the industry:
- Sappi Europe is a member of Two Sides Europe
- Sappi North America is a founding member of Two Sides US
- Sappi Southern Africa supported the launch of the local Two Sides campaign in 2014, and
- Sappi Trading serves on the Brazilian Two Sides Council.

Global TAPPI

Sappi, as a significant sponsor, supported TAPPI, the Technical Association of the Pulp and Paper Industry, to celebrate its technical and scientific contributions to the pulp and paper industry over the past 100 years.

South Africa

- PAMSA — Paper Manufacturers’ Association of South Africa
- Business Unity South Africa
- Manufacturing Circle
- Forestry South Africa

Through our membership of the Manufacturing Circle, we support the Buy Back South Africa campaign launched in November 2013 to promote support for locally manufactured products.

South Africa — Forestry

Sappi Forests is a founding member of the Tree Protection Co-operative Programme (TPCP) based in the Forestry and Bio-technical Institute at the University of Pretoria.

Through the TPCP we are also members of the internationally collaborative Biological Control of Eucalyptus Pests (BICEP) programme.

BICEP is based at the Australian Centre for Industrial and Agricultural Research (ACIAR).

We also belong to the Eucalyptus Genome Network (EUCAGEN) based at the University of Pretoria and to CAMCORE, an international, non-profit organisation dedicated to the conservation and utilisation of subtropical and tropical tree species.
Key issues and engagement in 2015

Global  Carbon taxes and energy
Our engagement processes as regards carbon-related taxes and energy issues in each region and the outcomes thereof in 2015 are detailed on pages 51 to 52 of this report.

Global  World Forestry Congress
In September 2015, Sappi representatives attended the World Forestry Congress which is held every six years and used the opportunity to engage at a high level and to showcase:
- Project Grow, our South African enterprise development initiative. We sponsored the attendance of a number of Project Grow beneficiaries
- Sappi’s technical expertise by sharing their expertise and best practice with international peers, and
- We participated in the Forest Dialogue workshop where discussions were around the scoping of a dialogue on intensively managed planted forests and in a special stakeholder meeting with the FSC® where we discussed the implementation of the FSC®’s new strategy.

Europe
In Europe, through our industry body CEPI, the Confederation of European Paper Industries, we put forward our view that sufficient carbon leakage protection for industry is essential, especially for sectors that want to invest in low carbon technologies in Europe.

North America
In North America, we continued to engage on issues like emissions and carbon taxes.

South Africa
We have engaged the National Treasury via our industry representative, PAMSA, the Paper Manufacturers Association of South Africa, to motivate the carbon tax design to incorporate rebates for carbon sequestration.

The problem of infection and pest control on our plantations is becoming increasingly challenging. To this end, our researchers engaged with a number of experts in this field.

Value add
- Sappi is able to create and launch new products which already meet Sustainable Packaging Coalition (SPC) criteria, which is beneficial to us on a cost basis and a sustainability basis
- Maintain and expand markets for our products
- Demonstrate the value-add of the forest products industry, and
- Dispel myths and promote understanding of our industry.

In support of our own research, Sappi Forests in South Africa actively engages with several international scientific bodies, including the Eucalyptus Genome Network (EUCAGEN).
Management approach

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

Areas of mutual interest

- Information on the company strategy
- Return on investment, and
- Transparent information about risks, opportunities and ESG (Environmental, Social and Governance) performance.

Ongoing avenues of engagement

Investor relations team

Our investor relations (IR) team engages with shareholders and analysts on an ongoing basis.

This team has direct access to the executive directors and any issues shareholders raise that would be relevant for the board are channelled through the IR team.

Formal communications

We issue announcements through Stock Exchange News Services (SENS), in the press and on our website www.sappi.com.

We publish an Annual Integrated Report and a group and three regional Sustainability Reports, available on the company website www.sappi.com.

We participate in the Carbon Disclosure and Forest Footprint Disclosure projects every year.

Face-to-face

Our Chairman engages with shareholders on relevant issues.

Shareholders can attend and participate in the AGM as well as the four quarterly financial results briefings.

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 conduct ad hoc mill visits and road shows.

Key issues and engagement in 2015

In 2015, we were included in the FTSE/JSE:
- Responsible Investment Index, and
- Responsible Investment Top 30 Index.

We scored 99C in the Carbon Disclosure Project.

Our engagement with environment, sustainability and governance (ESG) managers from investors and analyst companies increased during the course of 2015.

Value add

- Understanding of our strategic direction
- Enhanced reputation
- Greater investment confidence, and
- Broader licence to invest.
Our key relationships — Suppliers and contractors

Management approach

We are committed to establishing mutually respectful relationships with our suppliers and encouraging them to join our commitment to the 3Ps and to creating an environment that shares our commitment to doing business with integrity and courage, making smart decisions which we execute with speed.

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, and
- Security of fibre supply, income generation and job creation.

Ongoing avenues of engagement

Fibre certification

In addition to Sappi’s internal woodfibre certification efforts, we promote certification amongst our suppliers and outside our own operations:

- In North America and South Africa, our foresters work extensively with contractors and communities, and
- In Europe a joint sourcing partnership has been established with SCA which assists in negotiating better terms with timber and other suppliers.

North America  Certified fibre supply

Our ongoing forest management services and supplier outreach programmes help to increase certified lands in areas that supply fibre to our mills. We were the first pulp and paper company in North America to be granted a group forest management certificate by the FSC®. Small landowners who agree to become a member of Sappi North America’s forest management group have their land certified in accordance to the FSC® standard under this certificate. Our Sustainable Forestry Programme assists woodlot owners in the State of Maine to develop plans for managing and harvesting woodlands.

South Africa  Project Grow

Launched in 1983, Project Grow, a tree-farming scheme that gives subsistence farmers the opportunity to participate in the forestry industry, creates sustainable livelihoods in rural areas, fosters economic growth and entrepreneurship. Growers range from small individual growers to larger community projects.

We have expanded Project Grow beyond the borders of KwaZulu-Natal province to the Eastern Cape. In addition, we are working with communities in the Eastern Cape to help them obtain water-use licences for the establishment of new plantations.

We are active in land reform, assisting several land reform beneficiaries (communities) with the management of their plantations, and have signed supply agreements with 34 land reform/restitution projects.

In South Africa, our nurseries supply our own plantations with quality pine and eucalypt seedlings. We give seedlings to Project Grow tree farmers free of charge.
Our key relationships — Suppliers and contractors continued

Key issues and engagement in 2015

**Code of ethics alignment**
Contracts contain the requirement for vendors to adhere to the Sappi Code of Ethics and core values.

**North America Sustainable Forestry**
Our Sustainable Forestry Programme comprises a team of trained forest professionals, including licensed foresters, dedicated to assisting woodlot owners in the State of Maine develop, manage and harvest their woodlands.

Services offered include:
- Help with timber harvests to meet landowner objectives and maximise returns
- Development of forest management plans, and
- Assistance with wildlife management and aesthetics.

**South Africa Project Grow**
A team of qualified extension officers works with our Project Grow suppliers to offer advice.

**South Africa Certified fibre supply**
We have established a group scheme for small and medium growers with plantations ranging from a few hundred hectares to well over 10,000ha in size.

FSC® certification is not yet available to micro growers; largely because of administrative and financial constraints.

Under the auspices of Forestry South Africa, we are evaluating ways of overcoming these barriers; it may take another two years to be established.

**South Africa Supporting small business**
We are developing a framework and methodology for a value chain incubator/accelerator programme targeted at small-, medium- and micro enterprises. Our overall aim is to accelerate and diversify opportunities within the forestry value chain. The programme is being developed with input from our current contractor base.

**Value add**

- Improve supplier relations
- Better understanding of the requirements of the Sappi group
- Security of woodfibre supply, and
- Expanded basket of certified fibre.
Our key relationships — Civil society

Management approach

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 continue to update the media regarding our strategic shifts to extract value from woodfibre in line with future trends.

We engage with civil society organisations on issues of mutual interest.

We are members of key organisations relevant to our operations.

Areas of mutual interest

- Business developments
- The future of our industry
- Our impacts on our communities, and
- Our work to protect the environment.

Ongoing avenues of engagement

We join key credible 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.

Europe and North America In both these regions, we maintain close engagement directly and through our industry body CEPI and the FSC® and WWF International.

Europe In addition to engaging CEPI, we also engage through the PEFC™ — Programme for the Endorsement of Forest Certification™.

North America We are a member of the economic chamber of both FSC® US and SFI® — we actively engage with these organisations through a variety of working groups and committee activities.

South Africa We are a member of the local WWF organisation as well as the FSC®.

We provide support for the activities of SANBI (South African National Biodiversity Institute), Birdlife South Africa, WWF South Africa, Honorary Rangers, WESSA, the UCT ADU (Animal Demography Unit) tree project and the Kruger National Park Warburgia Salutaris project.

As fire is a key risk on our plantations, we belong to a number of fire protection associations.

Key issues and engagement in 2015

South Africa The Centre for Environmental Rights (CER) accused 20 companies, of which Sappi was one, of non-compliance with environmental legislation based on their review of information contained in the National Environmental Compliance and Enforcement Reports (NECER) of the Environmental Management Inspectorate (EMI) of the Department of Environment Affairs (DEA). Sappi’s response to the findings of the CER can be found on the CER website.

Sappi has taken note of the comments of the CER and for increased transparency we will align our reporting to any mentions in the NECER. We continue to engage with authorities regarding all issues of environmental compliance.

In the recently published 2014/15 NECER (National Environmental Compliance and Enforcement Report) of the Environmental Management Inspectorate (EMI) of the Department of Environment Affairs (DEA) of the Government of South Africa, an entry is included which makes reference to an EMI inspection which took place at Sappi Saiccor Mill during September 2014.

The entry goes on to state that several non-compliances were identified and an inspection report detailing the findings of the inspection had been finalised.

We have not yet received any official report resulting from the initial inspection done in 2014 from the EMI or the DEA.

Value add

- Opportunity to inform and educate media, and
- Transparent, two-way communication and opportunity for dialogue.
## Our key relationships — Government and regulatory bodies

### Management approach

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

We also engage with regional and local governments and local authorities to obtain support for our operations and show how our activities contribute to local economic and social development.

### Areas of mutual interest

- Energy issues in general and in particular government moves on carbon taxation
- The impact of increased regulations on business, and
- The social and economic benefits of our industry nationally as well as at a local level.

### Ongoing avenues of engagement

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

### Key issues and engagement in 2015

We engage with governments and regulators in all regions on a regular basis both directly and through our industry associations on a myriad of issues which impact our operations as well as our contributions to and role in local communities. In particular, please refer to the discussion of emissions regulations and carbon tax on page 51 of this report.

**North America**

As part of our ongoing obligation in terms of our hydroelectric dam licences to restore fish passage on the Presumpscot River in the State of Maine, we have been engaging with Federal and state agencies, non-government organisations and members of the public concerning the design of the fish passage at the Saccarappa hydro facility.

We plan to remove the facility, and have recently filed a surrender application with the Federal Energy Regulatory Commission (FERC).

As a result of the engagement process, we have made several improvements to the fish passage design. The fish passage at the Saccarappa station must be operational by 01 May 2017.

This project is discussed in detail in our Group Sustainability Report 2014.

### Value add

Opportunity to promote understanding of the issues and challenges we face and resolve certain challenges.
Hyperconnectivity is now the norm.
Nothing stays the same for long.
Our Strategy and 2020Vision, our game plan for the medium term, will reinforce and reposition Sappi across a number of core business segments, realise their strategic importance to the group and maximise their significant cash flow contribution — enabling us to evolve the business and develop new opportunities that derive value from nanocellulose, biorefinery products and energy.

Key material issues are those challenges we face in our operating environment that we believe may have a material impact on our business by affecting the value we create for stakeholders.
Declining demand in some of our traditional markets

Material issue
Declining demand graphic papers

In a digitally connected world, information is increasingly consumed on computer screens, mobile phones, tablets and other devices instead of paper.

Our response

We recognise the graphic papers market is in decline, but maintain that paper is a renewable and recyclable product that, when manufactured from woodfibre originating in responsibly managed forests and plantations like ours, is an environmentally sustainable, powerful communications medium.

In this market segment, we continue to develop and enhance our portfolio of products to meet the needs of customers who recognise the value of print.

Our response — Europe

In November 2014, we upgraded our Gratkorn Mill’s largest paper machine, PM11 to further improve paper quality and increase the machine’s operating capability by expanding the weight-range of paper products it can produce.

Our response — North America

In response to the needs of integrated marketers who want a competitive advantage, we developed and launched 94 Bright Opus — strengthening the Opus sheet line which comprises Opus, Opus PS and Opus DX digital.

The Opus range is optically engineered to reproduce more colours, making it easier to match press sheets to colour proofs.

The heft and stiffness of Opus papers deliver a higher quality feel than any competitive grade at the same basis weight, and can handle tough press room conditions.

Our response — South Africa

We realigned our operations; concluding the sales of Enstra and Cape Kraft Mills shortly after financial year-end, to focus more intensely on our core business — virgin fibre-based paper and paper packaging products and dissolving wood pulp.

We are also increasing our offering to our domestic customers with a range of papers imported from Sappi Europe.

These strategic changes have allowed us to focus more on export markets in line with our One Sappi strategy.

We will continue to meet the needs of customers who recognise the value of print.

Sappi Europe, Gratkorn Mill.
The power of paper...

"We remain firm believers in the power of print…

Print is a concentrated, intense reading experience with unique affinity in our digitally distracted age."

Robert Thomson
Chief Executive Officer
News Corp

Paper offers the power of touch

The power of paper is highlighted by a Sappi North America publication and promotion, *Haptic Brain, Haptic Brand: A Communicators Guide to the Neuroscience of Touch* which won the sixth annual Positively Print award.

The scientific exploration for this promotion was conducted by a leading neuroscientist and specialist in haptics (the science of touch), who extensively researched how different media shapes perception and how our sense of touch impacts our experience with corporate communications and brands.

The research found that paper quality significantly affects viewer response and that tactile communications, like paper, cause people to exhibit a sense of ownership of the objects they read about, influencing buying decisions.

Paper facilitates language development

A compelling body of evidence from high income countries shows that children’s language development and literacy skills are facilitated by book sharing with a care-giver, beginning in infancy.

Paper offers higher levels of retention

Taking notes on laptops rather than in longhand is increasingly common. Many researchers have suggested that laptop note-taking is less effective than longhand note-taking for learning. The present research suggests that even when laptops are used solely to take notes, they may still be impairing learning because their use results in shallower processing and that students who take notes on laptops performed worse on conceptual questions than students who took notes longhand. Laptop note takers’ tendency to transcribe lectures verbatim rather than processing information and reframing it in their own words is detrimental to learning.

Digital-first companies turning to paper

A growing number of online-only retailers are turning to print to drive traffic to their online platforms (and increase sales). In 2015, online-only retailers increasingly supported print-advertising. Some are launching their own magazines. Examples include: • Luxury online-only retailer, Net-a-Porter, with a monthly online audience exceeding six million people, in 170 countries, launched, Porter, a bimonthly, pricey fashion magazine. • The Editorialist, a previously online-only luxury fashion-accessories retailer, launched a biannual print spin-off. Others include: Airbnb, the online hospitality exchange, CNET, a consumer technology portal with more than one million monthly users and Bonobos.

Brand managers are citing the need for bringing their brands into the physical space that helps people become more engaged with their brands as reasons for the shift. Increasingly, marketers are recognising that an omni-channels approach is most effective at building brands.
Material Issue: Growing demand for packaging and speciality papers

In 2012, the global market for paper packaging stood at US$254.8 billion.

Since 2013, global market for paper packaging has been growing at a compounded annual growth rate of 4.4%.

The value of the global paper packaging market is expected to reach US$344.4 billion by 2019.

Consumers are becoming increasingly environmentally aware; more than 75% of consumers say that environmentally sound packaging has an influence on the beverage brand they buy.

Our response: Global

We are targeting earnings from our paper packaging division to be 25% of EBITDA by 2020, up from 18% today.

Our coatings expertise gives us a competitive advantage in this market and means that we can easily fulfill requirements for complicated prints, finishes, colours and barrier coatings.

Growing demand in some of our market segments

Our response: Europe

We launched two new speciality products, Algro Thermo and atelier and extended our Fusion range. Our speciality Algro Sol silicone base-papers continued to gain acceptance in global markets.

Algro Thermo, a premium-quality base-paper for specialist thermal coating offers the option to preprint text and images on both sides of the substrate with high levels of consistency. Developed for the niche market of on-demand tickets and available in weights from 100-193g/m², Algro Thermo is well suited for a wide range of applications, including point-of-sale systems and vouchers and as labels for shipping and product identification.

Algro Sol, our speciality silicone base-papers range continued to gain acceptance in global markets. An important advantage for converters using silicone base-paper is the low silicone consumption achieved with Algro Sol paper grade in the siliconisation process.

Typical carrier papers currently available on the market consume silicone at a rate of 1-1.3g/m². Algro Sol consumes less than 1g/m² — a 25% saving. Despite the low silicone consumption, an extremely homogeneous silicone surface is achieved. This ensures excellent removal of the self-adhesive films from the siliconised carrier paper.

Atelier, a multi-ply folding boxboard broadens Sappi’s offering in terms of both width and depth of coated virgin fibre cartonboards for the packaging market. Atelier combines a bright-white finish with the rigidity and strength required for functionality with any type of cartonboard printing, converting, finishing or post-production handling. We successfully launched this product into the South African market.

Fusion, which targets the fast food and microflute packaging is now also available in 90g/m². Fusion is designed specifically for use with and on corrugated board and is fully ISEGA-certified for direct contact with food.

Marketing promotion for atelier.
Growing demand in some of our market segments continued

Our response  Quality assurance

Following the completion of the US$69 million upgrade of PM2 at Alfeld Mill in 2013, the mill has become a Sappi Centre of Excellence for speciality papers.

In 2015, we expanded the Competence Centre for Speciality Papers at the mill with a new paper laboratory.

The Paper Lab will be used to conduct field quality testing with the latest technological capabilities. The laboratory replaces the previously used test line in the climate lab. Its state-of-the-art technology and the broader weight measuring range (18-400g/m²) are world-class in the quality testing of speciality papers and cartonboards.

In operation around the clock, every production batch is subjected to precise measurement to ensure the quality of the batch, thereby guaranteeing our customers a unique level of continuity in our papers and boards.

Our response  North America

We established a focused packaging division supported by a dedicated sales team.

Building on the success of LusterPrint®, a grease-resistant paper used primarily in pet food packaging, we launched LusterCote™ for labels and other related end-use applications.

Our response  South Africa

We continued to experience good demand for Ultraflute, our new lightweight semi-chemical fluting made with 75% virgin fibre, launched in 2014. The product is used mainly in the industrial and agricultural sectors.

We also launched Ultratest, a recycled linerboard with superior strength properties.

We successfully launched atelier, produced by Sappi Europe, into the South African market.
Growing demand in some of our market segments continued

Material issue
Global textile-market pressures are affecting pricing of commodity-grade dissolving wood pulp (DWP)

Commodity-grade prices for DWP are currently low but are showing signs of improving.

The recent decline in the price of oil, a feedstock for synthetic fabrics, and the current high cotton reserve stocks in China may continue to negatively impact the price of DWP-based textiles and in turn our DWP.

Our response
Market drivers
Textiles are the primary market for our DWP which is sold globally for use in viscose staple fibre (rayon) and solvent spun fibres (lyocell).

We anticipate continued improvement in the underlying demand drivers. Although demand will always be subject to relative inter-fibre pricing dynamics, cellulosic-based fabrics have the advantage that they breathe, are comfortable to wear and when incorporated into fabric-blends with the wash-and-wear characteristics of petroleum-based fibres, produce clothing with excellent overall properties.

Based on global GDP and population growth expectations and increasing affluence, particularly in Asia, we remain confident in this market segment and its continued growth.

Sustainability
The DWP used in our manufacturing operations not only gives us a competitive advantage but most importantly, is produced from sustainably managed wood sources:

- **South Africa** Applies the chain-of-custody (CoC) FSC®-certification system, and
- **North America** Uses the CoC FSC®, PEFC™, or SFI®-systems.

Certification by these internationally-recognised accreditation organisations provides assurance that the woodfibre used in our DWP originates in sustainably-managed forests and plantations.

Strategic focus
Our strategic focus in this market segment includes:
- Working with key customers to support common growth
- Investigating adjacent and profitable end-uses, and
- Managing our capacity — our Cloquet Mill can switch between DWP and paper pulp.
Our pulping processes — extracting value from a renewable resource

Wood yard

**Kraft pulping process yields pulp for paper production.**

Wood chips are cooked under pressure in a sodium hydroxide (NaOH) cooking liquor to create **soda pulp** or a mixture of NaOH and sodium sulphide (Na₂S) cooking liquor to create **sulphate pulp.**

By steaming wood chips in water and raising the temperature, raw materials, not used in the manufacture of DWP, can be extracted.

**Sulphite pulping process (used at Saiccor Mill) yields dissolving wood pulp.**

Wood chips are cooked under pressure in a magnesium bisulphite (MgHSO₄) or calcium bisulphite (CaHSO₄) cooking liquor. Bisulphites of ammonium or sodium can also be used.

Prehydrolysis Kraft (PHK) pulping (used at Ngodwana and Cloquet Mills) yields dissolving wood pulp.

Rejects can be used as a biofuel.

Spent liquor is used as a biofuel. See FAQ: Biofuels energy
Material issue  Nanocellulose

The market for nanocellulose continues to grow, driven by the trend towards sustainable, lightweight, biobased products, and possibilities proffered by the material's exceptional physical and chemical properties.

The raw material for nanocellulose, woodfibre, is abundant. In addition to being lightweight, nanocellulose:
- Has very high tensile strength — eight times that of steel on a weight-for-weight basis
- Is transparent in its crystalline form
- Is gas impermeable, and
- Is highly absorbent when used as a base for aerogels or foams.

Our response  Nanocellulose

In 2015, we announced our development of a patented, low-cost nanocellulose production process in conjunction with Edinburgh Napier University. This process uses a unique chemistry which easily breaks down wood pulp fibres into nanocellulose without producing the large volumes of effluent associated with existing energy-intensive processes.

As an added advantage, the chemicals used in our process can be recycled and reused without generating significant volumes of effluent.

The energy-saving process will be further developed in a pilot-scale plant at Brightlands Chemelot Campus in The Netherlands which will test the manufacturing of dry redispersible Cellulose NanoFibrils (CNF).

CNF applications

Our CNF is derived from a sustainable resource, woodfibre, making it very desirable as a new material for various industrial and transport applications.

Products produced using Sappi's CNF will be optimally suitable for:
- Conversion into lighter and stronger fibre-reinforced composites and plastics
- Food and pharmaceutical applications
- Rheology modifiers, and
- Barrier and other paper and coating applications.

Our initial focus

The pilot plant will be used for market development and up-scaling. Our initial focus is on:
- Thickening water-based products such as paints, foods and concrete
- Making composites which could replace glass fibres in, for example, the next generation of lighter, fuel-efficient vehicles and aeroplanes
- Producing replacements for plastic films in packaging, and
- Investigating applications including:
  - Films in lithium batteries
  - Touch screen displays, and
  - Biomedical applications such as wound dressings and regenerative medicine.
Adjacent business opportunities — extracting additional value from wood continued

Material issue Sugars and lignins

The key components of woodfibre include cellulose, hemicellulose, lignin and other extractives.

Both cellulose and hemicellulose are polysaccharides containing many different sugar monomers which can be extracted from pulping streams.

Our response Sugars

Aligned with our move towards near and adjacent markets, the extraction of sugars from pulping streams to produce biorenewable chemicals is currently under investigation.

Should it prove commercially viable, we will develop a pilot-scale plant.

Material issue Bio-energy

Bio-energy, another targeted adjacent business stream, is discussed in the ‘Planet’-section as part of a discussion about energy.

Our response Lignins

We continued to investigate the extraction and utilisation of lignin from Sappi’s various liquor and waste streams. Working with external experts, we have embarked on a programme to characterise the different lignin sources in Sappi and to identify new market opportunities.

South Africa In 2015, we announced a US$8.5 million investment to increase the lignin production capacity at LignoTech South Africa, our joint venture with Borregaard, by 20,000tpa. The added volume will be marketed to the joint venture company’s existing applications and geographical markets. The project is expected to be completed in 2017.

South Africa Tugela Mill has been selling lignosulphonate into the dust suppression, concrete additive, ceramic and brick-making markets since 2012. We are now looking into products suitable for biobitumen, adhesives and sealant applications.

The mill recently installed drying equipment to reduce transport costs.
Plantation- and forest-derived products are emerging as a global game changer

Material issue Innovation

As the world increasingly recognises the value of products based on woodfibre, opportunities are opening up to supply products, processes and services based on this renewable, biodegradable natural resource.

Our response R&D

Our research and development (R&D) initiatives focus on:

- Consolidating and growing our position in our targeted markets segments
- Driving cost competitiveness and cost reduction, and
- Optimising our equipment and forestry assets.

We invested US$28 million in R&D in FY2015 which included approximately US$8 million on our Exciter programme which focuses on core business (Exciter I) and new and adjacent business (Exciter II).

During FY2015, we redesigned the process for selecting and managing Exciter I and II projects to allow for greater involvement of Sappi’s non-technical managers, including the managers of Sappi’s R&D centres in consultation with the regional manufacturing directors, strategic business development managers, marketing departments and mills in each region.

In compiling the Exciter II portfolio, the team uses an in-house developed risk-assessment to assist with portfolio selection and to rate projects on their risk profiles versus potential return. The risk assessment rates in-house competencies such as technical knowledge, assets, sales, marketing and commercial expertise to take a project from concept to market or to a functioning new business.

Our response Product development R&D

During FY2015, product development R&D focused on:

- Nanocellulose
- Paper-for-plastics — developing paper products that can replace plastic-based products
- Microbial paper coatings that help packaged fruit and vegetables last longer, and
- Higher-strength packaging.

Our response Production focused R&D

Production focused R&D concentrated on supporting the DWP projects at Ngodwana and Cloquet Mills — optimising processing conditions for wood-mixes to enhance cost efficiency.

Our response Forestry R&D

R&D focused on our forestry assets continued the development of DNA markers for improving marker-aided selection of wood properties in hardwoods with the establishment of the required tree breeding populations.

The introduction of exciting new genetic techniques to link genes and important wood properties, such as cellulose content and lignin type, both of which influence processing (pulping) time, allows us to select superior trees at a young age, to accelerate our conventional tree breeding initiatives.

We also made progress in establishing useful genetic markers for disease resistance in our commercial softwoods.
Material issue  Safety

Ensuring the safety of our people is not only an ethical imperative. It is also a business issue which impacts productivity, costs and reputation. Safety is discussed in detail in the “People”-section of this report.

Our response  Fatalities

We deeply regret the three contractor fatalities in South Africa during the year under review. We view these fatalities in a very serious light and are committed to reducing the impact of injuries on our workforce through continuous concentrated focus on driving down the severity of accidents and a concerted effort on eliminating all accidents. Despite the fatalities, the LTIFR of all regions continued the positive downward trend.

Our response  Responsibility

Although we expect all our employees and contractors to take responsibility for their own and their colleagues’ safety, management remains accountable for safety and is expected to demonstrate leadership.

Our response  Management

The OHSAS 18001 Safety Management System continues to be the foundation and structure for all operations, with a core element being the process of hazard identification and risk assessment. This is essentially a tool for identifying task-specific hazards and risks, quantifying the exposures and establishing risk-reduction activities.

The incident investigation method has provided the root-cause analysis output that drives all prevention activities. Our investigations continue to focus on root causes as opposed to finding blame.
Sound labour relations create a harmonious working environment, enhance productivity and help maintain a healthy turnover rate.

### Global

The Sappi employment landscape includes interaction with trade unions at all our manufacturing sites across the group. This interaction is based on transparent communication and mutual respect.

Globally, approximately 63% of our workforce is unionised, with 69% belonging to a bargaining unit.

Overall, the year under review was characterised by amicable, but tough negotiations and relatively good relationships with organised labour across the geographies.

### Europe

Approximately 77% of our employees belong to a union and are represented through Works Councils.

European Works Council meetings take place twice a year at which Sappi is represented by the Chief Executive Officer and the Human Resources Director. The main purpose of the meeting is to inform and consult on business results/market developments and pan-European organisational topics.

There were no material issues in FY2015.

### North America

Approximately 65% of our employees are members of a union; there are 11 collective bargaining agreements with hourly employees in place.

During FY2015, we settled labour agreements with the majority of our hourly production workers through negotiations with the United Steelworkers Union at Westbrook, Cloquet and Somerset Mills on economic terms consistent with the industry.

### South Africa

Amendments to several labour laws did not have a material impact on Sappi.

Approximately 51% of our total workforce is unionised.

In FY2015, a new recognition and threshold agreement was concluded with the majority union, the Chemical, Energy, Paper, Printing, Wood and Allied Workers Union. This agreement regulates the relationship with the union and most importantly, sets the criteria for any new trade union wishing to claim organisational rights at any of the region's operations or business units.

The other recognised trade unions, which are party to the Bargaining Council for the Wood and Paper Sector, are also covered by this agreement and enjoy certain organisational rights in Sappi Southern Africa where they have membership.

We also developed and adopted a new engagement and dialogue framework which clearly defines the terms of reference for these engagement structures, both at national and business unit level.

During FY2015, wage negotiations without industrial action were successfully concluded in all sectors – forestry, pulp and paper as well as sawmilling.

**Sale of Cape Kraft and Enstra Mills**

Formal consultation was concluded with all recognised trade unions regarding the sale of Cape Kraft and Enstra Mills, and the relocation of the Will cutter machine from Enstra Mill to Stanger Mill. Consultations were conducted in accordance with sections 189 and 197 of the Labour Relations Act.

Consulting parties have reached consensus to use a combination of voluntary severance packages and redeployment to other Sappi Southern Africa business units as mitigating factors to avoid or minimise forced retrenchments.
Mutual benefit

**Material issue**  Corporate Social Responsibility

Corporate Social Responsibility (CSR) investment can enhance a company’s social licence to operate, help establish customer loyalty and attract talent.

Community investment is particularly important in South Africa, given that it is a developing country and that our plantations and operations are situated in rural areas where economic and social development lags behind more urbanised sectors.

**Our response**  Global perspective

In each region where we operate, we invest in three key stakeholder groups: customers, communities and employees. While each region has its own programme, these conform to common themes aligned with our business needs and priorities, including education, local community support, the environment and health and welfare. In addition, support for activities associated with access to Sappi land and conservation efforts, such as biodiversity and species mapping, mountain biking and recreational birding continues to grow.

Representative examples of our CSR initiatives are showcased here. Our CSR initiatives in each region are described in more detail in our regional Sustainability Reports.

**Case study**  Eco-effectiveness campaign

**Europe**  As part of the recently launched regional Eco-effectiveness campaign, at the Labelfix Europe trade show in September 2015, we encouraged customers to help support the forestry rehabilitation charity, WeForest.

In Khasi Hills (India), a subtropical forest area designated as one of the most biodiverse and unique habitats of the Indian subcontinent bioregion, social and economic forces are driving fast deforestation and forest degradation.

WeForest’s tree planting project promotes women’s entrepreneurship and empowers indigenous communities to build a climate-resilient landscape. The contribution by Sappi and our customers will enable WeForest to plant 4,000 trees.

**Case study**  Ideas That Matter

**North America**  Our Ideas That Matter (ITM) programme continues to recognise and support designers who use design as a positive force in society.

Since 1999, the ITM programme has disbursed close to US$5 million to support approximately 220 charitable causes in the USA.
Case study  Early Childhood Development

South Africa  We entered the second year of our new Early Childhood Development (ECD) project in KwaZulu-Natal (across 25 sites through the Training and Resources in Early Education (TREE) organisation) and in Mpumalanga (the development of an ECD Centre of Excellence at the Elandshoek community through Penreach).

We have extended the ECD programme into Gauteng, with 50 practitioners in 50 ECD centres undergoing training through Jabulani Training and Development.

Case study  PROTEC

South Africa  In 2015, we celebrated a 20-year association with PROTEC—a non-profit organisation focused on maths, technology and science education for students, from the country’s previously disadvantaged communities, in their final three years of high school. We sponsor branches close to our operations in KwaZulu-Natal and Mpumalanga.

In the 2014 National Curriculum Statement examinations, PROTEC students once again outperformed the average results achieved by National and Provincial Education Departments, achieving a 97% average grade 12 pass and 71% average bachelor pass against the national averages of 76% and 28% respectively.

Over the last twenty years, we have helped prepare more than 20,000 secondary and tertiary level students for technological careers and successful integration into the working environment, contributing over US$2.3 million towards PROTEC.

From 2013 onwards, we have contributed US$836 (ZAR10,000) for each ‘A’ pass in maths and science achieved by PROTEC learners, towards their tertiary education.

We try to recruit from the communities close to our operations, particularly through the PROTEC pipeline, for example, Hlengiwe Ndlovu, Environmental Manager at Sappi Forests. Shown above, monitoring water quality in the Lions River, on our Shafton Plantation in KwaZulu-Natal.

PROTEC results at grade 12 (matriculation) level: 2014

PROTEC deploys learner excellence and teacher development programmes through a permanent branch network spanning eight provinces.
Sustainable woodfibre supply

Material issue  Woodfibre

The global demand for woodfibre is expected to increase for the foreseeable future, driven partly by the trend to use renewable resources like woodfibre, rather than finite fossil fuels, for energy generation.

Given that woodfibre is a key input to our manufacturing operations, maintaining continuity of supply is integral to our sustainability as a business.

Our response  Climate change

Climate change, discussed on pages 53 and 112 to 113 is affecting our fibre supply.

Our response  Europe and North America

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

Our response  Europe

In October 2014 the European Union (EU) Council of Ministers adopted a 27% renewable energy by 2030 target. Unlike the 2020 mandate (20% renewable energy), the 2030 goal is an EU-wide target, not a country-specific target.

The focus on renewable energy is impacting the wood supply to our mills because using wood as an energy source is incentivised through subsidies. Wood pellet consumption rose by 14% to 20 million tons in 2014 — more than double the consumption five years ago.

The American Forest and Paper Association (AF&PA) reports that wood pellet exports, mainly from the southern states, to the EU amounted to 2.8 million tons in 2013. The US Industrial Pellet Association report exports to have grown to 3.6 million tons in 2014.

Sappi Southern Africa is involved in 44 land reform/restitution projects, totalling 18,803ha, generating valuable economic opportunities in rural areas.

FY2015 total fibre consumption

5.7 million tons

79% of our global fibre use is FSC®, PEFC™- or SFI®-certified
Sustainable woodfibre supply continued

Our response South Africa
We are faced with both opportunities and challenges in terms of our fibre supply base.

Opportunity — improved yield
Owning, managing and leasing 492,000 hectares of plantations gives us a competitive advantage. Our aim is to produce low-cost wood with the required pulping characteristics and increase yield per hectare. We actively pursue this aim, particularly through genetic improvement of planting stock. Accordingly, we continue to investigate and classify timber species according to their respective pulping characteristics and end-pulp quality.

An example of this approach is our evaluation of a Pinus elliottii x Pinus caribaea variety hondurensis (PECH) hybrid which was recommended for use in the production of high Kappa unbleached softwood. A successful mill trial was subsequently run with good results and an estimated timber saving of approximately US$1 million a year. This hybrid has a higher tolerance to the current range of pests and diseases.

We are also identifying timber species for Saiccor Mill which will improve production efficiency.

Opportunity — pest and disease tolerance
Eucalyptus grandis has historically been the South African forestry industry’s most important hardwood species. It has good specialised cellulose and kraft pulping characteristics, but is prone to pests and diseases like the gall-forming wasp, Leptocybe invasa.

In light of this, we are evaluating Eucalyptus dunnii as an additional hardwood timber source for the production of pre-hydrolysis kraft specialised cellulose pulp at Ngodwana Mill. This species has pulping properties similar to Eucalyptus grandis, but has a higher tolerance to pests and diseases.

To ensure sustainable production from these properties, we have entered into supply agreements with the land-reform beneficiaries and have also provided assistance. Assistance depends on the requirements of the project, but ranges from a pure supply agreement to a comprehensive Forestry Enterprise Development Agreement (FEDA). The latter is a supply agreement that incorporates development objectives — Sappi provides technical and business training as well as administrative support.

Challenge — continuity-of-supply
Maintaining continuity-of-supply from plantations owned by land-reform beneficiaries is a challenge. Many land reform projects in South Africa have failed, despite the best intentions. As the World Bank has put it “After 20 years of land reform there are some islands of success, especially in horticulture, but these exist in a sea of partial or complete failure, and the number of beneficiaries and the land area transferred is disappointingly low.”

Poor post-settlement support is one of the key reasons cited by experts.

Against this backdrop we have been approached by a large number of land reform beneficiaries to assist with the management of the timber on their properties, post settlement.

By September 2015, Sappi was involved in 44 land reform/restitution projects (including those on existing community land or on those purchased by the current owner, totalling 18,803ha. These projects range from 28ha to the biggest project of 6,876ha planted near Lothair in Mpumalanga. A large number of these properties previously belonged to commercial farmers who had supply agreements with Sappi.

Challenge — Drought
The severe drought in KwaZulu-Natal has posed a challenge.

In this province, the supply of one of Stanger Mill’s key inputs, bagasse, has been affected, with yields decreasing from 80 tons of sugarcane per hectare in 2009 to 30 tons per hectare in 2015.

Accordingly, we are looking into the possibility of using sawdust, sourced from sawmills in the vicinity of the mill, as an alternative fibre source.

As bagasse cooks more quickly than wood, we have been investigating ways to optimally process sawdust which has proved to be successful on a laboratory scale. Using sawdust would be an interim solution and would close an immediate fibre gap rather than be a permanent solution.

Opportunity/challenge — GMO tree crops
We have taken the decision to understand the challenges and risks of GMO tree crops as our competitors in the woodfibre space have started utilising the technology.

While we envisage possible environmental, social and reputational risks with GMOs, we also see their potential to adapt our plantations to a potentially rapidly changing climate and as a renewable source of chemicals, energy and fibre.
Material issue
Emissions regulations and carbon tax

Against the backdrop of the pulp and paper industry's high levels of energy intensity, regulators are formulating policy aimed at curbing emissions and introducing carbon tax without due recognition of the industry's high use of renewable energy or of the important role that sustainably managed natural forests and plantations play in mitigating global warming.

Our response Global

The success of our industry depends, in part, on fair, consistent and predictable environmental regulations that take account of the high level of renewable energy used by our operations. In 2015, our global generation of renewable energy (derived from black liquor, sludges and biomass) stood at 52.4% — an increase of 6.1% over five years. In addition, over five years we have achieved a reduction in absolute emissions intensity (Scope 1 and 2) of 16.9%.

Our response Europe

Emissions regulations

In October 2014, the European Council recognised that measures to protect energy intensive industry from carbon leakage (defined as the increase in CO₂ emissions outside the countries taking domestic mitigation action divided by the reduction in the emissions of these countries) should be maintained when revising the European Emission Trading System (EU ETS). The Council concluded that the most efficient installations in sectors such as the pulp and paper industry should not face undue carbon costs that would impact their global competitiveness.

In July 2015, the European Council proposed new terms for the EU ETS.

We share the view of the Confederation of European Paper Industries as well as the Alliance of Energy Intensive Industries that the proposal falls short, most notably in its protection of energy intensive industries.

Carbon taxes

A regionwide carbon tax was proposed by the European Commission in 2010, but has not been agreed upon by the 27 member states. However, both Finland and The Netherlands where we have operations, have instituted carbon taxes.

Tax incentives for a reduction in carbon emissions have been tabled in Europe for all industries. Sappi Europe is engaging with the relevant commissions in this regard.
Emissions regulations
In the USA, both the US Environmental Protection Agency (EPA) and the federal legislature submit numerous bills and/or proposed regulations concerning emissions, many of which are never adopted or never become law. We routinely monitor pending legislation and proposed regulations to ensure we are in a position to understand the ramifications if and when the proposed legislation or regulation goes into effect.

The EPA has finalised or proposed several rules relating to emissions reporting and emissions reductions, including rules finalised in January 2013 known as ‘Boiler MACT’. These establish new standards for emissions of hazardous air pollutants from commercial and industrial boilers including particulate matter, hydrogen chloride, mercury and carbon monoxide. Under the rules, companies have three years to comply, but individual states have the authority to allow an additional year for compliance.

The states where Sappi North America’s mills are located have authorised an additional year.

Our boilers currently meet most limits under the rules due to past capital investments and optimisation of fuel mix.

Equipment needed for further emissions control at each of the three mills in North America is included in our capital expenditure plans as part of annual maintenance spending.

Carbon taxes
There is no nationwide carbon tax levied in the USA.

The USA has submitted its Intended Nationally Determined Contribution (INDC) to the United Nations Framework on Climate Change (UNFCC). This envisages an economy-wide target of reducing GHG emissions by 26–28% below the 2005 level in 2025.

The nature, scope and timing of regulations to implement such a target are highly uncertain and, currently, we do not know the potential impact of potential regulations on our operations in North America.

Emissions regulations
In September 2015, South Africa submitted its INDC to the UNFCC. The mitigation component of the country’s INDC moves away from a ‘deviation from business-as-usual’ form of commitment and takes on the form of a ‘peak, plateau and decline’ (PPD) greenhouse gas (GHG) emissions trajectory range. The trajectory range is consistent for 2025 with 42% deviation below the business-as-usual emissions growth trajectory.

Carbon tax
Linked to the above is the South African Government’s determination to introduce carbon tax.

Shortly after year-end, the government published the Draft Carbon Tax Bill with the aim of implementing carbon taxation by 01 January 2017. In addition, the Department of Environmental Affairs (DEA) and National Treasury have embarked on a process to ensure that the carbon tax is aligned with a proposed carbon budget system — a move we welcome.

The proposed carbon tax formula includes the ability to sequestrate which gives us a zero liability based on our current calculations. If we could not use our plantations as a carbon sink, the direct tax payable would be approximately US$5.8 million (US$6.4 million if landfill sites were included) based on current Scope 1 carbon emissions.

Going forward, we will work closely with the DEA on determining the ‘local conversion factor’ for our plantations in respect of carbon sequestration. This is critical to ensure that we are not liable for any carbon tax.

We will also continue to develop and implement renewable and cogeneration energy projects to reduce indirect carbon tax and dependence on Eskom (the national electricity generator) and reduce waste to landfill to reduce our potential tax liability in this area.
Climate change

Material issue  Climate change

The World Economic Forum 2015 Global Risks Survey identifies failure of climate adaptation as one of the top four high-impact, high-likelihood risks, alongside water crises, under/unemployment and interstate conflict.

Our response  Global perspective

Climate change risk and opportunity factors such as regulatory, reputational, weather related (fire and pests), forest management, operational resource management (water and energy), licence to operate and customer behavioural change are assessed together with other non-climate change related risks and are plotted biannually on a risk matrix according to the probable severity of the monetary impact and the likelihood of occurrence, to determine possible risk exposure.

The risk matrix is updated biannually.

According to the US National Oceanic and Atmospheric Administration (NOAA), the average global temperature during the period from December 2014 to February 2015 was the highest on record. NOAA points out that warmer-than-average temperatures were widespread across Central America, northern and central South America, Australia, most of Africa, and much of Eurasia, including most of Russia. However, there were also colder-than-average temperatures in February across the central and eastern United States — similar to the conditions experienced in the region at the same time in 2013/14.

In all three regions where we operate, climate change could alter the frequency and intensity of forest disturbances such as insect outbreaks, invasive species, wildfires, and storms. These disturbances could reduce forest productivity and change the distribution of tree species.

Our response  Europe

Given our general risk mitigation strategy of sourcing pulp and woodfibre from a variety of sources and regions, we do not anticipate any material impact to our raw material supply from climate change in the short- to medium-term.

Our response  North America

Our operations do not currently face material risks associated with climate change. We source from northern hardwood and softwood wood baskets that have not suffered under any drought conditions or from fire. We work diligently to minimise the carbon footprint of our operations by sourcing only from sustainably managed forests, using fossil fuels wisely with large reliance on carbon neutral biomass fuel, and minimising waste throughout our processes.

Our response  South Africa

We are conducting forest research into species improvement in order to maximise yield under different climate change scenarios and match species more closely to sites.

Drier conditions increase the likelihood of fire on our plantations in South Africa.

To mitigate this risk we have established an improved Fire Risk Management System (FRMS) which categorises our risks and assigns a risk rating. We also calculate an estimated maximum loss (EML) per area.

Fire management plans are drawn up with mitigation measures to minimise these risks and reduce EMLs as much as possible. These plans are monitored throughout the fire season using our FRMS system.
### Water

#### Material issue: Water

NASA observed 37 of the world’s largest aquifers over a ten-year period from 2003 to 2013 in a satellite project called GRACE (Gravity Recovery and Climate Experiment).

Of the 37 aquifers studied, 21 are being depleted at an unsustainable rate — more water was removed than replaced during the decade-long study period.

#### Our response: Global

Our production processes depend on water, as does woodfibre, our primary input.

**Water abstraction and use**

Globally, we return 93% of the water we extract back into the environment after it has been treated and cleaned. Of the 7% balance, approximately 4% exits the mill as in-product moisture; the remaining 3% is released to the environment as water vapour.

Please note: Saiccor Mill has been excluded from these calculations as it is the only mill in the group to use the sulphite pulping process in the production of DWP. (Both Ngodwana and Cloquet Mills use the Prehydrolysis Kraft pulping process to produce dissolving wood pulp.) Over five years, Saiccor Mill has reduced TSS and COD effluent concentrations by 30% and 20% respectively.

**Water returned to the environment**

Globally, over five years, we have improved effluent quality by reducing chemical oxygen demand by 21.8% and total suspended solids by 7.1%.

#### Our response: South Africa

Of all the regions where Sappi has operations, South Africa, a water-stressed country, presents the most significant water risk to our business. The country is currently experiencing its worst drought in many years.

**Saiccor Mill**

To mitigate the impact of low flows on the uMkomazi River, the prime source of water to Saiccor Mill, we are proceeding with a project to raise the Comrie Dam wall, upstream of Saiccor Mill. This dam was originally constructed in 1978 to augment supply from the uMkomazi River. Raising the dam wall by four metres will more than triple the amount of water stored in the dam, which will help ensure security of water supply — avoiding possible downtime as a result of low river-flows.

#### Globally, over five years

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<td>3% of the water we extract is released to the environment as water vapour</td>
<td>93% of the water we extract is returned to the environment after it has been treated and cleaned</td>
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Energy

**Material issue**  
Energy

Energy is a key input for our industry. Aggressively managing energy usage leads to a reduction in carbon emissions and enhanced cost efficiencies. In South Africa, where national energy demand outstrips supply at times, energy security is also an issue.

**Our response — Global**

We are overcoming energy price increases, by reducing our specific energy consumption. Over five years, we have reduced:  
• specific energy consumption by 19.9%  
• energy intensity by 12.5%. We have increased energy self-sufficiency by 9.1%.

Globally we have five hydro, two gas and 31 steam turbines which generate around 800MW of renewable power on 14 sites across seven countries.

Globally, over five years

![Energy self-sufficiency chart](image)

**Our response — Europe**

In Europe, we opened a new biomass power plant at Kirkniemi Mill in Finland, six months ahead of schedule. The new US$64.4 million power plant — inaugurated in September 2015, six months ahead of schedule — will flexibly use solid fuels such as bark from the mill’s debarking process, and other wood-based fuels, as well as and coal. The boiler plant has a circulating fluidised bed system and a capacity for 96MW of thermal energy.

**Our response — North America**

In North America, over 70% of the energy used by our mills comes from renewable resources, and as a result we have the lowest reported greenhouse gas emissions amongst the major domestic coated freesheet suppliers.

**Our response — South Africa**

Biomass electricity generation

South Africa  
The government’s Renewable Energy Independent Power Producer Programme (REIPPP) is aimed at addressing the national need to increase electricity generating capacity and reduce carbon emissions.

Sappi submitted the Ngodwana Mill Energy Biomass Project to REIPPP and was selected as preferred bidder. The project involves the supply of biomass from local plantations to Ngodwana Mill. This is then used as boiler fuel to produce steam which in turn will generate 25MW of electrical energy which will be fed into the national grid. The energy generated will be sold into the national grid from 2018. Significant ongoing value is being created due to the nature of biomass projects and the monetary and job creation spend across the project value chain; from collecting biomass in the plantations, through plant and equipment contracts, to community impact through Community Trusts and the economic development and socio-economic development spend as well as shareholder returns.

Biogas

South Africa  
In many of our European mills, we generate biogas, a renewable energy source. In line with our strategic focus to derive value from energy opportunities and in the light of increasing energy prices, we are looking at expanding our use of anaerobic digestion technology.

We are examining the use of anaerobic digestion as one of the technologies to treat Saiccor Mill’s waste condensate. Rich in organic matter, it could be treated with a process which uses organic acids to produce biogas in the form of methane. This in turn could be used to produce energy, either for internal use or sold to the national grid. This has significant implications for the mill’s energy costs — evaluations show that the condensate has the potential to generate enough energy to replace 30 tons of coal per day. We are also evaluating the extraction of chemicals from the condensate stream.

Following bench-scale test work, we have assessed three potential technology suppliers and will be establishing a pilot-scale plant in 2016.
Prosperity

The time it takes to go from breakthrough technology to mass-market application is collapsing and this is re-shaping the global economy.
Our investment case

Significant assets
Our global presence allows us to take advantage of opportunities where markets are strong:
- Europe: well-invested assets at the heart of the European market
- North America: exposure to most attractive end-market segment
- South Africa: favourable currency trend.

Extensive fibre-base
In South Africa:
- Low-cost, fast-growing wood fibre base from state-of-the-art sustainably managed plantations
- Forestry R&D programmes target suitability of species for changing climate conditions and end-use in terms of growth and fibre properties, and
- Carbon sequestration by our plantations offers a potential buffer against carbon taxes.

Debt reduction
We have a demonstrable track record of debt reduction. Refinancing and debt reduction has led to lower financing costs. There is the possibility of utilising some of our cash reserves to repay and refinance a portion of our debt, moving closer to our target of two times net debt to EBITDA.

Paper
We are well positioned for current and future growth markets. The paper business is highly cash-generative, providing the funds for future growth into cellulose-based solutions, specialty packaging papers and complementary products.

Dissolving wood pulp (DWP) +
Underlying-demand trends positive:
- Share of the textiles market, our primary market, is expected to grow further, and
- Market offers diversification opportunities.

Speciality paper
This business continues to improve sales volumes and realised prices.

Speciality paper market
Global market volume is projected to reach 34.9 million tons by 2020; growing at a compound annual growth rate of 6.6% from 2015.

Paper packaging
Demand for virgin packaging is strong in South Africa.

Paper packaging market
Global market value is estimated to reach US$344.4 billion by 2019.

Nanocellulose
Nanocellulose opens up growth opportunities. We have developed and patented a low-cost, energy-efficient, production process that uses a unique chemistry to break down wood pulp fibres into nanocellulose. The chemicals used in our process can be recycled and reused without generating significant volumes of effluent. A pilot-scale nanocellulose plant is being built at the Brightlands Chemelot Campus in The Netherlands.
Sustainability in context

Although Prosperity, People and Planet are all interlinked, our current and future viability as a business and our performance in the People and Planet areas are contingent on successfully generating Prosperity on behalf of all our stakeholders.

Our ability to deliver value creation for our shareholders by focusing on Prosperity through improved profit, strategic positioning and debt reduction, lies at the heart of our commitment to sustainability.

A detailed analysis of our FY2015 financial performance, which is beyond the scope of this Group Sustainability Report, can be found in our Annual Integrated Report 2015, available at www.sappi.com.

Global saleable production decreased slightly as a result of declining demand for graphic paper and the disposal and sale of certain mills.

Europe Production decreased due to the: • Sale of Nijmegen Mill — part of the mill’s production was moved to Lanaken Mill • PM11 rebuild at Gratkorn Mill which resulted in some curtailment.

North America Production decreased slightly due to: • Somerset Mill had a cold outage and lower paper machine efficiency which led to reduced production volumes • Cloquet Mill switched between DWP and kraft pulp production which resulted in less saleable pulp.

South Africa Production increased due to: • Higher saleable volumes attributed to the addition of DWP capacity at Ngodwana Mill • Project Buyisa, an energy project at Saiccor Mill aimed at increasing the use of renewable energy sources and generating savings • Increased Ultraflute production at Tugela Mill.

Our strategy to intentionally evolve the business has positioned us to capitalise on the opportunities presented by a carbon-constrained future, providing enhanced rewards to all our stakeholders.
On the cusp of renewal

Our industry stands on the cusp of renewal as plantation- and forest-derived bioproducts emerge as a global game changer in a carbon constrained future.

Our integrated pulp and paper mills are ideal platforms from which to meet future market demand for carbon neutral bio-energy, biochemicals, biomaterials, nanomaterials, nutraceuticals and pharmaceuticals. Integrating the extraction and beneficiation of plantation- and forest-derived biocompounds with our mill processes is significantly more efficient than standalone operations; giving us a head start in growing adjacent businesses that add additional value to the wood we use in our pulp and paper businesses.

To capitalise on the opportunities presented by a changing world, we have evolved our strategy, embedding our medium-term targets in our 2020Vision.

Our 2020Vision capitalises on the potential to increasingly connect our businesses and operations with each other and our customers' needs as One Sappi, maximising the value of our global brand.

Our aim is to remain a global business with proud roots as a South African multinational company. We will maintain and develop production operations across the globe supported by strong research and development centres and operate through a worldwide sales network.

Our strategy to intentionally evolve the business will avoid the need for radical change. We are able to respond to and accommodate in the most appropriate way, any changes in our macro environment, which may emerge from those megatrends we have identified as the most likely to influence our evolution. These megatrends are introduced in the lead-in of each section of this report.

2020Vision
Sappi will be a diversified woodfibre group targeting a substantial increase in EBITDA through an expanded product portfolio with increased margins, providing enhanced rewards to all its stakeholders.
Our group strategy

Through intentional evolution we will continue to grow Sappi into a profitable and cash generative diversified woodfibre group — focused on dissolving wood pulp, paper and products in adjacent fields.
Realising our strategy

Rationalise declining businesses, grow through moderate investments and accelerate growth in adjacent businesses from a strong base.

Our strategy, supported by the medium-term targets detailed in our 2020Vision, sets out to rationalise declining businesses; grow through moderate investments and accelerate growth in adjacent businesses from a strong base.

We are achieving this by focusing more intensively on specialised packaging; providing high-end graphic papers for our customers who still see the value of printed communications; expanding our dissolving wood pulp (DWP) business and moving into adjacent markets, as described in the ‘Key material issues’-section of this report which also showcases some of our new products.
Following the upgrade of PM11 at Gratkorn Mill in November 2014 and increasing the weight-range capability of this paper machine, we completed a general rebuild of critical parts of the liquor boiler and recovery plant in 2015. The rebuild decreases noise and NOx and SO2 pollution, and assures continued pulp production in the long term.

We commissioned a new energy plant at Kirkniemi Mill in Finland, six months ahead of schedule.

To cope with declining paper demand, some merchants in Europe have reduced their working capital by holding less stock and increasing indent orders. We’ve therefore had to keep larger stocks which led to increased logistics and stock-keeping costs. In response, we developed a new framework Sappi & You — a new way of doing business — to put our own and our merchants’ businesses on a more sustainable footing to jointly serve the market at the lowest possible cost. As we were holding the stock anyway, it made sense for the biggest printers to order directly from us.

Our eCommerce platform provides direct access to mill cutter reels and production cycles.

Recognising that dealing directly is not the solution for every printer and every market, our sales teams have been working with our preferred merchant partners to implement mutually beneficial supply solutions.

In addition, we create and nurture partnerships with customers; working with them to offer solutions and products, ensuring that we are the ‘go-to’ publication paper supplier. By developing service concepts like Dynamic Replenishment where we automatically top up printers’ stock, based on the volume of their previous print run, we are doing our utmost to improve mutual business performance. This is helping our customers achieve higher revenues, with the potential to reduce costs.
We further consolidated the focused packaging division established in 2014.

The packaging market in this region has been disrupted by recent closures, sales and mega-mergers.

Responding to the market gap created by these developments and building on the success of LusterPrint, a grease-resistant paper used primarily in pet food packaging, we launched LusterCote for labels and other related end-use applications.

The wide range of speciality packaging grades produced at Sappi Alfeld Mill in Germany — Algro Finess, Parade, Prima and Fusion — is now available in North America, meeting the evolving expectations of the North American packaging market.
Aligned with the Sappi group’s 2020Vision, we are now focusing on packaging, energy generation and dissolving wood pulp in South Africa.

Demand for our new Ultraflute — a lightweight semi-chemical fluting made with 75% virgin fibre — launched in 2014 remained firm and we launched Ultratex, a recycled linerboard with superior strength properties.

We invested in capital upgrades to secure Stanger Mill as a worldclass office and tissue paper producer. The first phase of this project has been successfully completed through an investment of approximately US$2.5 million in upgrading various aspects of the paper machine to ensure paper quality meets the high standard required in today’s demanding markets.

During H1 FY16, we will invest a further US$5.9 million in Stanger Mill’s sheeting and finishing operations focusing on speed, increasing the throughput of our finished A4 products and improving the packaging quality of our products to further benefit customers.

Tugela Mill recently installed a spray dryer that turns lignosulphonate liquid into powder, making it easier to transport to customers around the world.
We have made good progress in cleaning and strengthening our balance sheet to accelerate our growth in adjacent businesses.

We achieved this through the sales of Enstra and Cape Kraft Mills in South Africa (finalised in October and November 2015, respectively) and by issuing a new EUR450m seven-year bond at a record low interest rate of 3.375%. We then used the proceeds to pay off bonds that had average interest rates of 7.5%. The last bond issue was five times over-subscribed.

The refinancing has reduced Sappi’s annual interest charge by US$27 million, lowering our total interest bill in 2015 from US$162 million a year to US$135 million. This from a peak of US$250 million in 2011. We ended the year at 2.8 times net debt to EBITDA, and we expect that to come down significantly further towards our over-time target of two times net debt to EBITDA in 2016.

Annual profit was up 24% to US$167 million from US$135 million last year. This, together with our improved debt position has positioned us better for growth.
To achieve cost advantages, aligned to our One Sappi strategy, we initiated a global procurement strategy to enhance the value of purchased third-party goods and services and create a sustainable competitive advantage.

The global procurement strategy is based on:
- Exercising global leverage where possible
- Sharing best procurement practices for regional based purchases
- Working with key stakeholders to reduce purchased commodity costs, considering alternate sources and/or substitute materials
- Benchmarking commodity spend within Sappi, as well as within and outside our industry, and
- Prioritising and delivering game-changing cost reductions.

Our global procurement strategy is supported by the appointment of a global management consulting firm to conduct a global spend analysis to achieve a detailed breakdown of current procurement spend across regions. This will enable us to identify additional opportunities for cost savings beyond the initiatives already undertaken across all regions.

The analysis also involves identifying groupwide changes that can be made to current tools and practices to improve overall effectiveness.
Underpinning our strategy with research and development

Technology is a cornerstone of our business and is supported by technology centres in each region, covering every section of the value chain.

We invested US$28 million on R&D in FY2015.

We promote an internal culture of innovation through the annual TIA awards.

Sappi Group Sustainability Report 2015

Adjacent markets Nanocellulose

Our decision to build a pilot nanocellulose plant aligns with our strategic move into adjacent markets.

The pilot plant at Brightlands Chemelot Campus in The Netherlands offers state-of-the-art R&D and manufacturing infrastructures, on-campus education and science-oriented business support, venture capital, and business development services.

- **Nov 2007**  Project to spin fibres from nanocellulose initiated at Napier University.
- **Mar 2010**  Comprehensive market survey.
- **Jan 2011**  Full time Sappi employees appointed to the project.
- **Nov 2012**  Project realigned towards the low-cost production of nanocellulose.
- **2013-2014**  Business case, patents and laboratory trials.
- **2014-2015**  Announcement of a patented nanocellulose process that uses a unique, low-cost chemical process whereby chemicals can easily be recycled without generating large amounts of effluent.
- **2016**  Commission plant.
Responding to growing demand

**Specialities** Expanding our range in Europe

We launched Algro Thermo, a new premium-quality base-paper for the direct, specialist thermal printing market.

Available in weights from 100-193g/m², Algro Thermo offers a superior optical appearance for tickets, and other thermal printing applications including point of sale systems and vouchers as well as labels for shipping and product identification.

Algro Thermo is aimed at converters who add a thermal coating layer to its surface. The paper offers the option to preprint text and images on both sides of the substrate with high levels of consistency, ensuring high quality levels, with sharper text and a smoother surface.

**Specialities** Excellence in North America

Designed for excellence in offset and flexographic printing, LusterCote is a coated one side (C1S) product with superior print performance.

With a unique backside coating, LusterCote performs with both hot melt and wet adhesives in a wide variety of converting applications.

Designed with the cut and stack label market in mind, additional applications for C1S products include: base sheet for metalising, PS label face sheet, litho laminating, posters and book dust-jackets.

**Specialised packaging** A strong presence in the food packaging market globally

Our coatings expertise enables us to meet requirements for complicated prints, finishes and colours. Paper-based packaging is increasingly seen by consumers, manufacturers and retailers as an environmentally friendlier alternative to fossil fuel-based packaging.

Food is projected to account for almost three-quarters of global consumer flexible packaging consumption in 2015. Meat, fish, and poultry are the largest users of flexible packaging in the food sector. Confectionery and baked goods follow. Flexible food packaging has been growing at an average annual rate of 4.0% in volume terms over the period 2010–2015.

Among the many food packaging papers we offer are:

**Europe** Algro Guard M and Leine Guard M with integrated oil barrier and hot sealing properties. These innovative and unique grades developed in partnership with BASF and Eurofins are recommended to prevent migration of contaminants into foods and other sensitive products and are ideal for use in sugar, chocolate, confectionery, coffee, tea, crisps, snacks, nuts, and dried and dehydrated foods packaging.

**North America** LusterPrint, a grease resistant paper with an outstanding print surface, is FDA compliant for direct food contact and engineered with high strength characteristics. LusterPrint has become the market leader in multi-wall bags used for pet food.

**Packaging** Expanding the Ultraflute range

**South Africa** Lightweighting is a worldwide trend which has benefits in terms of cost and in the reduction of carbon footprint.

To meet demand, in South Africa, we launched Ultraflute lightweight semi-chemical fluting in 2014. Ultraflute offers improved yield without compromising the structural integrity of the box. The product’s high humidity performance makes it particularly ideal for fruit and vegetable packaging that need to withstand changing cyclic humidity conditions, as well as frozen fish, meat and other agricultural produce sent to market via the cold chain. Ultraflute typically retains more than 70% of its initial strength under these conditions and maintains this strength for longer periods. This is an improvement on Sappi’s previous semi-chemical range.

In 2015, there was outstanding demand for the product on the back of booming agricultural exports and we added a 150g/m² variant to the weight range.
Developing and maintaining a strong brand presence in Europe

FachPack 2015 — Nuremberg

At FachPack 2015 — a packaging trade fair that hosted 1,500 exhibitors and 43,000 industry visitors — we joined forces with Danish flexo technology provider, TRESU, and Swedish converter FrontPac to showcase our Fusion® topliner corrugated board designed specifically for bag-in-box and gift-box wrapping. It features an extremely bright white and very flat surface after lamination. Fusion is fully ISEGA-certified for direct contact with food.

We also showcased: atelier, Algro Design, Algro Nature, and Algro Guard M and Leine Guard M barrier paper grades.

atelier, a unique multi-ply board produced on a single-wire board machine, delivering high levels of brightness, purity and gloss with a silky touch and feel and unrivalled bulk.

Algro Design, an award-winning bright white cartonboard.

Algro Guard M and Leine Guard M barrier paper grades equipped with hot seal properties, developed in partnership with BASF and Eurofins. The former is ideal for outer packaging that requires high quality print; the latter is suitable for internal packaging and pouches for packaging: sugar, chocolate and confectionery, coffee, tea, crisps, snacks, nuts and dried etc.

Algro Nature, a certified home compostable flexible packaging substrate derived from renewable raw materials. It is the first and only food-grade packaging paper with vegetable-based coating ingredients (instead of mineral-oil-based binders) that can be composted. It can be laminated with flexible packaging films from NatureFlex (produced by Innovia Films).
Developing and maintaining a strong brand presence in Europe

Labelexpo — Brussels

We exhibited for the first time at the world’s largest label and package printing industry event, Labelexpo Europe. We featured the following products:

**Algro Sol**, our line of silicone base-papers features low silicone consumption, 25% lower than other standard carrier papers currently available on the market. This ensures excellent removal of the self-adhesive films from the siliconised carrier paper and results in significant cost savings.

**Parade® Prima A, G and HP**, our label paper portfolio dedicated to wet-glue labelling, is a one-side-coated paper with impressive brightness and gloss designed for superior print results and excellent optical appearance.

Customer engagement

Our sixth annual Sappi Football Cup, challenged our customers to show off their skills in table football. Participating countries included: Austria, Belgium, Czech Republic, France, Germany, Hungary, Italy, Poland, Serbia, Slovakia, Spain, Switzerland, Turkey and the United Kingdom. Qualifying matches follow the rules issued by the International Table Soccer Federation.

Save Food initiative

One-third of global food production — with a 3.3 giga ton carbon footprint — is wasted or lost en route to end-use customers, enough to meet the world’s demand for food. Sappi became a member of the Save Food initiative (set up to combat food waste), signalling a firm commitment to better protection of foodstuffs the world over.

Save Food is a joint initiative of the Food and Agriculture Organization of the United Nations (FAO), the United Nations Environment Programme (UNEP), Messe Düsseldorf and Interpack, the world’s leading trade fair for food processing and packaging. Through projects, trade fairs and conferences, Save Food aims to increase awareness among decision makers from the worlds of politics, business and industry of the critical need to fight food waste.

Our commitment to the Save Food initiative is aligned with our strategic focus on innovative and sustainable paper-based packaging solutions. We aim to actively help reduce the use of fossil-fuel-derived packing materials in favour of renewable, natural raw materials and environmentally-friendly packaging alternatives, simultaneously reducing food waste.
Pack Expo 2015 — Las Vegas

We showcased our full range of speciality and packaging grades at the 2015 Pack Expo exhibition in Las Vegas, 28–30 September 2015.

In addition to LusterPrint and LusterCote, we also displayed Algro Guard M, Leine Guard M, Algro Sol and Algro Nature, as well as Algro Design and atelier, which have enjoyed significant success in Europe, are now available to the North American market and were on display at Pack Expo.

McCoy

We introduced a new promotion on McCoy that features special effects for digital paper. With covers printed in multiple colours, standout graphics, photography and special printing techniques, we have designed this new promotion to inspire as well as inform printers about the superior performance of Sappi digital papers.

Opus

We relaunched our Opus brand with a comprehensive swatch book, product guide and promotion. The new swatch book addresses the breadth of the Opus line including all types of printing formats — sheets, web and digital — as well as all finishes and weights. The Opus product family includes a solution optimised for direct mail with superior glueability, foldability and calliper guarantees ensuring predictable postage costs. Within the digital offering, Opus has been optimised to perform using either dry or liquid toner on digital presses. Flexible with the perfect balance of shade and brightness, as well as the tightest tolerance of standards for any premium paper in its category — Opus delivers minimal variability across runs.

Product guides

We introduced new product guides for McCoy, Opus, Somerset and Flo with updated product positioning and details about the unique characteristic of what differentiates each brand in the market. The guides also feature product specifications and information about Sappi products, research and development, sustainability and best-in-class service.
Developing and maintaining a strong brand presence in North America continued

Haptic Brain, Haptic Brand

We ran a 2015 promotion entitled Haptic Brain, Haptic Brand: A Communicator’s Guide to the Neuroscience of Touch which included a printed book, six video shorts, a microsite and live customer events in major US cities featuring Dr David Eagleman, a leading neuroscientist and specialist in haptics. The campaign won the Positively Print award which is given to the individual, company or organisation that develops a programme or advertising campaign which best illustrates the strengths, sustainability and value of print as a marketing medium.

Among the studies this book cites is a new finding from Eagleman Lab, which demonstrated that consumers who read about a fictitious company on heavy, high-quality coated paper had more positive feelings about the company and understood and remembered the content significantly better than those who read the exact same content on either lighter, lower-quality uncoated paper or on a computer screen.

The Standard

We continued to educate our customers, publishing volume 6 – which focused on binding techniques – in ‘The Standard’-series of publications.

eQ Insight

We continued to promote the eQ Insight series on topical sustainability issues in the paper industry and featured these on the ‘Sappi etc®’-section of our website.

Sappi etc

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

Print excellence and innovation

We recognised print excellence and innovation across 10 categories for work produced on Sappi papers in terms of the Sappi Printer of the Year awards. Since 1999, the Sappi Printer of the Year Awards programme has been regarded as the world’s most respected accolade of excellence in the printing industry.

To see the 2015 winners, please click here:

Ideas That Matter

We continued with the annual Ideas That Matter grant programme which recognises and supports designers who use their skills and expertise to solve communications problems for a wide range of charitable activities.

For the first time, we offered a chance for the design community to participate directly in the grant programme by voting for their favourite projects. The grant that received the most Facebook ‘Likes’ by 30 September will receive a US$5,000 bonus to escalate the reach, impact and influence of their project.
Developing and maintaining a strong brand presence in South Africa

atelier

We introduced Sappi Europe’s new folding boxboard (FBB), atelier, in South Africa.

Labelled a hybrid FBB, atelier is produced at Maastricht Mill in the 220–350g/m² weight range and combines a bright-white finish with the rigidity and strength required in a FBB to deliver impressive functionality with any type of cartonboard printing, converting, finishing or post-production handling.

Typek — a nationally recognised brand

Starting at the end of August 2015, as part of a promotion, Typek — our popular brand of A4 office papers — wrappers featured the South African flag prominently.

The Typek brand is well-known and recognised by its distinctive colours — sporting the South African flag on the wrappers bolstered this product’s proudly made in South Africa credentials.

The promotion coincided with the Rugby World Cup, adding support for the national rugby team during their September/October campaign.

Typek supports education

We maintained our support of the Pick n Pay School Club, which provides educational material for learners across South Africa. The advertising agency which created this campaign received a gold Assagai award.

Typek sponsorships

We make annual donations of Typek paper to schools and support the annual pantomime at the Johannesburg Theatre.
Innibos — in the bush

Sappi has been a corporate sponsor of the Innibos National Arts Festival, the biggest community event in Mpumalanga since the festival started in 2004.

We showcased our green credentials once again in 2015 at this annual event.

World Forestry Congress

In September 2015, a number of Sappi representatives attended the World Forestry Congress held in Durban. They used the opportunity to engage at a high level and to showcase Sappi’s technical expertise by sharing their expertise and best practice with peers at an international level.

Mountain biking

Engaging with the mountain biking community, across a broad range of people and organisations, allows Sappi to create awareness around the value our plantations bring to people’s lives, aside from fibre products.

Our involvement with the mountain biking fraternity creates the opportunity to showcase our business, products, the contribution we make to our communities and our focus on responsible environmental management, thereby enhancing our reputation.

We have increased our mountain biking sponsorship to extend our reach in demonstrating our sustainable management of our extensive natural areas and commercial plantations.

We have taken up naming rights of several events: Sappi Karkloof MTB, including the Classic, Trailblazer and Recreational events • Sappi Mankele Mountain Bike Challenge • Sappi Howick MTB Classic.

We have also provided land access/sponsorship to the following races: • Isuzu 3 Towers Stage Race • MTN Barberton Classic • SANi2C • Joburg2C • DCSR Misty Valley Challenge.

The impact of the Sappi Karkloof MTB Festival on the local economy has been assessed at US$0.7-1 million.

In 2015, we participated in a number of mountain biking fairs, including the Africa Cycle Fair.
Our value add

Our products add value to people’s lives

**Dissolving wood pulp**
Viscose fabrics and textiles, and used in foodstuffs, cosmetics and pharmaceutical products.

**Graphic 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 casting release papers**
Consumer goods, labels and a variety of other applications.

Indirect economic benefits

The indirect economic benefits of our operations impact on sectors including technical, construction and engineering services which are outsourced to a wide variety of contractors. The chemicals industry, in particular, is one of our major suppliers.

In addition, the provision of services including the collection of waste paper for the industry and the outsourcing of non-core activities such as maintenance, medical services, transportation, cleaning and security creates opportunities for small-, medium- and micro-enterprises.

Added value to regional prosperity

**Employment**
Globally, we employed 12,753 employees and 791 contractors in 2015. In addition, approximately 12,000 people were employed by contractors working for Sappi Forests in Southern Africa.

**Manufactured goods**
Globally, we produced goods worth US$5,390 million:

- **Europe** US$2,660 million
- **North America** US$1,377 million
- **South Africa** US$1,353 million

Contributing to domestic growth

We contribute to domestic growth and the balance of payments in each region where we operate by exporting products to over 100 countries around the world.

Our contribution to society

We contribute to society through payments of governments, suppliers and employees, as well as returns to shareholders.

We facilitate social and economic wellbeing by using labour drawn from local communities, and 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.

At a glance

- **5%** to governments as taxation
- **12%** to lenders of capital as interest
- **26%** reinvested to grow the business
- **57%** to employees as salaries, wages and other benefits

**Our economic value added in FY2015**

- **US$5.39 billion** value of goods produced
- **3** number of continents where we manufacture
- **5.6 million** tons per annum paper
- **2.5 million** tons per annum paper pulp
- **1.3 million** tons per annum dissolving wood pulp capacity
- **12,753** employees
- **12,000** contractor employees (Sappi Forests)
- **791** contractors
### Paper industry
**Adds value**
With its traditional and new products, the paper industry plays an important role in society, offering efficiently manufactured, fully recyclable products, made from renewable raw materials.

### Forestry industry
**A strategic economic sector**
The forestry industry is one of the strategic economic sectors in the regions where we operate, and makes a significant contribution to economic growth and job creation — particularly in rural areas, where employment and income-generation opportunities are more limited than in cities.

### Pulp and paper industry
**Europe**
The pulp and paper industry provides 180,000 jobs in Europe directly, and 1.5 million in the value chain. It has a turnover of EUR175 billion and adds EUR15 billion to Europe’s GDP. 

### Forest products industry
**North America**
The forest products industry employs 900,000 workers and is among the top 10 manufacturing sector employers in 47 states. For every 100 jobs in the industry, the paper and allied products industry supports 325 jobs in supplier industries and local communities. The wood-products industry supports an additional 225 jobs outside the industry.  

**Forest sector**
**South Africa**
The forest sector employs about 166,000 people (directly and indirectly); providing a livelihood for about 652,000 breadwinners and their dependants — mostly among the country’s rural population.

The forest sector (forestry and forest products) contributes about 1% to national GDP. Regional GDP contributions summarises as follows:

- **KwaZulu-Natal**: 4.0%
- **Mpumalanga**: 3.7%
- **Eastern Cape**: 0.6%
- **Limpopo**: 0.6%

Our industry stands on the cusp of renewal as plantation- and forest-derived bioproducts emerge as a global game changer in a carbon-constrained future.
More effective in tandem

Despite the migration of traditionally paper-based content to electronic media, neuroscience research shows that paper-based content and advertisements offer specific advantages in connecting with our brains.

Rather than an all-digital world carrying the day, it appears that a multi-channel approach — one that leverages the unique benefits of paper with the convenience and accessibility of digital — will perform best.

The most recent work supporting paper-based marketing is a study sponsored by Canada Post and performed by Canadian neuromarketing firm TrueImpact. The study compared the effects of paper marketing (direct mail pieces) with digital media (eMail and display adverts).

The study used eye-tracking, high-resolution EEG brain wave measurements and conventional questionnaires to evaluate three key metrics:

- Cognitive load — ease of understanding
- Motivation — persuasiveness, and
- Attention-span — how long subjects looked at the content.

Direct mail requires 21% less cognitive effort to process than digital media, suggesting it is both easier to understand and more memorable. Post-exposure memory tests validated what the cognitive-load test revealed about direct mail's memory encoding capabilities. When asked to cite the brand (company name) of an advertisement they had just seen, recall was 70% higher among participants who were exposed to a direct mail piece (75%) than a digital advert (44%).

While these measurements and metrics don’t rise to the level of universal scientific standards, they seem to fit with other research in the paper vs digital debate.

An important role in language development

Illiteracy is a global concern. Research suggests that 175 million young people, largely from poor countries and regions, lack basic literacy skills. A World Literacy Foundation study estimated that illiteracy costs the global economy more than US$1 trillion through lost job opportunities.

Recently, South African Deputy President, Cyril Ramaphosa, said that fewer than 5% of parents in South Africa read to their children.

Research suggests that the way to equip children for a life of literacy from infancy is to share picture books with them. A compelling body of evidence from high income countries, shows that children’s language development and literacy skills are facilitated by book sharing with a caregiver, beginning in infancy. There seems to be something special about the process of book sharing. Providing training in sensitive early book-sharing could play a major role in boosting the educational prospects of children living in poverty.

Pen and paper trump electronics

A Princeton University Psychology Department study revealed that the increasingly common practice of using laptops to take notes, as opposed to using long-hand may be impairing students’ ability to learn.

The study follows in the wake of earlier studies which primarily looked into students’ abilities to multitask and how that affects studying. This latest study shows that even when used exclusively for note taking, laptops may still be impairing learning, because the information processing process is shallower than it would be using long-hand.

Laptop note-takers tend to transcribe lectures verbatim, as opposed to long-hand note-takers who process lectures and reframe the information in their own words. Laptop note-takers perform worse than long-hand note-takers when answering conceptual questions about lecture content.

Children’s language development and literacy skills are facilitated by book sharing.
Globally, 1.5 million people are moving to cities every week.
They made it possible…

The quality of our people, their dedication, resourcefulness and drive has made it possible to overcome the transformative challenges that have come with the realignment of our businesses.

Because of their tenacious optimism and pragmatic approach to achieving productivity gains and strategic change, we are in a stronger position today, than when we embarked on our realignment strategy to make Sappi a profitable and growing company in this ever-changing world.

From this position of strength we now have the opportunity to continue on a path of intentional evolutionary change — grow our existing pulp and paper businesses and prepare ourselves for an exciting future in adjacent businesses as we unlock and commercialise the potential of plantation- and forest-derived bioproducts.

The globalisation of ideas, knowledge and values is driving global-scale transformations in unforeseeable ways with dramatic impact.

Our experience reminds us that we need to continuously adapt and prepare for the transformative change these megatrends will bring.

Throughout history, connectedness has driven every social, political and economic aspect of our lives — creating opportunity and adding value.

Equally, throughout history it has been the quality and the commitment of the people involved which has been the key element of success.

Our people need to understand the world of tomorrow and how to position Sappi within that world to grow and prosper.

It is therefore critical that we attract and retain the right people and that we correctly train, equip and empower them.

Providing the right employee experience is critical to differentiating us from other employers in a competitive market and enables us to attract and retain talent.
One Sappi — a hyperconnected diversity equipped to evolve

In 2015, we employed 12,753* people and 791** Contractors and temporary employees.

To execute our strategy of intentional evolution, we need a diverse, engaged workforce who understand the world of tomorrow to position ourselves to take advantage of future trends — to grow and prosper.

Continuing to invest in our people enables us to both create and seize opportunities. The cornerstone of this approach is making resources available that enable our people to grow intellectually and bring new ideas to fruition.

We aim to create an environment where everyone can live up to our values of doing business with integrity and courage, making smart decisions which we execute with speed.

† of previously disadvantaged employees. ‡ Headcount as at 30 September 2015. * Full-time equivalents (FTEs). ** Excludes approximately 12,000 people who work for Sappi Forests (South Africa) contractors. § Women as a percentage of own employees.
Compensating fairly

Our compensation programmes are designed to achieve our goals of attracting, motivating and retaining employees who can drive the achievement of our 2020Vision.

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 and internal equity as well as company and individual performance.

Recognising achievement

Recognition plays a role in motivating employees and establishing a high level of connection to the business.

At a global level we present two annual awards:
- Technical Innovation Award, and
- Group Chief Executive’s Award

Recognises outstanding leadership behaviour and contributions to our business.

Regionally, we present the following awards:
- **Europe**
  The annual Coryphaena award which recognises truly exceptional achievements.
- **North America**
  The quarterly Risk Taking and Ingenuity awards
- **South Africa**
  The Excellence in Achievement Awards.

Managing performance

While we invest in formal training and development programmes, we realise that potential is not only developed through training courses which develop competencies and skills.

We provide our employees with opportunities to gain new experiences and through personal development plans which are based on creating the right conditions and circumstances which allow people to develop their careers.

We also conduct regular talent reviews in order to ensure that we have the right people for the right job.

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**Eligible employees who have completed a performance review, or who were in the process of doing so at financial year-end**

<table>
<thead>
<tr>
<th>Region</th>
<th>Completed (%)</th>
<th>Uncompleted (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sappi Europe</td>
<td>90%</td>
<td>10%</td>
</tr>
<tr>
<td>Sappi North America</td>
<td>34%</td>
<td>66%</td>
</tr>
<tr>
<td>Sappi Southern Africa</td>
<td>85%</td>
<td>15%</td>
</tr>
<tr>
<td>Sappi Trading</td>
<td>100%</td>
<td>0%</td>
</tr>
</tbody>
</table>
Enabling our people to grow and develop

Our goal of being at the forefront of technological innovation is underpinned by the recognition that we need to develop our people in order to hone their personal and career development as well as our own competitive advantage. We create opportunities and make resources available to enable our people to grow intellectually and bring new ideas to fruition.

Training and development programmes are reviewed on an ongoing basis to ensure they remain relevant to the changing needs of our people, the business environment and Sappi. Our approach to training is decentralised. Each mill, function, business unit and region takes responsibility for training. Five-year regional training targets allow us to monitor our progress.

Developing leaders

Having a strong leadership pipeline is critical to achieving our 2020Vision and also underpins our sustainability as an organisation. We are developing plans to accelerate leadership development and will report on this in 2016.
Training and development

Average training spend per employee

Per capita regional training spend in local currencies is reported in our Annual Integrated Report. (S)

Average training hours per employee by employment category

We track spend per category ensure that training is directed where most appropriate and where skills gaps have been identified.

Europe

Disclosure per category is legally prohibited.

Note: All Sappi Southern Africa training and development numbers exclude Lomati Sawmill, as the mill’s SAP reporting system does not align with the group’s systems.
Europe
Increasing interactivity to enhance training

A key component of our Employability Strategy is to ensure that both managers and staff take joint responsibility to nurture employability through personal and professional development. This leads to increased engagement in learning and training opportunities, mobility across jobs, and functional mobility. Fostering a culture of life-long learning supports our strategy.

Against this backdrop, we recently launched Universe, a digital learning platform aimed at providing support before, during and after any form of development and learning such as training. By increasing the interactivity between our employees and internal trainers, as well as between participants, the impact of the training can be effectively prolonged.

North America
Acclimating our employees

The EDGE (Enhancing Development and Growth through Engagement) programme is targeted at leveraging the engagement of young employees in order to retain them.

The programme took place over two and a half days during which the group focused on personal branding, project management, peer coaching and power and systems, which explored human and organisational dynamics.

All of this was done to help our young employees acclimate to working with different generations, improve everyday job skills and build camaraderie with their peers. The facilitators were open to feedback and evolved their techniques to make sure participants were getting the most out of each session. After the sessions, the group was invited to participate in monthly peer coaching sessions.

South Africa
Global Leadership Academy

Thirteen employees participated in the Sappi Leadership Academy, a global programme run on a regional basis, which targets high-performance individuals and is designed to develop leadership behaviours.

The programme comprises three one-week residential blocks as well as project work spread over the year.

The Academy is a key aspect of our efforts to develop a leadership pipeline.

South Africa
Enabling young talent

We support 50 bursary students of whom 32 are historically disadvantaged South Africans.

Of the total group, 15 are studying forestry; seven are registered for MSc or PhD studies in line with our research and continuous development strategies. The other 28 bursars are studying engineering.

Our training and development opportunities in South Africa are discussed in more detail in the regional Sustainability Report.
Measuring engagement

A strong correlation…

Clear evidence continues to link employee engagement to an organisation’s bottom line.

According to Gallup, on average, employees who are engaged and thriving have an absenteeism rate almost three time lower than those who are actively disengaged and suffering.

Companies with both highly aligned cultures and highly aligned innovation strategies have 17% higher profit growth than companies with low degrees of alignment.

We recognise that ascertaining levels of employee engagement is important in achieving our goal of building a workforce that is engaged, enabled and energised. Accordingly, we continue to measure levels of employee engagement every alternate year.

Employee engagement is one of our 2020 global goals.

Survey 2015: Goals and focus

In September 2015 we conducted a Global Employee Engagement Survey, the objectives of which were as follows:

• Measure changes in employee opinions and perceptions of Sappi as a place to work since conducting the 2013 baseline survey
• Measure the evolution of sustainable engagement at Sappi, and
• Understand what drives sustainable engagement among our employees.

Given the strong correlation between company performance and sustainable engagement, we focused on the latter objective which measures employee commitment and motivation, as well as enablement and wellbeing.

Our overarching aim is to build a culture of high employee engagement that unlocks the potential of all our people and connects them deeply to our mission, strategy, 2020Vision and values.

Survey 2015: Highlights

The global response rate was 73%. Areas covered (in alphabetical order) were:

• Development and empowerment
• Ethics and values
• Image and customer focus
• Leadership and direction
• Operational efficiency
• Safety and wellbeing
• Supervision
• Sustainable engagement
• Talent and recognition, and
• Teamwork and communication.

We are in the process of developing comprehensive plans to address gaps and will report on our progress towards these in 2016.

Preliminary results show that:

Significant improvements

Compared to the 2013 Global Employee Engagement Survey, there were significant improvements in leadership and direction, as well as operational efficiency.

Tools and resources

Most respondents say they have the tools and resources they need; but, only 44% say they are not confronted with obstacles.

Personal accomplishment

There was a downward trend regarding a sense of personal accomplishment.

Language diversity

Although English is the primary language used throughout the group, key communication materials, for example, the Global Employee Engagement Survey or the communications campaign to promote the revised Mission, Strategy, 2020Vision and Values, are adapted for each region and disseminated in the appropriate languages of each region.

Moving Towards Sustainable Engagement

Employee Engagement Survey 01–25 September
Business success through diversity

The rationale
Celebrate our differences in human capital

Members of an organisation who think alike or are trained in similar disciplines with similar bases of knowledge run the risk of becoming insular in their ideas.

Instead of exploring alternatives, a confirmation bias takes over and members tend to reinforce one another’s predisposition. In other words, collaboration becomes stronger when different people from different cultures and skills sets are involved.

Against this backdrop, our success is based on the diversity of our people.

This diversity brings with it different skills sets and backgrounds, as well as unique ways of doing things and different ways of thinking innovatively. All of which enhance our ability to service diverse, rapidly evolving global markets.

We celebrate our differences in human capital and strive to create a workplace free from discrimination and harassment; acknowledging and accepting differences among our people with respect to age, class, ethnicity, gender, physical ability, race, sexual orientation and spiritual practice.

We view diversity as a key driver that enhances our competitiveness and sustainability.

Case study
I Can at Shaw Research Centre

We have embarked on a disability joint project with an organisation called I Can in terms of which we are sponsored by the fibre processing and manufacturing (FP&M) Sector Education and Training Authority (SETA) to support ten disabled learners from previously disadvantaged backgrounds for a 12-month National Qualifications Framework (NQF) SETA-accredited learnership at our Sappi Shaw Research Centre in KwaZulu-Natal.

North America
Planning for pending retirement

We ensure that employees receive training to increases their skills and proficiency for their current position and for future opportunities.

As we are facing turnover due to a large number of pending retirements and are hiring new employees at a relatively high rate, delivering ongoing training that effectively grows the skills of our employees is essential.
Women tend to be under-represented in our workforce due to the nature of our operations being a predominantly manufacturing environment that requires shift work. We are nevertheless making progress towards gender equality as reflected in our new hires.

Line management are mandated to facilitate the employment of women by ensuring that those working on shifts are safe and that bathroom facilities are available to them.

We celebrate our differences in human capital and strive to create a workplace free from discrimination and harassment; acknowledging and accepting differences among our people.

<table>
<thead>
<tr>
<th>Gender diversity Sappi boards</th>
<th>Sappi Limited board</th>
<th>Sappi Limited Executive Committee</th>
<th>Sappi Europe subsidiary board</th>
<th>Sappi North America subsidiary board</th>
<th>Sappi Southern Africa subsidiary board</th>
</tr>
</thead>
<tbody>
<tr>
<td>Women</td>
<td>12</td>
<td>9</td>
<td>7</td>
<td>8</td>
<td>13</td>
</tr>
<tr>
<td>Men</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>8</td>
<td>13</td>
</tr>
</tbody>
</table>

Note: Employee numbers are reported on a full time equivalent (FTE) basis; employment equity numbers are reported as headcount on 30 September 2015.
The definitions of ‘diversity’ differ in each country where we operate in Europe, as they do in the countries that fall under Sappi Trading. Consequently, diversity indicators for these regions are not included in this report.

**South Africa**

*Broad-based Black Economic Empowerment*

In South Africa, where employment equity falls under Broad-based Black Economic Empowerment (BBBEE) legislation, our employee diversity profile is monitored quarterly by the South African lead team and discussed monthly at every business unit’s Equity Forum.

Each human resources manager and hiring manager is required to recruit in accordance with the employment equity plan in place at their site. We report in more detail on BBBEE in our regional Sappi Southern Africa Sustainability Report 2015.

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**European and Sappi Trading**

**Ethnic diversity**

<table>
<thead>
<tr>
<th>Age diversity Sappi boards</th>
<th>Sappi Limited board</th>
<th>Sappi Limited Executive Committee</th>
<th>Sappi Europe subsidiary board</th>
<th>Sappi North America subsidiary board</th>
<th>Sappi Southern Africa subsidiary board</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age diversity</td>
<td>≤ 50 yrs</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>51-60 yrs</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>≥ 61 yrs</td>
<td>7</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

**South Africa**

*Historically disadvantaged South Africans as a percentage of cohort*

Note: Employee numbers are reported on a full time equivalent (FTE) basis; employment equity numbers are reported as headcount on 30 September 2015.
A certain turnover rate is needed to bring new people with new skills into the business to drive innovation and a fresh approach while maintaining a certain level of continuity.

Our turnover rate of 12% in 2015 is in line with the total global turnover rate for the manufacturing and distribution industry which in 2014 stood at 13.7%.

Turnover includes retrenchments, retirements and non-renewal of contracts.

Actual resignations were 3% in 2015.

Monitoring turnover by gender and age group is strategically important. A disproportionately high number of women leavers could indicate discrimination. Similarly, an extremely high number of younger people leaving could indicate that they are not being given sufficient career opportunities.

Employee turnover by region

An employee absent from work because of incapacity of any kind, not just as the result of work-related injury or disease.

Monitor absenteeism, turnover and new hires

Diversity enhances our ability to service diverse, rapidly evolving global markets.
Globally, approximately 63% of our workforce is unionised, with 69% belonging to a bargaining unit.

Overall, the year under review was characterised by amicable, but tough negotiations and relatively good relationships with organised labour across the geographies.

### Engaging constructively with trade unions

#### Ensuring disciplined behaviour

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

#### Freedom of association

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.

#### Forced or compulsory labour

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.

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

### Child labour

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

### Percentage of employees belonging to collective bargaining units

- **Europe**: 89%
- **North America**: 64%
- **South Africa**: 53%
- **Sappi Limited**: 15%
- **Sappi Trading**: 11%
- **Group**: 69%

We proactively seek to keep our employees healthy, thereby enhancing productivity, reducing stress and enabling creativity and innovation.
Communicating operational changes

Operational changes are of key concern to all employees, particularly those represented by trade unions and/or bargaining units.

Overall, we aim to communicate any changes to our people timeously and transparently.

Career endings

Access to retirement planning services is provided on a regional basis and in some instances this is supported by financial wellbeing programmes.

Termination

To the extent that there are employee lay-offs, we provide severance pay to all employees and, in some instances, outplacement assistance.

Europe

In Europe, information about significant operational changes needs to be provided at a time when planned changes are concrete enough to enable proper consultation.

Finland is the only country in which we operate where the process is followed-through according to a set timeline.

North America

In North America, the notice period in terms of Federal Law is 60 days.

Details regarding operational changes are not specified in collective bargaining agreements.

South Africa

In South Africa (including Sappi Limited), the implementation of significant operational changes is governed in terms of section 197 and section 189 of the Labour Relations Act, 66 of 1995. The Act does not prescribe a specific notice period in this regard. However the standard practice is a minimum of 30 days, and a maximum of 60 days’ notice for consultation in case of a large-scale restructuring process. The recognition agreement concluded with the majority union (CEPPAWU) recognises the provision of the Act in this regard.

SSA is party to the Bargaining Council for the Wood and Paper Sector as well as Forestry within South Africa. In the case of Sawmilling and Pulp and Paper, collective bargaining is conducted at industry level under the auspices of the bargaining council. The constitution specifies when parties should submit issues of bargaining for the particular year and when the negotiations should commence.

Forestry conditions of employment are implemented on 01 April every year and are regulated by ministerial sectoral determination. The normal notice period applies.

Sappi Trading

Sappi Trading does not employ a large staff complement: Hong Kong (43 employees), Sappi Southern Africa: Sappi Exports Services (17 employees), Mexico (13 employees) and the others have less than 10 employees each.

Most of the companies within Sappi Trading are not covered in collective agreements except for Austria, Brazil and South Africa.
Promoting wellbeing, health and safety

Proactively seeking to keep our employees healthy enhances productivity, reduces stress and enables creativity and innovation.

Promoting wellbeing also has a direct impact on the bottom line. A 2014 Harvard Business Review study of 20 companies found an average annual health care cost of 1-2% for companies with wellness programmes, compared to the 7% national average.

Health and safety committees

Health and safety committees are in place at all 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.

Europe

Formal committees are in place at different levels of the business in line with statutory requirements. 100% of all Sappi Europe employees are represented by the safety committees.

North America

All unions have the opportunity to participate in joint management worker safety committees. 64.5% of the employee population is unionised.

South Africa — including Sappi Limited

Health and safety representatives are elected from non-supervisory staff. In line with legislation, there is one representative for every 50 workers.

Sappi Trading

No formal joint management/worker health and safety committees exist due to the small number of people in each office, but there are appointed safety officers.

Wellbeing programmes

Employee wellbeing programmes are decentralised and each mill, together with the mill lead teams, decides on their priorities for the year.

Programmes vary across the mills and include preventative medical health care check-ups; flu vaccinations and immunisations as well as support of employee sports and social activities, amongst other things.

Europe

Employee wellbeing programmes are decentralised and each mill, together with the mill lead teams, decides on their priorities for the year. Programmes vary across the mills and include preventative medical health care check-ups; flu vaccinations and immunisations as well as support of employee sports and social activities, amongst other things.

North America

We encourage all salaried and hourly employees (and their spouses) who participate in one of Sappi’s medical plans to complete a Health Risk Assessment (HRA) questionnaire.

We continue to have wellness events, such as healthy cooking demonstrations and Wellness Webinars, at our sites.

South Africa

The complexity of the South African workforce and employment legislation has resulted in a more structured employee wellbeing function. We categorise our health and wellbeing programmes based on occupational health, primary health care and employee wellbeing.

Occupational health

Our practice is governed through standards and best operating practices aimed at preventing harm to employees at work.

The major risks we are challenged with due to our work environment are noise, vapours, fumes and ergonomic risks. To mitigate the noise risk, we conduct repeated hearing loss measurements and have focused on reducing or eliminating noise levels in the work environment.

Employee wellbeing

Employee wellbeing programmes focus on educating, empowering and providing employees with the skills to take ownership of their wellbeing. The programmes include support against: • Obesity • Substance abuse (alcohol and drugs) • Basic counselling for referrals to external providers • Financial wellness • Trauma counselling • Work stress issues • Other health issues, and • Relationship issues.

Primary health care

We continue to focus on HIV/AIDS and tuberculosis as primary health care issues.

At some of our mills we have partnered with the provincial health services to provide chronic medication and HIV/AIDS retroviral drugs to the clinics at our mills.

The mortality rate from HIV/AIDS within Sappi Southern Africa has been reducing steadily over time.

HIV/AIDS mortality rate — Sappi Southern Africa

North America — Aids Action Committee

We support the AIDS Action Committee (AAC) of Massachusetts by participating in the annual AIDS Silent Auction. To date, we have raised US$257,000 and shortly after year end, made over US$40,000 in goods and services available for bidding.
Unlocking safety

Our management approach to safety

The pulp and paper making process presents several safety risks including the use of certain substances/products, operation and maintenance of machines, exposure to high temperatures and the transport and handling of different kinds of loads. Globally, forestry is also recognised as a dangerous occupation.

Recognising the safety risks inherent in our industry, we strive to establish a culture of zero incidents based on a healthy workforce working under safe conditions, with the necessary skills and comprehensive training.

The OHSAS 18001 Safety Management System underpins the group’s safety strategy. The reporting of ‘near miss’ incidents is an integral part of our Incident Reporting Standard. Safety experts in the group analyse the near miss reports in order to establish trends which enable the safety platforms to develop corrective action. Our investigations focus on root causes rather than apportioning blame. Practical support is supplied in the form of workshops, training sessions, a safety bulletin and monthly sharing of good practices and of learning from mistakes.

Our culture and goal of zero incidents and accidents is underpinned by our team oriented, behaviour-based safety (BBS) approach. To achieve this, safety risk managers meet on a quarterly basis in a regional safety platform. Common problems and solutions, as well as lessons learnt from inside and outside the group, are discussed and assimilated. The key components of the regional platforms are the analysis of trends and the development of corrective action.

Safety leadership

The Group Head: Technology, who reports directly to the Chief Executive Officer, is responsible for safety throughout the group.

Management is accountable for safety and will demonstrate leadership through personal example.

We also expect and encourage every employee to take responsibility for their own health and safety and give our employees the necessary skills, tools and training to do so.

Unlocking safety during Sustainability Week

In 2015, we extended our traditional Global Safety Awareness Day — the tenth of its kind — to a Sustainability Week. This allowed senior management in every region to visit more of the units in their respective areas to demonstrate their commitment to safety.

Building on the 2014 theme of ‘Walk the talk’, the theme in 2015 was ‘You are the key that unlocks safety’. This theme emphasised that a safe working environment is only possible when everyone at all levels of the organisation is committed to safety and encouraged each Sappi employee to take a leadership role in safety.

Our 2016 theme, ‘I see, I say’ will encourage every employee to display courage and act decisively as stated in our values.
Improvements in lost time injuries (LTIs) were evident throughout the group with new benchmarks being achieved in every region. Noticeable improvement was reported in work-related incidents, the result of a concerted focus on reducing the impact of injuries in our workforce by continued and concentrated focus on driving down the severity of accidents and of near misses.

Tragically, there were three fatal contractor injuries during the year in Southern Africa. We deeply regret these fatalities and view them in a very serious light.

We remain committed to achieving the goals of our formal safety campaign, Project Zero, and are as concerned about the safety of our contractors as we are about that of our own employees.

Our aim is that safety should be an entrenched value and a 24/7 ‘way of life’ for all our employees and contractors worldwide.

The fatalities involved: the overturning of a loader on a steep slope, a chainsaw accident during harvesting and an accident involving a skidder.

The Sappi management team takes the unacceptable trend in the number of fatalities in 2015 very seriously and has instituted the following mitigation actions in response to the accidents described:

- In terms of loader overturning, we have implemented far more rigorous training of the drivers and increased supervision
- We conducted refresher training for all chainsaw operators and appointed an independent assessor to verify chainsaw operator felling practices, and
- We have reviewed and improved on the procedure for timber bundle extraction.

From a safety perspective, the LTIFR of all regions continued the positive downward trend.

Tragically, in South Africa there were three fatal injuries during the year. The severity of these accidents is reflected in the increased Injury Index (II) for contractors.

Learn more about our safety terminology and LTIFR.
Contractor incidents are now treated as own employee incidents. There is no difference in analysis, discussion and prevention of accidents. The contractor lost time injuries increased from 16 in FY2014 to 20 in FY2015, but there were three major projects with many contractors on site, consequently the LTIFR decreased from 3.42 to 3.19 in FY2015.

There is room for improvement at Lanaken Mill, where LTIs increased from 5 to 8.

Key safety statistics

- LTIFR: 0.76 (FY2014: 1.04)
- 34 LTIs (FY2014: 44)

Improvement was also noted in the more complete collection of working hours.

In September 2015 Sappi Europe found that approximately 650,000 manhours were not accounted for which will be corrected in FY2016.

Significant accomplishments

- **Kirkniemi Mill**
  The most significant improvement for own employees with 3 LTIs (FY2014: 10).

- **Alfeld Mill**
  LTIFR of 0.18 – only one LTI recorded.

- **Alfeld Mill and Sappi Europe R&D**
  Awarded the internal Golden Safety Award in May 2015.

- **Gratkorn Mill**
  Improving trend with 12 LTIs (FY2014: 15).

Focus going forward

- FY2016 target LTIFR ≤ 0.70 for own employees and an ongoing LTIFR improvement for contractors.
- Implement the agreed safety strategy for Sappi Europe based on leadership behaviour, engagement of all, focus on pre-work risk assessments and not ‘Looking away’ — ‘I see it, I say it’.
- Continue to apply the Sappi Performance Engine and PDCA (Plan Do Check Act).
- Further intensify cooperation and communication between the mills on safety performance and initiatives facilitated by the EU Safety Platform.
- Implement and follow-up existing and new safety best-practices, continue with inter-regional exchange of learnings and application of useful tools and statistics (safety toolbox).
- Complete, as far as possible, automated collection of working man-hours.

With a nod to Abbey Road, London, made famous by The Beatles in 1969, management at Sappi Alfeld Mill promotes safety with an ‘If they can, so can we…’ emulation of one of the most famous and copied images of the era.

**Europe — Lost time injury frequency rate**

<table>
<thead>
<tr>
<th>Year</th>
<th>LTIFR</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td></td>
</tr>
<tr>
<td>2013</td>
<td></td>
</tr>
<tr>
<td>2014</td>
<td></td>
</tr>
<tr>
<td>2015</td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td></td>
</tr>
</tbody>
</table>

**Sappi Group Sustainability Report 2015**
Because our use of contractors is well managed, single incidents have a significant impact on the safety statistics of the region. Our contractors experienced one significant lost time incident in FY2015 which occurred during the cold outage at Somerset Mill.

In terms of safety performance, SNA benchmarks in the upper 20% compared to the North America paper industry according to the AF&PA.

### Key safety statistics

- LTIFR: 0.48 (FY2014: 0.56) — below the FY2015 budget and the second best LTIFR achieved in this region’s history.
- 12 lost time/restricted incidents (FY2014: 14).
- Best ever OSHA Incidence Rate (OIR): 1.01.
- 25 recordable incidents (FY2014: 44).
- LTISR: 19.6 (FY2014: 17.5) — the second best rate ever.
- Lost and restricted workdays increased slightly by 10%, driving a slight decline in performance compared to FY2014.

### Significant accomplishments

- **Allentown Sheeting Facility**
  Zero Lost Time OSHA recordable injuries.

- **Cloquet Mill**
  One million hours worked without a lost-time incident as of 07 October 2015.

- **Somerset Mill**
  160 days without an OSHA recordable — previous record 82 days.

- **Technology Centre**
  One million hours without an LTI.

### Focus going forward

- Increase personal ownership for own safety and workmate safety.
- Engage with labour unions, focusing on task teams.
- Streamline pre-job hazard assessment and improve preventative actions on high-risk tasks.
- Improve new employee orientation/training and groom front line supervisors.
- Communicate best practices and corrective actions across the mills.

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**Our safety performance benchmarks in the upper 20% compared to the North American paper industry according to the AF&PA.**
Regional safety performance – Sappi Southern Africa

The unacceptable trend in the number of fatalities in 2015 has received enormous focus by the Sappi management team with a number of new initiatives, including forestry contractor training and operator certifications.

**Key safety statistics**

- LTIFR for own employees: 0.46 — the best ever.
- LTIFR for contractors: 0.28 against the regional target of 0.53.
- II own employees: 37.21; contractors: 37.49 against the target of 7.60 — the result of three fatal accidents and three amputations which occurred during the year.
- Ten out of eighteen operating units achieved zero own LTIs for 12 months or more, and six units achieved zero contractor LTIs for 12 months or more.

**Significant accomplishments**

- **Stanger Mill**
  LTIFR of zero in December 2014 and 650 days without an LTI by year-end.
- **Cape Kraft Mill**
  Achieved zero LTIFR and one year without a LTI in December 2014.
- **Ngodwana and Saiccor Mills**
  Recorded a steady downward trend for LTIFR, with Ngodwana Mill FY2014 on 0.22 and Saiccor Mill on 0.36.
- **Ngodwana Mill**
  Achieved one million manhours without an LTI in February 2015.
- **Saiccor Mill**
  Achieved one million manhours without an Own-LTI on 11 November 2014 and again on 24 March 2015.
- **Tugela Mill**
  Achieved one year without an Own-LTI in July 2015.

**Focus going forward**

Achieve:
- Zero fatal accidents
- An LTIFR of better than 0.40 for own employees and contractors
- An II of less than 7.00 for all categories of employees by:
  - Continuing to engage with employees and contractors in safety drives by means of mini safety conferences and coaching to bring the ‘hearts and minds’ of all employees back to safety
  - Maintaining momentum the BBS programme
  - Managing the psychological aspects of change to maintain focus during disruptive periods, and
  - Improving communication lines with contractors.
Driving meaningful change in communities

Whether it’s our plantations in South Africa, the natural forests from which we source wood fibre in Europe and North America, or the towns and cities in which our mills are located; we actively engage with and are part of the communities where we are located. Helping address the needs and concerns of our communities enhances our licence to operate, entrenches our reputation and aligns with our goal of being a responsible corporate citizen.

The key themes of our corporate social responsibility (CSR) initiatives include community welfare, infrastructure, education, environmental conservation, with particular reference to greening and tree planting projects.

For Sappi, sustainable CSR projects are those which enable communities to progress further than they would have on their own — projects that allow people to leverage their energies and talents to sustain themselves, creating meaningful change.

Mills in each region support local community projects ranging from youth clubs, community centres, vulnerable groups, sports clubs, environmental education and paper donations.

The bulk of our spend is allocated to the Southern African region, where the developmental needs are greater than in the other regions where we operate. Our initiatives in South Africa are described in detail in our Sappi Southern Africa Sustainability Report 2015.

Further details of our management approach to societal support, together with the amount spent in 2015 and case studies, are outlined in the ‘Key material issues’-section of this report.

Case study
Nepal earthquake

Globally, we supported the appeal by relief organisations for assistance for the people of Nepal, following the devastating earthquake which struck the country on 25 April 2015.

We matched donations by our staff in all regions, collectively raising the equivalent of US$28,000 for the Red Cross. This donation was used for the humanitarian and rebuilding efforts in Nepal.

Case study
Save Food initiative

In June 2015, Sappi became a member of the Save Food initiative, signalling a firm commitment to better protection of all foodstuffs the world over.

Save Food is a joint initiative of the Food and Agriculture Organization of the United Nations (FAO), the United Nations Environment Programme (UNEP), Messe Düsseldorf and Interpack, the world’s leading trade fair for processes and packaging.

We are a member of the Save Food initiative, firmly committed to better foodstuffs protection.

Case study
Ideas That Matter — North America

The Ideas That Matter programme aims to recognise and support designers who use their skills and expertise to solve communications problems for a wide range of charitable activities.

Since 1999 approximately US$5 million has been disbursed to around 220 campaigns in the USA.

In 2015 we initiated the People’s Voice Award and offered the design community the chance to participate directly in the grant programme by voting for their favourite projects. The grant that received the most Facebook ‘Likes’ benefitted from a US$5,000 bonus to escalate the reach, impact and influence of their project.

The 2015 winner of this award was a project entitled Visual Nourishment: Cultivating Greater Engagement in Worcester’s Environmental Community. This project seeks to inform, engage, and spread the spirit of environmental and food justice to the Worcester community. This was achieved through the design of a visual identity and campaign comprising vegetable twist ties, posters for farmers’ market stands, and an online plant guide.

We are a member of the Save Food initiative, firmly committed to better foodstuffs protection.
Action on climate change requires shifting investment flows to unlock low-carbon business opportunities.
As the world increasingly recognises the value of woodfibre-derived products, opportunities, based on this renewable and biodegradable natural resource, are opening up.
Treading more lightly on the Planet is contingent upon…

Although Prosperity, People and Planet are all interlinked, our current and future viability as a business and our performance in the People and Planet areas are contingent on successfully generating Prosperity on behalf of all our stakeholders.

Our ability to deliver value creation for our shareholders by focusing on Prosperity through improved profit, strategic positioning and debt reduction, lies at the heart of our commitment to sustainability and treading more lightly on the Planet.
Our global planet performance at a glance — a five-year view

<table>
<thead>
<tr>
<th>Energy</th>
<th>Energy — a five-year view</th>
<th>Emissions — a five-year view</th>
<th>Water — a five-year view</th>
<th>Woodfibre and plantations</th>
</tr>
</thead>
<tbody>
<tr>
<td>57 PJ/annum generated on site</td>
<td>9% increase in energy self-sufficiency</td>
<td>17.2% reduction in Scope 1 (direct) GHG emissions</td>
<td>35.1 m³/adt water drawn</td>
<td>492,000ha owned, managed or leased plantations in South Africa FSC®-certified</td>
</tr>
<tr>
<td>52% of the energy we use is renewable</td>
<td>8% reduction in specific energy consumption</td>
<td>16.0% reduction in Scope 2 (indirect) GHG emissions</td>
<td>2.1% reduction in specific process water extracted</td>
<td>Approximately 30% of our landholdings are managed for biodiversity</td>
</tr>
<tr>
<td>43% energy self-sufficient</td>
<td>6% increased use of renewable energy</td>
<td>16.9% reduction in total GHG emissions intensity</td>
<td>On average 91.8% of water drawn is returned after being treated</td>
<td>79% of our global fibre use is FSC®, PEFC™- or SFI®-certified</td>
</tr>
</tbody>
</table>
We are committed to managing and mitigating our environmental footprint, the climate and biodiversity impacts of our operations.

We achieve this by working towards the Planet commitments embodied in our Sustainability Charter.

To realise our commitments, we have a far-reaching Environmental Management System which includes the systems described here that enable us to mitigate our environmental footprint.

We follow a lifecycle approach to environmental management including minimising the environmental impact of our operations’ raw materials and energy sources; developing new production methods and products and finding innovative ways of beneficiating waste.

We identify opportunities to save water and energy at every step in our production processes, starting in our plantations, where we apply best-practice management techniques to produce woodfibre with properties that require less energy and water during pulping.

We invest in research and development.

We maintain systems that monitor environmental performance and legal compliance at each mill, including energy dashboards, integrated water management, air emissions, waste and effluent plans.

We take appropriate, pre-emptive action to improve or mitigate identified environmental risks.

We keep up with environmental best practice through a number of internal environmental ‘clusters’ comprised of experts in various fields.

We use internationally recognised, independently verified certification systems including:
- FSC® Forest Stewardship Council®
- PEFC™ Programme for the Endorsement of Forest Certification™
- SFI® Sustainable Forestry Initiative® (woodfibre)
- ISO 9001 Quality management system
- ISO 14001 Environmental management system
- OHSAS 18001 Safety management system
- EMAS Eco Management and Audit System in Europe, and
- ISO 50001 Energy management system.

Our certificates of compliance are published online and summarised in ‘Our certifications’ FAQ.
Ensuring sustainable fibre supply responsibly

Fibre sources and species used

**Europe**
We do not own plantations or land in this region.

Woodfibre is mainly sourced from certified and controlled forests in the regions where our mills are located.

Softwood and hardwood pulp are both sourced from certified market-pulp suppliers in 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.

The hardwood:softwood market-pulp ratio has increased significantly in recent years. The main market-pulp hardwood we use are eucalypt species. Poplar, birch and mixed hardwood account for a small portion of total hardwood consumption. The softwood species we use include spruce and pine.

**North America**
As in Europe, we do not own plantation forests or land in this region.

Wood is sourced from certified and controlled forests landowners and commercial loggers in the temperate forests of Maine, New Hampshire, Michigan, Minnesota and Wisconsin and from the Canadian provinces of Alberta, New Brunswick, Quebec and Ontario.

Tree species used include: maple, poplar, aspen, beech and birch (hardwoods) and spruce, pine and fir (softwoods).

**Southern Africa**
We do not use any indigenous wood. We source woodfibre from softwood and hardwood plantation forests. Owning, managing and leasing 492,000ha of plantations gives us a competitive advantage. Our aim is to produce low-cost wood with the requisite pulping characteristics and increased yield. We actively pursue this aim, particularly through genetic improvement of planting stock through plant breeding. We therefore continue to investigate and classify timber species according to their respective pulping characteristics and end-pulp quality.

Approximately two-thirds of our owned and leased plantations are planted to commercial tree species, the remaining third is covered by natural vegetation and managed for conservation.

The softwoods we use are all pines including: *Pinus patula, P elliottii, P taeda* and some hybrids. The hardwoods we use are mostly eucalypts: *Eucalyptus grandis, E dunnii, E nitens, E smithii* and a range of hybrids. We also use wattle, *Acacia mearnsii*.
Mitigating fibre-supply risk

Europe
We mitigate fibre-supply risk through shareholdings in wood sourcing co-operatives and a combination of approaches which include both short- and long-term wood supply agreements.

North America
We mitigate fibre-supply risk through a combination of approaches which include both short- and long-term wood supply agreements.

South Africa
The severe drought in KwaZulu-Natal, during this past year, has posed a challenge.

In this province, the supply of bagasse, one of Stanger Mill’s key inputs, has been affected with yields decreasing from 80 tons of sugar cane per hectare in 2009 to 30t/ha in 2015.

Accordingly, we are investigating the possibility of using sawdust, sourced from sawmills in the vicinity of the mill, as an alternative fibre source. As bagasse cooks more quickly than wood, we have been investigating optimum ways to process sawdust on a laboratory scale which proved to be successful. Using sawdust would be an interim solution, closing an immediate fibre gap rather than a permanent solution.

We are using some burnt timber at Tugela Mill for unbleached packaging products, which reduces losses from fires and maximises available fibre use.

Developing tree farmers

South Africa
Encouraging entry into the industry and helping to develop tree farmers in South Africa consolidates the industry and aligns with the South African government’s focus on rural development.

Our Project Grow enterprise development initiative — a tree-farming scheme focused on supporting subsistence farmers, community forestry projects and forestry projects handed to land-reform beneficiaries — contributes to securing of our woodfibre supply. 2015 was a record year for Project Grow. The scheme, which enhances the security of our woodfibre base, supplied more than 360,000 tons of fibre into our mills, thereby injecting several hundred million rands into the local economy.

Project Grow farmers entering into a supply agreement with Sappi are guaranteed a future market — Sappi, being a global concern with an ongoing, growing need for woodfibre gives them certainty that they will not be left with stands of trees because Sappi is no longer in the market for timber.

Ensuring sustainable fibre supply responsibly continued
Striving to increase the certified fibre we use…

Forest and Chain-of-Custody certification

Forest and Chain-of-Custody certification assures our customers that the forest products they buy from us are made from legally harvested and sustainably managed forests and plantations. We strive to increase the amount of certified fibre we procure and work with certifying bodies, and landowners to achieve this.

Non-certified fibre

Wood and pulp is sourced from known and trusted suppliers close to our mills and are visited regularly by Sappi’s buyers.

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

Environmental- and forestry-related information, including wood sources, is obtained from every pulp supplier on a regular basis and this data is then evaluated by a team of experts.

Forest products certifications

We have achieved certification by the three most internationally recognised forest products certification programmes:
- FSC® Forest Stewardship Council®
- SFI® Sustainable Forestry Initiative®, and
- PEFC™ Programme for the Endorsement of Forest Certification™.
Striving to increase the certified fibre we use… continued

Forest and Chain-of-Custody certification assures our customers that the forest products they buy from us are made from legally harvested and sustainably managed forests and plantations.

Fibre certification — Europe

78% of fibre used is certified

78% of fibre supplied to our European mills is FSC®, PEFC™, or SFI®-certified.

Fibre certification — North America

58% of fibre used is certified

58% of fibre supplied to our North American mills is FSC®, PEFC™, or SFI®-certified. We include fibre sourced from Certified Logging Professional and the Maine Master Logger programme toward our regional goal of achieving 60% of our fibre from certified sources.

Fibre certification — South Africa

83% of fibre used is certified

83% of the fibre supplied to our South African mills is FSC®, certified. All our own, leased and managed plantations, are FSC®-certified.
Forest certification

The World Wildlife Fund defines forest certification as: “Mechanism for forest monitoring, tracing and labelling timber, wood and pulp products and non-timber forest products, where the quality of forest management is judged against a series of agreed standards.

Credible forest certification covers much more than just logging practices — it also accounts for the social and economic wellbeing of workers and local communities, transparency and inclusiveness in decision making.”

Promoting transparency

Global

We provide information about our environmental performance to a wide range of stakeholders.

We participate in both the Carbon Disclosure and Forest Footprint Disclosure Projects, 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.

Promoting third-party certification

North America

Sappi was the first pulp and paper company in North America to be granted a group forest management certificate by the FSC®.

Through this certificate, small landowners, who agree to become a member of Sappi’s forest management group, have their land certified in accordance to the FSC® standard. Our ongoing forest management services and supplier outreach programme help to increase certified lands in the areas that supply fibre to our mills.

Our Sustainable Forestry Programme assists woodlot owners in the state of Maine to develop plans for managing and harvesting woodlands.

South Africa

We have established a group scheme for small- and medium-scale growers. There are currently more than 205 members in the scheme with plantations ranging from a few hundred hectares to well over 103,000ha.

FSC®-certification is not yet available to microgrowers, largely because of financial constraints. Through the auspices of Forestry South Africa, we are researching ways of overcoming these barriers, but this will take another two years to be established.

Currently timber from microgrowers is recognised as ‘controlled wood’ and can thus be used to produce FSC®-certified products labelled as ‘Mixed Sources’.

GreenBlue® Forest Products Working Group

North America

As a founding member of GreenBlue®’s Forest Products Working Group, Sappi North America is heavily involved in an Industry Leadership Committee working on forest certification issues.

GreenBlue® is a non-profit organisation whose goal is to empower business leadership to build a thriving, resilient material economy.

Utilising a unique Value Innovation Process, the group is exploring the key elements of certification that provide value to various stakeholders. We are exploring efficient and cost-effective models (including but not limited to certification) that would enable small private landowners in the United States to provide brand owners the level of assurance they need that they are sourcing fibre from responsibly-managed forest land.

Working with landowners and certified loggers

North America

We strive to increase supply relationships with certified loggers, and our foresters work with landowners in Minnesota and Maine to improve forest management and harvesting practices.

Helping to enhance plantation sustainability

South Africa

Sappi Forests is a founding member of the Tree Protection Co-operative Programme (TPCP) based in the Forestry and Bio-technical Institute (FABI) at the University of Pretoria.

Through the TPCP we are also members of the international collaborative programme BiCEP (Biological Control of Eucalyptus Pests) at the Australian Centre for Industrial and Agricultural Research (ACIAR).

We belong to the Eucalyptus Genome Network (EUCAGEN) based at the University of Pretoria.

Promoting sustainable forest management

Europe

CEPI, the Confederation of European Paper Industries, of which Sappi is a member, participates in actions supporting and promoting the development of sustainable forestry management tools — including forest certification — all over the world, particularly in less developed countries.
Energy, woodfibre and water, are our most important production process inputs. Energy represents both a risk and an opportunity:

- **Risk.** We are heavily dependent on energy and the cost of energy is a critical cost factor, and
- **Opportunity.** Reducing energy usage reduces costs and aligns with our strategy to develop adjacent businesses.

Aggressively managing energy-use and increasing energy-use efficiency, positively impacts profitability and environmental performance. Our specific energy costs, relative to our cost of sales, are trending downwards due to actions we have taken.

Steam generation accounts for a significant portion of energy consumed. Steam is used to energise digesters (pulp production), as a heat-source for drying pulp and paper and to generate power. We generate 98.6% of our own steam and purchase the balance.

By using less energy we are reducing our carbon footprint, highlighted by the combined 16% reduction of our specific Scope 1 (direct) and Scope 2 (indirect) greenhouse gas emissions over the past five years.

**FY2015 energy metrics**

Graphs on this page and overleaf refer:

- **Global.** Renewable energy-use decreased slightly; energy self-sufficiency (graph overleaf) increased slightly.
- **Europe.** Gratkorn Mill’s energy self-sufficiency decreased due to the rebuild of the recovery line. A damaged biomass boiler at Kirkniemi Mill in Q4 contributed to the decrease.
- **North America.** Fuel switching and purchased power strategies at Somerset Mill reduced renewable energy production. Westbrook Mill burned more coal due to biomass supply constraints.
- **South Africa.** Ngodwana Mill’s energy self-sufficiency increased due to more steam being produced from renewable fuel — the result of improved black liquor firing and increased bark consumption. Saliccor Mill increased black liquor recovery which resulted in more own power generation. Boiler efficiencies improved at Stanger Mill.

Globally, we’ve increased our use of renewable energy, mostly black liquor, by 6% over the past five years. In FY2015, 52% of the energy we used was derived from renewable resources; 73% of which was own black liquor. This is an important marketing advantage — consumers are increasingly aware of the environmental footprint of the products they use — and a strategic advantage in light of possible carbon taxes, carbon budgets and/or carbon levies which may be imposed on us in the future.

**North America**

Our use of renewable energy, currently more than 70%, is a significant cost benefit and a competitive advantage, enabling customers to choose papers with a smaller environmental footprint. The industry benchmark in this region is 62%.
Energy — identifying opportunities and mitigating risk continued

Energy self-sufficiency

Being significantly energy self-sufficient — 43% in FY2015 — helps to cushion against supply constraints, particularly important in South Africa, where inconsistent energy supply has been affecting industry.

Globally we have five hydro, two gas and 31 steam turbines on 14 sites across seven countries which generate 57.4PJ per annum or 15.9TWh.

External benchmarks

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

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

- **TAPPI** Technical Association of Pulp and Paper Industries, United States of America
- **PAPTAC** Pulp and Paper Technical Association, Canada, and
- **CEPI** Confederation of European Paper Industries.

Looking to the future

Our aim is to enhance energy self-sufficiency, improve energy efficiency and decrease our reliance on fossil fuels.

We are achieving this by:

- Making process changes
- Installing Best Available Technology (BAT) which is more energy efficient, and
- Reducing purchased energy (electricity and fossil fuel) by increasing our use of renewable energy — an approach that ultimately results in a reduction in CO₂ emissions.

Profit Improvement Plans

Profit Improvement Plans (PIPs) are managed at mill-level by each section. These smaller scale improvements/projects require little or no capital spend and can be implemented in a short period of time.

In the last couple of years, the focus in all regions has been on energy efficiency, energy self-sufficiency and water savings. We have established energy platforms in each region whose task it is to continue to share knowledge on how to improve efficiency and drive the energy strategy in each region.
Energy developments

**Energy developments — Europe**

The energy plant at Kirkniemi Mill was completed six months ahead of schedule — the most significant development in the group during FY2015. At Lanaken Mill, we have signed an agreement for a new gas turbine in October 2014.

At Cloquet Mill we conducted a millwide energy Pinch study which has enabled the mill to develop a plan to achieve the region’s five-year goal for energy reduction. Pinch analysis is used to identify energy cost and heat exchanger network capital cost targets for a process and recognizing the pinch point. The prime objective of pinch analysis is to achieve financial savings by better process heat integration (maximising process-to-process heat recovery and reducing the external utility loads).

Somerset Mill has also identified additional opportunities for energy savings including a paper machine heat recovery project.

**Case study**

**Somerset Mill PM2 and PM3 heat recovery**

Heat from both paper machines’ dryer hoods used to be vented. Equipment has been installed to recover that thermal energy, which is now being used to generate approximately 4.6 million litres of hot water per day which is used in the machines.

The recovered thermal energy will reduce steam demand by approximately 474GJ/day, resulting in reduced fossil fuel use and enable the mill to generate additional electrical power.

The project is expected to avoid generating 2,210 tons of CO₂ every year.

The PM2 heat recovery project was commissioned in November 2015, and the PM2 project was commissioned in December 2015.

**Energy developments — North America**

We are proceeding with a biomass-derived energy project at Ngodwana Mill.

At Tugela and Saiccor Mills we are investigating a cogeneration project and a green power project which could generate 10MW and 4MW of electricity respectively.

**Case study**

**Saiccor Mill cogeneration/condensing**

Saiccor Mill currently runs five turbines; three are small, less efficient and primarily driven by steam generated in coal-fired boilers; the other two are combined heat and power (CHP) units driven by steam generated from renewable resources.

The mill batch-cooks wood in digesters. Steam demand is therefore intermittent, resulting in excess steam being vented into the atmosphere when not required by the digesters.

To redress this, we are investigating replacing the three small turbines with a cogeneration and condensing system. When not supplying steam to the digesters, the new system will take up process-demand swings.

Avoiding steam venting will make the mill considerably more energy efficient.

While allowing steam to be drawn by the digesters when needed, the cogeneration and condensing system will generate up to 25MW of power which could be fed into the national grid.

**Energy developments — South Africa**

Globally, over five years

- **6%** increase in the use of renewable energy
- **9%** increase in energy self-sufficiency
Managing and mitigating climate change

Emissions avoidance value

The emissions avoidance value was calculated by taking each regional power utility’s emissions factor and comparing it with Sappi’s internal power generation emissions factor. The difference between the two factors indicates that Sappi’s internal power generation is less carbon intensive in certain regions and therefore results in carbon emission avoidance. The global economy is becoming increasingly carbon constrained, manifesting in:

- Rising energy prices
- Carbon budgets and taxes
- Costs associated with emission rights, and
- Consumer concerns about global warming

Climate change could potentially impact water and fibre supply — two of our key inputs.

These risks influence our business strategy which favours climate change remediation. In each region, we aim at maximising the use of renewable energy, thereby reducing the use of fossil fuels — one of the major causes of climate change.

Opportunity

Consumer concerns about climate change give us the opportunity to develop and market ‘green’ products.

Ultimately responsible

The individual within Sappi with the highest responsibility for climate change is the Group Head Technology who reports directly to the Chief Executive Officer.

Emissions intensity reduced

During the past five years, we have reduced our total Scope 1 and 2 greenhouse gas emissions intensity by 16.9%. 🌍

Case study Reducing third-party emissions

Scope 2 emissions are emissions that can be avoided by a third party.

Most of our mills generate power on site from fossil fuels or renewable resources for own consumption. In some instances — Westbrook Mill (Sappi North America), Gratkorn and Maastricht Mills (Sappi Europe) and Ngodwana Mill (Sappi Southern Africa) — excess energy generated is sold back into the power grid. 🌍

At some mills, excess heat energy is used for district heating projects in the vicinity of Sappi’s mills, thereby displacing fossil fuels.

Roughly 103,000 tons CO₂ emissions have thus been avoided during the past five years. 🌍

Nanocellulose

A key component of our strategy focuses on extracting previously untapped value from woodfibre. Aligned with our strategic move into adjacent markets, we have invested in a nanocellulose pilot plant which offers the opportunity to build on our established presence in lightweight packaging and other materials — which is important, given the need to reduce carbon emissions. 🌍

North America, Cloquet Mill, can swing between producing paper pulp and dissolving wood pulp.
Managing and mitigating climate change continued

An important asset

Our plantation assets are an important growth pillar and forest research is conducted into species improvement to maximise yield under different climate change scenarios.

Trees use water and sunlight to convert CO₂ into carbohydrates, through the process of photosynthesis to provide energy and the building blocks for growth. Carbon removed from the atmosphere is effectively stored in plant material and wood — trees act as carbon sinks.

Sustaining healthy forests

“Sustaining healthy forests and mitigating and adapting to climate change are two sides of the same coin. Forests are the largest storehouses of carbon after oceans. The carbon they store in their biomass, soils and products is equivalent to about 10% of carbon emissions projected for the first half of this century. At the same time, deforestation and land-use changes account for 17% of human-generated carbon dioxide emissions.”

Ban-ki Moon
United Nations Secretary General International Day of Forests 2015

Sappi Europe’s employee-led tree planting initiative started in Spring 2010 in association with the Agentschap voor Natuur en Bos (ANB), the equivalent of a national department of forestry. This organisation is responsible for planting approximately 30,000 trees every year in the Forêt de Soignes as part of the National Forest Management Plan (Belgium).

In February 2015, employees from Sappi Europe’s headquarters in Brussels once again headed out to the Forêt de Soignes with a batch of 1,400 saplings, ready to be planted. A further 2,600 will be planted by ANB on behalf of Sappi. This will bring to over 12,000 the number of trees planted by the group since the initiative started five years ago.

Sappi Europe has also provided funds to a tree-planting project in India.

Planting more trees in Europe

Forests exposed in South Africa

Given our ownership of plantations in South Africa, our exposure to climate change in this region is particularly high, especially as the country’s water resources are, in a global context, severely limited.

The country is currently experiencing a severe drought.

We moderate the risk climate change poses to our plantations by:

- Deploying a diverse range of commercial species and hybrids across a wide range of climatic conditions
- Continually monitoring and reviewing forest best practices in the light of changing environmental factors, thus helping to mitigate any increased threat from water shortages or drought
- Maintaining wide genetic variability in our planting material, including drought resistant species and hybrids
- Measuring permanent eucalypt sample plots annually and pine sample plots biannually to determine the effect of drought for use in long-term planning, and
- Implementing an extensive fire protection strategy, as climate change exacerbates the potential for fires.

Sappi Europe: Both soft- and hardwood species are used.
Our greenhouse gas emissions

Globally, over five years

17.2% reduction in Scope 1 (direct) GHG emissions

16.0% reduction in Scope 2 (indirect) GHG emissions

16.9% reduction in total GHG emissions intensity

Global No significant change.

Europe The reduced Scope 1 emissions trend continued. Reduced specific emissions at Alfeld Mill, compared to the previous year is attributed to the upgrade of PM2. Stockstadt Mill decreased specific emissions due to increased production and more efficient liquor evaporation in the pulp plant.

North America Scope 1 emissions increased. Somerset Mill burned more natural gas and purchased more electrical power instead of burning biomass and generating own power as a result of energy price changes in the last year. At Westbrook Mill, more coal was burned because of biomass supply constraints.

South Africa Scope 1 emissions decreased. Enstra Mill optimised boiler efficiencies, decreasing the use of fossil fuels and PM6 achieved better operating efficiencies on brown runs. Ngodwana Mill decreased fossil fuel use and increased own renewable fuels consumption through higher total dissolved solids fired in recovery boilers. The implementation of Project Buyisa at Sacciocor Mill resulted in enhanced black liquor recovery and thus an overall reduced reliance on fossil fuels. Stanger Mill decreased purchased fossil fuel use and increased own renewable fuels as a result of improved boiler efficiencies.

Global Year-on-year, there was a slight reduction in Scope 2 emissions.

Europe Scope 2 emissions decreased slightly, mainly due to Gratkorn Mill switching purchased power to 100% renewable sources (mainly hydro power).

North America The decrease in Scope 2 emissions is attributed to the public utility from which Somerset Mill draws power, reporting a lower CO2/MWh emission factor. Cloquet Mill reduced purchased power.

South Africa Scope 2 emissions decreased. Cape Kraft Mill’s machine efficiencies improved which in turn had a positive effect on the specific purchased power value. Enstra Mill reduced the use of purchased power following the shut of PM4. Sacciocor Mill is generating more of its own power following the completion of Project Buyisa. The mill now requires less purchased power and emissions are reduced. Stanger Mill required less purchased power as the mill suffered water shortages and forced mill-downtime resulting from municipal power failures.

Global The total global GHG reduction is attributed, in the main, to process improvements and changes in South Africa and Europe — refer to the detailed discussions described alongside.
Our greenhouse gas emissions continued

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<tr>
<th>Specific NOx air emissions</th>
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<th>Specific particulate matter air emissions</th>
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<td>2014</td>
<td>2015</td>
<td>Global</td>
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**Global**  
No significant change.

**Europe**  
Emissions were slightly lower because less pulp was produced due to the rebuild of Gratkorn Mill’s liquor boiler.

**North America**  
No significant change.

**South Africa**  
The slight decrease is attributable to Ngodwana Mill’s improved coal quality and stable operation of the Pulverised Fuel (PF) boiler.

**Note**  
Europe’s specific NOx emissions are lower than South Africa’s and North America’s due to the degree of integration of these mills. Gas boilers, predominantly used in our European operations tend to have lower NOx emissions than optimised recovery boilers.

**Global**  
The global increase is mainly attributable to our South African operations.

**Europe**  
No significant change.

**North America**  
No significant change.

**South Africa**  
Enstra Mill’s SOx emissions increased due to a slight reduction in coal quality. Ngodwana Mill SOx emissions increased due to improved incineration of non-condensable gases in the lime-kiln following installation of a multi-fuel burner.

**South Africa**  
No significant change.

**North America**  
The slight decrease is attributed to improvements in the No1 hog-fuel boiler precipitator at Somerset Mill.

**South Africa**  
No significant change.
Reducing water use and improving water discharge quality

Water use in our processes

As with other pulp and paper manufacturers, our papermaking processes use large quantities of water to hold, transport and distribute the fibre that becomes the sheet of paper. Water is also an integral part of the steam systems used to generate and circulate energy.

Water is circulated several times in the pulp and paper production process; only a small portion of the water leaves the process as effluent which has to be replaced with fresh water.

We return a significant portion of the water we extract back into the environment.

Due to the nature of our processes, it is very difficult to improve on this metric.

Water management is included in our operational environmental management plans, which are reviewed and updated annually.

Bleaching

Europe All our integrated pulp is totally chlorine-free (TCF). Market-pulp is either elemental chlorine-free (ECF) or TCF.

North America Our mills use the elemental chlorine-free bleaching process.

South Africa Our mills use elemental chlorine-free or oxygen bleaching sequences.

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**Intensively managing our water usage presents an economic opportunity.**

Sappi Europe, Lanaken Mill, effluent treatment plant.

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**Water-related energy savings**

Pulp and paper mills use energy to produce hot water and steam for cooking wood chips, pulp washing, transporting pulp, drying paper and other applications.

If effluent is allowed to simply discharge (after appropriate treatment), a huge amount of heat-energy is lost. Therefore, one of the most effective ways of retaining heat-energy within an operation, is to maximise water recirculation and minimise effluent discharge. Avoiding heat-energy losses reduces energy requirements and as a result less fossil-fuel derived GHG emissions are generated.

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**Water withdrawn and returned**

Global Extraction from surface- and groundwater decreased; consumption of potable municipal water increased.

Europe Consumption of surface water decreased due to the rebuild of Gratkorn Mill’s recovery boiler and pulp mill which resulted in downtime. Some minor measures in water reduction in the region also contributed to the decreased annual consumption.

North America Municipal water use increased slightly.

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**South Africa** Surface water abstraction decreased as a result of Saiccor Mill’s drive to reduce water-use. The mill also implemented small water-saving projects. Potable municipal water consumption increased due to additional water required at Enstra Mill as a result of water imbalances. Due to dirt contamination on PM2, the machine ran on potable water only, on a few occasions.
Effluent quality

Quality of effluent is an important environmental indicator. We have been steadily improving the quality of effluent we discharge over time. We use temperature, oxygen-level controls and other metrics to ensure we comply with all environmental regulations.

Over five years effluent chemical oxygen demand (COD) has declined by 21.8%; total suspended solids (TSS) have decreased by 7.1%.

Global  The COD decrease is attributed mainly to improved performance by South Africa and Europe.

Europe  COD reduction attributed to: • The rebuild of Gratkorn Mill’s recovery boiler and the reduction of own-pulp integration • Increased paper production at Stockstad Mill.

North America  No significant change.

South Africa  COD reduction attributed to: • The additional Fine Bubble Diffuser installation at Stanger Mill. See our Sappi Group Sustainability Report 2014, Innovative effluent treatment at Stanger Mill, for a more detailed discussion.

Tugela Mill increased production without increasing its COD load, resulting in a reduced specific COD.

Global  Despite the slight TSS increase in FY2015, the five-year trend remains downwards.

Europe  TSS remains very low despite increasing slightly due to reduced filtration performance at Alfeld Mill.

North America  The TSS reduction is attributed to Cloquet Mill’s increased efficiency of POTW (Public Owned Treatment Works). There was no change at Somerset Mill. Westbrook Mill improved its WWTP (Waste Water Treatment Plant) performance.

South Africa  The TSS increase is attributed to: Cape Kraft Mill experiencing sludge centrifuge equipment problems. Enstra Mill experienced increased fibre losses in the transition to brown grades.
Water-use in our plantations — South Africa

As South Africa is a water-stressed country, water usage is a significant focus.

Our plantations have both positive and negative impacts on the environment. One of the negative impacts is that, generally, they use more water than the grasslands they typically replace. There is considerable variation from place to place and season to season.

On a national scale the water used by plantations is relatively small — about 3% of available resources. Viewed in context: irrigated agriculture uses approximately 60% of South Africa’s available water resources.

Restrictions on expansion

Serious restrictions on expansion have been put in place by the South African government. We believe this misguided, based on the following:

- As the only designated streamflow reduction activity, plantation forestry is not irrigated, but pays for the water it uses in what is essentially a ‘rain’ tax
- Our trees are planted away from riparian zones, thereby decreasing the amount of water used
- The quality of water emanating from afforested catchments is generally good and much better than most other forms of agriculture, and
- Though difficult to calculate, the value added to the water our plantations use compares very favourably with other forms of land use — especially because forestry uses land that has few alternative economic uses.
Reducing solid waste and adding value

Minimising end-of-life waste

Sending waste to landfill adds costs; adding value to waste brings in revenue. We focus on minimising end-of-life waste through waste beneficiation which mitigates environmental impacts, reduces waste-management costs and can generate additional revenue.

The least desirable method of solid waste disposal from an environmental perspective is to discharge to a landfill site, because:

- **Organic waste** emits methane (CH\(_4\)), a greenhouse gas with approximately 25 times the global warming potential of CO\(_2\), and
- **Inorganic waste** can leach, resulting in surface and/or groundwater pollution.

Globally, most of the solid waste we generate is wood waste — mostly bark. In all regions, this is used as a fuel for on-site energy generation. In South Africa, wood waste is also used for composting and landfill stabilisation.

![Wood waste, mostly bark, is used as a fuel for on-site energy generation.](image)

**Specific landfilled waste**

- 2011
- 2012
- 2013
- 2014
- 2015

**Disposal methods of solid waste**

- Sappi Trading 1.83%
- Sappi Trading 27.61%
- Landfill (on site) 27.67%
- Composting 2.03%
- Reuse 15.95%
- Other (solid, third-party waste etc) 16.04%
- Landfill (off site) 8.77%

**Global breakdown of solid waste types**

- Own bark 32%
- Boiler ashes 27%
- Primary sludge 21%
- Other 7%
- Secondary sludge 2%
- Soil beneficiation 2%
- Process rejects 2%
- Plastics etc 2%
- Lime mud 2%
- Building rubble 1%

Bark ash included under boiler ashes and combusted sludges.

![Disposal methods of solid waste](image)

**Global** There has been an increase in waste sent to landfill.

**Europe** there was a small increase in ash generated due to the rebuild and repair works at Gratkorn Mill.

**North America** The slight decrease in waste sent to landfill is attributed to: • Reduced boiler ash being generated at Somerset Mill because of increased natural gas firing and lower biomass use • Cloquet Mill increased lime kiln capacity, reducing waste sent to landfill.

**South Africa** Waste to landfill increased. Enstra Mill experienced increased fibre losses from paper machines. Less waste could be reused at Saiccor Mill and had to be sent to an off-site landfill. **SA** Tugela Mill operated the Copeland reactor for longer periods than the previous year, which resulted in more waste being sent to landfill. Construction waste generated by the spray-dryer project at Tugela Mill further contributed to waste sent to landfill.
Reducing solid waste and adding value continued

**Used oil**

Used oil is dewatered, chemically treated, refined and filtered for re-use in various grades of base oils.

**Pigments and dyes**

At Alfeld and Ehingen Mills in Europe, coarse pigments from repulping internal broke are recovered from paper machine effluent and reprocessed to substitute virgin material. In another process, coating colour is recovered from effluent and reprocessed. These partly Sappi-patented processes help to increase material-use efficiency.

**Solid waste**

Sludges, bark and wood are combusted for energy production in all regions.

In Europe, dried sludge is used for animal bedding by farmers.

**Tall oil**

At some mills, tall oil, a by-product of the kraft pulping process, is sold to converters as a renewable chemical raw material and used to make detergents, lubricants and paint additives.

**Lime**

In North America, lime is given to farmers as a soil enhancer through a partnership with the University of Minnesota Extension Service, Carlton County By-Products Programme.

In South Africa, lime is sold.

**Boiler ash**

In North America, inorganic grit removed from the chemical recovery process is used for roadbed underlay.

**Lignosulphonates**

Lignosulphonates, a by-product of the pulping process, are recovered from spent pulping liquors, and sold to customers for use in other products.

In Europe and South Africa, lignosulphonates are sold to the cement and fertiliser industries and for other speciality chemical applications. In South Africa, lignosulphonates are sold to customers for use in a dust suppressant product used in the mining sector.

A US$8.5 million investment at LignoTech South Africa, our joint venture with Borregaard, will increase lignosulphonate production capacity by 20,000tpa.

**Bagasse pith**

Bagasse supplied to Stanger Mill in South Africa is depithed, and the pith given to farmers as a soil enhancer.

**Hazardous waste**

We generate very little hazardous waste — only 1.34% of our total waste generated is classified as hazardous.

Hazardous waste is closely controlled and carefully managed, both at our operations and the receiving facilities.
Soils are increasingly coming under the international spotlight amidst findings that ten million hectares of arable land is being eroded or degraded annually and that unsustainable farming methods are stripping the topsoil of nutrients at 10-40 times the rate that it can be naturally replenished. The loss of topsoil has significant productivity consequences.

To highlight the importance of soil, the United Nations Food and Agriculture Organisation declared 2015 as the International Year of Soils.

Soils are the foundation for vegetation which is cultivated or managed for food, fibre, fuel and medicinal products. In addition, soil:

- Supports biodiversity
- Stores and filters water, improving the earth’s resilience to floods and droughts, and
- Helps the earth combat and adapt to climate change by playing a key carbon storage role.

Our approach South Africa

Soil quality is a particularly important issue in South Africa, given that we own, manage and lease 492,000 hectares of plantations. The commercial tree species we grow can take up nutrients from relatively acidic soil and are therefore able to grow on degraded soils not suitable for agriculture.

The trees we grow in our plantations are deep rooted and long-lived with little or no mechanical cultivation required. As a result, soil structure is maintained or improved. Topsoil nutrients accumulate as nutrients and minerals are taken up deep within the soil profile. Organic matter that accumulates on the plantation floor is a key source of available nutrients for subsequent tree crops and is managed appropriately during harvesting and site preparation.

The greatest concentration of plant nutrient elements are found in those parts of the tree where essential life processes are taking place: foliage, vascular tissue, inner bark and root tips. Stemwood is less rich in nutrients. In our plantations, most of the nutrient-rich biomass (leaves, twigs, branches and bark) remains behind when we harvest and remove the stemwood in the form of tree trunks.

Removing tree trunks can result in a loss of minerals and nutrients, but generally in Sappi’s plantations, with crop rotation of many years (8–18 years for pulpwood), deposition of nutrients, the buffering capacity of the soils and the rate of resupply through the weathering of parent material (the mineral material from which soil forms) exceeds the rate of removal and thus our soil management is sustainable.

Biomass power generation

In 2015, we announced the establishment of a 25MW biomass-to-power project which will be erected at Ngodwana Mill, in Mpumalanga. The project qualifies Sappi as a preferred bidder under the South African government’s Renewable Energy Independent Power Producer Procurement Programme (REIPPPP).

Biomass will be supplied from the mill and from our own plantations. The latter should not compromise soil quality in any way, as we will be utilising mostly woody biomass currently left in-field after harvesting — large branches, stem tops, non-utilisable wood (broken trees and non-commercial species) — from sites that have a low risk of nutrient depletion (sites with deep soils on relatively flat areas).

Nutrient removal will be minimised by leaving most of the nutrient-rich leaves, needles and small branches behind.

FSC®-certification requirements

To achieve FSC®-certification, forest owners need to protect endangered plants and animals and their habitats, ensure they do not damage soil and water quality, and identify and protect areas of high value for conservation.

SFI® bio-energy feedstock related objectives

Through stabilisation of soil, forests minimise erosion and hence reduce the impairment of water quality due to sedimentation. Forest and forest plant roots prevent run-off from heavy rains and with it soil erosion.

PEFC™ forest productivity objectives

To ensure long-term forest productivity, carbon storage, and conservation of forest resources through prompt reforestation, soil conservation, afforestation and other measures.
Managing for biodiversity

Convention on Biological Diversity

According to the Convention on Biological Diversity: “At least 40% of the world’s economy and 80% of the needs of the poor are derived from biological resources. In addition, the richer the diversity of life, the greater the opportunity for medical discoveries, economic development, and adaptive responses to such new challenges as climate change.”

Why biodiversity matters to us

Biodiversity boosts ecosystem productivity where each species, no matter how small, has an important role to play. Greater species diversity in turn ensures natural sustainability for all life forms, contributing to healthy ecosystems that can better withstand and recover from a variety of disasters and stressors like pests and disease.

Biodiversity is key to the healthy functioning of ecosystems like forests or mixed-used plantation estates like ours. Neither our plantations nor these natural forests would be productive without biotic processes taking place in healthy ecosystems.

It is therefore in our own best interests to ensure that the forests (Europe and North America) and plantations (South Africa), from which we source woodfibre are actively managed to promote biodiversity and the health of these ecosystems.

We are currently in the process of formalising a groupwide Biodiversity Policy.

Biodiversity in our plantations

In South Africa, landscapes dominated by timber plantations, are perceived, by some people, as being significantly less biodiverse than natural forests. Past biodiversity studies have concentrated on plantation stands rather than viewing estates or landscapes holistically. On average, approximately two-thirds of our owned and leased plantation estates are planted with commercial tree species, the remaining third is covered by natural vegetation and managed for conservation.

Bird and mammal surveys conducted on our plantation estates, show a significant variety and number of bird and mammal species from a wide range of habitats are found on these plantation estates. A diverse population of birds and mammals make a significant contribution to the conservation of biodiversity, and are good indicators that the mixed-use landscapes of our plantation estates are healthy ecosystems in a state of equilibrium. Most of our plantation estates have been in existence for at least 30 years.

Timber plantations generally replace grassland and, as one would expect, species that favour forest and woodlands have become very common. Although some grassland and wetland species have been negatively affected, many of these species are nevertheless still found on our plantation estates. Read more about our efforts to protect wetlands. S

In summary: well-managed plantation estates, with ample areas not planted with commercial tree species, harbour rich bird and mammal diversity.

Assessing bird diversity

Over ten years, we’ve held annual bird-counting weekends, engaging the public, on at least 20 different plantation estates each year. Most of our estates have hosted bird-counting weekends. Bird counters have recorded 455 bird species — 47% of all the species that occur in Southern Africa. The number of bird species recorded cumulatively from year to year was tended to establish whether we had recorded the full range of species on our estates. We did not do the same for the mammal data, because sites were varied and only four could be monitored at a time.

The fact that 125 bird species (27% of all the birds spotted) were recorded every year and that 286 species (63% of all the birds spotted) were recorded during more than half of the bird-spotting weekends indicates that our plantation estates provide suitable habitats and that these birds can be considered resident. Only 74 species (16% of all the birds spotted) were recorded on only one occasion — these can be considered rare on our plantation estates.

Assessing mammal data

We have deployed four ‘camera-traps’ at a variety of sites on a wide range of plantation estates over a two-year period. A total of 30 mammal species have been recorded — 20 were commonly found on multiple estates, at more than one site on any given estate — a good indication of residency.

Assessing mammal data

Mammal species on our plantation estates associated with various habitats

Biodiversity in European forests

Around 70% of the forests in Europe are dominated by two or more tree species. The remaining 30% are dominated by one tree species alone, mainly conifers. W

Maintaining US forests

The amount of US forestland has remained essentially the same for the last 100 years at about 750 million acres, even though the US population tripled during the same period. W
The newly released Sustainable Development Goals will be used as the blueprint for national policy for all UN member states for the next 15 years.
Our way of living, and ultimately Sappi’s future, is being impacted by a number of megatrends shaping our world — we are embracing these with a focused strategy and some very clear objectives.

To reshape Sappi’s future, our 2020Vision draws on the power of One Sappi as we move beyond pulp and paper to unlock and commercialise the potential of woodfibre derived bioproducts.

Our strategic evolution is underpinned by a commitment to collaborating and partnering with our stakeholders, and aims to position Sappi as a trusted and sustainable organisation with an exciting future in woodfibre.
Human rights

Principle 1
As stipulated in our Group Human Rights Policy and Group Human Resources Policy, we endorse the principles entrenched in the Universal Declaration of Human Rights and the International Labour Organisation (ILO).

We also conform to, and in many cases exceed, prescriptions set out in the labour legislation in the countries in which we operate.

Our labour standards ensure that our remuneration practices are fair, with compensation levels set to reflect competitive market practices and internal equity as well as company and individual performance.

Our Group Human Resources Policy recognises the right of all people to be treated with dignity, and prohibits harassment in the workplace.

Hotlines in all regions allow employees and suppliers to report human rights abuses in full confidentiality.

Principle 2
As set out in our Group Human Rights Policy, we:

- Require our suppliers to respect human rights and act in full accordance with our policies and guidelines concerning social responsibility, labour standards and human rights; and
- We commit to openly and transparently reporting on human rights violations within our value chain, should these occur.

This policy further commits us to working with communities in order to address indigenous people’s interests and to resolving land claims in South Africa with wide participation and in the best interests of individuals and communities.

In terms of our Group Supplier Policy, we encourage our suppliers to uphold the principles of human rights as set out in the United Nations Universal Declaration on Human Rights.

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.

Principle 1 Business should support and respect the protection of internationally proclaimed human rights.

Principle 2 Business should make sure their own corporations are not complicit in human rights abuses.
Labour

Principle 3

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. In 2015, globally 63% of our workforce was unionised, with 69% belonging to a bargaining unit.

We focus on maintaining constructive relationships with trade unions, believing that this is essential to long-term sustainable development. Discussions range from remuneration issues, to training and development, health and safety and organisational changes.

We recognise the complexity of the labour situation in South Africa and have established a number of structures to enhance engagement as set out in the table below.

Principle 4

Disciplined behaviour is essential not only for individual well-being, but also to achieve our group goals and objectives.

In each region, disciplinary codes ensure disciplinary procedures are applied consistently, while grievance policies entrench the rights of employees, including the right to raise a grievance without fear of victimisation, the right to seek guidance and assistance from a member of the human resources department or their representative at any time and the right to appeal to a higher authority, without prejudice.

The Maplecroft Forced or Involuntary Labour Index 2014 assesses the USA and Europe as medium risk and South Africa as high risk.

In all three regions, labour is sourced on the open market. In rural areas, forest products companies like Sappi are often the only, or major, employers in the region which makes the local population very dependent on the company and which could in turn lead to exploitative behaviour. This is a particular issue in South Africa, which has one of the highest inequality rates in the world. While there has been some progress in reducing poverty in urban areas, many South Africans in rural areas still endure high levels of poverty underpinned by social deprivation and under-development. According to Statistics SA, levels of poverty in rural areas in South Africa are twice as high as in urban areas and the majority (58.3%) of poor people in the country live in rural areas.

In South Africa as in the other regions where we operate, Sappi pays market-related wages in accordance with local legislation. Furthermore, in this region, our plantations are 100% FSC®-certified or controlled; and this forest certification system stipulates the protection of indigenous peoples’ rights.

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 Sappi Southern Africa Sustainability Report 2013.
Labour continued

Principle 3  **Businesses should uphold freedom of association and the effective recognition of the right to collective bargaining.**

Principle 4  **The elimination of all forms of forced and compulsory labour.**

Principle 5  **The effective abolition of child labour.**

Principle 6  **The elimination of discrimination in respect of employment and occupation.**

**Principle 5**

Our **Group Human Rights Policy** explicitly forbids the use of child, compulsory and forced labour.

Our **Group Supplier Policy** states that we encourage our suppliers to adhere to national labour law and to internationally proclaimed human rights, particularly those relating to child labour and forced labour (including prison and slave labour).

**Principle 6**

We recognise that the creation of an equitable working environment, in which the dignity of all individuals is respected and the diversity of all employees is valued, represents an essential foundation for sustainable growth and competitive advantage.

We are committed to 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 our relationship with our employees, including recruitment, hiring, assessments, work assignments, promotions, transfers, terminations, wage and salary administration and selection for training and development.

The **Group Human Resources Policy** and the **Group Human Rights Policy** state that Sappi prohibits "discrimination based on race, gender, colour, ethnicity, age, religion, political and sexual orientation, union membership, physical disability or HIV/AIDS status."

Where an unfair or discriminatory practice has occurred, employees are able to make use of the grievance procedure to lodge their grievance. Employees also have access to a hotline telephone number where they can report incidents of this nature.

In South Africa we have employment equity targets to promote economic and social transformation of the previously disadvantaged.

Women tend to be under-represented in our workforce due to the nature of our operations — a manufacturing environment which involves shift work.

Line management are mandated to facilitate the employment of women by ensuring that women working on shifts are safe and ensuring that female bathroom facilities are available.

We are making progress — indicated by the fact that 24% of new hires are women, with women accounting for 18.4% of the workforce.
Environment

Principle 7

As stated in our Group Sustainability Charter and Group Environmental Policy, we acknowledge that we do have an environmental footprint, but are committed to managing and mitigating the environmental, climate and biodiversity impacts of our operations.

The precautionary approach places the onus on Sappi to anticipate harm before it occurs and to take active steps to prevent any harm from occurring. We achieve this by:

- Conducting ongoing research into the impact of our activities and investigating methodologies to improve our performance at our research centres around the world
- Continuously monitoring our environmental performance and setting environmental targets
- Conducting thorough environmental impact or risk assessments before the start of any new activity
- Alignment with best available technology (BAT)
- Ongoing investment in research and development to come up with solutions to environmental challenges
- Using internationally accepted, independently verified forest certification systems including the Programme for the Endorsement of Forest Certification®, the Forest Stewardship Council® and the Sustainable Forestry Initiative®. Globally, 79% of the fibre supplied to our mills is certified, the rest is procured from known and controlled sources, and working with landowners in North America and South Africa to enable conformance with forest certification systems.
- Using dashboards in each mill to monitor performance such as energy usage and emissions
- Conducting internal audits of our mills and plantations
- Appointing a technical manager and/or risk manager and, at some mills, an environmental manager whose role is to monitor legal compliance in terms of emissions, solid waste and effluent, as well as to reduce fossil fuel consumption

We view conducting our business in an environmentally sustainable manner as an obligation — one which is integral to our licence to operate on an individual, community, country and global level.

It also makes sound business sense, given that we depend on natural resources such as water and woodfibre for our ongoing viability as a business and it is in our interest to use these resources as responsibly as possible.

Our Group Climate Change Policy

Our Group Climate Change Policy states: “As reducing deforestation of the world’s endangered and tropical forests can help to reduce global warming, we commit to:

- Utilising wood fibre from 100% sustainably managed forests and plantations in accordance with our Group Wood and Fibre Procurement Policy — healthy productive forests absorb carbon dioxide, thereby helping to mitigate global warming
- Collaborating in research and development programmes to address the challenges of climate change
- Improving our forestry operations through tree breeding that allows for greater yields per hectare, reduces the risks from pests and diseases, and improves drought tolerance, and
- Promoting the recycling of paper and paper packaging products.”
Principle 8

At the heart of our business is a renewable, recyclable natural resource — woodfibre. We use this to create pulp, paper and dissolving wood pulp solutions which enhance the lives of consumers around the world.

We take a holistic approach to protecting the environment, beginning with the responsible procurement of wood that is grown and harvested sustainably and sourced only from well-managed forests and plantations. We are committed to reducing our use of traditional fossil fuels, lowering both our environmental footprint and energy costs. We focus on the efficient use and recovery of materials used in the manufacturing process in order to minimise waste.

Our energy efficiency is enhanced through our ongoing drive to make process improvements and install more efficient equipment and through our extensive use of cogeneration.

Most conventional power generation is based on burning a fuel to produce steam, the pressure of which turns 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 — steam is generated from a combustion source (coal, natural gas and biomass) which is used to generate power and the excess steam (pass-out steam), usually in the form of relatively low-temperature steam is exhausted from the power generation turbines. Such steam is suitable for a wide range of heating/drying applications in the manufacturing process 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 portion (60-90%) of the primary fuel into usable energy.

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

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

We track key metrics for fibre, emissions, energy usage and the impact of our operations on air, water and solid waste. We use this data when setting improvement goals related either to our operations or our interactions with our key stakeholder groups — employees, customers and our local communities.

In 2015, we established overarching global goals in addition to the regional goals established in each region to deal with specific issues.

Over five years we have:

- Reduced energy consumption within our organisation by 8% and energy intensity by 12.5%
- Decreased direct (Scope 1) and indirect (Scope 2) greenhouse gas (GHG) emissions by 17.2% and 16% respectively and reduced absolute emissions intensity by 16.9%
- Increased energy self-sufficiency by 9.1%
- In terms of air emissions, reduced SOx emissions by 14.3%, and decreased particulate matter emissions by 42.3%
- Disappointingly, NOx increased by 4%
- In terms of effluent quality, decreased chemical oxygen demand (COD) by 16.5%, and total suspended solids (TSS) by 30.2% (both statistics include Saiccor Mill), and
- Decreased solid waste by 9.3%

We are a constituent of the FTSE/JSE Responsible Investment Index and the FTSE/JSE Responsible Investment Top 30 Index. To achieve this, we were assessed on our environmental, social and governance performance. Our inclusion in these indices indicates that we are succeeding in our goal — set out in our Group Sustainability Charter — of treading more lightly on the Planet.
Environment continued

Principle 8 continued

Group

Annually, we provide information to the Carbon Disclosure and Forest Footprint Disclosure Projects and make our submission publicly available. We also achieved a score of 99C in the 2015 Carbon Disclosure Project.

In each region we sponsor environment-related publications accessible to the general reader.

In Europe we:

- Have embarked on an eco-effectiveness campaign whereby Sappi people share their stories about achieving greater levels of environmental responsibility.
- Demonstrated our continued commitment to environmental sustainability by encouraging customers to help us support charity WeForest at Labelexpo Europe. Postcard invitations encouraging customers to visit Sappi's stand at the expo included a sticker. For every sticker placed on a special wall at the show, we increased our sponsorship of WeForest to plant new trees. WeForest is an international non-profit organisation whose mission is to create and promote a pioneer movement in large-scale sustainable reforestation to halt global warming.

In North America, we:

- Play an active role in Living Lands and Waters, a non-profit, environmental organisation focused on cleaning up America's great rivers and forest restoration.
- Are working on a fishway project near Westbrook Mill, enabling natural fish passage through a portion of the Presumpscot River for the first time in more than 150 years.
- As a founding member of GreenBlue’s Forest Products Working Group, we are heavily involved in an Industry Leadership Committee working on forest certification issues. Utilising a unique Value Innovation Process, the committee is exploring the key elements of certification that provide value to various stakeholders. Efforts are underway to explore efficient and cost-effective models (including but not limited to certification) that would enable small private landowners in the US to provide brand owners the level of assurance they need that they are sourcing fibre from responsibly managed forest land.

In South Africa

- We own, manage and lease 492,000 hectares of land, of which approximately 30% is managed for the conservation of natural habitats (including indigenous forests) and the biodiversity they contain.
- Have established a group scheme for small and medium growers. There are currently over 205 members in the scheme with plantations ranging from a few hundred hectares to well over 103,000 hectares in size.
- As a major land owner in South Africa, we recognise that we have an important role to play in promoting multiple-use of our landholdings. Our land provides a resource for planned recreational activities. We support non-motorised activities such as mountain biking and bird watching on our land, aligning with our commitment to promoting a healthy lifestyle and nurturing an appreciation for nature and the sustainable lifestyle use of renewable resources. We have partnered with mountain biking clubs and event organisers, allowing access to our plantations and natural areas in Mpumalanga and KwaZulu-Natal.
- In 2014, we created the Earthkind Agent electronic sustainability game to educate our people about key aspects of our environmental performance. In 2015, we launched a tablet version (iPad and Android) of the game, giving access to our suppliers, customers and other stakeholders. The game for laptops and the links to the Apps can be found on our website.
- We are involved in a number of environmental projects, two examples being: A co-operative initiative to ‘Save the Midmar Dam’, and The Warburgia Salutaris project. Once widespread, the Warburgia Salutaris (WS) (pepper bark tree) in its natural habitat is on the brink of extinction.

In 2013, the Kruger National Park (KNP) WS project was nominated as the beneficiary in the Typek Earth Kind™ Green promotion run by Sappi and a major retailer. The money raised and project coordination provided by Sappi kick-started a project whereby Sanparks, SANBI and the Agricultural Research Commission are identifying, collecting and growing 30,000 trees for distribution to communities around the KNP over the next three years. Sappi’s Shaw Research Centre is also involved in determining alternative propagation techniques.

These focused efforts are helping to enhance the sustainability of the tree.
Principle 9

In line with our strategy of intentional evolution which includes seeking growth opportunities by producing innovative performance materials from renewable resources, we have identified nanocellulose as a key growth area. We are currently building a pilot-scale plant for low-cost Cellulose NanoFibrils (nanocellulose) production at the Brightlands Chemelot Campus in The Netherlands.

This is a culmination of our three year project with Edinburgh Napier University to find a low cost energy-saving process that would allow Sappi to produce the nanocellulose on a commercially viable basis — and importantly without producing large volumes of chemical waste water associated with existing techniques.

Significant about our process is the use of unique chemistry, which has allowed us to very easily break down the wood pulp fibres into nanocellulose. There is no expensive chemistry required and, most significantly, the chemicals used can be recycled and reused without generating large quantities of waste water.
Anti-corruption

Principle 10

The Social, Ethics, Transformation and Sustainability (SETS) Committee, amongst other things, monitors our activities with regard to matters such as social and economic development, including the UN Global Compact and the OECD Policy Guidelines for Preventing Corruption, with particular emphasis on Section VII of the OECD Guidelines for Multinational Enterprises dealing with Combating Bribery, Bribe Solicitation and Extortion.

No issues have been raised regarding Sappi with regards to compliance with the Convention either externally or internally.

The Sappi Code of Ethics and the Sappi values complement each other as a guide to appropriate behaviour and actions.

One of the platforms used by the business to measure adherence to the Code of Ethics is the Ethics Hotline. The types of complaints received by the Ethics Hotline are at par with the benchmark average. Hotline calls are monitored quarterly and disclosed annually in our Annual Integrated Report.
By 2030, two thirds of the world’s middle class will live in the Asia Pacific region.
## GRI General standard disclosures

**Key:** • AIR Sappi Annual Integrated Report 2015 • SDR Sappi Group Sustainability Report 2015 (this report) • SASDR Sappi Southern Africa Regional Sustainability Report 2015 • Blue page numbers are links

<table>
<thead>
<tr>
<th>General standard disclosures</th>
<th>Where reported</th>
</tr>
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<tbody>
<tr>
<td>G4-1 Provide a statement from the most senior decision-maker of the organisation (such as Chief Executive Officer, chair, or equivalent senior position) about the relevance of sustainability to the organisation and the organisation’s strategy for addressing sustainability.</td>
<td>SDR, Leadership messages, page 3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Organisational profile</th>
<th>Where reported</th>
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</thead>
<tbody>
<tr>
<td>G4-3 Report the name of the organisation.</td>
<td>AIR cover, SDR cover</td>
</tr>
<tr>
<td>G4-4 Report the primary brands, products, and services.</td>
<td>AIR, pages 25-27</td>
</tr>
<tr>
<td>G4-5 Report the location of the organisation’s headquarters.</td>
<td>SDR, About this report, page 5</td>
</tr>
<tr>
<td>G4-6 Report the number of countries where the organisation operates, and names of countries where either the organisation has significant operations or that are specifically relevant to the sustainability topics covered in the report.</td>
<td>AIR, map, pages 16-17</td>
</tr>
<tr>
<td>G4-7 Report the nature of ownership and legal form.</td>
<td>AIR, Nature of business (shareholding etc), page 92</td>
</tr>
<tr>
<td>G4-8 Report the markets served (including geographic breakdown, sectors served, and types of customers and beneficiaries).</td>
<td>AIR, Our business, pages 16–17, AIR, Our products, pages 25-27</td>
</tr>
</tbody>
</table>

| G4-9 Report the scale of the organisation, including: |
|---|---|
| a Total number of employees | SDR, Our investment case, page 57 |
| b Total number of operations | SDR, Targets, page 9 |
| c Net sales (for private sector organisations) or Net revenues (for public sector organisations) | SDR, Sustainability in context, page 58 |
| d Total capitalisation broken down in terms of debt and equity (for private sector organisations) | AIR, Sustainable business model, page 2 |
| e Quantity of products or services provided. | SDR, Our value add, page 75 |

| G4-10 Report the composition of the workforce, including: |
|---|---|
| a Report the total number of employees by employment contract and gender | SDR, People, page 80 |
| b Report the total number of permanent employees by employment type and gender | |
| c Report the total workforce by employees and supervised workers and by gender | |
| d Report the total workforce by region and gender | |
| e Report whether a substantial portion of the organisation’s work is performed by workers who are legally recognized as self-employed, or by individuals other than employees or supervised workers, including employees and supervised employees of contractors | |
| f Report any significant variations in employment numbers (such as seasonal variations in employment in the tourism or agricultural industries). | |
## Organisational profile continued

| G4-11 | Report the percentage of total employees covered by collective bargaining agreements. | SDR, Key material issues, page 46  
SDR, People, page 90 |
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<tbody>
<tr>
<td>G4-12</td>
<td>Describe the organisation's supply chain.</td>
<td>AIR, Our sustainable business model, page 2</td>
</tr>
</tbody>
</table>
| G4-13 | Report any significant changes during the reporting period regarding the organisation's size, structure, ownership, or its supply chain, including:  
a. Changes in the location of, or changes in, operations, including facility openings, closings, and expansions  
b. Changes in the share capital structure and other capital formation, maintenance, and alteration operations (for private sector organisations)  
c. Changes in the location of suppliers, the structure of the supply chain, or in relationships with suppliers, including selection and termination. | SDR, Key material issues, page 36  
SDR, About this report, page 6 |
| G4-14 | Report whether and how the precautionary approach or principle is addressed by the organisation. | SDR, UNGC, page 128  
SDR, About this report, page 6 |
| G4-15 | List externally developed economic, environmental and social charters, principles, or other initiatives to which the organisation subscribes or which it endorses. | SDR, Stakeholders, page 32  
SDR, UNGC, page 124 |
| G4-16 | List memberships of associations (such as industry associations) and national or international advocacy organisations in which the organisation:  
• Holds a position on the governance body  
• Participates in projects or committees  
• Provides substantive funding beyond routine membership dues  
• Views membership as strategic. | SDR, Stakeholders, page 5, 26, 27, 32  
SASDR SA |

## Identified material aspects and boundaries

<table>
<thead>
<tr>
<th>G4-17</th>
<th>List all entities included in the organisation's consolidated financial statements or equivalent documents. Report whether any entity included in the organisation's consolidated financial statements or equivalent documents is not covered by the report.</th>
<th>AIR, Financial statements, page 74</th>
</tr>
</thead>
<tbody>
<tr>
<td>G4-18</td>
<td>Explain the process for defining the report content and the aspect boundaries. Explain how the organisation has implemented the reporting principles for defining report content.</td>
<td>SDR, About this report, page 6</td>
</tr>
</tbody>
</table>

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**SDR** = Sustainability Disclosure Report  
**G4** = GRI General Standard Disclosures  
**AIR** = Accountability in Reporting  
**UNGCA** = United Nations Global Compact  
**SASDR** = South African Sustainability Disclosure Report
### Identified material aspects and boundaries continued

<table>
<thead>
<tr>
<th>Standard</th>
<th>Description</th>
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<tbody>
<tr>
<td>G4-19</td>
<td>List all the material aspects identified in the process for defining report content.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Standard</th>
<th>Description</th>
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</table>
| G4-20    | For each material Aspect, report the aspect boundary within the organisation, as follows:  
- Report whether the aspect is material within the organisation.  
- If the aspect is not material for all entities within the organisation (as described in G4-17), select one of the following two approaches and report either:  
  - The list of entities or groups of entities included in G4-17 for which the Aspect is not material or  
  - The list of entities or groups of entities included in G4-17 for which the Aspects is material.  
- Report any specific limitation regarding the Aspect Boundary within the organisation. | SDR, Key material issues, page 34 |

<table>
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<tr>
<th>Standard</th>
<th>Description</th>
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</table>
| G4-21    | For each material Aspect, report the Aspect Boundary outside the organisation, as follows:  
- Report whether the Aspect is material outside of the organisation  
- If the Aspect is material outside of the organisation, identify the entities, groups of entities or elements for which the Aspect is material. In addition, describe the geographical location where the Aspect is material for the entities identified  
- Report any specific limitation regarding the Aspect Boundary outside the organisation. | SDR, Key material issues, page 34 |

<table>
<thead>
<tr>
<th>Standard</th>
<th>Description</th>
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<tr>
<td>G4-22</td>
<td>Report the effect of any restatements of information provided in previous reports, and the reasons for such restatements.</td>
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<tr>
<th>Standard</th>
<th>Description</th>
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<tr>
<td>G4-23</td>
<td>Report significant changes from previous reporting periods in the scope and aspect boundaries.</td>
</tr>
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</table>

### Stakeholder engagement

<table>
<thead>
<tr>
<th>Standard</th>
<th>Description</th>
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<tbody>
<tr>
<td>G4-24</td>
<td>Provide a list of stakeholder groups engaged by the organisation.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Standard</th>
<th>Description</th>
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<tbody>
<tr>
<td>G4-25</td>
<td>Report the basis for identification and selection of stakeholders with whom to engage.</td>
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<th>Standard</th>
<th>Description</th>
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<tbody>
<tr>
<td>G4-26</td>
<td>Report the organisation's approach to stakeholder engagement, including frequency of engagement by type and by stakeholder group, and an indication of whether any of the engagement was undertaken specifically as part of the report preparation process.</td>
</tr>
</tbody>
</table>

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<tr>
<th>Standard</th>
<th>Description</th>
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</table>
| G4-27    | Report 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.  
- Report the stakeholder groups that raised each of the key topics and concerns. | SDR, Stakeholders, page 18-33 |
<table>
<thead>
<tr>
<th>Report profile</th>
<th>Where reported</th>
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<tbody>
<tr>
<td>G4-28</td>
<td>Reporting period (such as fiscal or calendar year) for information provided. SDR, Scope of this report, page 5</td>
</tr>
<tr>
<td>G4-29</td>
<td>Date of most recent previous report (if any). SDR, Scope of this report, page 5</td>
</tr>
<tr>
<td>G4-30</td>
<td>Reporting cycle (such as annual, biennial). SDR, Scope of this report, page 5</td>
</tr>
<tr>
<td>G4-31</td>
<td>Provide the contact point for questions regarding the report or its contents. Graeme Wild, Group Head Investor Relations and Sustainability</td>
</tr>
</tbody>
</table>
| G4-32         | 'In accordance’ option:  
  a. Report the ‘in accordance’ option the organisation has chosen.  
  b. Report the GRI Content Index for the chosen option.  
  c. Report the reference to the External Assurance Report, if the report has been externally assured. GRI recommends the use of external assurance but it is not a requirement to be ‘in accordance’ with the Guidelines. Core SDR, page 6 |
| G4-33         | Assurance:  
  a. Report the organisation’s policy and current practice with regard to seeking external assurance for the report.  
  b. If not included in the assurance report accompanying the sustainability report, report the scope and basis of any external assurance provided.  
  c. Report the relationship between the organisation and the assurance providers.  
  d. Report whether the highest governance body or senior executives are involved in seeking assurance for the organisation’s sustainability report. SDR, About this report, page 6 |

**Governance**

<table>
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<tr>
<th>Where reported</th>
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<tr>
<td>AIR, Governance report, pages 54-60</td>
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**Ethics and integrity**

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<tr>
<th>Where reported</th>
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</table>
| SDR, Code of Ethics, page 8  
AIR, Governance, page 60 |
### Economic performance

#### EC1 Direct economic value generated and distributed
Report the direct economic value generated and distributed (EVG&D) on an accruals basis including the basic components for the organisation’s global operations as listed below. If data is presented on a cash basis, report the justification for this decision and report the basic components as listed below:

- Direct economic value generated:
  - Revenues
  - Economic value distributed:
    - Operating costs
    - Employee wages and benefits
    - Payments to providers of capital
    - Payments to government (by country)
    - Community investments.

Economic value retained (calculated as ‘Direct economic value generated’ less ‘Economic value distributed’). To better assess local economic impacts, report EVG&D separately at country, regional, or market levels, where significant. Report the criteria used for defining significance.

<table>
<thead>
<tr>
<th>Where reported</th>
<th>SDR, Our value add, page 75</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>SDR, Stakeholders, page 21</td>
</tr>
</tbody>
</table>

#### EC2 Financial implications and other risks and opportunities for the organisation’s activities due to climate change
Report risks and opportunities posed by climate change that have the potential to generate substantive changes in operations, revenue or expenditure, including:

- A description of the risk or opportunity and its classification as either physical, regulatory, or other
- A description of the impact associated with the risk or opportunity
- The financial implications of the risk or opportunity before action is taken
- The methods used to manage the risk or opportunity
- The costs of actions taken to manage the risk or opportunity.

<table>
<thead>
<tr>
<th>Where reported</th>
<th>SDR, Key material issues, page 53</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>SDR, Planet, page 112</td>
</tr>
</tbody>
</table>

#### EC3 Coverage of the organisation's defined benefit plan obligations

##### a
Where the plan's liabilities are met by the organisation’s general resources, report the estimated value of those liabilities.

##### b
Where a separate fund exists to pay the plan's pension liabilities, report:

- The extent to which the scheme's liabilities are estimated to be covered by the assets that have been set aside to meet them
- The basis on which that estimate has been arrived at
- When that estimate was made.

##### c
Where a fund set up to pay the plan's pension liabilities is not fully covered, explain the strategy, if any, adopted by the employer to work towards full coverage, and the time-scale, if any, by which the employer hopes to achieve full coverage.

##### d
Report the percentage of salary contributed by employee or employer.

##### e
Report the level of participation in retirement plans (such as participation in mandatory or voluntary schemes, regional or country-based schemes, or those with financial impact).

| Where reported | AIR, Compensation report, pages 62-68 |
### Indirect economic impacts

<table>
<thead>
<tr>
<th>EC7</th>
<th>Development and impact of infrastructure investments and services supported</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>a Report the extent of development of significant infrastructure investments and services supported.</td>
</tr>
<tr>
<td></td>
<td>b Report the current or expected impacts on communities and local economies. Report positive and negative impacts where relevant.</td>
</tr>
<tr>
<td></td>
<td>c Report whether these investments and services are commercial, in-kind, or pro bono engagements.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Where reported</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDR, Communities, page 21</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>EC8</th>
<th>Significant indirect economic impacts, including the extent of impacts</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>a Report examples of the significant identified positive and negative indirect economic impacts the organisation has. These may include:</td>
</tr>
<tr>
<td></td>
<td>• Changing the productivity of organisations, sectors, or the whole economy</td>
</tr>
<tr>
<td></td>
<td>• Economic development in areas of high poverty</td>
</tr>
<tr>
<td></td>
<td>• Economic impact of improving or deteriorating social or environmental conditions</td>
</tr>
<tr>
<td></td>
<td>• Availability of products and services for those on low incomes</td>
</tr>
<tr>
<td></td>
<td>• Enhancing skills and knowledge amongst a professional community or in a geographical region</td>
</tr>
<tr>
<td></td>
<td>• Jobs supported in the supply chain or distribution chain</td>
</tr>
<tr>
<td></td>
<td>• Stimulating, enabling, or limiting foreign direct investment</td>
</tr>
<tr>
<td></td>
<td>• Economic impact of change in location of operations or activities</td>
</tr>
<tr>
<td></td>
<td>• Economic impact of the use of products and services.</td>
</tr>
<tr>
<td></td>
<td>b Report the significance of the impacts in the context of external benchmarks and stakeholder priorities, such as national and international standards, protocols, and policy agendas.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Where reported</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDR, Prosperity, page 58</td>
</tr>
<tr>
<td>SDR, Our value add, page 75</td>
</tr>
<tr>
<td>SDR, Our industry’s value add, page 76</td>
</tr>
</tbody>
</table>
### Environmental — energy

<table>
<thead>
<tr>
<th>EN3</th>
<th>Energy consumption within the organisation</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>Report total fuel consumption from non-renewable sources in joules or multiples, including fuel types used.</td>
</tr>
<tr>
<td>b</td>
<td>Report total fuel consumption from renewable fuel sources in joules or multiples, including fuel types used.</td>
</tr>
<tr>
<td>c</td>
<td>Report in joules, watt-hours or multiples, the total:</td>
</tr>
<tr>
<td></td>
<td>• Electricity consumption</td>
</tr>
<tr>
<td></td>
<td>• Heating consumption</td>
</tr>
<tr>
<td></td>
<td>• Cooling consumption</td>
</tr>
<tr>
<td></td>
<td>• Steam consumption.</td>
</tr>
<tr>
<td>d</td>
<td>Report in joules, watt-hours or multiples, the total:</td>
</tr>
<tr>
<td></td>
<td>• Electricity sold</td>
</tr>
<tr>
<td></td>
<td>• Heating sold</td>
</tr>
<tr>
<td></td>
<td>• Cooling sold</td>
</tr>
<tr>
<td></td>
<td>• Steam sold.</td>
</tr>
<tr>
<td>e</td>
<td>Report total energy consumption in joules or multiples.</td>
</tr>
<tr>
<td>f</td>
<td>Report standards, methodologies, and assumptions used.</td>
</tr>
<tr>
<td>g</td>
<td>Report the source of the conversion factors used.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Where reported</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDR, Key material issues, page 55</td>
</tr>
<tr>
<td>SDR, Planet, page 109</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>EN5</th>
<th>Energy intensity</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>Report the energy intensity ratio.</td>
</tr>
<tr>
<td>b</td>
<td>Report the organisation-specific metric (the ratio denominator) chosen to calculate the ratio.</td>
</tr>
<tr>
<td>c</td>
<td>Report the types of energy included in the intensity ratio: fuel, electricity, heating, cooling, steam, or all.</td>
</tr>
<tr>
<td>d</td>
<td>Report whether the ratio uses energy consumed within the organisation, outside of it or both.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Where reported</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDR, Planet, pages 51, 55</td>
</tr>
<tr>
<td>SDR, UNGC, page 129</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>EN6</th>
<th>Reduction of energy consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>Report the amount of reductions in energy consumption achieved as a direct result of conservation and efficiency initiatives, in joules or multiples.</td>
</tr>
<tr>
<td>b</td>
<td>Report the types of energy included in the reductions: fuel, electricity, heating, cooling, and steam.</td>
</tr>
<tr>
<td>c</td>
<td>Report the basis for calculating reductions in energy consumption such as base year or baseline, and the rationale for choosing it.</td>
</tr>
<tr>
<td>d</td>
<td>Report standards, methodologies, and assumptions used.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Where reported</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDR, Planet, pages 55, 109, 111</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>EN7</th>
<th>Reductions in energy requirements of products and services</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>Report the reductions in the energy requirements of sold products and services achieved during the reporting period, in joules or multiples.</td>
</tr>
<tr>
<td>b</td>
<td>Report the basis for calculating reductions in energy consumption such as base year or baseline, and the rationale for choosing it.</td>
</tr>
<tr>
<td>c</td>
<td>Report standards, methodologies, and assumptions used.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Where reported</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDR, Planet, pages 55, 109, 111</td>
</tr>
</tbody>
</table>
### Environmental — water

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Description</th>
<th>Where reported</th>
</tr>
</thead>
<tbody>
<tr>
<td>EN8</td>
<td>Total water withdrawal by source</td>
<td>SDR, Planet, page 116</td>
</tr>
</tbody>
</table>
| a         | Report the total volume of water withdrawn from the following sources:  
• Surface water, including water from wetlands, rivers, lakes, and oceans  
• Ground water  
• Rainwater collected directly and stored by the organisation  
• Waste water from another organisation  
• Municipal water supplies or other water utilities. | |
| b         | Report standards, methodologies, and assumptions used. | |
| EN10      | Percentage and total volume of water recycled and reused | SDR, Key material issues, page 54  
SDR, Planet, page 116 |
| a         | Report the total volume of water recycled and reused by the organisation. | |
| b         | Report the total volume of water recycled and reused as a percentage of the total water withdrawal reported under Indicator G4-EN8. | |
| c         | Report standards, methodologies, and assumptions used. | |

### Environmental — biodiversity

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Description</th>
<th>Where reported</th>
</tr>
</thead>
<tbody>
<tr>
<td>EN13</td>
<td>Habitats protected or restored</td>
<td>SDR, Planet, page 122</td>
</tr>
<tr>
<td>a</td>
<td>Report the size and location of all habitat protected areas or restored areas, and whether the success of the restoration measure was or is approved by independent external professionals.</td>
<td></td>
</tr>
<tr>
<td>b</td>
<td>Report whether partnerships exist with third parties to protect or restore habitat areas distinct from where the organisation has overseen and implemented restoration or protection measures.</td>
<td></td>
</tr>
<tr>
<td>c</td>
<td>Report the status of each area based on its condition at the close of the reporting period.</td>
<td></td>
</tr>
<tr>
<td>d</td>
<td>Report standards, methodologies, and assumptions used.</td>
<td></td>
</tr>
<tr>
<td>Environmental — emissions</td>
<td>Where reported</td>
<td></td>
</tr>
<tr>
<td>---------------------------</td>
<td>----------------</td>
<td></td>
</tr>
<tr>
<td><strong>EN15</strong> Direct greenhouse gas (GHG) emissions (Scope 1)</td>
<td>SDR, Planet, page 114</td>
<td></td>
</tr>
<tr>
<td>a Report gross direct (Scope 1) GHG emissions in metric tons of CO₂ equivalent, independent of any GHG trades, such as purchases, sales, or transfers of offsets or allowances.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b Report gases included in the calculation (whether CO₂, CH₄, N₂O, HFCs, PFCs, SF₆, NF₃, or all).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c Report biogenic CO₂ emissions in metric tons of CO₂ equivalent separately from the gross direct (Scope 1) GHG emissions.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>d Report the chosen base year, the rationale for choosing the base year, emissions in the base year, and the context for any significant changes in emissions that triggered recalculations of base year emissions.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>e Report standards, methodologies, and assumptions used.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>f Report the source of the emission factors used and the global warming potential (GWP) rates used or a reference to the GWP source.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>g Report the chosen consolidation approach for emissions (equity share, financial control, operational control).</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>EN16</strong> Energy indirect greenhouse gas (GHG) emissions (Scope 2)</td>
<td>SDR, Planet, page 114</td>
<td></td>
</tr>
<tr>
<td>a Report gross energy indirect (Scope 2) GHG emissions in metric tons of CO₂ equivalent, independent of any GHG trades, such as purchases, sales, or transfers of offsets or allowances.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b Report gases included in the calculation, if available.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c Report the chosen base year, the rationale for choosing the base year, emissions in the base year, and the context for any significant changes in emissions that triggered recalculations of base year emissions.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>d Report standards, methodologies, and assumptions used.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>e Report the source of the emission factors used and the global warming potential (GWP) rates used or a reference to the GWP source, if available.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>f Report the chosen consolidation approach for emissions (equity share, financial control, operational control).</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>EN18</strong> Greenhouse gas (GHG) emissions intensity</td>
<td>SDR, Planet, page 114</td>
<td></td>
</tr>
<tr>
<td>a Report the GHG emissions intensity ratio.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b Report the organisation-specific metric (the ratio denominator) chosen to calculate the ratio.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c Report the types of GHG emissions included in the intensity ratio: direct (Scope 1), energy indirect (Scope 2), other indirect (Scope 3).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>d Report gases included in the calculation.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>EN19</strong> Reduction of greenhouse gas (GHG) emissions</td>
<td>SDR, Planet, page 114</td>
<td></td>
</tr>
<tr>
<td>a Report the amount of GHG emissions reductions achieved as a direct result of initiatives to reduce emissions, in metric tons of CO₂ equivalent.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b Report gases included in the calculation (whether CO₂, CH₄, N₂O, HFCs, PFCs, SF₆, NF₃, or all).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c Report the chosen base year or baseline and the rationale for choosing it.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>d Report standards, methodologies, and assumptions used.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>e Report whether the reductions in GHG emissions occurred in direct (Scope 1), energy indirect (Scope 2), other indirect (Scope 3) emissions.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### GRI General standard disclosures — Material aspects continued

#### Environmental — emissions

**EN21** NOx, SOx, and other significant air emissions

- Report the amount of significant air emissions, in kilograms or multiples for each of the following:
  - NOx
  - SOx
  - Persistent organic pollutants (POP)
  - Volatile organic compounds (VOC)
  - Hazardous air pollutants (HAP)
  - Particulate matter (PM)
  - Other standard categories of air emissions identified in relevant regulations.

- Report standards, methodologies, and assumptions used.

- Report the source of the emission factors used.

*Where reported: SDR, Planet, page 115*

#### Environmental — effluents and waste

**EN22** Total water discharge by quality and destination

- Report the total volume of planned and unplanned water discharges by:
  - Destination
  - Quality of the water including treatment method
  - Whether it was reused by another organisation.

- Report standards, methodologies, and assumptions used.

*Where reported: SDR, Planet, page 117*

**EN23** Total weight of waste by type and disposal method

- Report the total weight of hazardous and non-hazardous waste, by the following disposal methods:
  - Reuse
  - Recycling
  - Composting
  - Recovery, including energy recovery
  - Incineration (mass burn)
  - Deep well injection
  - Landfill
  - On-site storage
  - Other (to be specified by the organisation).

- Report how the waste disposal method has been determined:
  - Disposed of directly by the organisation or otherwise directly confirmed Information provided by the waste disposal contractor
  - Organisational defaults of the waste disposal contractor.

*Where reported: SDR, Planet, page 119*
### Social — labour practices and decent work

#### Social — employment

<table>
<thead>
<tr>
<th>LA 1</th>
<th>Total number and rates of new employee hires and employee turnover by age group, gender and region</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>a. Report the total number and rate of new employee hires during the reporting period, by age group, gender and region.</td>
</tr>
<tr>
<td></td>
<td>b. Report the total number and rate of employee turnover during the reporting period, by age group, gender and region.</td>
</tr>
</tbody>
</table>

- **Where reported**: SDR, People, page 89

#### Social — labour/management relations

<table>
<thead>
<tr>
<th>LA 4</th>
<th>Minimum notice periods regarding operational changes, including whether these are specified in collective agreements</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>a. Report the minimum number of weeks’ notice typically provided to employees and their elected representatives prior to the implementation of significant operational changes that could substantially affect them.</td>
</tr>
<tr>
<td></td>
<td>b. For organisations with collective bargaining agreements, report whether the notice period and provisions for consultation and negotiation are specified in collective agreements.</td>
</tr>
</tbody>
</table>

- **Where reported**: SDR, People, page 91

#### Social — occupational health and safety

<table>
<thead>
<tr>
<th>LA 5</th>
<th>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</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>a. Report the level at which each formal joint management/worker health and safety committee typically operates within the organisation.</td>
</tr>
<tr>
<td></td>
<td>b. Report the percentage of the total workforce represented in formal joint management/worker health and safety committees.</td>
</tr>
</tbody>
</table>

- **Where reported**: SDR, People, page 92

<table>
<thead>
<tr>
<th>LA 6</th>
<th>Type of injury and rates of injury, occupational diseases, lost days, and absenteeism, and total number of work-related fatalities, by region and by gender</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>a. Report types of injury, injury rate (IR), occupational diseases rate (ODR), lost day rate (LDR), absentee rate (AR) and work-related fatalities, for the total workforce (that is, total employees plus supervised workers), by region and gender.</td>
</tr>
<tr>
<td></td>
<td>b. Report types of injury, injury rate (IR), occupational diseases rate (ODR), lost day rate (LDR), absentee rate (AR) and work-related fatalities for independent contractors working on-site to whom the organisation is liable for the general safety of the working environment, by region and gender.</td>
</tr>
<tr>
<td></td>
<td>c. Report the system of rules applied in recording and reporting accident statistics.</td>
</tr>
</tbody>
</table>

- **Where reported**: SDR, People, page 94
### Social — training and education

<table>
<thead>
<tr>
<th>LA9</th>
<th>Average hours of training per year per employee by gender, and by employee category</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>a. Report the average hours of training that the organisation’s employees have undertaken during the reporting period, by gender and employee category.</td>
</tr>
</tbody>
</table>

Where reported: SDR, People, page 83

<table>
<thead>
<tr>
<th>LA11</th>
<th>Percentage of employees receiving regular performance and career development reviews, by gender and by employee category</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>a. Report the percentage of total employees by gender and by employee category who received a regular performance and career development review during the reporting period.</td>
</tr>
</tbody>
</table>

Where reported: SDR, People, page 81

### Social — diversity and equal opportunity

<table>
<thead>
<tr>
<th>LA12</th>
<th>Composition of governance bodies and breakdown of employees per employee category according to gender, age group, minority group membership, and other indicators of diversity</th>
</tr>
</thead>
</table>
|      | a. Report the percentage of individuals within the organisation’s governance bodies in each of the following diversity categories:  
  - Gender  
  - Age group: under 30 years old, 30-50 years old, over 50 years old  
  - Minority groups  
  - Other indicators of diversity where relevant.  
  
  b. Report the percentage of employees per employee category in each of the following diversity categories:  
  - Gender  
  - Age group: under 30 years old, 30-50 years old, over 50 years old  
  - Minority groups  
  - Other indicators of diversity where relevant. |

Where reported: SDR, People, pages 80, 87, 88

### Social — compliance

<table>
<thead>
<tr>
<th>SO8</th>
<th>Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations</th>
</tr>
</thead>
</table>
|      | a. Report significant fines and non-monetary sanctions in terms of:  
  - Total monetary value of significant fines  
  - Total number of non-monetary sanctions  
  - Cases brought through dispute resolution mechanisms.  
  
  b. If the organisation has not identified any non-compliance with laws or regulations, a brief statement of this fact is sufficient.  
  
  c. Report the context against which significant fines and non-monetary sanctions were incurred. |

Where reported: GRI Index — not applicable, no such fines or sanctions
Glossary

**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%.

**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.

**BBBEE**
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.

**casting 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.

**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 woodfibre that has been produced in a chemical process.

**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.

**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.

**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.

**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 forest land to achieve FSC endorsement, its forest management practices must meet the FSC 10 principles based on environmental, social and economic criteria. Roundwood (logs) with FSC-certification: Sappi Southern Africa Forests FSC C012316 and Sappi Southern Africa Group Scheme FSC C017054. For manufacturers of forest products, including paper manufacturers like Sappi, Chain-of-Custody (CoC)-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. Sappi’s mills in South Africa are licensed – Ngodwana Mill – FSC C021636, Salcor Mill – FSC C011012, Stanger Mill – FSC C019831 and Tugela Mill – FSC C012468.

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.

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.

Haptic
Haptic (haptic communication)
Refers to the ways in which people communicate and interact via the sense of touch. As well as providing information about surfaces and textures, touch, or the haptic sense, is a component of communication in interpersonal relationships that is non-verbal and nonvisual. Touch is extremely important for humans and is vital in conveying physical intimacy.

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.

Lignin
An organic substance that, with cellulose, forms the chief part of woody tissue.

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.

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.

LTIFR
Lost Time Injury Frequency Rate = number of lost time injuries x 200,000 divided by man hours.

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.
Glossary continued

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
A non-governmental organisation is any non-profit, voluntary citizens’ group which is organised on a local, national or international level.

NPO
Non-profit organisation. A corporation or an association that conducts business for the benefit of the general public without shareholders and without a profit motive.

natural/indigenous forest
Pristine areas not used commercially.

newsprint
Paper produced for the printing of newspapers mainly from mechanical pulp and/or recycled waste paper.

OHSAS
An international health and safety standard aimed at minimising occupational health and safety risks firstly, by conducting a variety of analyses and secondly, by setting standards.

packaging paper
Paper used for packaging purposes.

PAMSA
Paper Manufacturers Association of South Africa.

PEFC™
The world’s largest forest certification system, the PEFC™ is focused on promoting sustainable forest management. Using multi-stakeholder processes, the organisation develops forest management certification standards and schemes which have been signed by 37 nations in Europe and other inter-governmental processes for sustainable forestry management around the world.

plantation
Tree farm.

PM
Paper machine.

power
The rate at which energy is used or produced.

pulwood
Wood suitable for producing pulp – usually not of sufficient standard for sawmilling.

red data list
A global index of endangered species published by the World Conservation Union.

sackkraft
Kraft paper used to produce multi-wall paper sacks.

Sappi Specialised Cellulose
The business within Sappi which oversees the production and marketing of dissolving wood pulp.

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.

SE
Sappi Europe.

silviculture costs
Growing and tending costs of trees in forestry operations.

SMMEs
Small-, medium- and micro enterprises.

SNA
Sappi North America.

solid waste
Dry organic and inorganic waste materials.

speciality paper
A generic term for a group of papers intended for commercial and industrial use such as flexible packaging, metallised base paper, coated bag paper, etc.

specific
When data is expressed in specific form, this means that the actual quality consumed during the year indicated, whether energy, water, emissions or solid waste, is expressed in terms of a production parameter. For Sappi, as with other pulp and paper companies, this parameter is air dry tons of saleable product.

specific purchased 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, this parameter is air dry tons of saleable product.

SSA
Sappi Southern Africa.

Sustainable Forestry Initiative — SFI®
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.
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.

VSF — viscose staple fibre
A natural fibre made from purified cellulose, primarily from dissolving wood pulp that can be twisted to form yarn.

woodfree paper
Paper made from chemical pulp.

World Wide Fund for Nature (WWF)
The world's largest conservation organisation, focused on supporting biological diversity.

TAPPI
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 woodfibres using heat and mechanical grinding or refining wood or wood chips.

ton
Term used in this report to denote a metric ton of 1,000kg.

TSS — total suspended solids
Refers to matter suspended or dissolved in effluent.

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## Referenced third-party websites

- **AF&PA**
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  [www.afandpa.org](http://www.afandpa.org)

- **African Journal of Agricultural and Resource Economics**
  [www.afjare.org](http://www.afjare.org)

- **GreenBlue**
  [www.greenblue.org](http://www.greenblue.org)

- **HBR**
  Harvard Business Review
  [www.hbr.org](http://www.hbr.org)

- **How life unfolds**
  [www.howlifeunfolds.com](http://www.howlifeunfolds.com)

- **Human Rights Watch**
  [www.hrw.org](http://www.hrw.org)

- **IOL**
  Independent (newspapers) On Line
  [www.iol.co.za](http://www.iol.co.za)

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  [www.sanbi.org](http://www.sanbi.org)

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  [www.twosides.info](http://www.twosides.info)

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  [www.typek.co.za](http://www.typek.co.za)

- **United States Environmental Protection Agency**
  [www.epa.gov](http://www.epa.gov)

- **University of Maine Pulp and Paper Foundation**
  [www.mainepulpaper.org](http://www.mainepulpaper.org)

- **Verisk Maplecroft™**
  [www.maplecroft.com](http://www.maplecroft.com)

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