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Group



Prosperity



People



Planet

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# Reader's guide

## Realising our 2020Vision

*We are progressing our journey towards our 2020Vision which draws on the power of One Sappi to reshape Sappi's future as we move beyond pulp and paper to unlock and commercialise the potential of woodfibre-based bioproducts. Our strategy of intentional evolution, which underpins this journey, is defined by the megatrends described in the wheel on page 46.*

### 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
- Move to the previous page you were reading
- Access additional/explanatory information, including data to the Prosperity and Planet graphs.
- Related information within this report is cross-referenced
- This report makes use of Adobe Acrobat's bookmark tools

## More information

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

- Read more detailed information available in other published documents available on the Sappi website, [www.sappi.com](http://www.sappi.com).
- Read more detailed information available from third-party websites.

## Best viewed

This sustainability report is best viewed using Adobe Acrobat's PDF viewer, which can be downloaded free of charge from Adobe's website.

Viewing the report online, using your browser's native built-in PDF-reader may render some of the navigational and interactive functionality unusable.

## 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.

- Certification information for each mill can also be obtained from our website, [www.sappi.com](http://www.sappi.com).
- Recognition of certification bodies is further detailed in the glossary.

## 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.

## Conventions

**Billion**  
We follow contemporary 'short scale' convention; defining one billion as one thousand million.

**Specific**  
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 pulp and paper 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

We have used the following exchange rates:

	FY2016 Average
US\$/ZAR	14.7
EUR/US\$	1.1

# About this report

## Scope of this report

This report is aligned with our Annual Integrated Report and covers the period from the beginning of October 2015 to the end of September 2016. 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 specific measurement criteria – as well as instances where these have changed – are clearly spelled out.

## Reporting framework

As Sappi Limited is headquartered in South Africa and we have our primary listing on the JSE Securities Exchange, we abide by the King III Code on Corporate Governance (King III). In line 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 overview. Our 2016 regional Sustainability Reports for our operations in Southern Africa and North America, together with an updated summary for Europe, will be available in 2017.

## Joint ventures excluded

LignoTech South Africa, our 50:50 joint venture (JV) with Borregaard at Saiccor Mill, is excluded as we do not manage the operation. However, the JV is included in our safety statistics.

## 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).

## Defining report content

### 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.

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

Throughout the report, qualitative text is backed up by quantitative information, generally in the form of graphs illustrating performance over five years between 2012 and 2016.

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 publish our performance against targets in both the group report and our regional reports, transparently reporting on success or lack thereof in achieving these targets.

## Prioritising content

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 greater detail in our Annual Integrated Report, available on [www.sappi.com](http://www.sappi.com).<sup>⑥</sup>

## Identifying stakeholders

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



## Messages from our leadership

The success of our drive to adapt our business to the global megatrends that are reshaping the world around us is evident in our performance over the past year.

This performance would not have been possible without our dedicated, resourceful people. Their commitment to our values of doing business with integrity and courage, making smart decisions which are executed with speed, has resulted in a leaner, more productive and efficient business.

In terms of prosperity, this translated into an increase of 62% in return on capital employed, and a dividend of 11 US cents for the year ended 30 September – our first since 2008. This means that our Southern African colleagues who are beneficiaries of our Broad-based Black Economic Empowerment (BBBEE) transaction, Sefate, will for the first time receive dividend payments as members of either the management or employee share trusts.

In addition, we reduced debt significantly during the year and by US\$800m over the past three years. Our improved cash generation resulted in the group achieving the targeted leverage of less than two times net debt to our earnings before interest, taxes, depreciation and amortisation, earlier than expected.

However, great business results hold little value if they come at the cost of our people. Our outstanding financial results were overshadowed by our disappointing safety performance. Although our combined own employee and contractor lost time injury frequency rate declined, there were four fatalities in Southern Africa involving one employee and three contractor fatalities at our sawmilling and forestry operations.

We deeply regret these fatalities and our hearts go out to the families of the deceased. Our group and regional management teams, as well as our board of directors, have placed even greater emphasis on safety, particularly in our plantation operations where most of our severe and fatal accidents occur. We have brought in experts from around the world to advise us on how we can improve our systems, training and overall approach to safety in order to make our company a safer place to work. We will continue to focus on entrenching a strong safety culture with the ultimate aim of zero accidents in the workplace. Our ultimate goal remains reinforcing a 24/7 safety culture and ensuring that every person who comes to work goes home uninjured.

On a more positive note, we continued to position our product portfolios to meet the needs of our customers across the world, leverage the opportunities inherent in global megatrends and unlock the potential of forest-derived bioproducts. This was underpinned by the commissioning of our nanocellulose pilot plant in the Netherlands, together with the decision to build a second-generation sugar extraction demonstration plant in South Africa, which is due to come on stream in 2017, as well as the establishment of a dedicated Biotech division to consolidate and expand our renewable biomaterial offerings.

In terms of our people, our priority is a diverse, engaged workforce who understand the world of tomorrow so that we position ourselves to take advantage of future trends in order to grow and prosper. Accordingly, we continued to invest in our people so that we are able to create and seize opportunities, enable our people to grow intellectually and bring new ideas to fruition.

We also continued to invest in the communities in which we operate, with a view to empowering them to reach their full potential through self-sustaining initiatives.

The ongoing trajectory of urban growth around the globe is leading to growing concerns about natural resources and food security. To successfully navigate this trajectory, as One Sappi we need to continue treading more lightly on the planet by progressively increasing our generation of renewable energy, enhancing our energy efficiency, reducing the amount of solid waste generated, promoting the use of certified fibre and returning more than 90% of extracted water to the environment.

In addition to these efforts, we are working collaboratively with technology partners and industry bodies to develop more sustainable approaches to the task of balancing socio-economic growth and natural capital.

Sappi celebrated 80 years of existence in 2016. The original company was established in 1936 and registered on the Johannesburg Stock Exchange in January 1937. Over the years, we have built up an enviable legacy and reputation. As we continue on our One Sappi journey towards our 2020Vision, it is important to safeguard our legacy and reputation. This means ensuring that all our people, customers, partners, communities, suppliers and other stakeholders know what we stand for, how we hope to achieve our vision and understand the principles that guide us along the way. Accordingly, our revised Code of Ethics sets out the expected behaviours that will help us stay true to who we are as we progress on our journey.

**Steve Binnie**  
 Chief Executive Officer, Sappi Limited



## Messages from our leadership continued



In line with our 2020Vision, we are intentionally evolving Sappi to respond to global megatrends, including shifts in demographics, technology, climate, the drivers of the international economy and a carbon constrained future. If we are to succeed in realising our vision, we recognise that we have to be agile enough to respond not just to changes in the business landscape, but also to the evolving needs of our people and the communities in which our operations are situated, as well as the challenges they face in dealing with a rapidly changing world. In addition, we need to respond to pressures on the natural resources on which our business depends, continuously striving to implement best environmental practice and keeping abreast of cutting-edge technologies.



By balancing **People** and **Planet** with **Prosperity** in this manner, we will maintain our position as a global forest products leader committed to collaborating and partnering with stakeholders – focused on being a trusted and sustainable organisation with an exciting future in woodfibre.



### Valli Moosa

Chairman of the Social, Ethics, Transformation and Sustainability Committee

### External assurance

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

In practice, most of our key operations undergo external verification, including the Eco-Management Audit System (EMAS) in Europe and globally, ISO 14001 environmental certification, 9001 quality certification and OHSAS 18001 certification.

We are also assessed in terms of the forest certification systems we use, and in South Africa, our Broad-based Black Economic Empowerment (BBBEE) performance is assessed by an external ratings agency.

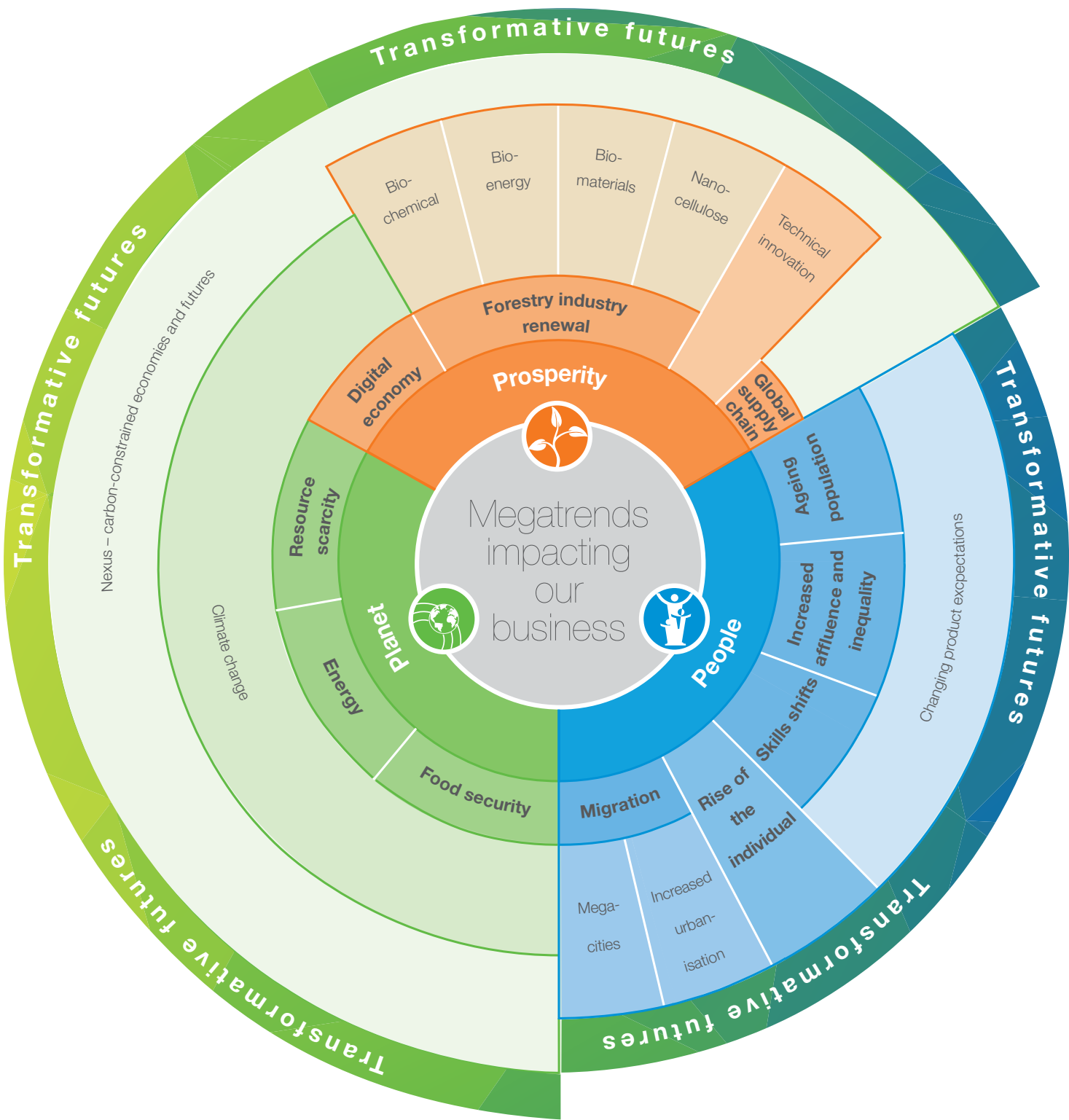
In addition, in FY2016 Sappi Limited was a constituent of the FTSE/JSE Responsible Investment Index and the FTSE/JSE Responsible Investment Top 30 Index. Being included in these indices means that our sustainability performance has been externally assessed.

Collectively, these external assessments and certifications, as well as interaction with our stakeholders, give us confidence that our performance indicators are reliable, accurate and pertinent. The Social, Ethics, Transformation and Sustainability (SETS) Committee reviews the efficacy of conducting external assurance annually. 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.

## Intentional evolutionary strategy responsive to megatrends . . .

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.





# Our sustainability governance structure

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 Group Sustainability Charter.📄

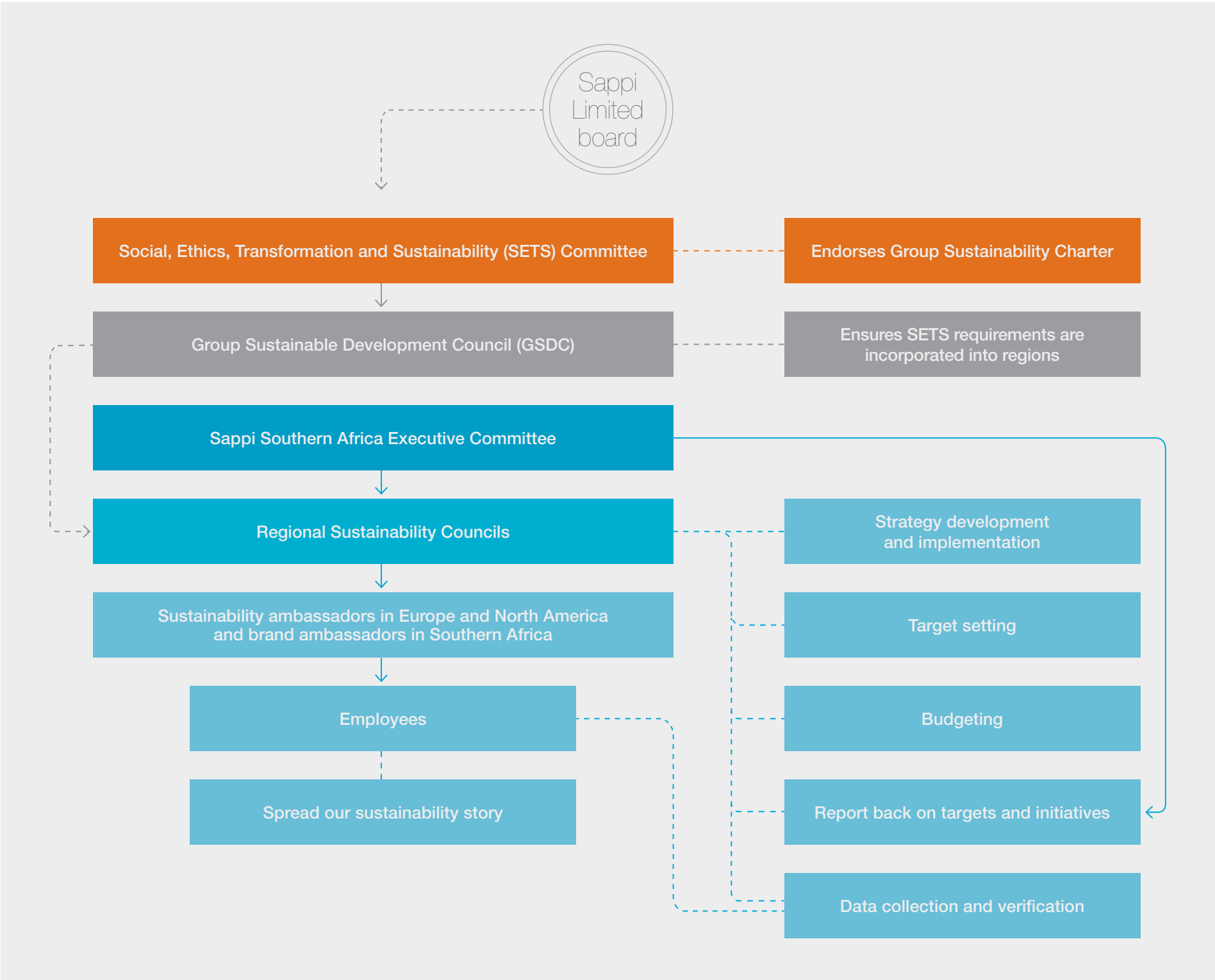
This in turn is underpinned by the Code of Ethics and our group value statement: *“At Sappi we do business with integrity and courage, making smart decisions which we execute with speed.”*

Regional Sustainability Councils (RSCs) operate in Europe, North America and Southern Africa.

Each RSC focuses on key material issues relevant to its 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 SETS Committee which in turn reports to the board.

Sustainability ambassadors in Europe and North America and brand ambassadors in Southern Africa help to entrench an holistic approach to the 3Ps of **Prosperity**, **People** and **Planet** throughout the group.



# Our performance against our regional targets



Prosperity			
Europe	Target	2016 performance	Status
	Return on net operating assets (RONOA) <b>10%</b>	<b>10.2%</b>	Achieved
	EBITDA margin greater than <b>10%</b> by 2017	<b>10.1%</b>	Achieved
North America	Target	2016 performance	Status
	Achieve or exceed an annual <b>12%</b> RONO	5% lower variable costs, particularly chemicals, wood and energy helped improve margins.	Not achieved
Southern Africa	Target	2016 performance	Status
	EBITDA margin greater than <b>20%</b>	<b>25%</b>	Achieved
	Sustainable cut above <b>four million</b> wet white tons per annum	<b>3.8 million tons</b>	Not achieved

- Achieved
- Exceeded
- Not achieved



Our performance against our regional targets continued



People			
Europe	Target	2016 performance	Status
	Provide <b>30 hours</b> of training per employee per annum by 2017	<b>Actual: 29.28</b> hours/employee <b>Female: 38.41</b> hours/employee <b>Male: 27.99</b> hours/employee	Not achieved
	Lost Time Injury Frequency Rate ( <b>LTIFR</b> ) Target of <b>0.8</b>	LTIFR of <b>0.65</b> LTISR: <b>20</b>	
North America	Target	2016 performance	Status
	Offer training at average of <b>60 hours</b> per employee per year to enhance job performance and management skills	<b>80 hours</b>	Exceeded
	Safety (LTIFR) Achieve <b>zero</b> workplace injuries	<b>0.69</b> Extremely good results at Cloquet Mill offset by incidents at Somerset Mill.	Not achieved
Southern Africa	Target	2016 performance	Status
	Achieve <b>Level 4</b> compliance in BBBEE (in respect of the new Forestry Codes)	<b>Level 3</b> (old Forestry Codes). The new Forestry Codes have not been gazetted yet and we have thus been audited on the old codes for our 2016 financial year.	Achieved
	Improvement of <b>2%</b> every other year of engaged employees in terms of participation, commitment and issues closed out	We have a formal <b>Employee Engagement Survey</b> every second year and this will happen again in 2017. In 2015, 76% of our employees engaged and the participation in the survey was 78%.	Not applicable
	Combined 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 (LTISR) to be <b>below 25</b>	<b>0.32 LTIFR</b> and <b>117.7 LTISR</b>	Not achieved

- Achieved
- Exceeded
- Not achieved

Our performance against our regional targets continued



Planet			
Europe	Target	2016 performance	Status
	Reduction of specific direct fossil CO <sub>2</sub> emissions including purchased power emissions (calculated at 400g/KWh) <b>by 5%</b> by 2017 (base year 2012, saleable production)	Increased by <b>2.1%</b> Direct CO <sub>2</sub> emissions reduced by <b>4.1%</b> We produced less than in 2012 and we sold less power to the grid. Both negatively influenced the specific performance.	Not achieved
	Reduction of specific water use (m <sup>3</sup> /ton manufactured pulp and saleable paper) <b>by 5%</b> by 2017 (base year is 2012, saleable production)	Increased by <b>1.9%</b> We produced less than in 2012, which negatively influenced the specific performance.	Not achieved
	Maintain a <b>high level of certified fibre</b> delivered to our mills (FSC® or PEFC™ certified, or equivalent)	<b>Certified: 75.3%</b> <b>FSC: 25.5%</b> <b>PEFC: 49.8%</b>	Achieved
North America	Target	2016 performance	Status
	Procure <b>60%</b> certified fibre to meet customer demands for certified products	<b>55%</b> Lower than target but able to meet customer demands.	Not achieved
	Reduce the amount of total energy expended in making each ton of product by <b>5%</b> by 2020	<b>4.4%</b> Realising benefits of continuous improvement, capital projects and a milder than normal winter.	Exceeded
	Reduce <b>paper mill</b> raw material waste by <b>5%</b> by 2020	<b>5.8%</b>	Exceeded
	Reduce <b>pulp mill</b> raw material waste by <b>10%</b> by 2020	<b>13%</b>	Exceeded
Southern Africa	Target	2016 performance	Status
	Achieve 10% reduction in <b>specific purchased fossil energy</b> by 2020 with 2014 as the base year	<b>6.1%</b> reduction	Achieved
	Achieve a 10% reduction in <b>total specific fresh water usage</b> by 2020 with 2014 as a base year	<b>15.2%</b> reduction	Achieved
	Achieve a 10% reduction in <b>specific solid waste landfilled</b> by 2020 using 2014 as a base year	<b>12.9%</b> increase	Not achieved
	<b>100%</b> certification of own timber	<b>100%</b> of own timber is certified, and <b>82%</b> of all timber used in our mills is certified.	Exceeded
	<b>70%</b> certification of Chain-of-Custody for our manufacturing plants		

Achieved

Exceeded

Not achieved

Our performance against our global sustainability goals

In line with our 2020Vision and One Sappi strategic approach, in 2015 we established ambitious global sustainability targets. Regional targets are aligned to these goals.

The base year is 2014, with five-year targets from 2016 to 2020. Capital spend budget over five years will be used to determine targets in various elements.

Our performance in 2016, together with commentary, is set out below.

Our targets reflect issues that are important to our sustainability as a business and are a key element of 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 RSCs, the Global Sustainable Development Council and ultimately, to the SETS Committee, a fully constituted board committee.

**Prosperity**

- **ROCE:** The 62% improvement on our 2014 base reflected the ongoing successful implementation of our 2020Vision and One Sappi strategy, and is highly encouraging, given that the ongoing viability of our business and generation of value for all our stakeholders depends on our ability to generate profits.

**People:**

- **Safety:** Globally, while there was no significant improvement in the own employee Lost Time Injury Frequency Rate (LTIFR), there was an improvement in contractor LTIFR, resulting in a 4.3% improvement in the combined LTIFR. However, this was tragically overshadowed by four fatalities in Southern Africa involving one own employee and three contractors.
- **Sustainable engagement:** Surveys are held every second year, which means the next one will be held in 2017. We are currently implementing solutions to the gaps identified during the 2015 survey.

**Planet**

- **Specific total energy (STE):** The 1.1% increase in STE/GJ/adt meant that we did not achieve our goal, due mainly to increased energy intensity in Southern Africa. This in turn was due to greater use of coal and heavy fuel oil at Saiccor Mill, as well as problems with the lignosulphonate spray dryer at Tugela Mill. Note that we previously indicated that our STE goal was 21.05GJ/adt. This has been changed as reflected in the table alongside, in line with the changes to our energy reporting described on page 87 of this report.
- **Certified fibre:** We did not achieve our goal in 2016, with the percentage standing at 73% against a target of maintaining or exceeding our 2014 base of 79%, for the following reasons: In Europe, we are finding there is a push back against certification by sawmills, who are finding certification requirements increasingly onerous; in North America, the decline was driven primarily by a change in production strategy at Cloquet Mill which involved a change from buying 100% certified market pulp to making our own pulp. Doing so means we are limited to the amount of certified fibre available in the local wood basket; and in Southern Africa, the decrease was the result of using less of our own woodfibre because of the drought, having to buy it in and being limited by the amount of certified fibre available.

	Prosperity	People	Planet
Global target	<b>ROCE</b> (Return on capital employed)	<b>LTIFR</b> (Combined own and contractor employees) 	<b>Energy efficiency</b> (Specific total energy) <b>Certified fibre</b>
2014 base	<b>10.8%</b>	<b>0.53</b> <b>Not measured</b>	<b>22.92<sub>GJ/adt</sub></b> <b>79%</b>
2016 performance	<b>17.5%</b>	<b>0.46</b> <b>Not measured</b> (2015: 74%)	<b>23.17<sub>GJ/adt</sub></b> <b>73%</b>
2015/2016 % change	<b>62% improvement</b>	<b>4.3% improvement</b> <b>Not applicable</b>	<b>1.1% increase</b> <b>6% decrease</b>
2020 goal	<b>12% ROCE minimum</b>	<b>Target zero LTIFR</b> with minimum 10% improvement year-on-year <b>76%</b>	<b>5% improvement over the period</b> <b>Maintain or improve percentage</b>

## Our accolades

We were included in:

- The FTSE/JSE Responsible Investment Index, and
- The FTSE/JSE Responsible Investment Top 30 Index.

### Europe



- The German Functional New Materials category went to the Sappi Guard product family. The award-winning new materials from Sappi's functional papers product group are Algro Guard® OHG and Leine® Guard M. The jury praised Sappi's sustainable paper packaging solutions, which offer innovative integrated barrier and heat sealing properties otherwise only achievable with multi-layer films. The jury also noted the exceptional tactile properties and excellent printability of the Sappi Guard product family.

### North America



Shortly after year-end, the Paper Association (AF&PA) recognised Sappi North America with the 2016 AF&PA Leadership in Sustainability Award for Energy Efficiency and Greenhouse Gas Reduction for their Hood Heat Recovery Project at Somerset Mill. Go to our 2015 Group Sustainability Report for further details. <sup>(1)</sup>

- Honoured with the Printing News Top Product Award in the Consumables, Packaging Substrates category for our heavyweight LusterCote packaging.
- Received a Champion of Economic Development Award from the Maine Development Foundation. The award is given to those individuals or organisations that are key to driving Maine's economy forward.
- Selected as a winner in the 2016 Pulp & Paper International (PPI) Awards, Bringing Paper to Life – Innovative Printing & Writing Campaign of the year<sup>(1)</sup>.

<sup>(1)</sup> Shortly after year-end.

### Southern Africa



• ZN Exporter of the Year award in the manufacturing category.

- Lomati Sawmill honoured with the 2015 Kruger Lowveld Chamber of Business and Tourism (KLCBT) Large Business Enterprise Award.
- Three PMR Diamond Arrow Awards – Sappi Ngodwana Mill, Sappi Forests and Sappi Southern Africa for doing the most to protect the environment
- Recognised as a top South African brand in the annual *Sunday Times* newspaper survey for 2016.
- A PRISA Gold Prism Award for Internal Communications.
- Sappi has been awarded a Gold Quill (Excellence) for communication management in the Community Relations category of the International Association of Business Communicators (IABC) for the Abashintshi Social Mobilisation Programme, as well as two IABC Silver Quill Awards for the same programme, one for community communication and one for environmental communication.
- Sappi Southern Africa received a FP&M SETA Recognition Award as a Best Practice Workplace Provider for Apprenticeship training. The award is given to companies addressing artisan development which is listed as a critical and scarce skill.
- Top 10 2016 Massmart Supplier Environmental Awards.



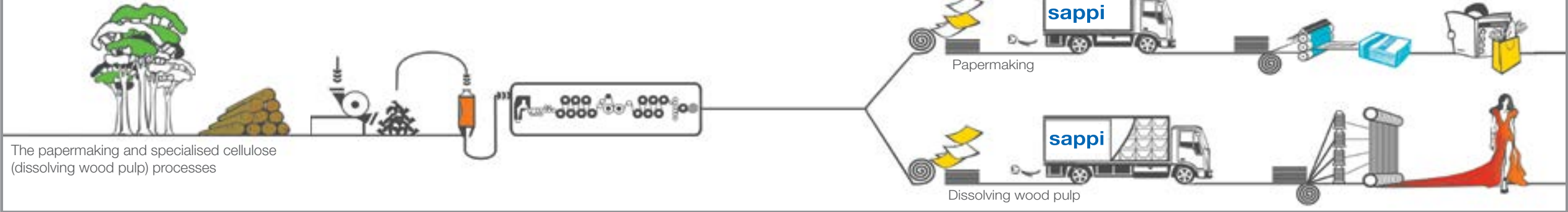
# Our sustainable business model

We have aligned our long-established approach to sustainable development – **Prosperity, People and Planet** – with the IIRC’s\* six capitals model.



Currently, **natural capital, financial capital and human capital** are the most important in our drive to position Sappi as a **profitable and cash-generative diversified woodfibre group – focused on dissolving wood pulp, paper and products in adjacent fields.**

## Our processes





# Our key material issues

The issues set out on the following pages are challenges in our operating environment that we believe may have a material impact on our business by affecting the value we create for stakeholders.

## Governance

### Material issue: a sound ethical culture

Background

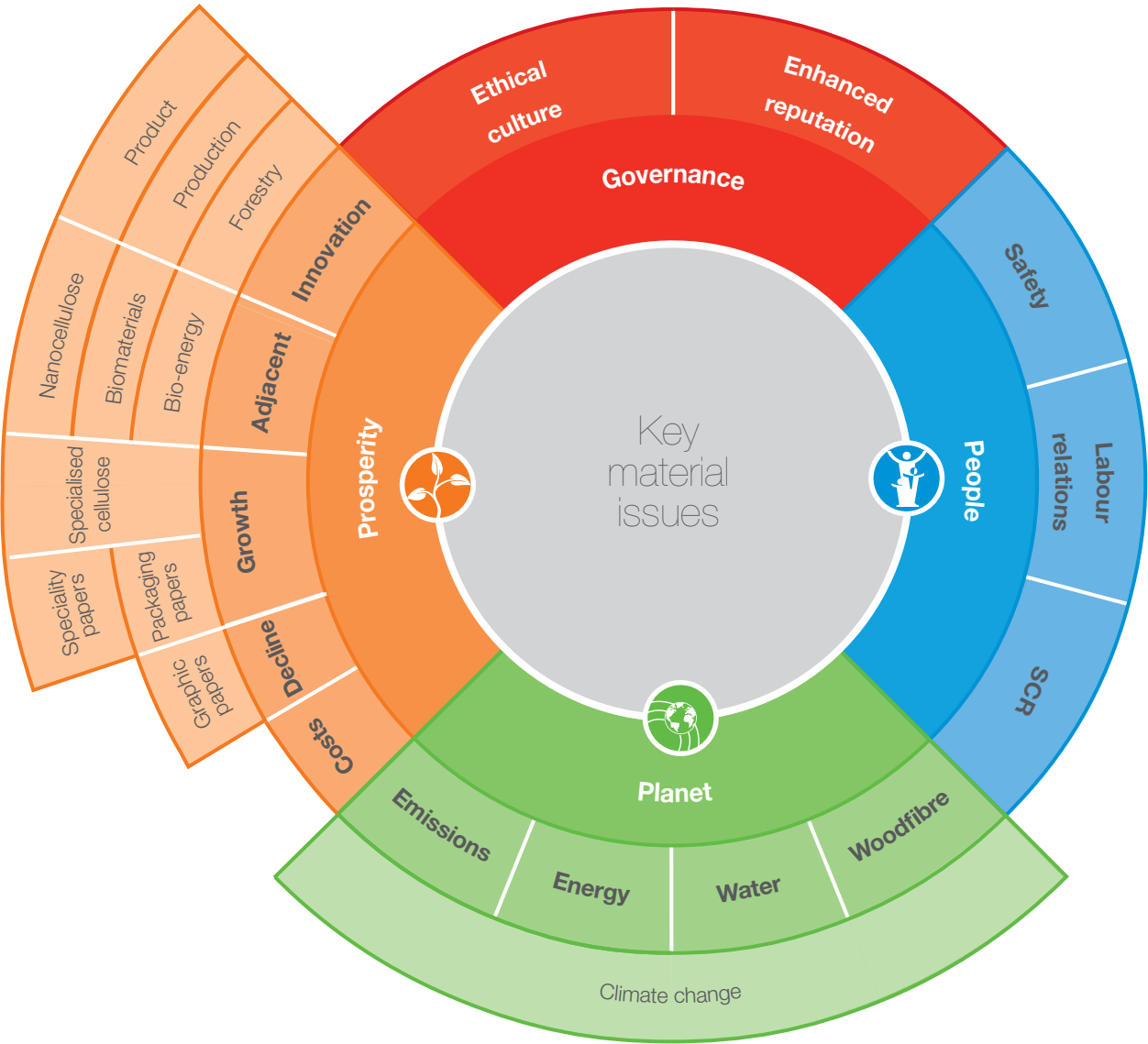
Our reputation, built up over 80 years, is one of our most important assets, and one of the most difficult to rebuild should it be negatively impacted. Accordingly, driving a strong ethical culture is both a moral responsibility and a business imperative.

### Our response

In 2016, we launched a revised Code of Ethics which incorporates the new Sappi values (*At Sappi we do business with integrity and courage; making smart decisions which we execute with speed*), which includes specific policies that guide employee behaviour and incorporates practical examples of possible scenarios which employees might encounter.

The Code has now been translated into the various Sappi languages (English, German, Dutch, Finnish and Zulu) and distributed to all Sappi mills and offices. The roll-out of regional awareness campaigns was accompanied by communications materials including a brochure, posters, letters to stakeholder groups, newsletter and training video and a slide presentation.

These campaigns followed the 2015 roll-out of the One Sappi Mission, Strategy, 2020Vision and Values. A dipstick survey conducted in August 2016 indicated a positive attitude towards the values campaign rolled out in 2015. Of the 4,804 staff members who took part, approximately 80% responded positively (strongly agree or tend to agree) to the statement: “I am sufficiently informed about Sappi’s values.”



## Our key material issues continued



### Prosperity

#### Material issue: costs

##### Background

In the highly capital intensive pulp and paper industry, cost containment is a key pillar of competitive advantage.

##### Our response

In recent years, we have embarked on a number of cost and efficiency projects at our mills, including:

- A new multifuel boiler at the Kirkniemi Mill, capable of firing coal, internal and external biomass, which has reduced energy costs by approximately 26% per annum
- The gas pipeline at Somerset Mill which enables the mill to switch selectively between gas, biomass or oil for energy generation
- Improved lime preparation, also at Somerset Mill, which has sped up the recommencement time after an annual shut
- An increase in capacity of the pulverised fuel power boiler at Ngodwana Mill, and
- A rebuild of the pulp line as well as paper machine (PM11) at Gratkorn Mill in order to enhance paper quality, increase the operating windows of the mill's biggest paper machine and enhance the potential grammage range.

In FY2016, we also embarked on a number of efficiency projects:

- New turbines at Tugela and Saiccor Mills (described on page 25)
- A new woodyard at Somerset Mill (described on page 22)
- Following an investment in Stanger Mill of approximately US\$2 million in the mill's paper machine in 2015, in FY2016 we invested a further US\$4.7 million in the sheeting and finishing operations with a focus on speed, increasing the throughput of our finished A4 products, as well as improving the packaging quality of our products to further benefit our customers, and
- In Europe, we allocated US\$22.7 million for mill upgrades which will be completed by the end of 2016. At Lanaken Mill, the gate-roll coater on PM7 is being replaced with a state-of-the-art film-press coater. With additional adaptations to the drying system and coating preparation, the rebuild paves the way to add weight to the first coating. The investment will enable PM7 to produce the entire portfolio of grades, without compromising on web profile, coating coverage and paper properties. Kirkniemi Mill is undergoing a variety of modifications to its PM3 to increase energy efficiency and further improve quality consistency through better basis weight and moisture profiles.

As part of our ongoing goal of continuous cost reductions, our latest formal programme focuses on procurement and efficiency savings. The intention is to reduce costs by US\$100 million per annum by FY2020 off the FY2015 cost base. We plan to achieve this by:

- Working to strategically identify those areas of our global spend, such as chemicals, purchased pulp and technical goods and services, which will produce important cost savings through a global sourcing approach
- Applying the strategic sourcing process and category management principles to reduce costs across all third party spend areas, and
- Identifying and adopting best in class procurement tools and practices.

#### Material issue: declining demand in some of our traditional markets

Our aspirational 2020Vision sets out a range of medium-term targets with the end goal of substantially increasing EBITDA (earnings before interest, taxes, depreciation and amortisation) by the conclusion of 2020. Expanding our product portfolio underpins this aim. Our response in terms of our targeted business segments is set out on the following pages.

#### Packaging

##### Background

A recent report, *World Packaged Food – Market Opportunities and Forecasts, 2014–2020*, indicates that by 2020, the packaged food market is expected to bring in revenue of US\$3.03 trillion, registering a compound annual growth rate (CAGR) of 4.5% from 2015 to 2020<sup>(1)</sup>.

##### Our response

Our target earnings from our packaging division is 25% of EBITDA by 2020. Our expertise in the food packaging market gives us a competitive edge, as does the growing demand for environmentally sound packaging.

In FY2016, in **Europe**, we launched the following speciality products:

- Building on the success of Algro® Guard, a product family designed to enhance the ability of packaging to protect food products and improve their safety while simultaneously removing steps from the production process, we launched Algro Guard OHG, a new high-barrier paper-based packaging solution. Algro Guard OHG provides integrated barriers that prevent the migration of oxygen and water vapour into packaged products and also make packaging production simpler and more efficient by eliminating the need to apply special coatings or lamination. This paper meets the market demand for alternatives to foil and plastics, reducing both costs and environmental footprint.

<sup>(1)</sup> <http://www.foodprocessing.com/industrynews/2015/global-packaged-food-market-by-2020-will-be-a-3-03-trillion-industry/>

## Our key material issues continued

- We also enhanced our leading position in silicone base papers in the European pressure sensitive adhesive market with new additions to the range of Algro Sol silicone base papers. We introduced lower grammages for Algro Sol SNC in the form of 82, 85 and 98g/m<sup>2</sup>. Produced on the mill's PM2, they are suitable for office applications, offering high volume, good mechanical strength, consistent thickness and outstanding siliconisation properties.

### ALGRO Sol | SNC

Sappi's Algro Guard family of products has recently been awarded The German Packaging Award 2016 in the New Materials category. The award-winning new materials from Sappi's functional papers product group are Algro® Guard OHG and Leine® Guard M. The packaging awards were announced at a ceremony on 27 September 2016 at Fachpack in Nuremberg, Germany. The jury praised Sappi's sustainable paper packaging solutions, which offer innovative integrated barrier and heat sealing properties otherwise only achievable with multi-layer films. The jury also noted the exceptional tactile properties and excellent printability of the Sappi Guard product family.

### ALGRO Guard | OHG

- We expanded our corrugated raw material product line by offering corrugated paper (fluting) and topline. The bright white Fusion® topline is the primary topline product, while the cartonboard Algro Design and the new folding carton atelier™ can also be used as topline. Weights from 90 to 400g/m<sup>2</sup> are available.

In Europe, Sappi now also offers the corrugating medium Ultraflute®, which is manufactured in Southern Africa for the global market.

In response to the high demand for Fusion topline, we expanded production from Alfeld Mill to include production at Ehingen Mill.

Following the conversion of the Alfeld Mill into a centre of excellence for specialities and board, and the scaling up in production of folding box board at Maastricht Mill, Ehingen Mill is now Sappi's third European production site for special papers and board. Previously, the mill produced only high-quality matt and silk graphic papers with single to triple coatings. As a result of the production of Fusion in Ehingen Mill and the associated further quality development, a slightly adapted range of product weights is now offered. In addition to 130 and 140g/m<sup>2</sup>, Fusion is now available in 135g/m<sup>2</sup> and, for the first time, 110g/m<sup>2</sup>. This offers corrugated card processors even more options and creative possibilities, and

- In this region, we are also developing barrier solutions for corrugated card. The mineral oil barrier liner, Leine Guard, has already undergone successful market testing as an inner liner.

#### In North America:

- We launched Neoterix™ST, the first commercial casting and release paper with Sharklet™ bacteria-inhibition technology. The new release paper is the first of its kind which creates surfaces that inhibit bacterial growth without the use of toxic additives or chemicals. The product is the first in our new Neoterix™ line and will be available to customers globally under the name Neoterix ST from 2017.

As with all Sappi's release papers, Neoterix ST acts as a mould for coated fabric and laminates. It is used to transfer texture and gloss onto these surfaces and is then stripped away. According to a published study in *Antimicrobial Resistance and Infection Control*, when applied to high touch surfaces, the microtexture reduced surface contamination of methicillin-sensitive *Staphylococcus aureus* (MSSA) and methicillin-resistant *S. aureus* (MRSA) by as much as 97% and 94% respectively, compared to controls.

- We expanded our LusterCote® packaging line to offer heavyweight options – 70, 80 and 95lb. Produced at Cloquet Mill, these products offer superior performance for offset, flexographic and gravure printing, including wide-format, multi-colour sheetfed presses. In combination with LusterCote 55 and 60lb, the new grades also extend Sappi's offering for cut and stack labels.

#### Graphics paper

##### Background

News, entertainment, and information is increasingly consumed via computers, tablets, and phones instead of paper.

Despite the enormous migration to electronic media, neuroscience research shows that paper-based content and advertisements offer special advantages in connecting with our brains. This is highlighted by a recent article in *Forbes* magazine<sup>(1)</sup> which cites a report showing that direct mail is easier to process mentally and tests better for brand recall.

According to the report, direct mail requires 21% less cognitive effort to process than digital media (5.15 vs 6.37), suggesting that 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%).

<sup>(1)</sup> <http://www.forbes.com/sites/rogerdooley/2015/09/16/paper-vs-digital/#7afd38ba1aa2>



## Our key material issues continued

### Our response

We recognise that the graphics paper 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 medium. We manage our capacity to strengthen our leadership position in this market, realising its strategic importance to the group and maximising its significant cash flow generation. Accordingly, we continue to develop and enhance our portfolio of products to meet the needs of customers who recognise the value of print.

In **Europe**, in addition to high performance offset printing, our Magno® Plus Gloss and Plus Silk high bulk products are now fully certified for use on HP Indigo digital presses – certification which eliminates the need for duplicated stocks, ensuring production flexibility between offset and digital processes.

In **North America** in FY2016:

- We announced the addition of McCoy® Gift Card 28pt to our McCoy line. The McCoy paper brand's premium surface and printability allow for a variety of stand-out printing techniques, including heavy colour saturated imagery, embossing, foil printing and spot gloss. McCoy gift cards have also been engineered for high bond strength to satisfy tape, hot glue and authorisation mechanisms, including scratch-offs, bar codes and magnetic strips.

Additionally, McCoy gift cards' multi-layer structure is optimised for clean-edge, die-cut quality, while the paper stays flat and even through processing, with no feeding issues. Printer feedback from product trials has been very positive, citing McCoy as one of the best performing paper gift cards on the market.

- We also made several recent product and service enhancements to our Opus® and Flo® product lines, including:
  - Increased sheet brightness on Opus to 94
  - Increased sheet brightness on Flo to 90
  - The addition of 120lb cover options to the Flo product line, and
  - Faster availability of size options on Flo products.

Sappi North America is a founding member of the Paper and Packaging Board, an industry-wide initiative under the auspices of the US Department of Agriculture to take steps to stem the decline of paper and grow paper-based packaging demand. The roughly US\$20 million consumer campaign, 'How Life Unfolds', was launched in July 2015 and has already had a measurable improvement in industry awareness and reputation among target consumers.

In **Southern Africa**, we continued to focus on our core market brands like the well-known Typek® office brand which has a high bagasse (sugar cane waste residue) content and offer our customers a range of papers from Sappi Europe in line with our One Sappi strategy.

In 2016, in conjunction with Intertek, we developed a composite called Symbio which is based on cellulose fibres found in trees and polypropylene. Cellulose fibres can significantly increase the rigidity of plastic despite keeping weight low, whilst at the same time giving the material renewable properties. Higher rigidity also means a potentially lower carbon footprint, as less materials are used.

The product is intended for standard injection moulding and extrusion processes. The use of fillers in plastic is already normal, but using these cellulose fibres instead of the traditional fillers reduces the weight by approximately 15%. Mixing 20% to 50% of the cellulose fibres with polypropylene increases the stiffness. The end-product can be easily coloured and the fibres are not visible. It will initially be available with 20% and 40% cellulose content. We see further possibilities to use this technology for car interiors, furniture, consumer electronics and toys.

### Dissolving wood pulp (DWP)

#### Background

The market demand for the use of cellulosic fibres is increasing across a wide spectrum of applications and sustained growth is expected for cellulose fibres in the industrial application over the next five years, according to a recent report<sup>(1)</sup>. The report finds that the apparel and home textile application segments of this market are expected to witness a compound annual growth rate of 9.66% and 9.62%, respectively.

The popularity of cellulosic-based fibres is based on their high levels of absorbency, breathability and softness, as well as wash and wear characteristics.

Their environmental credentials, when compared with petroleum-based fibres, also contribute to their growing popularity.

A potential shortage of cotton supply is expected to accelerate demand for DWP. The International Cotton Advisory Committee (ICAC) is forecasting a supply deficit in the 2016 season, on the back of El Niño and changing Chinese cotton policies. China has historically supported spinners with a rebate on domestically purchased cotton. The policy was amended in 2014, to subsidise cotton farming. However, only one province was offered subsidies, as China looked to unwind its stored inventories. Accordingly, Chinese cotton supply is estimated to have decreased by 6.5% year-on-year in 2015 and is forecast to decrease a further 27% year-on-year in 2016<sup>(2)</sup>.

### Our response

Textiles are the primary market for our DWP, which is sold globally for use in viscose staple fibre (rayon) and solvent spun fibres (lyocell), and we continue to supply smaller quantities into the other DWP market segments. Sappi is the world's biggest producer of DWP and we expect global demand for textiles continuing to grow, particularly in markets such as China, India and Indonesia, due to increasing population growth and affluence in these regions. Forecasts by Oxford Economics put Asia's share of world GDP in real US Dollar purchasing power parity at nearly 45% by 2025, up from 23.2% in 1990<sup>(3)</sup>.

<sup>(1)</sup> <https://globenewswire.com/news-release/2015/10/12/775180/0/en/Cellulose-Fiber-Market-2015-Global-Trends-Forecasts-to-2020-for-the-36-9-Billion-Industry.html>

<sup>(2)</sup> Source: Avior Capital Markets

<sup>(3)</sup> <http://dupress.deloitte.com/dup-us-en/economy/asia-pacific-economic-outlook/2016/q1-asia-economic-growth-continues.html>

## Our key material issues continued

Against this backdrop, we will be expanding our DWP capacity at Ngodwana and Saiccor Mills by 40,000 and 50,000tpa respectively, beginning in FY2017.

In light of our expansion plan and given that, in **Southern Africa**, our DWP is based on eucalyptus fibre, the suspension of the draft genus exchange regulations is a welcome move. The Department of Water and Sanitation (DWS) had intended to use the draft regulations to force timber growers to firstly apply for a licence or amendment to a licence, when switching genera and more importantly, insist on a blanket 30% reduction in plantation area, when switching from pine to eucalyptus.

Forestry South Africa (FSA), supported by the Department of Agriculture, Forestry and Fisheries (DAFF) had for many years contested these requirements and appointed a consultant based at the Council for Scientific and Industrial Research (CSIR) who established a significant error in the initial calculations on which the draft regulations were based. Their error can be demonstrated in the following hypothetical example:

- A grassland uses a hypothetical 100mm of rainfall per annum
- It is planted to pine which uses a hypothetical 110mm of rainfall (10% more than the grassland)
- It is subsequently converted to eucalyptus, which uses 113mm of rainfall (13% more than the grassland and 30% more than the pine)

- DWS erroneously concluded that the area would therefore have to be reduced by 30% due to the eucalyptus using 30% more than the pine, and
- They should instead have required only a 3% reduction in area, as this would bring the water use back to 10% more than the grassland and the same level as the pine which it replaced.

The consultant's findings have been substantiated and it is highly unlikely that the regulations will be reinstated. Accordingly, FSA is advising members that they can switch genera on at least a 1:1 area basis – a development we welcome.

### Adjacent markets: nanocellulose, sugars and lignins

#### Nanocellulose

##### Background

The raw material for nanocellulose, woodfibre, is abundant. Furthermore, nanocellulose is not only lightweight, it has very high tensile strength (eight times that of steel), the crystalline form is transparent, gas impermeable and it is highly absorbent when used as a basis for aerogels or foams.

The nanocellulose market is projected to register a market size in terms of value of US\$250 million by 2019, signifying an annualised compound annual growth rate of 19% between 2014 and 2019<sup>(1)</sup>.

Demand and value are forecasted on the basis of various key applications of nanocellulose, such as composites and packaging, paper and paper board, biomedicine, and other applications, including as a viable alternative to expensive high-tech materials such as carbon fibres and carbon nanotubes.

##### Our response

In 2015, we announced our development of a patented, low-cost nanocellulose process in conjunction with Edinburgh Napier University. This process uses unique chemistry whereby wood pulp fibres can be easily broken down into nanocellulose without producing the large volumes of effluent associated with existing techniques using high amounts of energy. In addition, the chemicals used in the process can easily be recycled and reused without generating large amounts of effluent.

Last year, we also announced that we would be developing this energy-saving process in a pilot-scale plant at Brightlands Chemelot Campus in Maastricht, the Netherlands.

The nanocellulose pilot plant has experienced a number of challenges mainly due to equipment deliveries. Nonetheless, with a number of innovative solutions we commissioned phase I of the pilot plant in March 2016. This allowed the team to manufacture microcellulose (CMF) of excellent quality when compared to our competitors. The highlight for the team was the ability to produce adequate quantity of the product to run a successful paper machine trial at one of our mills.

Phase II was delayed due to late equipment delivery from a few suppliers although our target for the final commissioning remains the end of December 2016 with further optimisation in early 2017 to produce a dry redispersible nanocellulose (CNF).

#### Biobased materials

##### Background

The key components of woodfibre include cellulose, hemicellulose, lignin and extractives. Both cellulose and hemicellulose are polysaccharides containing many different sugar monomers which can be extracted from pulping streams. This offers opportunities with strong, growing market demand for renewable biochemicals from non-food sources as companies intensify their search for 'green' products that offer enhanced sustainability and also offer product value chains with a lower carbon footprint.

##### Our response

One of the pillars of our strategy is to move into new adjacent business fields based on renewable raw materials, ie biomaterials and bio-energy, to extract more value from the production processes. In July 2016, we established a new business unit, Sappi Biotech, to take global responsibility for the commercialisation of new products.

For example, we are looking into ways to use the sugars (as well as lignin and organic acids) extracted from the wood during the pulping process, including entering into partnerships to modify these extracts into higher value products for use in a wide variety of applications.

<sup>(1)</sup> <http://www.marketsandmarkets.com/PressReleases/nanocellulose.asp>

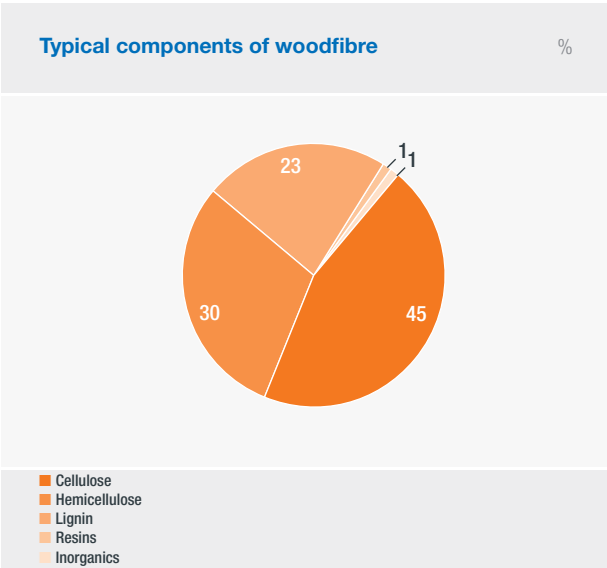


Our key material issues *continued*

The biorefinery process for second generation hemicellulose sugars at Sappi involves recovering them from the prehydrolysate liquor and then separating them from the associated lignin and organic acids. There are various levels of processing and purification depending on end uses. The products we are targeting include sugar alcohols such as xylitol (a low energy sugar substitute), lactic acid (used in the production of polylactic acid (PLA), a renewable plastic), glycols (the main applications being for the production of PET for plastic bottles) and unsaturated polyester resins and other products.

Second generation sugars are attractive because they do not compete with first generation sugars which are sourced from agricultural crops. This is extremely important because of a rapidly growing global population and worldwide pressure on agricultural resources.

The construction of a second generation sugar extraction demonstration plant at Ngodwana Mill in South Africa will begin in 2017, with the feedstock supplied from the DWP line. The demonstration plant will make it possible to study the next generation dissolving wood pulping process and test new ideas at mill scale. The main features which we hope to demonstrate include increasing production output, higher DWP quality, lower operating costs and a new optimised hydrolysate revenue stream. The products from the demonstration plant will assist in the development of various beneficiation options for the different DWP lines operated by Sappi.



Bio-energy  
*Background*

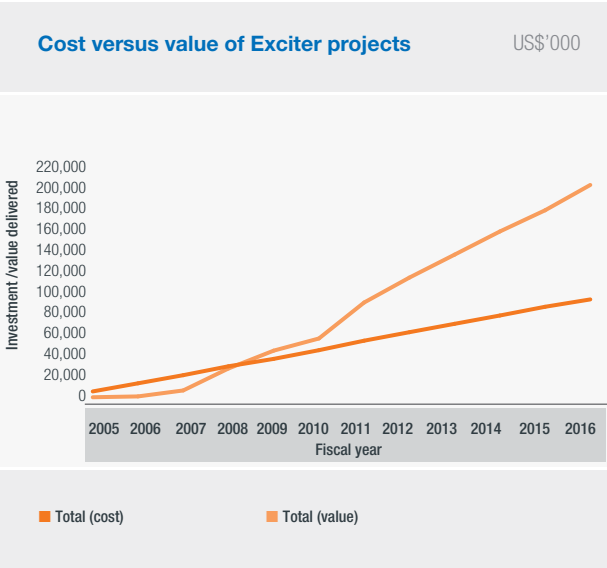
As the world looks to move away from fossil-based fuels in view of the need to reduce carbon footprint and mitigate global warming, so bio-energy is becoming increasingly important.

*Our response*  
In **South Africa**, the government’s Renewable Energy Independent Power Producer Programme (REIPPPP) is the result of the national need to increase energy capacity and reduce carbon emissions. Sappi submitted the Energy Biomass Project at Ngodwana Mill to REIPPPP 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 would generate 25MW of electrical energy which would be fed into the national grid. We are still waiting for regulatory approval.

**Material issue: innovation**  
*Background*  
The world is increasingly recognising the value of products based on woodfibre, so that opportunities are opening up to supply products, processes and services based on this renewable, biodegradable natural resource.

*Our response*  
Our R&D initiatives focus on consolidating and growing our position in our targeted market segments; driving cost competitiveness and cost reduction; as well as optimising our equipment and forestry assets.

Our total R&D spend in 2016 was US\$26 million, including spend of approximately US\$7 million on our Exciter programme which focuses on core business (Exciter I) and new and adjacent business (Exciter II).



In FY2016, the focus for Exciter I projects (core business) was on cost reduction, developing new products and optimisation of current processes. Over the past year, in addition to working on spray blade coater and stock preparation development, we focused on:

- Cost reduction through novel innovations for the paper industry
- Processing in our pulp and paper mills, including the potential inclusion of lower cost species in the timber furnish for DWP pulp production and ongoing work on the economic feasibility of sugar extraction
- The evaluation of disruptive processes or technologies for DWP manufacture and/or conversion
- Improving our DNA Fingerprinting Platform which has been in commercial use since 2008, and
- Breakthrough papermaking processes, including cost-effective concepts for coated fine paper by significantly decreasing variable costs and the use of CMF/CNF in papermaking.

Exciter II (new business) is primarily focused on new technologies in adjacent areas to the current business. In FY2016, we focused on:

- The development of products for adjacent markets, including paper for plastic projects which focused on delivering renewable raw materials and biodegradable products as alternatives to plastic products
- Biorefinery, as well as organic acids and lignin platforms, and
- New commercial revenue streams in the release field and active and intelligent packaging as well as the development of fibre-based composites.

## Our key material issues continued



### People

#### Material issue: safety

##### Background

Safety is not only an ethical issue, but also a business issue which can impact productivity, costs and reputation.

##### Our response

We regret to report that tragically, there was one own employee and three contractor fatal injuries during the year in **Southern Africa**. The severity of these accidents was reflected in the increased Injury Index (II) for own employees and contractors.

There was no significant improvement in the own employee LTIFR of all regions during FY2016, although there was an improvement in contractor LTIFR. All regions recognise that we will not improve our safety record by treating safety in the same way we have done so in the past. Consequently, in 2017, all regions are introducing new safety initiatives in order to significantly improve safety going forward.

In **Southern Africa**, Sappi Forests commissioned consultants from Finland and New Zealand to spend two weeks each in the forestry operations to evaluate practices and make recommendations for improvement. During 2017, the region will be embarking on a *Twice as safe* programme to halve the number of accidents by 2020.

The programme will involve all employees in manufacturing and forestry from the CEO down, to line management, supervisors, trade unions and health and safety representatives. The programme, which will be facilitated by an industrial psychologist, will address issues like fatigue, communication, risk tolerance and at risk behaviour. Contractors will be involved in all safety decisions and the Sappi Forests division will also focus on forestry contractor supervisor training and a chainsaw operator evaluation, gap analysis and a retraining programme.

#### Material issue: labour relations

##### Background

Sound labour relations are important in creating a harmonious working environment, enhancing productivity and maintaining a healthy turnover rate.

##### Our response

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.

Sappi promotes freedom of association and engages extensively with representative trade unions. Globally, approximately 60% of Sappi's workforce is unionised, with 71.5% belonging to a bargaining unit.

Overall, FY2016 was characterised by amicable, but tough negotiations, and relatively good relationships with organised labour across the geographies.

In **Europe**, approximately 72% of our employees belong to a union and are represented through work councils. European Works Council meetings take place twice a year at which Sappi is represented by the Chief Executive Officer and Human Resources Director. The main purpose of the meetings is to inform and consult on business results/market developments and pan-European organisational topics.

The overall labour relations climate in this region continued to be constructive. We concluded a collective labour agreement (CLA) at Kirkniemi Mill and are engaging with local union leaders to conclude a CLA at Maastricht Mill. The CLAs for the other mills are due for review in 2017.

In **North America**, approximately 65% of our employees are members of a union and there are 11 collective bargaining agreements with hourly employees in place.

There were no major disputes in this region. During FY2016, we settled labour agreements with trade unions at Somerset, Cloquet and Westbrook Mills, the security union at the Somerset Mill and the two small railroad unions at Cloquet Mill. These new agreements contain economic provisions similar to those negotiated with the production workers at all three mills during FY2015.

In **Southern Africa**, approximately 47% of the total workforce is unionised. In 2015, a new recognition and threshold agreement was concluded with the majority union, the Chemical Energy, Paper, Printing, Wood and Allied Workers Union (CEPPWAWU).

The labour relations climate in **Southern Africa** was volatile, mainly due to trade union rivalry. However, the mills continued to enjoy labour stability owing to ongoing positive engagement with union leadership facilitated by structures such as the National Partnership Forum which includes senior members of management and senior union leaders. They hold regular meetings where business, safety and union challenges are discussed.

While collective bargaining during FY2016 was extremely tough, we once again successfully concluded wage negotiations without industrial action in all sectors – forestry, pulp and paper, as well as sawmilling.

#### Material issue: investing in communities

##### Background

Corporate Social Responsibility (CSR) investment can enhance a company's social licence to operate; build reputation and employee morale; help establish customer loyalty and attract talent. Community investment is particularly important in Southern 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 key material issues continued

### Our response

Sappi’s CSR policy provides a global framework used by each operating region to guide local activities. The policy reflects community need, government priorities and business strategy as well as global developments including the emergence of sustainability/CSR standards and reporting.

Projects are aligned with and support business priorities and needs, taking into account feedback from our stakeholders.

In each region where we operate, we invest in three key stakeholder groups: our customers, communities and employees. While each region has its own programme, these conform to common themes which are aligned with our business needs and priorities and which include education, local community support, the environment and health and welfare. We encourage employees to participate in outreach and community projects.

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.

The fact that Sappi is headquartered and listed in South Africa, coupled to the significant development needs of the country, dictates a higher focus on CSR activities by Sappi in Southern Africa.

Our CSR initiatives in 2016 are described in more detail in our group sustainability report, available at [www.sappi.com](http://www.sappi.com), but a snapshot is set out below to give an overview of these initiatives.

In conjunction with Natuur en Bos, **Sappi Europe** continued with their employee-led tree-planting programme, planting a further 4,000 saplings in the Forêt de Soignes in Belgium. This brings the total number of trees planted by the group to over 16,000 since the initiative started six years ago.

Now in its 17th year, the annual Ideas that Matter (ITM) programme in **North America** continues to provide financial support to designer applicants who create and implement print projects for social impact. The programme is open to North American designers who have partnered with a non-profit organisation and developed a communication campaign that is ready for implementation. This year’s winning projects were chosen for the effective way they address pressing social issues including rural healthcare and pharmaceutical misuse, literacy, childhood development and the importance of play, education and leadership in war-challenged international communities, girls and youth development and traumatic health issues for children and their families.

Since 1999, the ITM grant programme has funded over 500 non-profit projects and has contributed more than US\$13 million to a wide range of causes that use design as a positive force in society.

To encourage more engagement and involvement from employees, in 2017 we will be launching an employee ITM programme.

### In **Southern Africa**:

- There is a proven causal link between early childhood development and success and wellbeing later in life. 2016 was the third year of our ECD project in KwaZulu-Natal, which covers 25 sites through the Training and Resources in Early Education (TREE) organisation, with the project expanding to include an additional 18 sites from the end of 2016. In Mpumalanga province, the development of an ECD Centre of Excellence at the Sappi Elandshoek community through Penreach is delivering strong results. We have also extended the ECD programme in Gauteng, with 50 practitioners in 50 ECD centres per year undergoing training through Jabulani Training and Development.
- We continue to support five PROTEC branches in Sappi communities (maths and science classes for over 1,000 students in grades 10, 11 and 12) as well as the KwaDukuza Resource Centre.

- Possibly the highlight of the year under review was the success of our youth development project called Abashintshi (‘the Changers’ in Zulu), implemented in conjunction with a development communication agency. The project involves using young people from the rural communities living in and around our operations across KwaZulu-Natal to mobilise their communities to take charge of their own future instead of waiting for work or development to arrive from outside, in line with the asset-based community development (ABCD) model. The programme began with 18 young volunteer men and women in 2015 and has now expanded to include 36 people.

Over the last two years, these 36 change agents have reached more than 18,500 people in their respective communities. Overall, almost 330 people have been taught some basic business skills which has resulted in more than 120 micro enterprises either starting up, or being rejuvenated. The Abashintshi have also mobilised communities to become involved in fire prevention with significant results – the average number of fires in 2016 is the lowest in six years.

### Social investment spend in 2016 and budgeted spend for 2017

Total	Spend 2016	Budget 2017
Europe	US\$98,200	US\$90,900
North America (ITM US\$250,000)*	US\$577,362	US\$580,000
Southern Africa	US\$2.5 million	US\$3.85 million
Additional once-off spend by Sappi Forests on capex items for villages including solar geysers, etc	US\$1.36 million	

\* The figures given here for Sappi North America differ from the SNA regional report as the figures in the latter include the value of steam donated to a local hospital from Westbrook Mill as well as our beneficial use of by-products from Cloquet Mill.



## Our key material issues continued



### Planet

#### Material issue: woodfibre

##### Background

The global demand for woodfibre is expected to increase for the foreseeable future, driven partly by the demand for wood pellets rather than finite fossil fuels as a green energy source. This is expected to accelerate as more and more countries commit to mitigation actions on climate change. In 2015, global wood pulp prices climbed past the previous peak from 2011, which was the highest price point in more than 30 years<sup>(1)</sup>.

In addition, climate change has the potential to seriously impact our fibre base. In all three regions where Sappi operates, 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.

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

##### Our position

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

In **North America**, we recently announced a US\$25 million capital project to update Somerset Mill woodyard. This project will allow the mill to modernise the wood debarking, chipping and chip distribution systems, thereby improving reliability, reducing white wood losses and costs while enhancing efficiency gains through the increased production of wood chips. The improved quality will decrease the cooking time within the digester, while the increased chip volumes mean the mill will no longer purchase woodchips from the external market.

The commissioning of the new system will be complete by the end of November 2017, following a temporary woodyard shutdown for installation. Specifically, upgrades will be made to the log infeed, debarker, chipper, chip transfer system, woodroom controls and bark handling.

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

In **Southern Africa**, the fact that we own and lease 388,000 hectares (ha) of plantations gives us a competitive advantage. Of this 388,000ha, 249,000ha is used to grow trees, with a further 139,000ha being used for other purposes such as conservation. We have access to wood from a further 103,000ha via contracted timber suppliers. 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. Work to enhance the sustainable management of our plantations and fibre base in FY2016 included:

- The acquisition of LiDAR (Light Detection and Ranging) data for all Sappi land holdings primarily for the purpose of determining ground roughness and slope (important variables for harvesting). LiDAR produces a very accurate three-dimensional point cloud (six points per m<sup>2</sup>). In addition to slope and ground roughness, these data were used to extract tree heights at a compartment level. Tree measurement, using LiDAR, is significantly better than the conventional 3% sampling approach conducted by Sappi as it is essentially a census of the tree growth in a compartment. It measures tree height, a main driver of growth, very accurately. Extensive testing was carried out, and the LiDAR data correlated extremely well with recent in-field conventional measurements (correlation greater than 90%). Growth data for approximately 50% of Sappi's planted area was updated using this methodology

- We continued to focus on the development of genomic methods for the selection of superior individuals to potentially shorten the breeding cycle. Pure species development is ongoing, with selected individual genotypes being captured through grafting. Trials on seed use efficiency, aiming to make best use of scarce seed resources, whether for breeding or in the nursery continue
- Hybrid production of both pines and eucalypts continues, and various hybrid combinations are being tested across Sappi land holdings. Work is being done to improve the growing environment for cutting production, to refine plant quality specifications and to investigate media and media enhancements to promote growth
- In the field, cold tolerance trials and insecticide investigations look for ways to counter biotic and abiotic threats, while methods of land preparation, fertiliser treatment and site selection seek to give plants the best possible growth, while studies on wood properties seek to add value to the pulping process
- We began to test *Corymbia henryi*, a promising potential new species choice which can tolerate salt-laden coastal winds and is slightly tolerant to frost (0 to -5° C), and
- We have used near infrared spectroscopy (NIRS) to develop baseline models representing a range of wood chemical traits. These models are being used to predict the wood property of large numbers of genotypes in tree breeding trials and the technique is being investigated as tool for scanning chips in our pulp mills for rapid assessment of important traits such as moisture and wood density.

<sup>(1)</sup> <http://www.pulpapenews.com/2016/02/wood-pulp-and-paper-prices-continue-to-rise>

## Our key material issues continued

In terms of climate change, we mitigate risks 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 light of changing environmental factors, thus helping to mitigate any increased threat from water shortages or drought
- Maintaining wide genetic variability in planting material, including drought resistant breeds
- Measuring permanent sample plots annually (eucalypts) or bi-annually (pines) to determine the effect of drought for use in long-term planning
- Proactively implementing innovative pest and disease programmes
- Maintaining a broad genetic base, thereby facilitating response to new challenges such as pests, disease and climate change while providing continuous genetic improvement over the long term, and
- Implementing an extensive fire protection strategy, as climate change exacerbates the potential for fires.

In **Southern Africa**, we work to expand access to the forestry sector in a number of ways, including:



- **Khulisa Umnotho** (Project Grow), our enterprise development initiative which began in 1983, is aimed at community tree-farming and has successfully uplifted impoverished communities in KwaZulu-Natal and the Eastern Cape. The total area currently managed under this programme amounts to 22,717ha. In FY2016, under the programme, 395,232 tons (2015: 361,134 tons), worth approximately US\$20 million was delivered to our operations. Since 1995, a total volume of 2,865,360 tons, to the value of ZAR1.3 billion, has been purchased from small growers in terms of this programme.

In recent years, we have expanded Khulisa Umnotho beyond the borders of KwaZulu-Natal to the Eastern Cape. We have signed a Memorandum of Understanding with the Eastern Cape Rural Development Agency (ECRDA) to facilitate forestry development in this region. To date, the total area planted covers 3,297ha and a further 4,812ha is in the Environmental Impact Assessment phase, with records of decision awaited on a further 1,250ha. For further details, please see our Khulisa Project Grow FAQ, available at [www.sappi.com](http://www.sappi.com)

- We are also active in land reform. As at the end of September 2016, Sappi was involved in 51 land reform projects with the average farm size of 218ha to the largest project of approximately 6,900ha belonging to the Somhlolo Community Trust. Many of these properties previously belonged to commercial farmers who had supply agreements with Sappi. To ensure sustainable production from these properties, we have entered into supply agreements with the new beneficiaries and have also provided assistance. This 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 but also incorporates development objectives whereby Sappi provides technical and business training as well as administrative support, and

- To further assist with the development of small growers and other forestry value chain participants, we have established a training centre at Richmond in KZN. The training centre has Khulisa Ulwazi ('Growing Knowledge') as its slogan and will be providing training to small growers, land reform beneficiaries and small scale contractors in the technical and business aspects of forestry and small business management. (See page 31 of the 2016 Sappi Southern Africa Sustainability Report for further details.)

### Material issue: emissions regulations and carbon tax

#### Background

The so-called Paris Agreement – adopted by all 196 parties to the United Nations Framework Convention on Climate Change at COP21 in Paris on 12 December 2015 and which came into force on 04 November 2016 – urges countries to implement policies that would allow them to keep a global temperature rise below two degrees Celsius. The global forest products industry has a highly significant role to play in the implementation of these targets.

We believe that any policies aimed at curbing emissions and introducing carbon tax need to take 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 key material issues continued

## Our response

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 industry. In 2016, globally Sappi's generation of renewable energy (derived from black liquor, sludges and biomass) was 52.9% – an increase of 5.1% over five years. Of this amount, just over 75% (2015: 73%) is own black liquor. In addition, over five years we have achieved a reduction in direct (Scope 1) emissions of 4.7% and 20.55% in indirect (Scope 2) emissions., representing a decrease in absolute emissions intensity (Scope 1 and 2) of 8.8%.

As forests grow, carbon dioxide (CO<sub>2</sub>) is removed from the atmosphere via photosynthesis. This CO<sub>2</sub> is converted into organic carbon and stored in woody biomass. Trees release the stored carbon when they die, decay or are combusted. As the biomass releases carbon as CO<sub>2</sub>, the carbon cycle is completed. The carbon in biomass will return to the atmosphere regardless of whether it is burned for energy, allowed to biodegrade or lost in a forest fire.

The net impact of these processes is that CO<sub>2</sub> flows in and out of forests and through the forest products industry by both biomass combustion and sequestration in products.

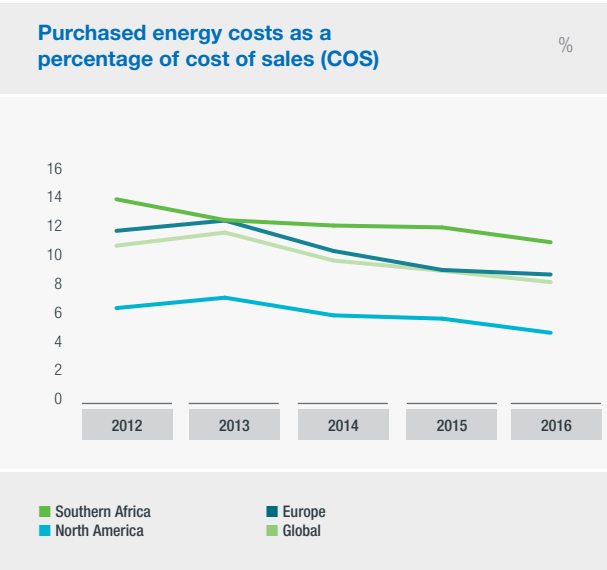
Overall, the flow of forest CO<sub>2</sub> is carbon positive when forests are sustainably managed and the forest system remains a net sink of CO<sub>2</sub> from the atmosphere. Thus, the carbon neutrality of sustainably managed forest biomass is a scientifically supported fact.

The carbon neutrality of biomass harvested from sustainably managed forests has been recognised repeatedly by an abundance of studies, agencies, institutions, legislation and rules around the world, including the guidance of the Intergovernmental Panel on Climate Change and the reporting protocols of the United Nations Framework Convention on Climate Change.

Our view is that any emissions regulations or carbon tax must take account of the carbon neutrality of biomass.

In terms of carbon taxes, we continue to monitor the situation in each region where we operate. In **North America** and **Europe**, carbon taxes do not appear to be an imminent risk. In **Southern Africa**, 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. We are pleased to report that the DEA has accepted our proposed carbon budget which is valid until 2020.

## Material issue: energy



## Background

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

## Our response

Even though globally our energy costs as a percentage of cost of sales have declined over five years due to actions taken, it makes business sense for Sappi to aggressively manage energy usage and promote the generation of renewable energy. We aim to reduce our carbon footprint by improving energy efficiency and decreasing our reliance on fossil fuels. We have and will continue to achieve this by making process changes, installing more efficient equipment, reducing purchased energy (electricity and fossil fuel) by increasing our use of renewable energy – an approach that ultimately results in a reduction in CO<sub>2</sub> emissions.

Over five years, we have achieved a reduction in internal energy consumption of 8.8% and a reduction in energy intensity of 2.1%, as well as an increase in energy self-sufficiency of 10.5%.

Our energy efficiency is enhanced through our extensive use of cogeneration and through our ongoing drive to make process improvements and install more efficient equipment. Globally we have developed and constructed five hydro, two gas and 31 steam turbines which generate around 800MW of renewable power on 14 sites across seven countries.

Most Sappi mills generate power onsite from fossil or renewable resources for internal consumption. In some instances (Westbrook Mill (North America), Gratkorn and Maastricht Mills (Europe) and Ngodwana Mill (South Africa)), excess energy is generated which is sold back into the power grid. This energy is used for district heating in the vicinity of Sappi's plants and for export into the public grid, thereby replacing fossil fuels. In this way, roughly 100,670 metric tons CO<sub>2</sub>e emissions were avoided during the past five-year cycle<sup>(1)</sup>.

In the USA, the country's energy profile is only 10% renewable energy whereas the pulp and paper industry uses 54.5% and Sappi **North America's** use of renewable energy is over 70%. This is a significant competitive benefit not just in terms of costs, but also in terms of customers choosing papers with a lower environmental footprint<sup>(2)</sup> and as a result we have the lowest reported greenhouse gas emissions amongst the major domestic coated freesheet suppliers.

<sup>(1)</sup> 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.

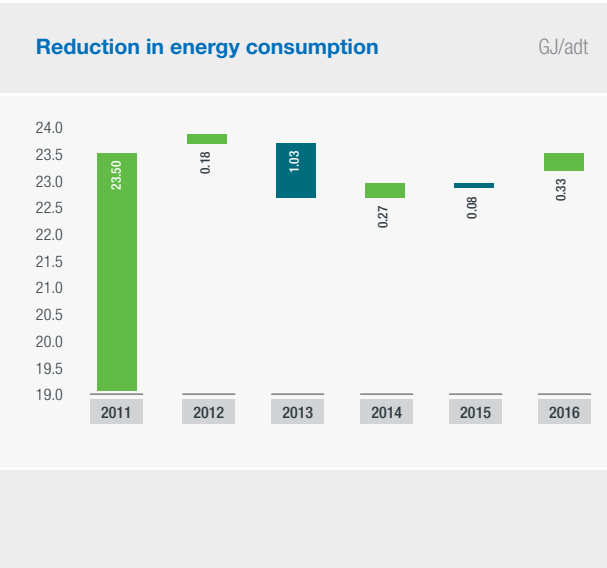
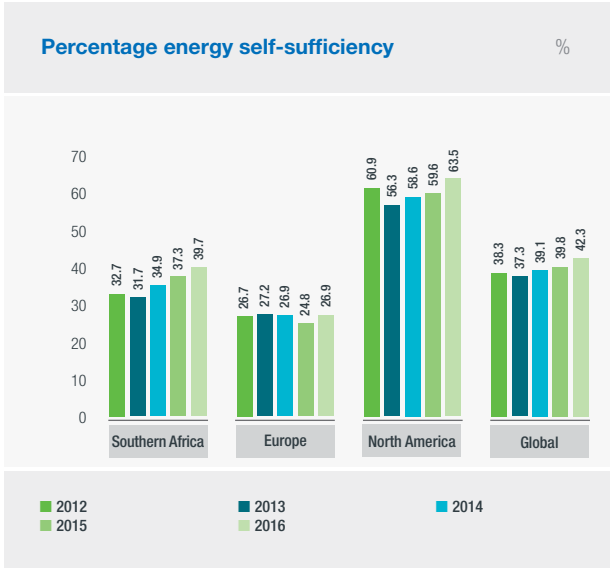
<sup>(2)</sup> [https://www.eia.gov/forecasts/aeo/data/browser/#/?id=37-AEO2016&cases=ref2016~ref\\_no\\_cpp&sourcekey=0](https://www.eia.gov/forecasts/aeo/data/browser/#/?id=37-AEO2016&cases=ref2016~ref_no_cpp&sourcekey=0)

# Our key material issues continued

In **Southern Africa**, we have embarked on two new energy projects:

- At Tugela Mill, we have installed a new turbine and applied for the project to be registered under the South African government’s co-generation Independent Power Producer Programme, and
- At Saiccor Mill, we are replacing three turbine generators with a high efficiency steam turbine generator set. This will eliminate wasteful steam venting during process upsets, allow for efficient boiler operation and mitigate the impact of an Eskom electricity supply interruption. It will also reduce the amount of imported power purchased from Eskom, thereby increasing power self-sufficiency to approximately 69% and enhancing the mill’s cost competitiveness. In addition, it will improve coal-fired boiler operation as the occasional oversupply of steam due to the cyclical nature of the steam demand will be handled via the condensing turbine set rather than by increasing or decreasing boiler steaming rates. It is expected that the boiler steam to coal ratio will improve by 6% as a result of running these boilers at an optimal rate. Annual savings are estimated to be approximately US\$4.9 million based mainly on reduced power purchases.

Also at Saiccor Mill, in FY2016, we established a pilot scale plant at the mill to assess the use of anaerobic digestion to treat Saiccor Mill’s waste condensate. Rich in organic matter, the condensate could be treated via 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 external sales to the national grid. This has significant implications for the mill’s energy costs, as 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.



## Material issue: water **Background**

The United Nations estimates that by 2030 almost half of the world’s population will live in areas of high water stress. Human population growth and consumption are the leading drains on global water supplies.

## Our response

Our production processes depend on water, as does woodfibre, our primary input. Globally, we return 92% of the water we extract back into the environment after it has been treated and cleaned. Of the 8% balance, approximately 4% exits the mill in the form of production, while the remainder is lost to the environment. Globally, over five years, we have achieved a positive result in effluent concentration by reducing chemical oxygen demand by 0.5% and total suspended solids by 36.5%.

Of all the regions where Sappi has operations, **Southern Africa**, which is a water-stressed region and which has been experiencing its worst drought in many years, has been most severely affected.

To mitigate the impact of low flows on the Umkomazi River, the prime source of water to Saiccor Mill, we have completed a project to raise the Comrie Dam wall, upstream of Saiccor Mill, tripling the amount of water in the dam. However, we still await a water use licence from the regulatory authorities. At Ngodwana, Tugela and Stanger Mills we are focusing on internal modifications which involve the more efficient use of water.



# Our stakeholders

By determining our most material issues through stakeholder engagement, we clarify and confirm the strategic themes that ascertain our most significant risks and opportunities.



## Our key relationships

Proactive, constructive stakeholder engagement is at the heart of our drive to integrate sustainability into our everyday business processes.

We engage with those stakeholders who have the most material impact on our ability to implement our business strategy and achieve our goals, as well as those who are most affected by our activities. Building relationships with them 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, we 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 ascertain 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.

Accordingly, we engage with a broad range of stakeholders through a variety of formal and informal channels – from ongoing engagement across all our stakeholder groupings, including investors, 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, and
- **Responsiveness** – engaging with stakeholders on these issues and giving regular, comprehensive, coherent feedback.

Our main stakeholder groupings, as set out in our Group Stakeholder Engagement Policy (available on [www.sappi.com](http://www.sappi.com) ⓘ), are set out in this section, together with selected examples of engagement undertaken during the reporting period.

### Strategic shift

As a global business, with our products sold into more than 150 countries, our ability to connect with stakeholders as One Sappi, motivated by our revised Mission, Strategy, 2020Vision 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 invest in future talent while challenging our people so that they are able to seize the opportunities presented by global megatrends. 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.
- Group values and Code of Ethics.

## Ongoing avenues of engagement

Our group and regional CEOs engage with staff through regular site visits, presentations and discussions; suggestion lines exist at some facilities, and unions have formal channels through which they engage with management.

We encourage full engagement between managers and their staff. Other avenues of engagement include:

- Global, regional and local newsletters
- Our global Intranet
- Letters, roadshows and presentations by the group CEO as well as regional CEOs
- Operating unit meetings, briefings and workshops
- Various forums (SSA):
  - National Employment Equity and Learning Forum
  - Shop Steward Forum
  - National Partnership Forum
  - Transformation Steering Committee
- Global Employee Engagement Survey (every second year)
- Wellbeing committees at mills and business units
- Health and safety committees at mills
- Global Technical Innovation Awards and Global Sappi Limited CEO Award for Excellence, and

- Regional recognition awards:
  - **SEU:** The annual Coryphaena award
  - **SNA:** The quarterly Risk Taking and Ingenuity awards
  - **SSA:** The Excellence in Achievement (EAA) awards
  - **Sappi Trading:** The Gold SMART awards.

Ongoing training and development initiatives, training targets in each region.

Targeted training and engagement programmes in each region regarding sustainability.

In Southern Africa, we operate bursary programmes and Engineers in Training and Foresters in Training programmes, and support further education and training (FET) colleges.

In this region, our employees also have access to the Earth Kind Agent eLearning game by which they are exposed to Sappi's sustainability information in a new and innovative platform. To date, approximately 900 employees have played the game. A tablet version of the game enables children, family and friends of employees to access the game.



# Our key relationships – Employees continued

Engagement in 2016	Value add
<p>The new global Sappi Mission, Strategy, 2020Vision and Values were launched in August 2015 by the group CEO. The roll-out of this initiative was supported by a robust communications and engagement campaign to ensure that all staff internalised the new approach and adjusted their focus and behaviours accordingly.</p> <p>In August 2016, we conducted a snap survey of the roll out. Of the 4,804 staff members who participated, approximately 80% responded positively (strongly agree or tend to agree) to the statement: “I am sufficiently informed about Sappi’s values.” The survey rated which communication mechanisms were most effective in informing staff about our new values. Newsletters and eMails scored highest overall. Per region, other mechanisms (meetings, videos, and workshops, other written material, slide presentations, team meetings, Sappi Net and information from management) also proved effective. Workshops were generally regarded as the least effective.</p> <p>We have initiated follow-up actions to the Employee Engagement Survey conducted during September 2015.</p> <p>In FY2016, average global training spend per employee amounted to US\$529.</p>	<p>In all regions, we encourage employees to participate in outreach and community projects. For example, in <b>North America</b>, we support the Portland (Green Neighbour Festival). The festival has a 5km run/walk affiliated with the event which supports clean water education. For two consecutive years, Sappi has been recognised by event sponsors for having the largest team in the event.</p> <p>In <b>Europe</b>, the Green Ambassador and Eco-effectiveness campaign launched in 2015 continued to gain traction, helping to bring the concept of sustainability from management levels and boardroom meetings to the shop floor. In 2016 we linked the campaign to the annual Sappi safety week so that corporate responsibility is seen within its broadest context.</p> <p>In <b>North America</b>, we:</p> <ul style="list-style-type: none"> <li>Continued with our sustainability ambassador, enhancing development and growth through engagement (EDGE) and leadership excellence and development (LEADS) programmes – in 2016 the latter focused on critical thinking</li> <li>Extended the Ideas that Matter (ITM) programme (described on page 78 of this report) which recognises and supports designers who support good causes to an employee ITM programme.</li> </ul> <p>In <b>Southern Africa</b>:</p> <ul style="list-style-type: none"> <li>The Sappi Leadership Academy saw a group of 15 complete the programme in 2016 and a new group of 24 employees began in August 2016, due for completion in 2017</li> <li>The region also focused on first line manager development, and</li> <li>A new learning management IT solution was implemented which involves job-specific skills gap analyses for employees to replace the generic personal development planning done in the past. The system will go live to the rest of Sappi in 2017.</li> </ul> <p>Although our combined own employee and contractor Lost Time Injury Frequency Rate declined, regrettably there were four fatalities in Southern Africa involving one employee and three contractor fatalities at our sawmilling and forestry operations.</p> <ul style="list-style-type: none"> <li>Engaged employees are pivotal to the success of our business – alignment with our strategic direction enables our people to contribute more positively to the business as well as their personal and career development.</li> <li>By building our human capital, we enable delivery of our 2020Vision and establish a base of the technical skills needed by the industry.</li> </ul>



# Our key relationships – Unions

## Management approach

Given today’s extremely challenging global economic conditions and the current socio-economic dynamics in the Southern African labour market, we prioritise our relationship with our employees and their representatives. Protecting the right to freedom of association and collective bargaining is fundamental to the manner in which Sappi does business. Globally, approximately 60% of our workforce is represented by unions, with 71.5% 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

- **SEU:** Negotiations occur at the various country and industry-specific collective labour associations, and the contract terms range from one to two years. The labour framework in **Europe** consists of works councils and collective labour agreements and differs from country to country.
- **SNA:** The majority of our hourly employees – generally production unit employees – are represented by the United Steelworkers (USW) union, but employees are also represented by various craft, guard and railroad unions. In this region, labour agreements are usually for three years.
- **SSA:** Our wage negotiations with recognised trade unions take place at the pulp and paper and sawmilling chambers under the auspices of the Bargaining Council for the Wood and Paper Sector in South Africa, and our agreements are generally annual. In this region, 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 National Partnership Forum.

## Engagement in 2016

Overall, FY2016 was characterised by amicable, but tough negotiations and relatively good relationships with organised labour across the geographies. More comprehensive details are provided on page 63 of this report.

## Value add

Meaningful engagement on a number of issues affecting both business and employees results in:

- Improved relationships
- More stable labour force, and
- Enhanced productivity.



## Our key relationships – Communities

### Management approach

Having a mutually respectful relationship with the communities in which our business is 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 which facilitate partnerships and collaboration between communities, government and the private sector.

### Areas of mutual interest

Key issues discussed on a regular basis include employment, job creation and business opportunities, economic and social impacts/contributions and community support. Environmental issues relate to water usage and quality, effluent quality and air emissions.

### 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. In **Southern Africa**, there are local farmer and community forums related to our forestry communities.

**Globally**, we 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.

### Regionally

- **SEU:** Each Sappi mill and sales offices support various local education, cultural and environmental projects based on annual requests and identified needs. We also 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.
- **SNA:** Each business unit has a lead sustainability ambassador who is responsible for supporting sustainability communication, conducting training and fostering community engagement through local projects. Education programmes are supported at targeted colleges and universities, as are programmes to encourage study in fields relevant to our operations. Corporate sponsorships support organisations like Living Lands & Waters focused on environmental stewardship and education.

- **SSA:** We support mountain biking and trail running, which promote access to our plantations and enables us to communicate with an influential and growing group of stakeholders regarding the positive messages around our forestry operations. We support the Sappi Karkloof MTB (Sappi Karkloof Classic Festival and Trailblazer Event and Sappi Karkloof MTB Recreational Club); the Sappi Mankele Mountain Bike Challenge; and the Sappi Howick MTB Classic. We have also provided land access/sponsorship to the Isuzu 3 Towers Stage Race, the MTN Barberton Classic, SANI2C, Joburg2C and the DCSR Misty Valley Challenge.

We support responsible honey collection from communities through our work with the African Honey Bee Trust. This also acts to prevent wildfires set by honey collectors.

We have established a youth development, entrepreneurship and social mobilisation project called Abashintshi in nine forestry communities in KwaZulu-Natal with the intention to roll out the project to other communities in the coming years.





# Our key relationships – Communities continued

## Engagement in 2016

All mills continued to offer paper and financial sponsorship to local schools, sport and hobby clubs, forest products industry students, local safety/environmental organisations, and support local charities.

Our innovative Abashintshi project continued to gain traction, helping to prevent the spread of fires, creating viable entrepreneurs, improving communication with communities, and developing a core group of previously unemployed youth. Thirty-six Abashintshi graduated in 2016.

We have also supported the African Honey Bee Trust to develop honey collectors who use our plantations. For further details on both these projects please see pages 72 and 73 of this report.

In **Southern Africa**, we continued to work with local government and communities to accelerate afforestation in the northern region of the Eastern Cape through our Khulisa Umnotho (Project Grow) enterprise development programme. We also continued to be active in land reform. For further details, please click here.

Spend on corporate social responsibility (CSR) initiatives in 2016 amounted to approximately US\$4.4 million.

Our CSR approach and initiatives are described on pages 72 to 78 of this report. To access this section, please click here.

## Value add

- Engagement with communities:
- Enhances our licence to operate
  - Promotes socio-economic development which could, in the long term, lead to increased demand for our products, and
  - Initiates real social mobilisation and change for the better.





## Our key relationships – Customers

### 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 customers' specific needs.

### Areas of mutual interest


- High service levels.
- Information and campaigns to promote print as a communication medium.
- Information and campaigns to promote paper packaging and the use of paper products for other technical, specialised as well as casting and release paper applications.
- Information and support to promote the use of dissolving wood pulp (DWP).
- Information and support to promote the use of biomaterials including lignins and nanocellulose.
- Provision of technical information and support to our paper and DWP customers.
- Information about organisational developments and the fibre sourcing and production processes behind our brands.
- 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.

#### Globally

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 TwoSides organisations in Europe, North America, South America, Southern Africa and Australia and the Print Power campaign in Europe.

- Trade shows and exhibitions to promote and support paper-based packaging.
- We provide extensive technical support:
  - Globally, a series of technical brochures is available on our website [www.sappi.com](http://www.sappi.com) 
  - We host customer and investor visits to the various mills
  - In **Europe** and **Southern 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, and
  - In **North America**, we use GreenBlue's environmental performance assessment tool (EPAT) which enables buyers to evaluate our performance on a mill-by-mill basis.

- Our customers can also make use of the following:

- In terms of specialised cellulose, technical Centres of Excellence are located at Saiccor and Cloquet Mills
- A Competence Centre for Speciality Papers and Paper Laboratory at Alfeld Mill
- Westbrook Technology Centre where scientists constantly look for ways to improve casting and release paper products. Click [here](#) to read details of Neoterix™ST, the first commercial casting and release paper with Sharklet™ bacteria-inhibition technology. (Declining demand – North America). 
- We introduced several new products. 
- We showcased our packaging papers from Europe and North America at FachPack 2016 and Labelexpo Europe, and
- We sponsored the Alexander Watson Associates (AWA) Global Release Liner Industry Conference & Exhibition in Austria.



## Our key relationships – Customers continued

### Engagement in 2016

#### In Europe:

- We held the seventh annual Sappi Football Cup, which challenges our customers, printers and publishers to show their skills in table football. Qualifying matches follow the rules issued by the International Table Soccer Federation. Thirteen qualifying teams from the original pool of 148 teams, representing Austria, CEE (Slovakia and Czech Republic), France, Germany, Italy, Poland, Spain and the UK, participated in the final. The three winning teams won tickets to the 2016 UEFA Champions League final in Milan on 28 May 2016. The tournament attracts increasing numbers of participants every year.
- There was an increase in the number of requests relating not only to whether we meet our customers' ethical requirements, but also whether our suppliers meet them as well. Accordingly, we completed information about our products from Alfeld Mill in the Sedex structure following a request from a large fast-moving consumer group.
- In this region, our Eco-effectiveness Campaign continued to enable customer engagement. This material includes many stories from within the mills and the rest of the Sappi organisation to provide clear evidence of our actions. The campaign promotes individual action and recognition to make efforts to be sustainably effective. It is about highlighting those who make the effort to help improve our eco-effectiveness. Investments and innovations are also made to meet customer expectations of increased efficiencies, reduced impacts and products which will enhance their own social responsibility journey. The personal stories from Sappi's Eco-effectiveness Campaign can be found at: <http://www.sappi.com/eco-effective-stories>

#### In North America:

- Our Sustainability Customer Council continued to provide candid feedback and valuable input on emerging issues. The council comprises Sappi customers, representing multiple customer segments of the coated papers, and casting and release papers business, including merchants, printers, publishers, corporate paper buyers and graphic designers. Online and print education platforms in this region include the environmental quotient (eQ) and education, training and consulting (ETC).
- We continued to support the Paper and Packaging Board (P+PB), of which we are a member, in rolling out a public, consumer-facing integrated marketing campaign on behalf of the paper and packaging industry.
- We also continued to support the 'paper checkoff', a consumer campaign aimed at helping reverse the decline in printing and writing papers as well as boost demand for paper-based packaging using TV, print, billboards and the Internet.

At FachPack 2016, we showcased our restructured containerboard product range including:

- Our bright white Fusion® topline as well as corrugating liner and fluting Ultraflute™, and
- Bright white coated cartonboard Algro® Design – typically used for folding cartons containing high-quality products such as cosmetics, perfume, premium chocolate and confectionery.

We also showcased our comprehensive portfolio of coated and uncoated papers for the flexible packaging and labels market, including papers for food and non-food applications such as sachets, pouches and wrappers as well as a range of self-adhesive and wet-glue labels. Algro Guard OHG, an innovative paper-based packaging solution with high-barrier functionality and heat seal characteristics, made its trade debut at FachPack. This product has been developed for flexible packaging applications and features integrated barriers against oxygen, grease, water vapours and mineral oil mixtures.

#### In Southern Africa:

- Following a customer request, we completed an Ecovadis questionnaire and were awarded a gold recognition level.
- We sponsored the graphic design category in the Student Gold Pack Awards held under the auspices of the Institute of Packaging SA and we also sponsored paper for the Citrus Research Institute annual report in addition to sponsoring their annual symposium.
- We partnered with Nashua and their franchisees to raise funds for their Children's Trust through the sale of Sappi copy paper.
- We also partnered with retailer Pick n Pay through their school club to bring education material to 600 primary schools (21,000 educators and 450,000 learners) as part of our efforts to show the value of paper-based education and deepen the use and brand recognition of Sappi Typek copy paper in schools.

### Value add

Ongoing engagement with our customers enables us to:

- Meet their needs for products with an enhanced environmental profile
- Enhance awareness of the importance of sustainability
- Promote our customers' own sustainability journeys
- Keep abreast of market developments
- Demonstrate the power of print, and
- Showcase our products and promote the Sappi brand.

## Our key relationships – Industry bodies

### 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 and 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.
- Social and environmental credentials of our products.

### Ongoing avenues of engagement

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

**SEU** is a member of TwoSides and supports Print Power. Both of these organisations work to dispel myths about the environmental impact of print, paper and paper packaging. **SNA** is a founding member of TwoSides US, and **SSA** supported the launch of the local TwoSides campaign in 2014. Sappi is a member of the Save Food initiative which aims to eliminate food waste and loss globally.

#### SEU memberships include:

- Confederation of European Paper Industries (CEPI)
- Eurograph
- The Alliance of Energy-Intensive industries
- The Two Team Project (focusing on breakthrough technology concepts in the industry which could enable a more competitive future), and
- European Joint Undertaking on Bio-based Industries.

#### SNA memberships include:

- American Forests and Paper Association (AF & PA)
- Paper and Paper Packaging Board
- Agenda 2020 Technology Alliance
- Sustainable Packaging Coalition (SPC), and
- Forest Products Working Group.

#### SSA memberships include:

- Paper Manufacturers' Association of South Africa (PAMSA) including their body for paper recycling (PRASA)
- Business Leadership South Africa
- The CEO Initiative
- Business Unity South Africa
- Manufacturing Circle
- Forestry 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) (<http://www.fabinet.up.ac.za/>) at the University of Pretoria. Through the TPCP we are also members of the internationally collaborative programme Biological Control of Eucalypt Pests (BiCEP) (<http://bicep.net.au/>) at the Australian Centre for Industrial and Agricultural Research (ACIAR), and
- 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.



[www.twosides.info](http://www.twosides.info)





# Our key relationships – Industry bodies continued

## Engagement in 2016

We participated in the FSC® economic chamber meeting held in August 2016 in São Paulo, Brazil. The objective of the meeting was to consolidate key issues that affect the plantation forestry component of the economic chamber of the FSC, and align the strategy of this group on how these issues should be dealt with by the FSC. In essence, the meeting was set up to organise and align the plantation sector on the following FSC issues: controlled wood, pesticide policy, Chain-of-Custody, online claims platform; free, prior and informed consent (FPIC) and biotechnology.

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.

In **Southern Africa**, various threats to economic stability, the rule of law, good governance as well as the independence of government and political role-players resulted in the private sector and in particular the CEOs of around 100 major companies mobilising around an action plan which was focused on helping government avert any sovereign credit rating downgrade; increasing the focus on anti-corruption efforts in government; strengthening Chapter 9 institutions (oversight bodies of Parliament); and developing plans to enhance job creation and skills development. In addition, work continues to deal with a crisis in tertiary education around the affordability of education and student demands for free education on the one hand, and the failure of vocational training facilities to deliver the technical skills the country requires. Sappi has supported and remains active in these CEO initiatives.

## Value add

- Sappi is able to create and launch new products which already meet Sustainable Packaging Coalition 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.
- Dispel myths and promote understanding of our industry.
- Contribute to the resolution of societal problems related to skills development, education and job creation.

## Graphic papers

Coated woodfree paper



Uncoated woodfree paper



Functional papers



Coated mechanical paper



Newsprint paper



Casting and release papers



Containerboard



Release liner



Flexible packaging and label papers



## Packaging and speciality papers

Rigid packaging



Technical papers



Tissue paper



## Dissolving wood pulp



# Our key relationships – Investors

Management approach	Ongoing avenues of engagement	Value add
<p>Our aim is to provide investors (shareholders and bondholders) and analysts with transparent, timely, relevant communication that facilitates informed decisions.</p> <p>Areas of mutual interest</p> <ul style="list-style-type: none"> <li>Information on Sappi’s strategy.</li> <li>Return on investment.</li> <li>Transparent information about risks, opportunities and ESG performance.</li> </ul>	<ul style="list-style-type: none"> <li>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. Our Chairman also engages with shareholders on relevant issues.</li> <li>We conduct ad hoc mill visits and road shows, and issue announcements through Securities Exchange News Services (SENS), in the press and on our website, <a href="http://www.sappi.com">www.sappi.com</a>.</li> <li>We publish our Annual Integrated Report and sustainability reports on the company website.</li> <li>Shareholders can attend and participate in the AGM as well as the four quarterly financial results briefings.</li> <li>Our CFO and Head of Treasury engage with bondholders, banks and rating agencies on an ongoing basis regarding the performance of the company.</li> <li>We participate in the Carbon Disclosure and Forest Footprint Disclosure projects every year, making our submissions publicly available, and</li> <li>In 2016, we continued to engage with our investors through the above-mentioned avenues.</li> </ul>	<ul style="list-style-type: none"> <li>Understanding of our strategic direction.</li> <li>Enhanced reputation.</li> <li>Greater investment confidence.</li> <li>Broader licence to invest.</li> </ul>



# 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 economic, social and environmental responsibility 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.

Given our focus on safety, we work with our contractors to ensure that they follow Sappi's safety systems.

## Areas of mutual interest

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

## Ongoing avenues of engagement

**SEU:** A joint sourcing partnership assists in negotiating better terms with timber and other suppliers.

**SNA:** We are participating in a project whereby, through a partnership with the American Forest Foundation and the Sustainable Packaging Coalition, stakeholders across the supply chain have come together to understand challenges, and identify new methods to evaluate sustainable forest management on family-owned land.

**SSA:** We have established a group timber certification scheme for small and medium growers. There are currently more than 40 members in the scheme with plantations ranging from a few hundred hectares to 4,391 hectares in size. FSC® certification is not yet available to micro growers. Sappi is currently working with other industry players to overcome this.

## Engagement in 2016

To further assist with the development of small growers and other forestry value chain participants, we have established a training centre at Richmond in KwaZulu-Natal. The training centre (Khulisa Ulwazi/Growing Knowledge) will provide training to small growers, land reform beneficiaries and small-scale contractors in the technical and business aspects of forestry and small business management.

## Value add

- Security of woodfibre supply.
- Improved supplier relations.
- Better understanding of the requirements of the Sappi group.
- Expanded basket of certified fibre.
- Better safety performance from contractors.





# Our key relationships – Civil society (Including media)

Management approach	Ongoing avenues of engagement	Value add
<p>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.</p> <p>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 and belong to key organisations relevant to our operations.</p> <p><b>Areas of mutual interest</b></p> <ul style="list-style-type: none"> <li>• Business developments.</li> <li>• The future of our industry.</li> <li>• Our contributions to our communities.</li> <li>• Protecting the environment.</li> </ul>	<ul style="list-style-type: none"> <li>• We join key credible organisations as members.</li> <li>• We develop personal relationships and engage on an ongoing basis.</li> <li>• We provide support to and sponsorship for key organisations on issues of mutual interest.</li> <li>• In <b>Europe</b> and <b>North America</b>, we maintain close engagement directly and through our industry body CEPI with the FSC®, WWF International and in Europe, with the Programme for the Endorsement of Forest Certification (PEFC™).</li> <li>• In <b>North America</b>, Sappi is a member of the economic chamber of both FSC US and SFI®. As such we actively engage with these organisations through a variety of working groups and committee activities.</li> <li>• In <b>Southern Africa</b>, Sappi is a member of the local WWF organisation as well as FSC. In this region, our forestry operations belong to a number of fire associations, given that fire is a key risk on our plantations. We are also members of and support: <ul style="list-style-type: none"> <li>• SANBI (South African National Biodiversity Institute)</li> <li>• Birdlife SA</li> <li>• WWF-SA</li> <li>• The Honorary Rangers of the Kruger National Park, and</li> <li>• The UCT ADU (Animal Demography Unit) indigenous tree mapping project.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Opportunity to inform and educate the media.</li> <li>• Transparent, two-way communication and opportunity for dialogue.</li> <li>• Support for the valuable work of various NGOs.</li> </ul>

Engagement in 2016 took place through the channels outlined above.



# 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.
- 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.

## Engagement in 2016

In **Southern Africa**, we continued to engage with government organisations regarding Broad-based Black Economic Empowerment (BBBEE), carbon taxes and budgets, as well as a biomass project at Ngodwana Mill which was still pending regulatory approval at year-end.

Also in Southern Africa, the Centre for Environmental Rights (CER) published a follow-up report on their 2015 review of corporate reporting and information contained in the National Environmental Compliance and Enforcement Reports (NECER) of the Environmental Management Inspectorate (EMI) of the Department of Environment Affairs (DEA). Their 2016 report can be found at <http://fulldisclosure.cer.org.za/company/sappi>. They commended Sappi for providing much more disclosure in its 2015 reports. They also noted, “Sappi is to be commended for this reference to the NECER and the mention therein of the inspection at the Sappi Saiccor Mill. The clarification that no official report has been received from the DEA is helpful, in particular in that it explains why the details of the alleged non-compliances have not been disclosed.” This remains the situation.

As in our 2015 report we confirm that we have taken note of the CER’s comments and their request for increased transparency. We remain committed to aligning our reporting to any mentions in the NECER. We also continue to engage with authorities regarding all issues of environmental compliance.

In the South African National Environmental Compliance and Enforcement Report 2015/16, the statement is made that a docket related to environmental non-compliances at Saiccor Mill will be referred to the Director of Public Prosecutions within the 2016/2017 financial year. We await the statement of charges and will respond once these are made available to us.

## Value add

Engagement creates opportunities to promote understanding of the issues and challenges we face and resolve certain challenges.







# Prosperity



**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.**



Prosperity 2016 – at a glance

**78%** increase in earnings per share

**62%** increase in return on capital employed

**Profit up 91%**

First dividend in eight years of **11 US cents** to be paid in January 2017

Cash generation up by more than **US\$200 million**

Net debt down by **20%**

We are a partner in creating successful, future-oriented packaging designs

Overall earnings growth driven by:

We launched these <i>packaging and speciality papers</i> in 2016:	
ALGRO Guard OHG	Algro® Guard OHG, a new high-barrier paper-based packaging solution
ALGRO Sol SNC	Algro® Sol SNC 82, 85 and 98g/m²
FusionTopliner	Fusion® 135g/m² and 110g/m²
Neoterix™ST	Neoterix™ST, the first commercial casting and release paper with Sharklet™ bacteria-inhibition technology
McCoy®	We launched McCoy® Gift Card 28pt graphics paper
symbio	Launched Symbio, a composite based on cellulose fibres found in trees and polypropylene

**SOUTH AFRICAN**

We are a global business with proud roots as a South African multinational company.

Our 2020Vision encapsulates the concept of One Sappi, maximising the value of our global brand.

**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.

Graphic paper

25% of EBITDA

Packaging and specialities

25% of EBITDA

Specialised cellulose

40% of EBITDA

New business opportunities

10% of EBITDA

Group EBITDA substantial increase by 2020



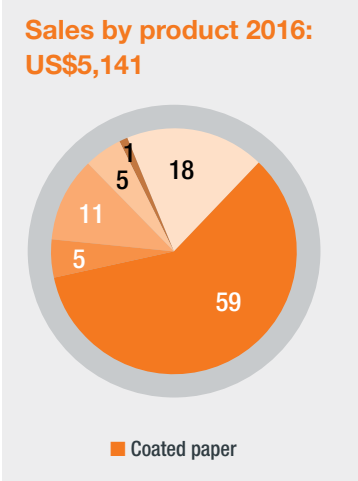
Our production operations across the globe are supported by **STRONG R&D** and a worldwide sales network.

Research and Development

PRODUCTION OPERATIONS ACROSS THE GLOBE

**Cost savings across the group**

Savings



# Our management approach

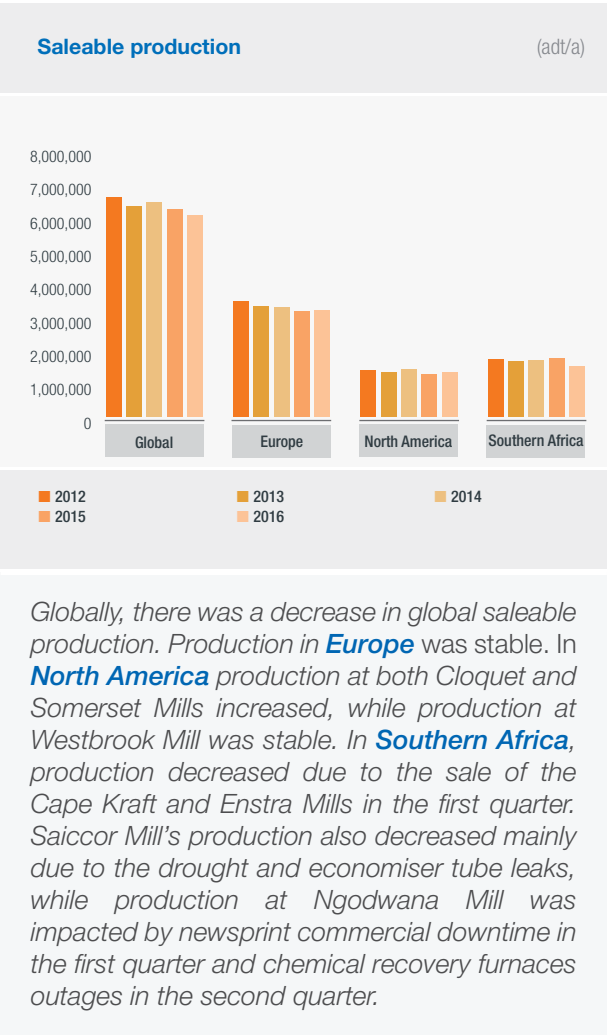
Our industry stands on the cusp of renewal as plantation and forest-derived bioproducts emerge as a global game changer in a carbon constrained future.

**Note:** A detailed analysis of our financial performance in FY2016 can be found in our 2016 Annual Integrated Report, available on [www.sappi.com](http://www.sappi.com). ⓘ

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.

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, neutraceuticals 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.



# Realising our strategy



Our 2020Vision sets out to rationalise declining businesses, generate cash to strengthen our balance sheet, achieve cost advantages, grow through moderate investments and accelerate growth in adjacent businesses from a strong base.

The manner in which we are achieving this is by focusing more intensively on speciality 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 by moving into adjacent markets. This is described in the key material issues section of this report. Details of new products are also covered here.

We finalised the sales of Enstra and Cape Kraft Mills in October and November 2015, respectively. The proceeds from the two sales was US\$39 million. Given our strategy, these assets were deemed to be non-core to our business. The products produced at these mills are no longer considered core to our long-term strategy, and the sale of these businesses were aimed at unlocking value from non-core assets and freeing up resources for further investment in DWP, virgin containerboard and other new business opportunities.



We have made good progress in our aim of having a cleaner, stronger balance sheet in order to accelerate our growth in adjacent businesses. We achieved this through the sales of the two mills in Southern Africa which realised approximately US\$39 million and improved operational cash generation, which increased from US\$145 million to US\$359 million in the year under review. This meant that we achieved our targeted leverage of less than two times net debt to our earnings before interest, taxes, depreciation and amortisation, which amounted to US\$739 million, earlier than expected. Net debt was down 20% or US\$363 million year-on-year, from US\$1,771 million to US\$1,408 million. This reduction, together with the refinancing of high-cost debt in 2015 – achieved through the issuing of seven-year bonds at a record low interest rate of 3.375%, has resulted in lower interest charges.

Our net debt currently equates to leverage of 1.9 times EBITDA, achieving our long-term target of less than two times leverage. We expect to reduce net debt levels further during the course of 2017 and are considering utilising some cash reserves to repay the maturing 2017 bonds in order to lower future finance costs. Profit was up 91% to US\$319 million from US\$167 million in 2015 and from US\$135 million in 2014. This, together with our improved debt position, has put us in a strong position to move forward with our 2020Vision.



Realising our strategy *continued*



We work to lower fixed and variable costs, increase cost efficiencies and invest for cost advantages. To achieve this goal, we have:

- Initiated a global procurement strategy based on our One Sappi strategy to reduce the cost of our third-party goods and services and create a sustainable competitive advantage for Sappi. Our target is to reduce third party spend by US\$100 million per annum by 2020. We are on track to achieve this, having realised savings of US\$13 million in FY2016. We expect to realise a further US\$50 million in FY2017 which will offset anticipated lower graphic paper prices. Our major focus areas are as follows:
  - Pulp, energy and non-fibre raw materials in Europe
  - Logistics and wood in North America
  - Wood and energy in Southern Africa, and
  - Global freight

- Installed a new turbine at Tugela Mill and applied for the project to be registered under the South African government’s cogeneration Independent Power Producer Programme. At Saiccor Mill, we are replacing three turbine generators with a high efficiency steam turbine generator set. Annual savings are estimated to be approximately US\$4.9 million based mainly on reduced power purchases, and
- Embarked on a project to increase the capacity of the recovery boiler at Ngodwana Mill, thereby debottlenecking the mill.

Click here to read more about our procurement savings in the key material issues section of this report.



We will make moderate investments in existing areas with strong potential growth, including pulp, speciality grades and packaging papers. We are also looking at:

- Additional packaging at Ngodwana and Tugela Mills
- Electricity opportunities in Southern Africa
- The debottlenecking of Saiccor and Ngodwana Mills through the expansion of DWP capacity
- Exploring opportunities in specialty packaging, and
- Securing additional hardwood timber supply in Southern Africa.



We will continue our focus on having a cleaner, stronger balance sheet so that we can then accelerate our growth in adjacent businesses. This was underpinned by the commissioning of our nanocellulose pilot plant in the Netherlands, together with the decision to build a second-generation sugar extraction demonstration plant in South Africa, due to come on stream in 2017. We have established a dedicated Sappi Biotech division to consolidate and expand our renewable biomaterials offering.



## Research and development

### Underpinning our strategy with research and development (R&D)

We spent US\$26 million on R&D in 2016. Technology is a cornerstone of our business and is supported by technology centres in each region covering each section of the value chain:

#### Europe

*Maastricht Centre of Excellence*  
Papermaking processes

#### North America

*Westbrook Centre of Excellence*  
Coated fine paper and speciality casting and release papers development

#### Southern Africa

*Forestry Research Centre (Tweedie)*

- Tree breeding
- Propagation techniques
- Silviculture

*Sappi Technology Centre (Pretoria)*

- Fibre processing
- Paper science
- Chemical sciences
- Environmental

*Sappi Specialised Cellulose Centre of Excellence (Umkomaas)*

- Applications testing
- Fundamental cellulose properties



The annual global Technical Innovation Awards promote a culture of internal innovation. In 2015, the regional winners were:

- **Sappi Europe:** Hot soft-nip-calendering for Gloss96 (global winner)
- **Sappi North America:** Ink reticulation mottle improvement for McCoy Silk Cover, and
- **Sappi Southern Africa:** The development of Ultraflute lightweight semi-chemical fluting.

The innovation developed by the Sappi Europe team was in response to customers' needs for a glossy paper allowing perfect machine runability during printing and converting whilst maintaining a high quality product.

**sappi** | technical  
innovation  
awards

### Case study

#### Symbio: Another example of Sappi innovation

In partnership with Intertek, we have developed a composite based on cellulose and polypropylene called Symbio. The product is intended for standard injection moulding and extrusion processes. The use of fillers in plastic is already normal, but using these cellulose fibres instead of the traditional fillers reduces the weight by approximately 15%. Mixing 20% to 50% of the cellulose fibres with polypropylene increases the stiffness. The fibres are not visible in the end-product, which means the end-product can easily be coloured. Symbio will initially be available with 20% and 40% cellulose content. We see further possibilities to use this technology for car interiors, furniture, consumer electronics and toys.

- Symbio is developed primarily for injection moulding. The cellulose fibres are not visible and the product has a neutral off-white colour and low odour.
- Symbio is partly biobased, incorporating cellulose fibres which are derived from sustainably managed forests and plantations with high levels of certification.
- Cellulose adds significant stiffness to the polypropylene matrix while keeping density low.
- Stiffness, thick wall mouldability and good dampening properties make Symbio ideal for applications where good sound quality is important.

<http://www.forestplastics.com/>



# Our value add

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

- **Dissolving wood pulp:** Viscose fabrics and textiles for fashion clothing, household furnishings and used in foodstuffs, cosmetics and pharmaceutical products
- **Graphics papers:** Commercial printing including magazines, brochures, catalogues, direct mail, corporate reports and calendars
- **Packaging papers:** Convenience food, fast food and to protect and transport fresh produce, and
- **Speciality and casting and release papers:** Consumer goods in the food, pharmaceutical and luxury product markets, labels and a wide variety of other applications.

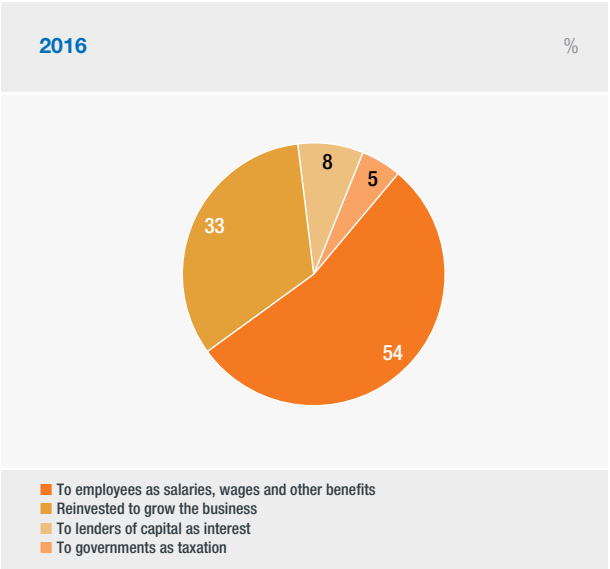
We contribute to society through payments to governments, suppliers and employees, as well as returns to shareholders. We facilitate social and economic wellbeing by using labour drawn from local communities, and the services of small and medium enterprises situated in the areas around plantations and production facilities. We also have a best practice training programme and, through our corporate social responsibility programme, together with our enterprise development programme in Southern Africa, invest in the socio-economic development of the communities in which our workers live.

The indirect economic benefits of our operations impact 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.

In 2016, we added value to the prosperity of the regions where we operate:

- By employing approximately 12,000 employees and 750 contractors globally (in addition approximately 10,500 people are employed by contractors working for Sappi Forests in Southern Africa)
- By creating millions of dollars’ worth of goods each year: In FY2016 sales per region were: Europe: US\$2,582 million; North America: US\$1,367 million; Southern Africa: US\$1,192 million, and
- By contributing to domestic growth and the balance of payments in each region where we operate by exporting products to over 150 countries around the world.



## Adding value in each region where we operate

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. The forestry industry is one of the strategic economic sectors in each region 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.

### Europe

In 2015, the pulp and paper industry provided 179,000 jobs in Europe directly, and 1.5 million in the value chain. It has a turnover of €79 billion and adds €16.5 billion to Europe’s GDP<sup>(1)</sup>.

### 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, while the wood products industry supports an additional 225 jobs outside the industry<sup>(2)</sup>. Forests products workers earn a combined total of approximately US\$50 billion.

The industry is a major contributor to the national economy, shipping goods that are worth more than US\$200 billion annually. The forest products

industry represents nearly 4% of US manufacturing GDP<sup>(3)</sup> and is a significant taxpayer, paying approximately US\$7 billion annually in federal, state, and local taxes<sup>(4)</sup>.

### Southern Africa

The forest sector in Southern Africa employs approximately 165,900 workers and provides about 62,700 direct jobs and 30,000 indirect jobs. Forestry provides livelihood support to 652,000 people of the country’s rural population. The pulp and paper industry provides about 13,200 direct and 11,000 indirect employment opportunities.

The forest sector (forestry and forest products) contributes about 1% to national GDP. In terms of regional GDP, forestry in KwaZulu-Natal contributes 4.4%; in Mpumalanga 3.7%; in the Eastern Cape 0.6%; and about 0.6% in Limpopo. Some 20,000 workers are employed in sawmilling, 6,000 in the timberboard and 2,200 in the mining timber industries, while a further 11,000 workers are employed in miscellaneous jobs in forestry<sup>(5)</sup>.

<sup>(1)</sup> <http://digibook.digi-work.com/Digibooks.aspx/Get/cepi/1520/FINALKeyStatistics2015webpdf>  
<sup>(2)</sup> <http://www.afandpa.org/docs/default-source/one-pagers-june-2015/jobs-and-economic-impact-june-2015.pdf>  
<sup>(3)</sup> [www.afandpa.org/docs/default-source/1pgs/jobs-and-economic-impact-january-2016.pdf?sfvrsn=2c](http://www.afandpa.org/docs/default-source/1pgs/jobs-and-economic-impact-january-2016.pdf?sfvrsn=2c)  
<sup>(4)</sup> <http://www.afandpa.org/our-industry>  
<sup>(5)</sup> <http://www.gov.za/about-sa/forestry>





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.



## People 2016 – at a glance



We aim to be a **great place** to work

## Great jobs

## Great leaders

## Great rewards

## Great culture

## Great company



**We unlock the  
potential of our  
people with  
world-class  
training  
programmes.**



**We produce  
communication  
materials  
in many languages.**



**Globally, we spent an average per employee of US\$529 on training and development.**

**Leadership academies in each**  
region develop future lead team successors.

## We recognise and reward

achievement through initiatives like the Technical Innovation Awards and the Group Chief Executive's Award which recognises outstanding leadership behaviour and contributions to our business.

**sappi** | technical  
innovation  
awards

## Training spend



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

**We monitor training in terms of gender to ensure that female employees are being provided with the same development opportunities as their male colleagues.**



# Our management approach to people

Our 2020Vision involves focusing on technological innovation that will help us unlock and commercialise the potential of biochemical extracts, microfibrils, nanocellulose fibres and cellulose nanocrystals found in wood.

In order to make this shift successfully, our priority is a diverse, engaged workforce who understand the world of tomorrow so that we position ourselves to take advantage of future trends in order to grow and prosper. Accordingly, we continue to invest in our people so that we are able to create and seize opportunities.

The cornerstone of this approach is making resources available to enable our people to grow intellectually and bring new ideas to fruition. Our aim is to create an environment where we can live up to our values of doing business with integrity and courage, making smart decisions which we execute with speed.

# Profiling our people



Diversity brings with it different skills sets and backgrounds, as well as unique ways of doing things and different ways of thinking innovatively. These in turn 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.

Women tend to be under-represented in our workforce due to the nature of our operations, ie a highly capital intensive manufacturing environment which involves shift work. 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.

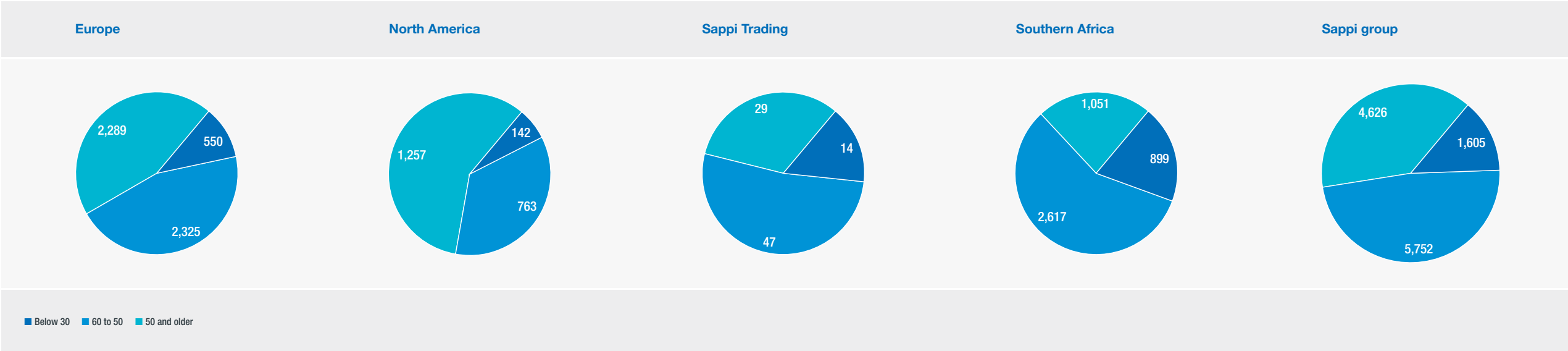
The diversity of our employee base is set out below and on the following pages.

Gender split per region



# Profiling our people continued

## Employees by age group

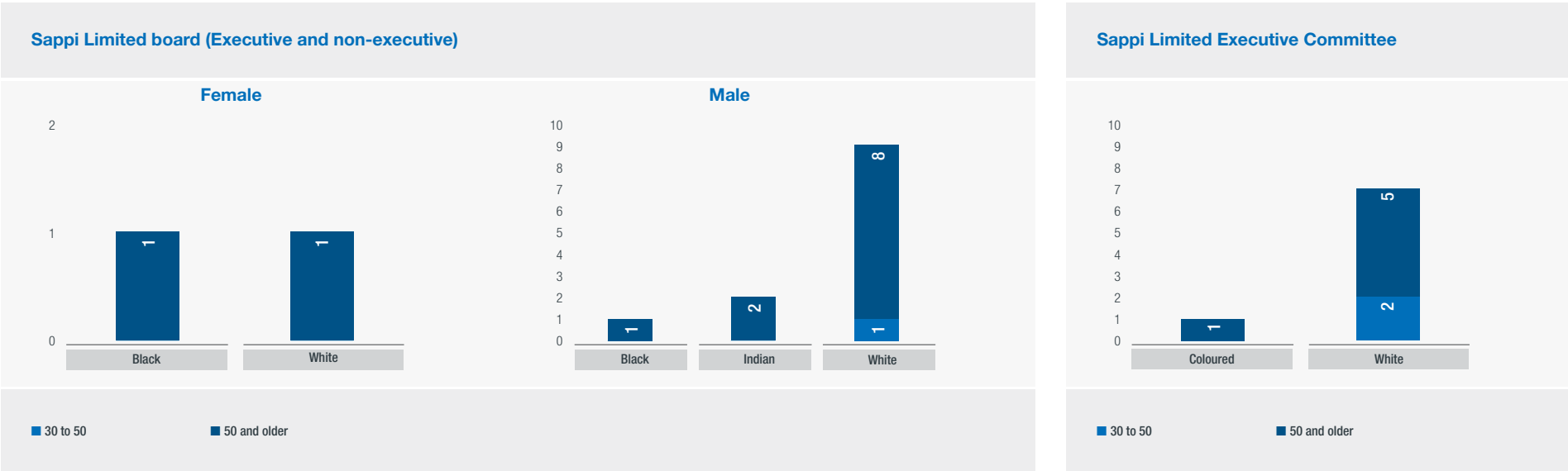


## Employees by job category

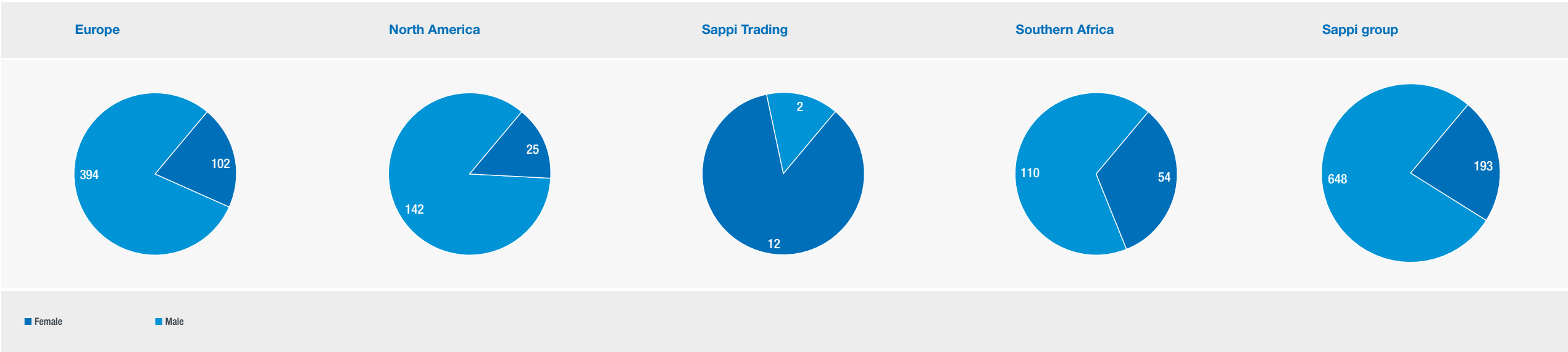


# Profiling our people continued

## Gender and race split at executive level



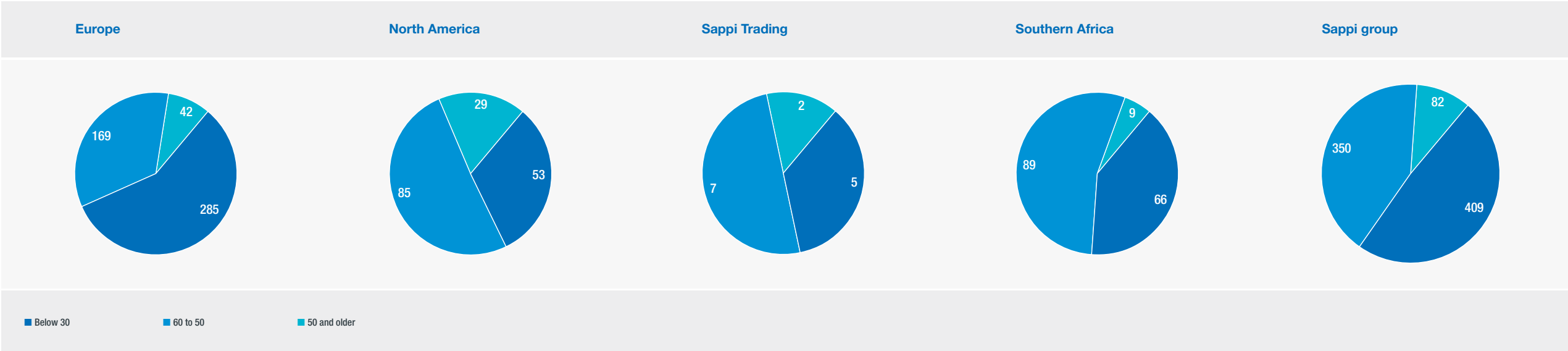
## New hires (external hires) by gender





# Profiling our people continued

New hires (external hires) by age group



New hires (external hires) by category



Profiling our people continued

New hires (internal movement)



Transformation

In Southern Africa, where employment equity falls under Broad-based Black Economic Empowerment (BBBEE) legislation, our employee diversity profile is monitored quarterly by the Southern 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 2016 Sappi Southern Africa Sustainability Report.

Language diversity

Although English is the primary language used throughout the group, key communication materials are disseminated in the prevailing languages of each region.

## Being a great place to work

Providing the right employee experience and being a great place to work is critical to differentiating us from other employers in a competitive market and enables us to attract and retain talent.

### Great rewards

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.

### Great culture

We have a strong talent management culture and mindset. One aspect of this is our recognition programmes which play an important role in motivating employees and establishing a high level of connection to the business. At a global level, we present two annual awards:

- The Technical Innovation Awards, and
- The Group Chief Executive's Award which 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, and
- **Sappi Trading:** The Gold SMART awards.

### Great company

In 2016, we launched a revised Code of Ethics which incorporates the new Sappi values (*At Sappi we do business with integrity and courage; making smart decisions which we execute with speed*) and includes specific policies that guide employee behaviour and incorporates practical examples of possible scenarios which employees might encounter.

The Code has now been translated into the various Sappi languages (English, German, Dutch, Finnish and Zulu) and distributed to all Sappi mills and offices. Regional roll-out campaigns have commenced which include various forms of awareness programmes including a brochure, posters, letters to stakeholder groups, newsletter and video and slide presentations.

These campaigns followed the 2015 roll-out of the One Sappi Mission, Strategy, 2020Vision and Values. A dipstick survey conducted in August 2016 indicated a positive attitude towards the values campaign. Of the 4,804 staff members who took part, approximately 80% responded positively (strongly agree or tend to agree) to the statement: *"I am sufficiently informed about Sappi's values."*

### Great jobs

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.

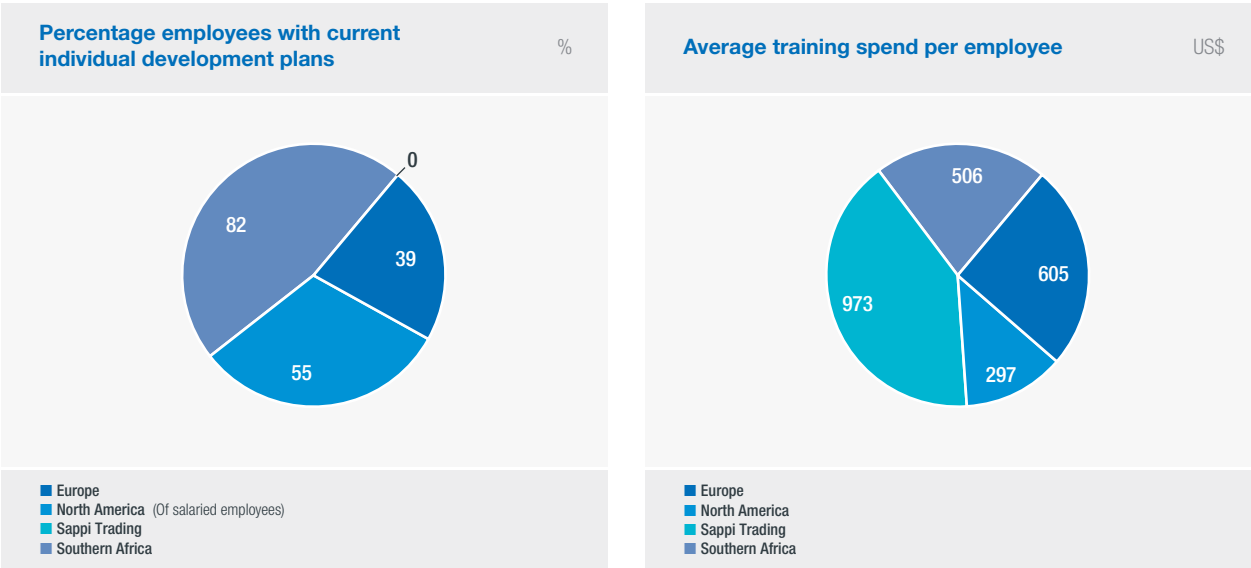
Our approach to training is decentralised, with each mill, function, business unit and region taking responsibility for training. Five-year training targets in each region allow us to monitor our progress.

In our ongoing drive to build a learning culture, we are reducing our focus on mandatory training in favour of skills building. On average for the group, the split between mandatory or compliance training and skills training is as follows 75.98% development, 24.02% compliance training.

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.



Being a great place to work continued

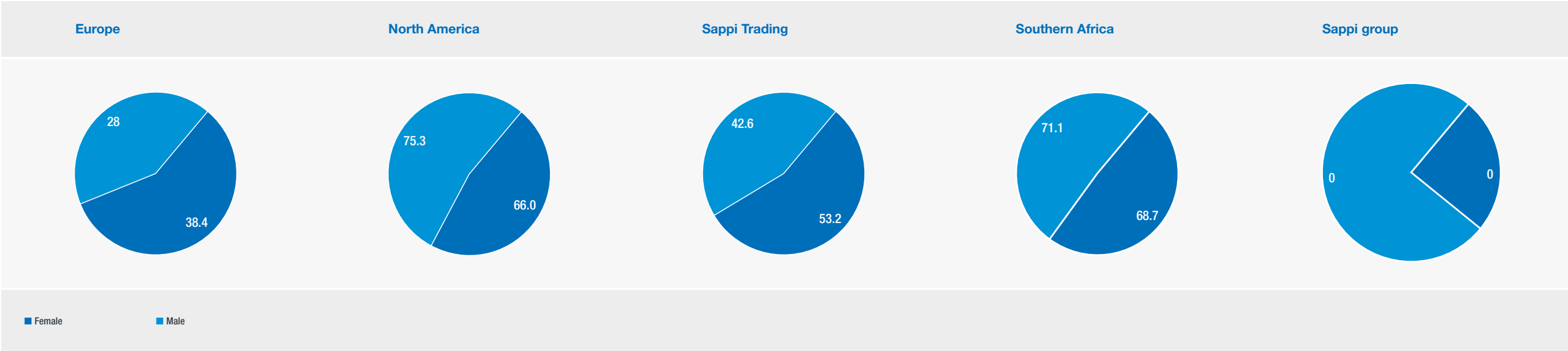


Percentage split per region on skills and compliance training %



Being a great place to work continued

Average training hours per employee by gender in 2016



We monitor training in terms of gender to ensure that female employees are being provided with the same development opportunities as their male colleagues.

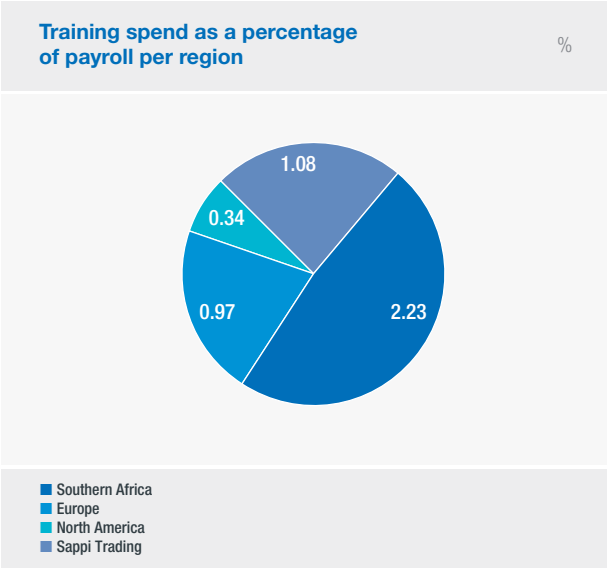
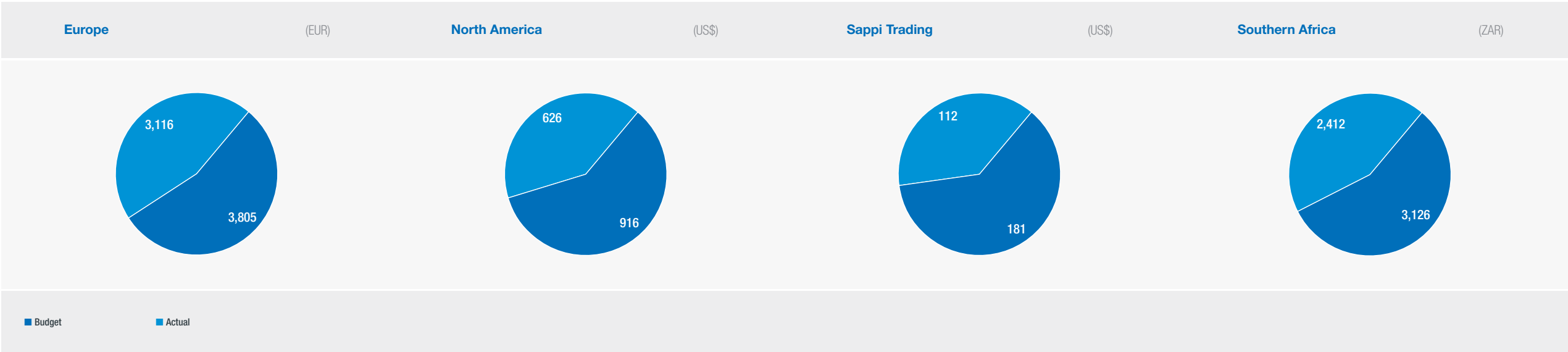
Average training hours per employee by employee category



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

# Being a great place to work continued

Training budget for the group '000





## Strong leaders

Training initiatives like bursaries, learnerships and artisan training are reported in more detail in our regional sustainability reports.

Having a strong leadership pipeline is critical to achieving our 2020 Vision and also underpins our sustainability as an organisation. In 2016, we focused on the following leadership initiatives:

- In **Europe**, we conducted a two-day coaching intervention to assist line managers in becoming more effective coaches to support their teams to embrace PDCA thinking. PDCA or plan-do-check-act or plan-do-check-adjust is an iterative four-step management method used in business for the control and continual improvement of processes and products. We also continued with the Sappi Europe Leadership Academy, with a new group of 16 employees started in September 2016, due for completion in 2017
- In **North America**, we continued with the LEADS (Leadership Excellence and Development at Sappi) programme with a focus on Critical Thinking. Topics offered to all salaried employees under the Critical Thinking umbrella included the Critical Thinking Standards, Biases, Levels of Thinking, and Thinking Fallacies. Westbrook Mill began training on Problem Analysis for all supervisors and managers. The training is being conducted by a multinational management consulting and training services company, and
- In **Southern Africa**, one of our focus areas was on first line manager development. Our classroom and project-based foremen development programme was attended by 35 employees in 169 individual classroom sessions covering eight modules. The Sappi Southern Africa Leadership Academy programme saw a group of 15 complete the programme in 2016 and a new group of 24 employees started in August 2016, due for completion in 2017.

## Measuring levels of engagement

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

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 second year. In September 2015, we conducted an 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 the baseline survey in 2013
- Measure the evolution of sustainable engagement at Sappi, and
- Understand what drives sustainable engagement among our employees.

We will report back in 2017 on follow-up actions implemented as a result of the survey, together with the outcomes of these.

**Employee engagement is one of our 2020 global goals.**

# Monitoring turnover and new hires

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. In 2015 the global turnover rate for the manufacturing and distribution industry stood at 9.1% for voluntary turnover and 14.8% in terms of total turnover<sup>1</sup>. Our turnover figures compare favourably against this benchmark: voluntary turnover across Sappi for 2016 was 2.47% while involuntary turnover across the group was 6.41%, with total turnover standing at 8.88%. A significant portion of involuntary turnover was the finalisation of the sale of the Enstra and Cape Kraft Mills early in FY2016 and the transfer of those employees to the new owners.

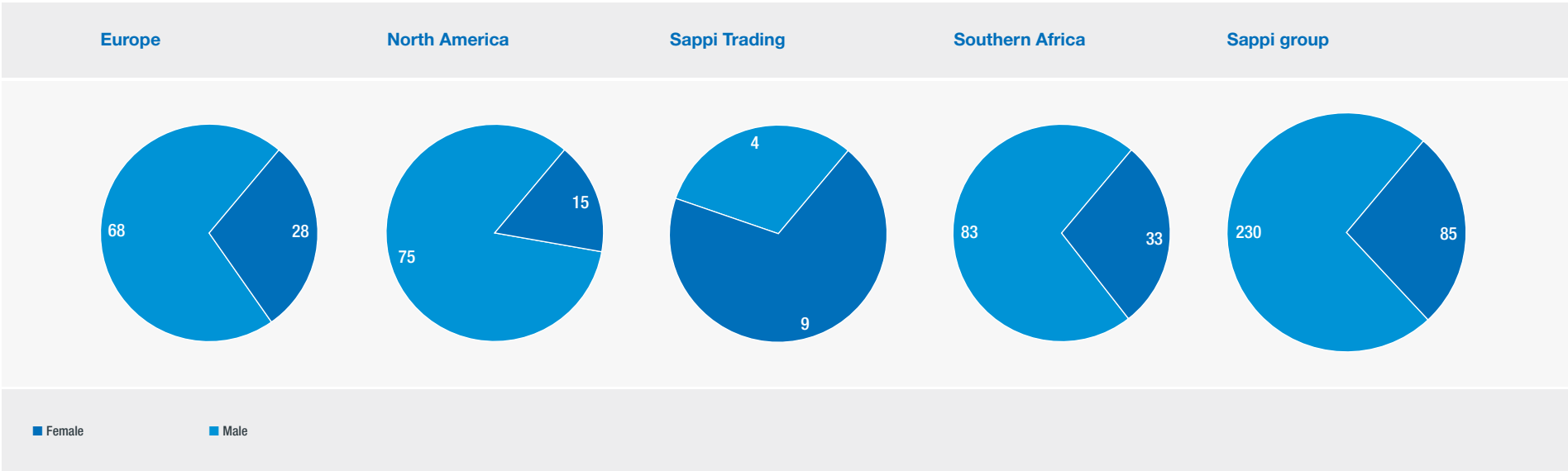
Turnover includes retrenchments, retirements and non-renewal of contracts. Monitoring turnover by gender and age group is strategically important: a disproportionately high number of women leavers could indicate discrimination. Similarly, an extremely high number of younger people leaving could indicate that they are not being given sufficient career opportunities.

Absenteeism rates cover sickness absences due to illness or injury on duty or accidents outside of the workplace, where employees are on paid sick leave.

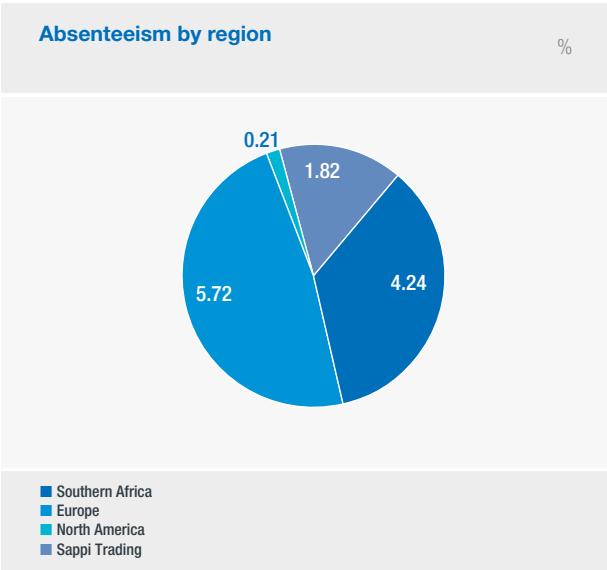
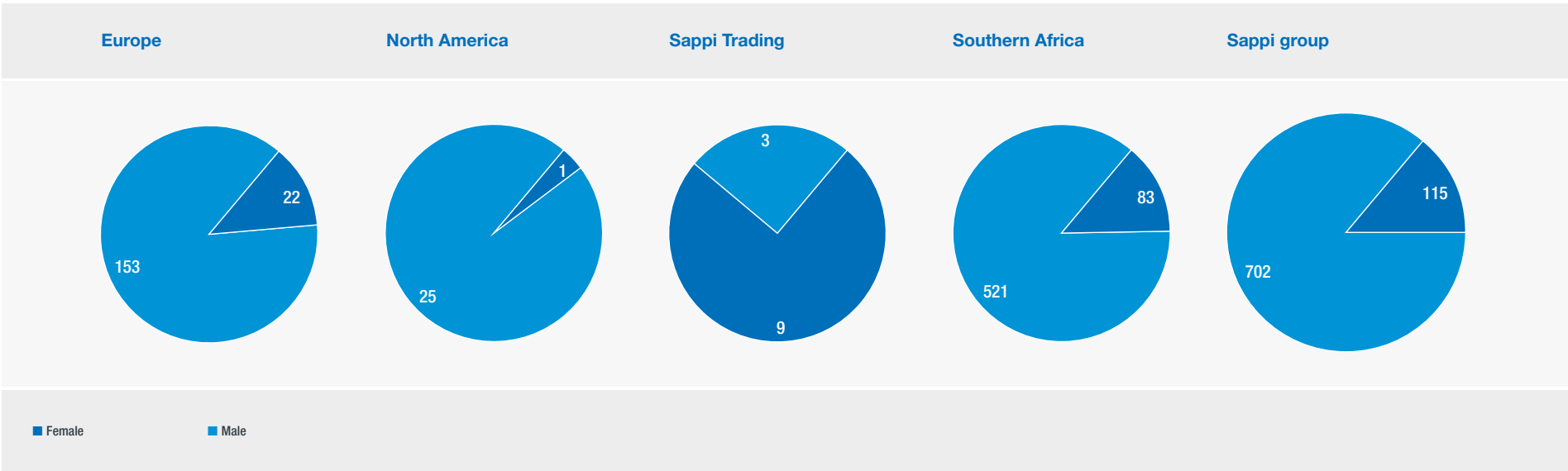
We also include paid maternity or paternity leave, but exclude unpaid maternity or paternity leave. Similarly, temporary disability where Sappi continues to pay a salary is included, while temporary or permanent disability covered by insurance is not included.

## Turnover by gender

### Involuntary turnover

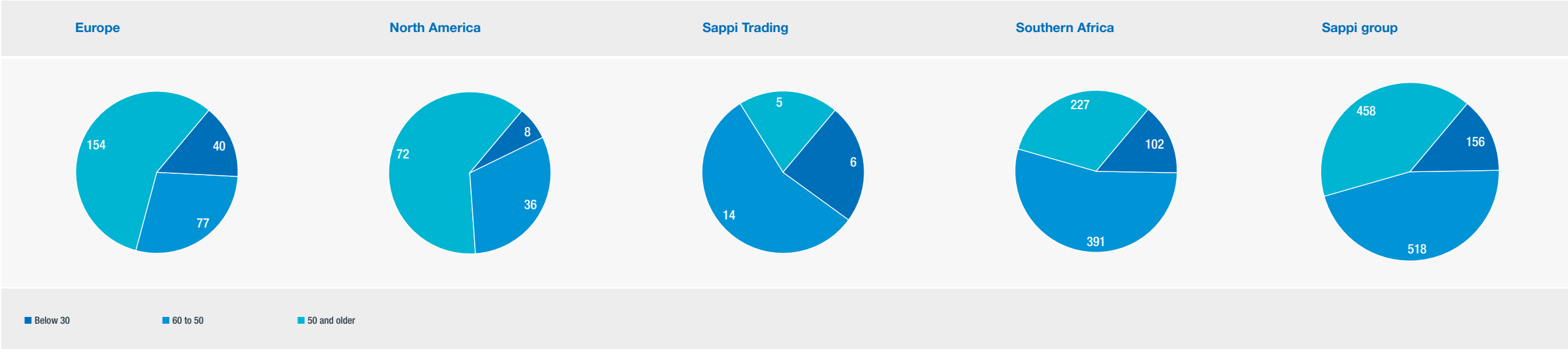


### Voluntary turnover

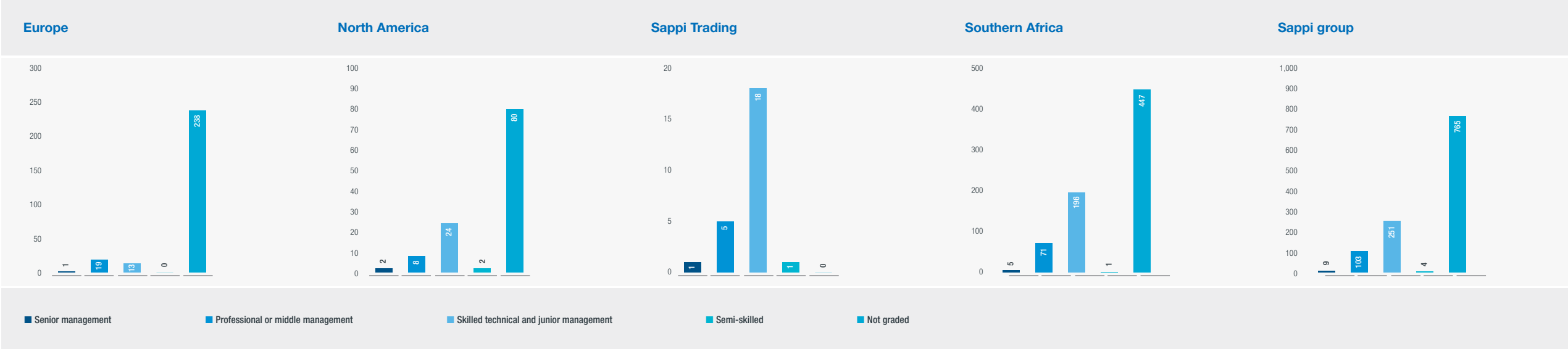


# Monitoring turnover and new hires continued

Total exits by age group



Total exits by employee category





# Engaging constructively with trade unions

Globally, approximately 60% of our workforce is unionised, with 71.5% belonging to a bargaining unit.

We recognise the right of employees to collective bargaining and freedom of association in accordance with all relevant local labour legislation. We maintain constructive relationships and partnerships with all representative unions and works councils, who enjoy consultative or negotiating powers on issues of mutual interest. Union representatives are present in our formal joint management/worker health and safety committees.

Overall, FY2016 was characterised by amicable, but tough negotiations and relatively good relationships with organised labour across the geographies. For details on our engagement with trade unions in 2016, please [click here](#).🔗

## 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 entrench the rights of employees, including the right to raise a grievance without fear of victimisation, the right to seek guidance and assistance from a member of the Human Resources Department, or their representative, at any time and the right to appeal to a higher body, without prejudice.

We have identified no operations or significant suppliers where the right to exercise freedom of association and collective bargaining has been violated or is at significant risk. 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, and measures to contribute to the elimination of all forms of forced or compulsory labour.

Collective bargaining units by region %



## Communicating operational changes

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

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

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

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.

Across all countries, information about significant operational changes needs to be provided at a time when planned changes are concrete enough to inform about reason of changes, planned measures with impact on employees, number of affected employees and timing, but early enough to still enable a proper consultation.

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.

In **Southern 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, Chemical, Energy, Paper, Printing, Wood and Allied Workers Union (CEPPWAWU), recognises the provision of the Act in this regard.

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

Most of the countries in which Sappi Trading is based are not covered in collective agreements except for Austria, Brazil and South Africa. In Austria, the notice period follows labour law and individual employment agreements. In the case of senior and general staff, notice periods of four and three months respectively are required. Based on local legislation, these notice periods increase according to years of service. A notice period is not set up in Collective Labour Agreements. In Brazil, a minimum notice period regarding operational changes is required for large companies, but there is no particular need to communicate to unions in advance.

## Our management approach to safety

The pulp and paper making process presents several safety risks including the use of certain substances/products, the operation and maintenance of machines, exposure to high temperatures and the transport and handling of different kinds of loads.

In addition, globally, forestry is recognised as a dangerous occupation – in many countries, the most dangerous occupation. In the USA, for example, according to the Bureau of Labor Statistics' Census of Fatal Occupation Injuries there were 111 deaths for every 100,000 loggers in 2014<sup>(1)</sup>.

Against the backdrop of the safety risks inherent in our industry, our safety drive – **Project Zero** – strives to establish a culture of zero incidents based on a healthy workforce working under safe conditions, with the necessary skills and comprehensive training. This is reinforced by the belief that all injuries and industrial illnesses can be prevented, underpinned by focusing on leading indicators, people's behaviours and determining the root causes of incidents.

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.

### I see, I say, I listen

We have changed the format of our Global Safety Awareness Day to a safety day safety week. This has meant that senior managers can visit a number of mills and participate in the proceedings; thereby confirming their personal commitment to sustainability in general and safety in particular. This year's theme "*I see, I say, I listen*" emphasised that a safe working environment is only possible when everyone at all levels of the organisation is committed to safety and builds on the previous themes of "You are the key that unlocks safety" and "Walk the talk."

The safety theme for FY2017 is "Life matters" with the intention of driving home the importance of preserving the lives of our employees and stakeholders in all areas of the operation.

The Group Head Technology, who reports directly to the CEO, is responsible for safety throughout the group. Management is accountable for safety and will demonstrate leadership through personal example, but 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.

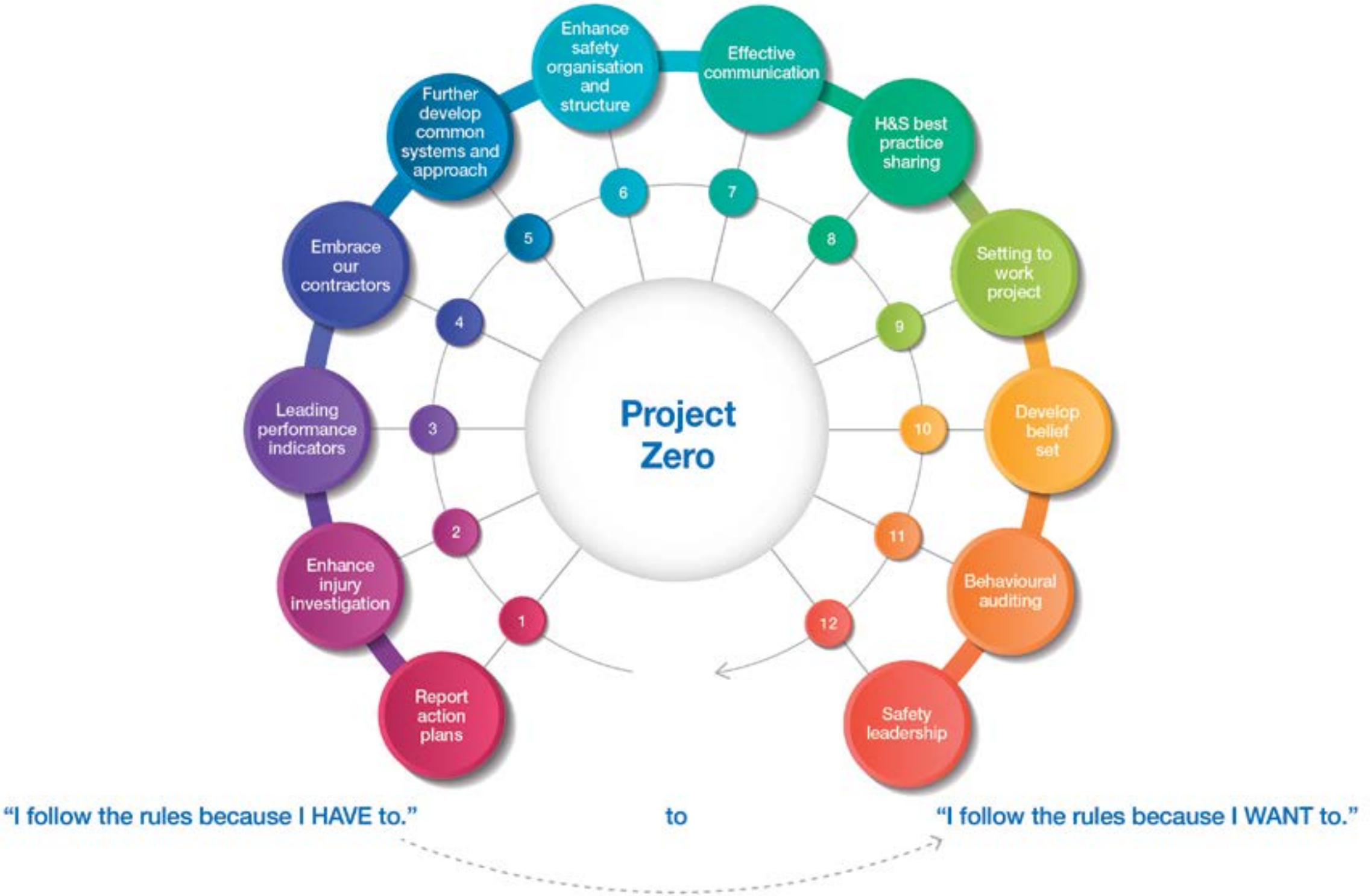


<sup>(1)</sup> <http://time.com/4326676/dangerous-jobs-america/>



# Our management approach to safety continued

## Our Project Zero approach

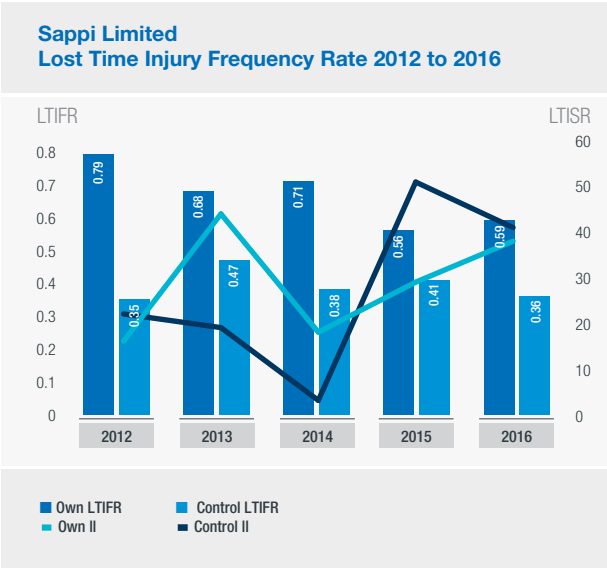


# Our management approach to safety continued

## Our overall safety performance in 2016

Tragically, there was one own employee and three contractor fatal injuries during the year in Southern Africa. The severity of these accidents was reflected in the increased Injury Index (II)<sup>(1)</sup> for own employees and contractors. There was no significant improvement in the own employee Lost Time Injury Frequency Rate (LTIFR)<sup>(2)</sup> of all regions during FY2016, although there was an improvement in contractor LTIFR. The group LTIFR for own employees and contractors stood at 0.46 (2015: 0.48). Regrettably, this meant that we did not achieve our global safety goal of zero LTIFR with a minimum 10% improvement year on year. In support of Sappi's 2020Vision, and our global safety goal, all regions have set specific safety targets to be achieved by 2020 and each region has compiled specific action plans to achieve these targets.

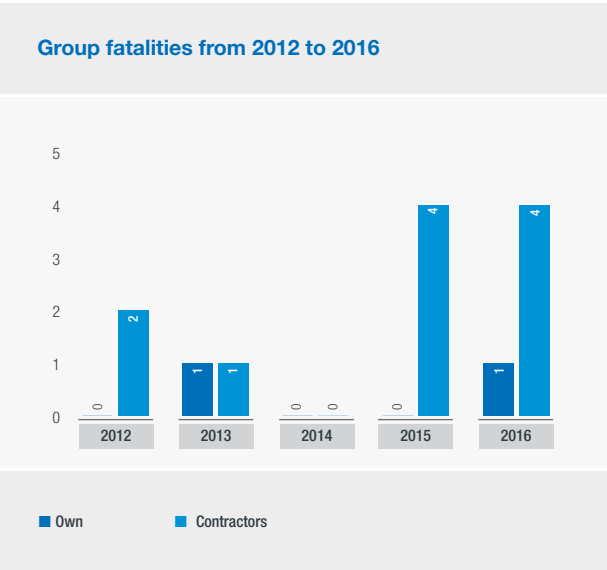
All regions recognise that we will not improve our safety record by treating safety in the same way we have done so in the past and consequently, in 2017, are introducing new safety initiatives in 2017 in order to significantly improve safety statistics going forward.



## Group fatalities

There was one own employee fatality and three contractor employee fatalities as follows:

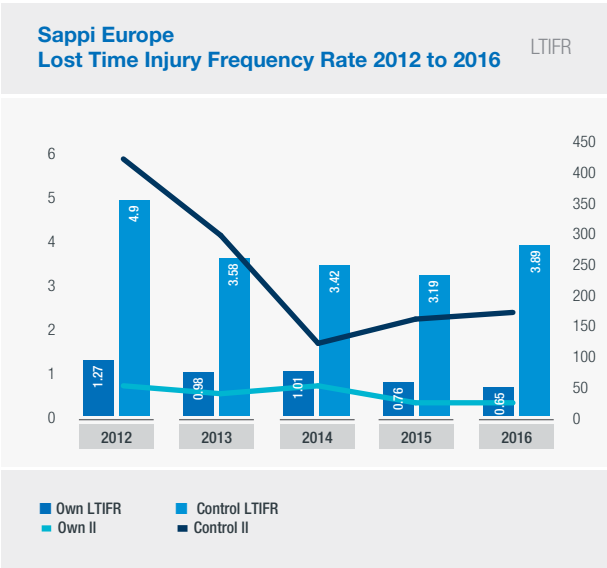
- A Sappi engineering supervisor from Lomati Sawmill suffered fatal head injuries when a fence pole that was being removed swung out of control and hit him against the head
- A tractor driver was fatally injured on Braemar plantation when the tractor that he was operating overturned
- A chokerman was fatally hit on the forehead with a log while extracting timber with an excavator yarder on Twello plantation, and
- A truck driver was fatally injured when the dump truck that he was operating as part of road building operations overturned on Sutton plantation.



<sup>(1)</sup> The injury index is a product of the LTIFR and the Lost Time Injury Severity Rate (LTISR) and provides an overall sense of safety within the measured unit, ie LTIFR LTISR.

<sup>(2)</sup> The LTIFR is calculated by dividing the product of lost time injuries and a group-wide standard for man hours by the unit's man hours, ie LTIFR = Lost Time Injuries LTI 200,000/unit's actual man hours.

# Safety performance in Europe



Sappi Europe (SEU) completed FY2016 with an LTIFR for own employees of 0.65. This is a significant step in the direction of achieving the SEU 2020 LTIFR target of 0.52. The number of LTIs for own employees decreased from 34 in F2015 to 28 in F2016. Contractor incidents decreased slightly from 20 in FY2015 to 18 in FY2016, but due to fewer working hours, LTIFR increased from 3.19 to 3.89 in FY2016.

## Significant accomplishments

- Stockstadt Mill reached one million man hours without an LTI on 27 June 2016.
- Maastricht Mill achieved an LTIFR of 0.33 and is well on its way to achieving zero accidents.
- SEU Central Services has not had an LTI for more than three years.

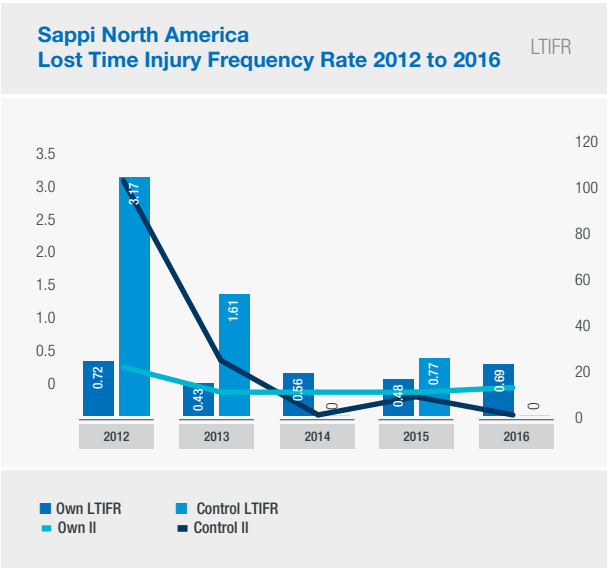
## Focus going forward

- SEU’s objective is to be the safest pulp and paper company in Europe. The strategic objectives in support of this goal are:
- Improving LTIFR by 10% per year with an ultimate goal of achieving 0.52 in 2020
  - Making the safety of personnel the first priority in all operations, and
  - Ensuring that no employee will suffer permanent loss of the use of a body part or a fatal injury.





# Safety performance in North America



Note: 2015 numbers have been restated.

Sappi North America (SNA) completed FY2016 with an LTIFR for own employees of 0.69 compared with 0.48 in FY2015 – above the FY2016 target of 0.6. A total of 17 lost time/restricted incidents occurred during FY2016 compared to 12 in FY2015.

SNA continues to benchmark in the upper 25% compared to the North American paper industry.

SNA completed FY2016 with an OIR<sup>(1)</sup> of 1.42 which is higher than the FY2015 historically best achievement of 1.01. There were 35 recordable incidents during FY2016 (FY2015: 25) and there were no contractor LTIs.

SNA’s severity rate has declined and stabilised, with the second-best year rate of 17.5 in F2014, followed by the best year rate of 16.8 in FY2016 (FY2015: 19.62). In FY2016, SNA experienced 414 lost workdays (FY2015: 486 lost days).

Safety improvement actions taken throughout the year included engagement with the labour unions, a refocus on ergonomic risk reduction, driving participation through actions and front line leaders refocused on performing daily safety contacts.

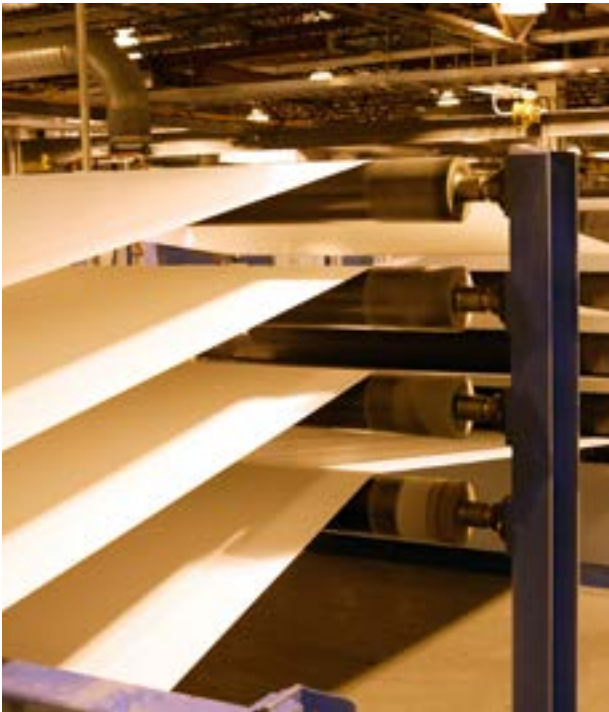
## Significant accomplishments

- Allentown Sheeting Facility experienced one lost time recordable injury on 27 July 2016 ending a four-year period or 1,579 days without a lost time incident.
- Cloquet Mill completed FY2016 with one lost time incident and an LTIFR of 0.13, the best in the mill’s history.
- The maintenance department at Somerset Mill experienced two incidents, equalling its best performance. The paper mill maintenance team had zero recordable injuries.
- Westbrook Mill experienced three lost time incidents, one less than FY2015.

## Focus going forward

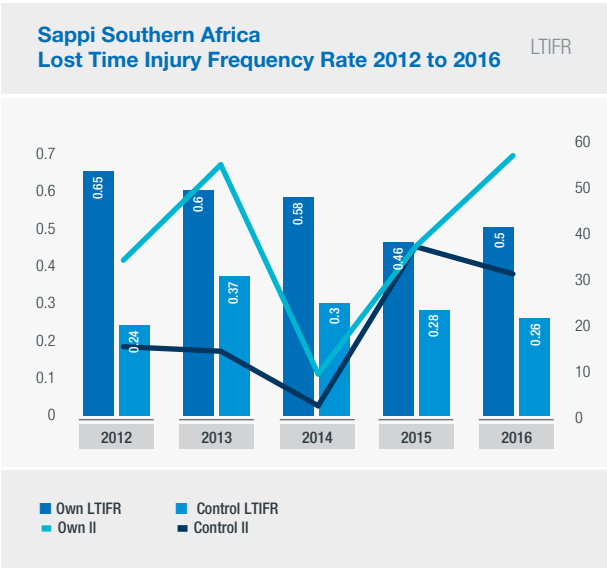
We will achieve our overall objective of zero fatalities or life-changing incidents and an LTIFR of less than 0.5 by:

- Driving participation and prevention activity through gain sharing
- Improving training and skills of the incoming workforce
- Coaching and mentoring of front line leaders through the safety contact programme
- Implementing hazard reduction techniques through the SafeStart programme to increase ownership and develop skills, and
- Implementing muscular skeletal disorder and ergonomics hazard reduction programmes.



<sup>(1)</sup> The OIR Incidence Rate is applicable only to North America and is arrived at by taking the number of recordable incidents 200,000/man hours.

# Safety performance in Southern Africa



LTIFR for own employees for FY2016 increased to 0.50 and for contractors declined to 0.26, both against a target of 0.45. The own employee and contractor employee fatalities described on page 67 resulted in the high severity rates for both own employees and contractors.

The unacceptable trend in the number of fatalities in 2015 and 2016 is receiving intense focus by the Sappi management team with a number of new initiatives under way.

In FY2016, Sappi Forests commissioned consultants from Finland and New Zealand to spend two weeks each in the forestry operations to evaluate practices and make recommendations for improvement.

## Significant accomplishments

- Saiccor Mill achieved one million man hours without an own LTI with a total of 1.66 million man hours between LTIs and also achieved one million man hours without a contractor LTI 2016 with a total of 1.85 million man hours between LTIs.
- There were no contractor injuries at Stanger Mill.
- Ten out of 16 operating units achieved zero own LTIs for 12 months or more, and eight units achieved zero contractor LTIs for 12 months or more.

## Focus going forward

- Our objectives for FY2017 are to achieve:
- Zero fatal accidents
  - An LTIFR of better than 0.46 for own employees and contractors, and
  - An LTISR of less than 25 for all categories of employees.

To achieve these objectives the focus will remain on maintaining OSHAS 18001 certification and improving the Behaviour Based Safety system by critically reviewing the current status and eliminating shortfalls.

During 2017 the region will be embarking on a *Twice as safe* programme to reduce the number of accidents by half by 2020.

The programme will involve all employees in manufacturing and forestry from the CEO down, to line management, supervisors, unions and health and safety representatives. The programme, which will be facilitated by an industrial psychologist, will address issues like fatigue, communication, risk tolerance and at risk behaviour. Contractors will be involved in all safety decisions and the Sappi Forests division will also focus on forestry contractor supervisor training and a chainsaw operator evaluation, gap analysis and retraining programme.

## Posters in Sappi Forests safety campaign



# Promoting wellbeing, health and safety

## Southern Africa

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.

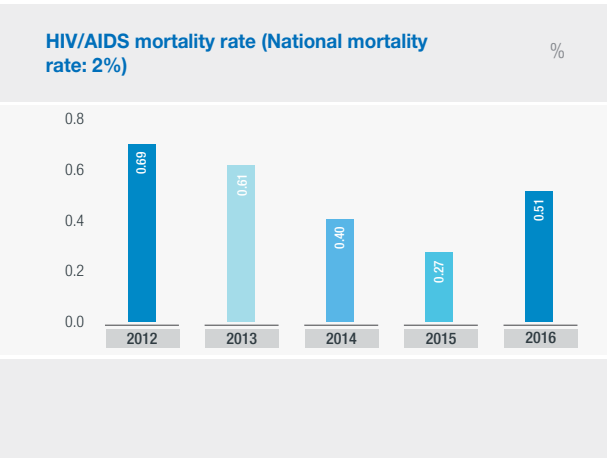
Health and safety committees are in place at all our operations. Through these committees, our people are consulted about the development/ review of policies and procedures and changes that affect workplace safety or health. Representation in each region is as follows:

- In **Europe**, formal health and safety 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
- In **North America**, all unions have the opportunity to participate in joint management worker safety committees
- In **Southern 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, and
- **Sappi Trading** does not have formal joint management-worker health and safety committees due to the small size of the offices, but there are appointed safety officers.

The complexity of the Southern 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 healthcare 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.
- **Primary healthcare** – we continue to focus on HIV/AIDS and tuberculosis as primary healthcare 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. As indicated by the graph alongside, the mortality rate from HIV/AIDS within Sappi Southern Africa has been reducing steadily over time.

- **Employee wellbeing** – these 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 and other health issues and relationship issues.



## 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 healthcare check-ups, flu vaccinations and immunisations as well as support of employee sports and social activities, among 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.

In 2016, Sappi North America once again supported the silent auction for World AIDS day in support of the AIDS Action Committee of Massachusetts by participating in the annual auction. All proceeds from the event benefit the cause.

<https://aidsauction.na.sappi.com/>



# Helping others to help themselves

## Supporting BEE entrepreneurs

The bulk of our corporate social responsibility (CSR) investment takes places in Southern Africa, given that we are headquartered here and in view of the country’s developmental needs. We are now measuring our investment more inclusively in terms of spend. Our CSR spend of US\$4 million in 2016 reflects once-off spend by Sappi Forests on capex items for community villages including water reticulation and building renovation.

The projects we support are increasingly focused on building capacity by empowering communities and individuals to help themselves and take responsibility for their own prosperity.

We have teamed up with a development agency, African Honey Bee (AHB) to provide training in the harvesting and collecting of honey by sponsoring bee farming training of community members and participants in Khulisa Umnotho (Project Grow) in KwaZulu-Natal.

Our support of the AHB project aligns with our increasing focus on the asset-based community development (ABCD) approach. As with the Abashintshi programme described on page 75, this involves a focus on appreciating and mobilising individual and community talents, skills and assets, rather than focusing on problems and hand-outs. It deals with the ‘glass half full’ rather than the ‘glass half empty’ mindset and helps to guide communities in realising their own worth and the unique assets they have available.

The week-long bee farming training takes place at monthly intervals and has been designed to address the needs of rural people with few resources. The training comprises six modules as set out in the organogram alongside, beginning with the basics of beekeeping and taking the potential honey farmers to the point where they are producing and marketing their own honey. The only stipulation is commitment, as only those participants who complete the required tasks can continue to the next level of training.



Helping others to help themselves *continued*

As honey production is seasonal, the training also teaches participants the basics of vegetable and poultry production so that they can generate income throughout the year.

Trainees are taught to make their own beekeeping personal protective equipment and smokers. They also receive beehive kits which they assemble themselves into functional beehives.

In South Africa, all imported honey is irradiated by law and there is significant demand for pure, local non-irradiated honey. AHB has secured a guaranteed offtake agreement with a leading pharmaceutical distributor under the ‘Eat Naked Honey’ brand. All honey procured from the AHB beekeepers is gravity extracted and distributed and marketed through the Eat Naked brand.

In addition to the income generation and skills aspects of this project, there are other significant advantages: Firstly, beekeeping as a form of agriculture has an overwhelmingly positive impact on the natural environment including pollination and improved yields of many food crops. Secondly, it ensures local participation in conservation by allowing people to derive economic benefit from indigenous flora.

Finally, it has helped to reduce the number of wildfires started by honey hunters. According to the Zululand Fire Protection Association, in 2015, wildfires started by honey hunters accounted for 40% of all wildfires in KwaZulu-Natal. Although most of these fires were small and caused limited damage, they use up valuable fire-fighting resources and have the potential to escalate out of control.

The services bees provide in pollinating South Africa’s food crops are estimated at ZAR10.3 billion annually<sup>(1)</sup>. According to the South African National Biodiversity Institute, honey bees are highly dependent on all eucalyptus trees<sup>(2)</sup> like those that grow on Sappi plantations. Because *eucalyptus* trees flower at various times of the year, they provide a constant, reliable flow of nectar and pollen, making them essential to the beekeeping industry.



<sup>(1)</sup> <http://www.iol.co.za/scitech/science/environment/lets-talk-about-bees-and-gum-trees-1820785>  
<sup>(2)</sup> *Gums and Bees: A roadmap for landowners in South Africa*, available on [www.sanbi.org](http://www.sanbi.org)

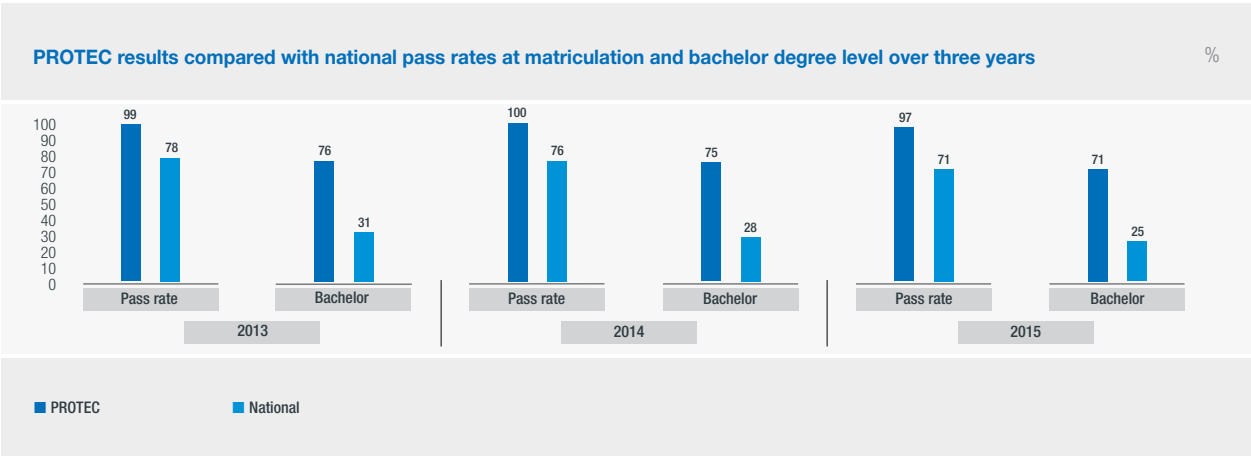


# Helping others to help themselves continued

## PROTEC: Continuing to exceed national pass rates

PROTEC delivers science, mathematics, technology, world-of-work and English theoretical and practical education to Grade 10 to 12 learners from disadvantaged communities. The programmes are run in parallel to formal schooling and are delivered at Saturday and vacation school classes by qualified and experienced PROTEC tutors. The programme consistently delivers matric and bachelor pass rates that exceed the national statistics year-on-year.

We continued to offer US\$680 for each distinction in maths and science. In 2015, in total 50 distinctions were earned in mathematics and science by matric pupils from the Sappi-supported PROTEC branches at Mandeni, Stanger, Umkomaas, Pietermaritzburg and Nelspruit.



## Early childhood development (ECD)

There is a proven causal link between early childhood development and success and wellbeing later in life. 2016 was the third year of our ECD project in KwaZulu-Natal, which covers 25 sites through the Training and Resources in Early Education (TREE) organisation, with the project expanding to include an additional 18 sites as from the end of 2016. In Mpumalanga Province, the development of an ECD Centre of Excellence at the Sappi Elandshoek community through Penreach is delivering strong results. We have also extended the ECD programme in Gauteng, with 50 practitioners in 50 ECD centres per year undergoing training through Jabulani Training and Development.

## Empowering communities and individuals



### The Abanakekeli

In our 2015 Sappi Southern Africa Sustainability Report, we disclosed our plans to roll out a community-based alien invasive programme at our KwaZulu-Natal mills aligned with the programme at our Ngodwana Mill. The programme has been developed with and is facilitated by WESSA (the Wildlife and Environmental Society of Southern Africa). Work has commenced through community teams at Sappi Stanger Mill and will begin in 2017 at Saiccor and Tugela Mills with an anticipated 20 **Abanakekeli** ('caregivers') per mill. The programme not only has environmental benefits, but also provides training and employment, with the ultimate goal of establishing viable businesses.



# Helping others to help themselves continued

## The Abashintshi

Our youth development project called Abashintshi ('the Changers' in Zulu), implemented in conjunction with a development communication agency has had a dramatic impact and changed a number of lives for the better. The purpose of the Abashintshi programme was to create a channel for Sappi to communicate directly with the communities close to its operations and, through this interaction, build relationships, improve Sappi's reputation and reduce risk factors such as fires.

The project involves using young people from the rural communities living in and around our operations in southern KwaZulu-Natal to mobilise their communities and take charge of their own futures instead of waiting for work or development to arrive from outside, in line with the asset-based community development (ABCD) model. The programme began with 18 young volunteer men and women in 2015 and has now been expanded to include 36 people.

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

- A youth life skills project (various modules dealing with decision-making and choices, among others)

- Work with each community in terms of the asset-based community development (ABCD) concept. ABCD focuses on appreciating and mobilising individual and community talents, skills and assets and most importantly – it is a community-driven process rather than a programme driven by external parties or agencies. The aim is to get each community to identify its own assets and to mobilise internally
- Ifa Lethu – a legacy project whereby the elderly in the community will document their heritage and the lessons learned will be transferred to the youth in the life skills project, and
- Establish school holiday programmes.

Over the last two years, these 36 change agents have reached more than 18,500 people in their respective communities. Overall, almost 330 people have been taught some basic business skills which has resulted in more than 120 micro-enterprises either starting up, or being rejuvenated. The Abashintshi have also mobilised communities to become involved in fire prevention with significant results – the average number of fires in 2016 is the lowest in six years. The programme is being expanded to Sappi's other forestry areas and to Sappi's mill communities during 2017.



## The Pepper Bark Tree Project

*Warburgia salutaris* (Pepper Bark tree) was once widespread in Southern Africa and has long been one of the most sought after commodities in the Southern African traditional healthcare sector where 27 million people rely on traditional medicine. The Warburgia Salutaris Project supports the efforts of the Kruger National Park to protect South Africa's most endangered tree by re-introducing the tree into communities. The focus is on growing and supplying to traditional healers and communities to reduce the commercial poaching value of the plant.

Our intervention has enabled seedlings to be grown on a large scale. To date 3,000 trees have been distributed to communities in Mpumalanga and Swaziland. Twelve thousand seedlings are being prepared for distribution in 2017. An annual target of 15,000 has been set. To re-introduce the tree in KwaZulu-Natal, the Sappi Shaw Research Centre has developed seed beds with 1,500 trees established within the first year. These will be distributed to our Khulisa Umnotho communities.



# Supporting school integration in Germany

As part of an initiative to raise funds for a school integration project in Aachen, Germany, Sappi Europe donated the high-quality coated paper necessary to produce a colourful cookery book entitled ‘Meat & Greet’. The ‘Juniorenkreis der IHK’ and a group of refugees from the Internationale Förderklasse an der Gemeinschaftshauptschule Aretzstraße worked together to compile recipes from the refugees’ home countries which reflect their culture and food traditions. With further support from an advertising agency and a printer who are providing their services for free, the students cooked their dishes and had them photographed for the book. All the revenue from the sales of the cookbook will go to ‘Youth power without violence e V’ which is the association that supports the school’s integration work.

In addition to raising funds through the sale of the book, the students who have been involved in the project have gained invaluable experience learning a variety of skills necessary to produce a cookery book, from compiling recipes and setting up photo shoots, to choosing the right paper and working with printers.





# Fighting food waste



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 Organisation 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.

Through projects, trade fairs and conferences, the initiative aims to increase awareness among decision makers from the worlds of politics, business and industry of the critical need to fight food waste. The initiative was set up in response to the shocking fact that one-third of all food is wasted or lost in transit to the end customer. The amount wasted or lost would meet the world’s demand for food.



# Making ideas matter

Since 1999, as an integral part of Sappi’s corporate social responsibility platform, the Ideas that Matter grant programme has funded over 500 non-profit projects and has contributed more than US\$13 million to a wide range of causes that use design as a positive force in society.

The programme is open to North American designers who have partnered with a non-profit organisation and developed a communication campaign that is ready for implementation.

This year’s eight winning projects highlight how designers can use the power of paper and print for social impact.

The winning projects were chosen for the effective way they address pressing social issues including rural healthcare and pharmaceutical misuse, literacy, childhood development and the importance of play, education and leadership in war-challenged international communities, girls and youth development and traumatic health issues for children and their families.

In FY2017, we will be launching an Employee Ideas that Matter programme.



Design Museum Foundation was a grant recipient for the Extraordinary Playscapes campaign. Playground passports, outdoor kiosks, a website, and a catalogue are being created to amplify the reach of a national travelling exhibition on the design and importance of imaginative outdoor play.



Coaniquem BCF, the Burned Children Foundation, was a worthy grant recipient. A storybook, patient passport and environmental graphic system to guide children and their families through burn treatment plans in Latin America.

For further details go to: <https://www.sappi.com/ideas-that-matter> ⓘ

# Planet



Our business relies on natural capital, particularly on woodfibre, land and water. Accordingly, we focus closely on responsible management of these resources.



Planet 2016 – at a glance

Our business relies on natural capital, particularly on woodfibre, land and water. Accordingly, we focus closely on responsible management of these resources.

Our woodfibre resources

### Europe

No owned plantations or land. Woodfibre sourced from forests close to each mill. Softwood and hardwood pulp is sourced from Europe and the Americas.

**Tree species used:**  
Spruce (used for mechanical pulp and softwood chemical pulp) and beech (used for hardwood pulp). Lanaken Mill can also process significant amounts of poplar.

### North America

No owned forest plantations or land. Wood sourced from landowners and commercial loggers. Woodfibre is procured from temperate forests in Maine, New Hampshire, Michigan, Minnesota and Wisconsin and from the Canadian provinces of New Brunswick, Quebec and Ontario.

**Tree species used:**  
Maple, poplar, aspen, beech and birch (hardwoods) and spruce, pine and fir (softwoods).

### Southern Africa

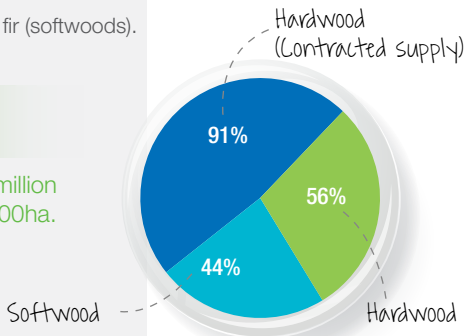
Sappi owns or leases 388,000 hectares with approximately 28.5 million tons of standing timber. Contracted supply covers a further 103,000ha.

**Tree species used:**  
Of the 234,000ha planted at the end of FY2016, 56% was hardwood and 44% softwood and of contracted supply, 91% is hardwood.

## Soil

With long rotation times of 8-18 years and little or no mechanical cultivation, the structure of soils in our plantations is maintained or improved, while topsoil nutrients are increased.

In KwaZulu-Natal, we are now mulching – rather than burning – slash, thereby enhancing the retention of soil moisture and nutrients.



High levels of forest certification

We make use of independently verified, internationally accepted forest accreditation systems including the Programme for the Endorsement of Forest Certification™ (PEFC™,) the Forest Stewardship Council® (FSC®) and the Sustainable Forestry Initiative (SFI). Forest certification combines auditing forest management practices with tracing the origin of forest products. The certification process begins in the forest or plantation and continues through the entire Chain-of-Custody (CoC); thereby giving consumers the assurance that forest products with these certifications have been produced in accordance with sound environmental and social practices and standards.

100% of our owned and leased plantations are FSC-certified.

Globally, 73% of fibre supplied to our mills is certified.

**And the rest?**

- FSC-controlled wood and PEFC Due Diligence Systems (DDS) requirements are incorporated into our purchasing specifications and contracts.
- 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.

“ As stakeholders in managed forests, we have a responsibility to ensure the sustainability of the world’s forest resources through our procurement practices. ”

Group Wood Procurement Policy



We generated 14.2% less solid waste than we did five years ago and we sent 6.6% less waste to landfill.

Reduced carbon footprint: Globally, over five years we...

have increased energy self-sufficiency by 10.5% and our generation of renewable energy by 5.1%.

have reduced Scope 1 emissions by 4.7%.

have reduced Scope 2 emissions by 20.5%.

Over half – 52.9% of the power we generate is from renewable resources.

We are doing more with less and aim for continual improvement.

We have reduced absolute emissions intensity (Scope 1 and 2) by 8.8% globally over five years.

We discharge 36.5% FEWER total suspended solids in effluent than we did five years ago.




## Our management approach to natural capital

The WWF® 2016 Living Planet Report points out that increased human pressure is diminishing natural capital at a faster rate than it can be replenished.


The WWF® 2016 Living Planet Report points out that increased human pressure – such as conversion of natural habitat to agriculture, over-exploitation of fisheries, pollution of freshwater by industries, urbanisation and unsustainable farming and fishing practices – is diminishing natural capital at a faster rate than it can be replenished. It also states that the consequences are expected to grow over time, increasing food and water insecurity, raising prices for many commodities and increasing competition for land and water.

Against this backdrop and recognising that healthy ecosystems are vital to our survival, wellbeing and prosperity, conducting our business in an environmentally sustainable manner is an obligation. This obligation 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.

We acknowledge that we do have an environmental footprint; however, we carefully manage and mitigate the environmental, climate and biodiversity impacts of our operations. We achieve this by working towards the Planet commitments embodied in our Group Sustainability Charter. 

To realise these commitments, we have a far-reaching environmental management system which includes:

- Following a lifecycle approach to environmental management which includes minimising the environmental impact of our operations in terms of raw materials and energy sources, as well as developing new production methods and products and finding innovative new ways of benefiting waste
- Identifying opportunities to save water and energy arise at every step in the production processes. This process begins in our plantations, where we apply best practice management techniques to produce woodfibre with properties that allow pulping using less energy and water
- Ongoing investment in research and development
- Maintaining systems which monitor environmental performance and legal compliance at each mill, including energy dashboards, integrated water and waste management plans, air emissions, and effluent
- Taking appropriate, pre-emptive action to improve or mitigate identified environmental risks
- Ensuring that we keep up with environmental best practice through a number of internal environmental 'clusters' comprising experts in various fields

- Having environmental targets in place in each region. Targets are reported on each quarter to the management teams in each region, on a regular basis to the Global Sustainable Development Council and to the Social, Ethics, Transformation and Sustainability Committee biannually, and
- Using ISO 9001, ISO 14001, OHSAS 18001 and in Europe: EMAS (Eco Management and Audit System) and ISO 50001. To view these certifications, please go to the certifications FAQ on our website. 

Paper comes from nature and it returns to nature. Not only is it strong, versatile, beautiful, reusable and recyclable, it is also fully biodegradable. In sea water conditions, paper biodegrades fully within four months, returning to nature without leaving any toxic residue.



# Sourcing sustainably managed fibre

Responsible manufacturing begins with responsible procurement. Healthy, abundant forests and plantations are critical to the long-term viability of each of our core businesses because wood supplies the bulk of renewable energy that drives our mills and cellulose fibres comprise the primary ingredient in our paper and pulp products.

Our procurement policies cover a wide variety of issues, including the management of plantation forests and harvesting.

We are certified by internationally recognised, independently verified certification systems including the Forest Stewardship Council® (FSC®), the Programme for the Endorsement of Forest Certification (PEFC™) and the Sustainable Forestry Initiative (SFI®) for woodfibre.

## Performance against our global certification goal

In terms of certified fibre, our 2020 global goal is to maintain or improve the percentage of certified fibre supplied to our mills at our 2014 base of 79%. We did not achieve this in 2016, with the percentage at 73%. In **Southern Africa**, this was the result of using less of our own woodfibre because of the drought and having to buy timber in. In **North America**, the decline was driven primarily by a change in production strategy at Cloquet Mill which involved a change from buying 100% certified market pulp to making our own pulp as we were limited to the amount of certified fibre available in the local wood basket. In **Europe**, there is push back against certification by sawmills, who are finding certification requirements increasingly onerous.

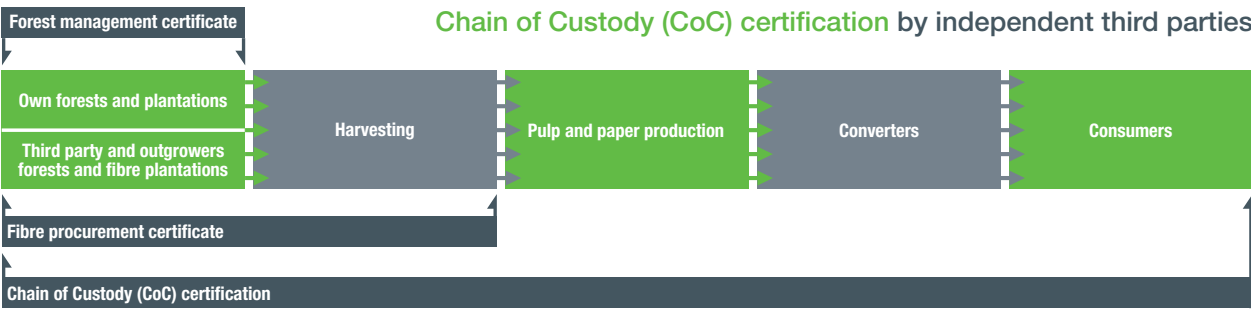
Certification is applicable to fibre and manufacturing sites. There are two types of certification: The first is forest certification which assures that forests and plantations producing wood products are managed according to a set of criteria aimed at responsible management and that social aspects such as indigenous rights have been taken into consideration. The second is Chain of Custody (CoC) certification which tracks and assures process wood products originate from certified forests and plantations.

CoC tracks the origin of a raw material at each stage of the production process, from beginning to end. For forest-based industries like ours, certifying the CoC means verifying that the wood, used at each stage of the production process, originated from a forest or plantation certified as being sustainably managed.

CoC is only valid if each link in the chain is checked. Once a link in the chain is broken, material loses its certified status. To ensure an unbroken chain, each time the timber is processed the processor must be certified to verify that they have a system of tracking the timber material through the process. For the paper industry, the value of certification lies in being able to label the final product as originating from a sustainably managed forest, providing added value for the customer or retailer.

## Regional certification

In North America, Europe and Southern Africa, the percentage of certified fibre is, respectively: 55%, 75.2% and 82%. Sappi's plantations in Southern Africa are 100% FSC-certified. In North America, 100% of wood and pulp is purchased in accordance with both the FSC Controlled Wood standard and the SFI Certified Sourcing standard. These standards are a critical element of Sappi's due diligence for the Lacey Act compliance. In **North America**, Sappi includes fibre sourced from Certified Logging Professional and the Maine Master Logger programmes. Cloquet, Westbrook and Somerset Mills are FSC, SFI and PEFC-certified. In Europe, all mills are FSC and PEFC-certified. In **Southern Africa**, 100% of Sappi's owned and managed plantations are FSC-CoC-certified, while Ngodwana, Saiccor, Stanger and Tugela Mills and Lomati Sawmill are FSC-CoC-certified.



# Sourcing sustainably managed fibre continued

## Collaborating with industry players

- Individual and family-owned land accounts for more than one-third of all land across the United States of America. These lands are owned by more than 22 million individual owners and the US Forest Service estimates that more than half of the wood harvested for the wood products industry originates in family-owned forests. While these landowners may have management plans in place, in most cases there is no formal CoC certification to offer brand owners the supply chain assurances they seek.

### Working with conservation agencies

Clairmont Mountain Nature Reserve near Bulwer in the foothills of the Drakensberg mountains is one of the sites we have identified as an area of high ecological value. The 1,000ha reserve is significant from a conservation point of view primarily because it connects two existing nature reserves. It also includes some large and relatively pristine portions of grassland that are important in terms of habitat connectivity. The Clairmont Nature Reserve project is a partnership between Sappi and Ezemvelo KZN Wildlife.

Consequently, through a partnership with the American Forest Foundation and the Sustainable Packaging Coalition, stakeholders across the supply chain have come together to understand challenges and identify new methods to evaluate sustainable forest management on family-owned land. Development of a new data driven assurance model will demonstrate how the practices and actions of landowners on individual parcels of land aggregate into a healthy forested landscape or regional ecosystem. The model could also be used to identify potential landscape-wide gaps and opportunities to enhance forest sustainability, and find practical ways for the supply chain to address them at a meaningful scale. This project is chaired by Sappi North America’s Director of Sustainability.

- CEPI, of which Sappi Europe 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
- In Southern Africa, Sappi has established a group certification scheme for small and medium growers. There are currently over 40 members in the scheme with plantations ranging from a few hundred hectares to 4,391 hectares in size. FSC certification is not yet available to micro growers. Sappi is currently working with other industry players to overcome this. To find out more, [click here](#). Currently timber from micro growers is recognised as ‘controlled wood’ and can thus be used to produce FSC products labelled as ‘Mixed Sources’.

We have taken the decision to understand the challenges and risks of genetically modified (GM) tree crops as our competitors in the woodfibre space have started utilising this technology. While we see potential environmental, social and reputational risks with GM crops, we also see them as a potential method to adapt our plantations to a potentially rapidly changing climate and as a renewable source of chemicals, energy and fibre. To date, however, our forestry operations are GM tree free.

In North America, our US\$25 million investment in a new woodyard at Somerset Mill is enhancing the sustainability of our fibre base. [Click here for details.](#)



# Sourcing sustainably managed fibre continued

## Case study



### Promoting sustainable forest management: working collaboratively to solve the problem of gall wasp in our plantations

Forest tree species are subject to attack by various pests, for example the Eucalyptus gall wasp, *Leptocybe invasa* (*L invasa*).

*Selitrichodes neseri* (*S neseri*), a parasitic wasp of *L invasa* was first discovered in April 2010. Studies have shown that *S neseri* is a suitable biological control agent due to its short developmental time, long adult life span, ability to utilise a range of gall ages and a high level of host specificity.

Our forestry research team is participating in a project to monitor the extent and degree of damage associated with *L invasa*, and level of success of the bio-control agent across the summer rainfall plantation area, using an industry monitoring network operated by forestry companies and supported by specialist technical expertise from the Forestry and Agricultural Biotechnology Institute (FABI) and the Institute for Commercial Forestry Research (ICFR). The main outcome expected from this project is the effective bio-control of *L invasa*. In order to achieve this, four outcomes are planned:

- A map to show the spatial and temporal trends in *L invasa* activity
- Estimates of the parasitism levels of *L invasa* by *S neseri* (bio-control agent)
- Estimates of economic impact on industry associated with *L invasa*, and
- Prioritised and targeted release of the bio-control agent *S neseri* as needed.

A pilot survey has been conducted in May 2016 to test the sampling protocol. A slightly revised sampling protocol will be used for the first national *L invasa* survey to be conducted during November 2016.

## Sourcing sustainably managed fibre continued

### Case study



#### Promoting sustainable forest management: mulching of harvest residue

Burning of harvest residue (slash) is a common practice in Southern Africa as it reduces fuel load and fire risk and it facilitates pre-planting, planting and post-planting activities. However, burning reduces soil organic matter (SOM) content which is important for improving water holding capacity of the soil and also soil texture, as well as maintaining soil fertility. In addition, SOM regulates soil temperature and serves as a habitat for soil organisms. Previous studies on nutrition of trees identified that nutrient loss, especially nitrogen (N) loss, is a concern on the sandy soils of KwaZulu-Natal which have low organic matter content.

A costlier alternative to burning is mechanical mulching of the remaining harvest residue. This process has a number of benefits, including:

- Protection of soil against erosion and compaction
- Conservation of soil moisture
- Increased percolation and retention of soil water
- Reduced evaporation
- Reduction of weed growth, and
- Moderation of soil temperature – elevated temperatures can result in fine root mortality which increase plant stress.

The remaining mulch also plays an important role in plant nutrition as it acts as a slow release fertiliser, releasing nutrients as it decomposes. This is especially important to retain N, which is easily leached from the soil after harvest residue has been burnt. These benefits should translate into increased survival and growth of trees.

In order to quantify this benefit of mulching, Sappi Forests established three research trials in KwaZulu-Natal. In general, the survival and growth of trees where slash was mulched was superior to where harvest residue was burnt. This may be related to moderation of soil temperature, conservation of soil moisture, reduction of sand blasting, increased nutrient retention, etc.

The studies indicated that the value of the estimated additional timber due to mulching exceeds the mulching costs, thereby making mulching a financially viable option. In addition, there are also indirect benefits along the supply chain. For example, mulching allows mechanisation of silviculture operations as old stumps do not limit machine movement, allowing for easier, cheaper harvesting of the next crop. Mulching also reduces the period a compartment is temporarily unplanted, when conditions for burning are unfavourable.

To sum up: Mulching is an economically viable alternative to burning as this treatment improves soil fertility at planting and throughout the rotation, allowing trees to rapidly capture the site and thus increasing overall growth.

We are now mulching on our plantations in KwaZulu-Natal.

# Managing and mitigating climate change

## Forests and plantations play an important role

We share the view that, collectively, greenhouse gases (GHGs), most notably carbon dioxide (CO<sub>2</sub>), and methane (CH<sub>4</sub>), are responsible for climate change and that these are generated primarily by human activities such as the burning of fossil fuels, poorly managed landfill and deforestation. The pace at which climate change is occurring is cause for concern.

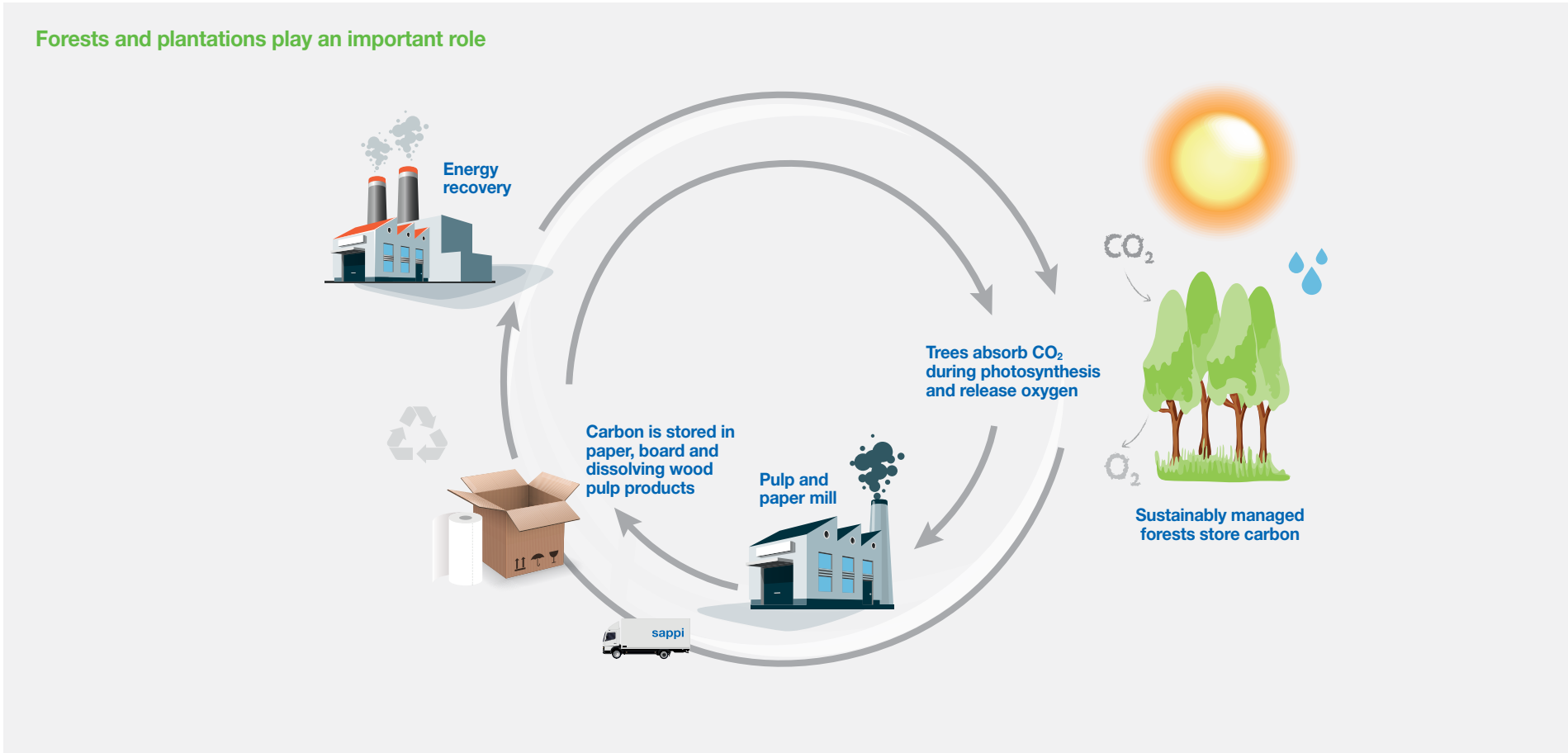
Climate change is exacerbated by the presence of too many greenhouse gases in the atmosphere of which CO<sub>2</sub> is the most abundant. Through photosynthesis, a part of the carbon cycle, trees and other plants use water and sunlight to convert CO<sub>2</sub> into carbohydrates to provide energy and building blocks for growth. The process releases oxygen as a by-product. The carbon removed from the atmosphere is effectively stored in plant material and wood. In other words, trees and the use of forest products can act as carbon sinks.

Our industry has played a significant role in expanding forests and plantations. In Europe and North America, for example, forests are growing. Europe's net forest area is currently increasing at a rate of approximately 1.6 million hectares per annum<sup>(1)</sup>. In the United States, more trees are grown than harvested. The country continues to benefit from a large and diverse forest inventory distributed across about one-third of total land area. Over the last 60 years, the total net United States forest area has increased by over 3%<sup>(2)</sup>.

The individual within Sappi with the highest responsibility for climate change is the Group Head Technology who reports directly to the group CEO.

For a discussion on how we mitigate climate change risk in our plantations, please click [here](#).

Forests and plantations play an important role



<sup>(1)</sup> Confederation of European Paper Industries.  
<sup>(2)</sup> <http://www.za.twosides.info/US/Thirty-Leading-North-American-Companies-Remove-Go-Paperless--Save-Trees-Claims>



# Reducing our carbon footprint

Our efforts to reduce our own carbon footprint are evident in the fact that over 50% of our global energy use is derived from renewable, rather than fossil fuel sources. This is important, as the burning of fossil fuels releases ‘new’ CO<sub>2</sub> previously locked up in the earth’s crust in the form of oil, gas or coal. When renewable energy like biomass is burned, the CO<sub>2</sub> released is equivalent to that which was bound from the atmosphere during the process of photosynthesis – so, no ‘new’ carbon is being introduced.

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

Over five years, we have reduced total Scope 1 and 2 greenhouse gas emissions intensity by 8.8%.

**Note:** In terms of water and energy, we have made certain changes to align more closely with the Global Reporting Initiatives G4 indicators and the guidelines set out by the National Council for Air and Stream Improvement (NCASI). Changes have been backdated to 2012 to allow for trend continuity.

Previously, total energy was defined as basic purchased energy (mill gate) plus own fuels. It has now been readjusted to include basic purchased energy plus own fuels minus energy sold. In addition, the inefficiency factor for some mills has been updated.

Cooling water is now included in process water, so that effluent levels have increased.

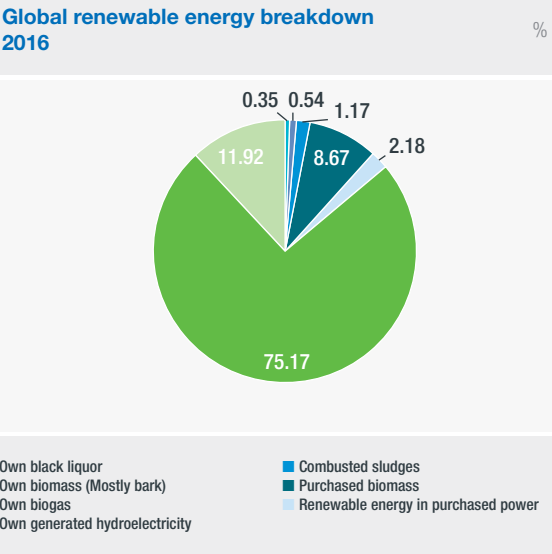
Most Sappi mills generate power onsite from fossil or renewable resources for internal consumption. In some instances (Westbrook Mill (North America), Gratkorn and Maastricht Mills (Europe) and Ngodwana Mill (Southern Africa)), excess power can be generated which is sold back into the power grid. This power is used for district heating in the vicinity of Sappi’s plants and for export into the public grid, thereby replacing fossil fuels. In this way, roughly 100,670 metric tons CO<sub>2</sub>e were avoided during the past five-year cycle<sup>(1)</sup>.

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, reducing purchased energy (electricity and fossil fuel) by increasing our use of renewable energy – an approach that ultimately results in a reduction in CO<sub>2</sub> emissions.

Our generation of renewable energy in FY2016 was 52.9% mostly from black liquor – just over 75% (2015: 73%), indicated in the pie chart alongside. The regional renewable energy profile is as follows: Europe: 36.1%, North America: 79.5% and Southern Africa: 44.6%.

The reason for the much higher percentages of renewable energy in our mills in North America and Southern Africa than in Europe is that in the first two regions, a much greater proportion of our product originates from integrated pulp and paper mills. These mills typically have a higher degree of energy self-sufficiency than mills with different processes or those that only produce paper, as the black liquor (dissolved organic compounds from wood) created during the manufacture of pulp is a biofuel and a primary source of renewable fuel for steam and power production.

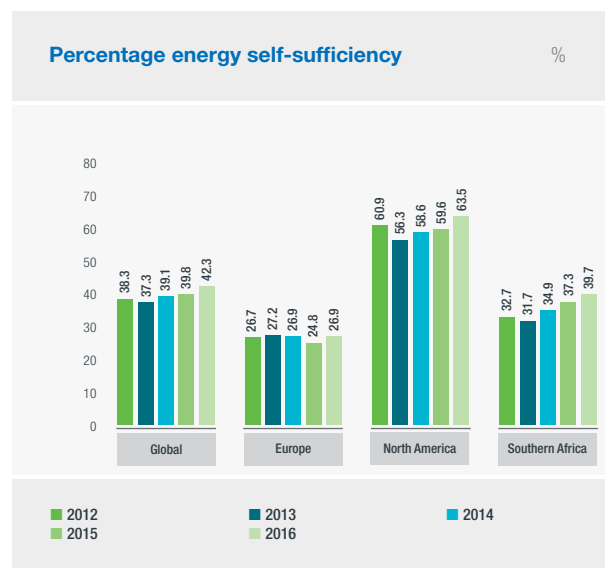
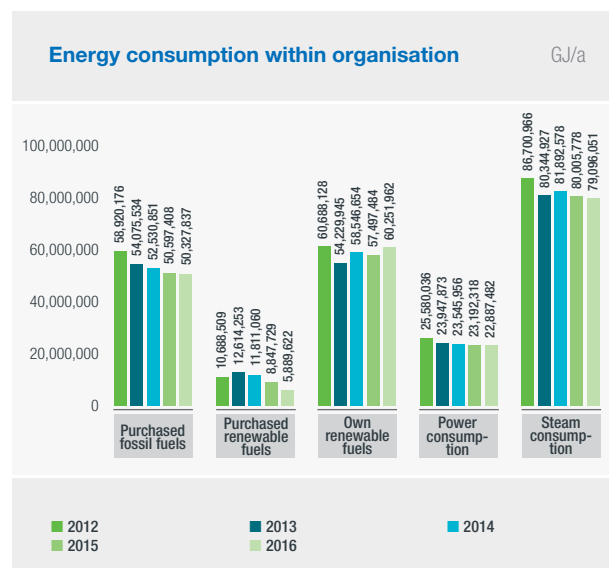
In the USA, the country’s energy profile is only 10% renewable energy whereas the pulp and paper industry uses 54.5% and Sappi North America’s use of renewable energy is over 70%. This is a significant competitive benefit not just in terms of costs, but also in terms of customers choosing papers with a lower environmental footprint<sup>(2)</sup>.



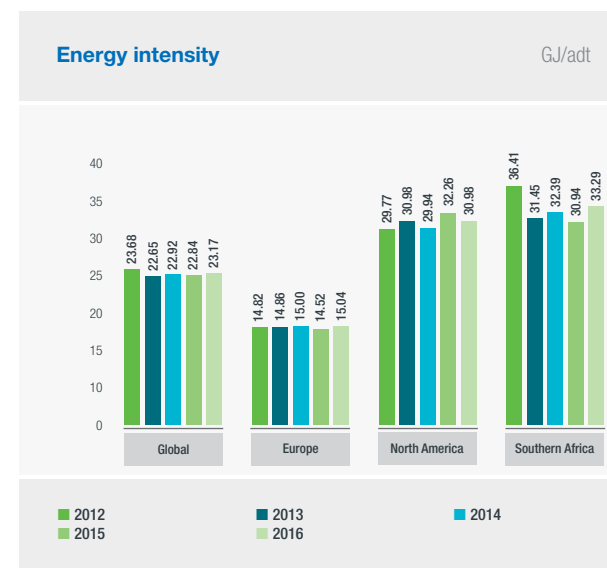
<sup>(1)</sup> The emissions avoidance value was calculated by taking each regional power utility’s emissions factor and comparing it with Sappi’s internal power generation emissions factor. The difference between the two factors indicates that Sappi’s internal power generation is less carbon intensive in certain regions and therefore results in carbon emission avoidance.

<sup>(2)</sup> [https://www.eia.gov/forecasts/aeo/data/browser/#/?id=37-AEO2016&cases=ref2016~ref\\_no\\_cpp&sourcekey=0](https://www.eia.gov/forecasts/aeo/data/browser/#/?id=37-AEO2016&cases=ref2016~ref_no_cpp&sourcekey=0)

# Reducing our carbon footprint continued



Globally, energy self-sufficiency showed an increase. In **Southern Africa**, Ngodwana Mill reduced the amount of power purchased, using more own produced renewable fuel (bark), leading to an increase of 2.4% in energy self-sufficiency. In **Europe**, Gratkorn and Kirkniemi Mills solved bottlenecks in the recovery/biomass boilers, resulting to a 2.1% rise in energy self-sufficiency. In **North America**, Cloquet and Somerset Mills purchased less biomass. At Cloquet Mill, the purchased biomass was reduced due to downtime on pulverised boiler 7. There was an increase in natural gas to offset some of this reduction in purchased bark, but natural gas use was down overall due to the lime kiln maintenance outage. Somerset Mill increased self-sufficiency due to increased black liquor firing. Additional factors include a net reduction in purchased energy input as a result of a shift from lower efficiency purchased biomass to higher efficiency natural gas.



Globally, energy intensity was stable. In **Europe**, energy intensity increased slightly due to Maastricht Mill increasing purchased power and at Kirkniemi Mill for the following reasons: the mill purchased more power rather than using the gas turbine based on pricing differentials, and the start-up curve of the new boiler. These increases were offset by Alfeld Mill improving PM2 efficiency and Lanaken Mill generating more own power due to higher steam demand. **North America** is seeing the benefits of recent capital and process improvement projects. For example, the paper machine hood heat recovery project at Somerset Mill is exceeding performance expectations. In addition, Lean Six Sigma projects continue to contribute to energy reductions. Better control of the causticising area at Somerset Mill has led to more stable lime kiln operations and a reduction in fuel usage in the kiln. Our improvements were also in part due to the milder winter weather.

Energy intensity increased in Southern Africa as Saiccor Mill used more heavy fuel oil and coal because of the poor quality of the latter, as well as recovery boiler tube leaks which meant the turbines generated less power. At Tugela Mill, the production and sale of lignosulphonate has increased our energy intensity due to the accounting treatment of the sales.

To view our performance against our global STE goal, please [click here](#).

# Reducing our carbon footprint continued

## Planting more trees in Europe

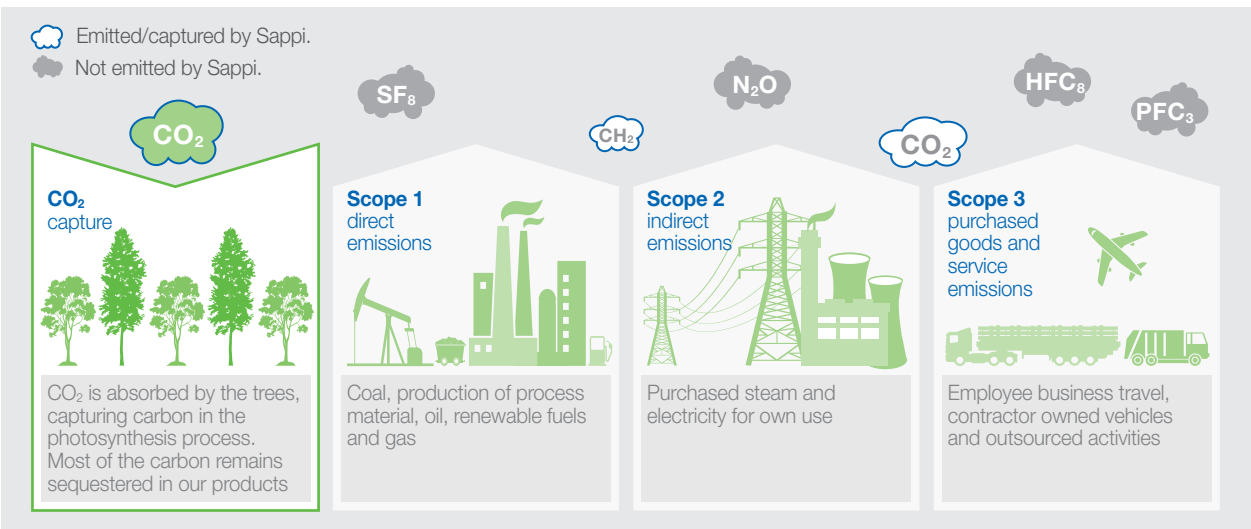
In February 2016, employees from Sappi Europe’s head office in Brussels continued their tradition of tree planting in the Forêt de Soignes by planting 4,000 saplings.

This brings the total number of trees replanted by the group to over 16,000 since the initiative started six years ago.

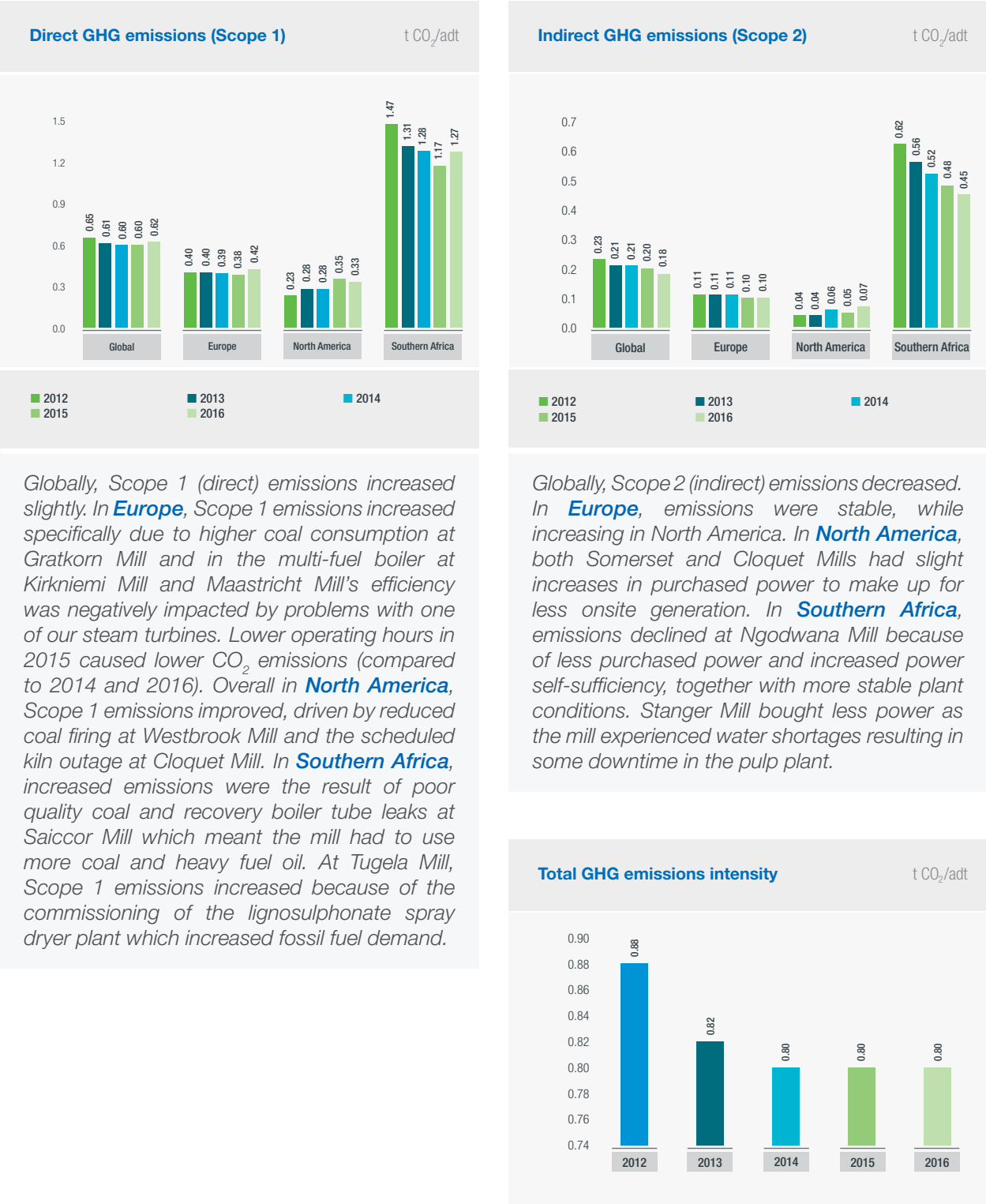
Sappi’s employee-led tree planting initiative started in Spring 2010 in association with ANB (Agentschap voor Natuur en Bos), the equivalent of the Department of Forestry. This organisation is responsible for the planting of approximately 30,000 trees in the Forêt de Soignes every year as part of the National Forest Management Plan (Belgium).

While this tree planting event is a good tradition and excellent team building, the number is certainly very small compared with the number of trees we plant in our Southern African plantations – 34 million per annum, which is (on average) 65 trees every minute.

## Our greenhouse gas emissions - cradle to gate



Since 2009, Sappi North America has participated in the US Environmental Protection Agency’s (EPA) Smartway Transport partnership, an innovative collaboration between the EPA and companies that provide freight delivery services. The goal of Smartway partners is to cut transportation-related carbon dioxide and nitrogen oxide emissions.

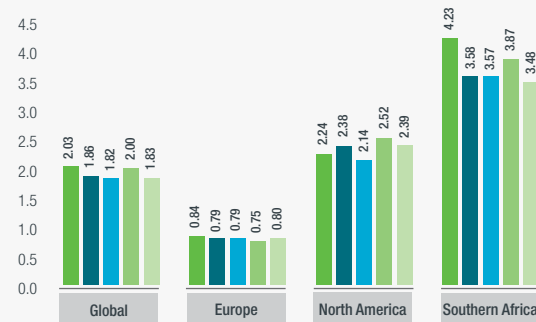




## Reducing our carbon footprint continued

### Specific NOx air emissions

kg/adt

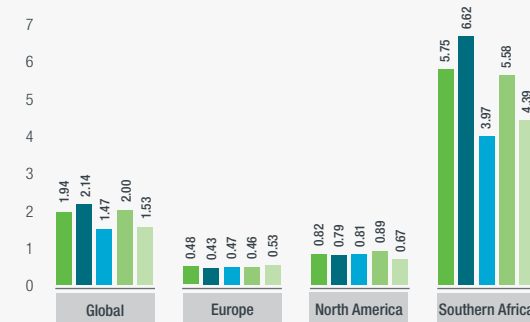


■ 2012 ■ 2013 ■ 2014  
■ 2015 ■ 2016

Globally, NOx emissions decreased. (Changes in 2015 for North America and Southern Africa resulted in an increase. Not 'no change' as previously reported – an explanation is provided below.) In **Europe**, emissions increased slightly due to reduced operational time of the gas turbine and increased coal firing in Gratkorn Mill, based on economic considerations. The overall trend for **North America** was down, driven by the installation of a low NOx burner at Cloquet Mill and reduced coal firing at Westbrook Mill. The NOx production at Somerset Mill was stable. There was an increase in reported NOx emissions at Cloquet Mill in 2015 because of improved monitoring by the Continuous Emissions Monitoring System (CEMS). In addition, the increase in specific NOx is significantly linked to the change in production basis. In 2014 Cloquet Mill produced nearly 100% dissolving wood pulp. In 2015 there were less reported saleable tons due to the production of kraft pulp for our paper machines. In **Southern Africa**, emissions at Ngodwana Mill decreased due to an increase in plant stability and reduced fossil fuel consumption in terms of coal and heavy fuel oil. At Saiccor Mill emissions decreased due to correction in gas flow rates in the coal fired boilers. At Stanger Mill, stack gas flows were corrected and backdated to 2012 resulting in higher NOx, SOx and particulate emissions than previously reported.

### Specific SOx air emissions

kg/adt

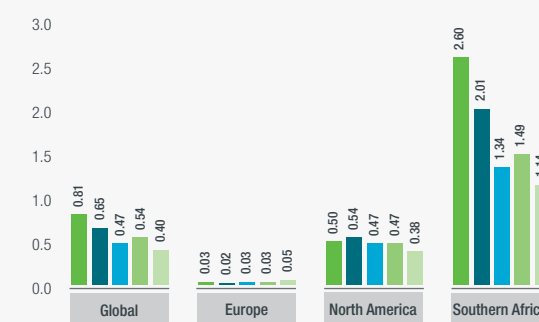


■ 2012 ■ 2013 ■ 2014  
■ 2015 ■ 2016

Globally, specific SOx emissions decreased. While emissions in **Europe** are low, they increased slightly in 2016 because of increased coal firing in Gratkorn, Kirkniemi and Stockstadt Mills. In **North America**, emissions were down overall, driven by a reduction in coal usage at Westbrook Mill and the continued trend of low number 6 fuel oil usage at Somerset Mill. In **Southern Africa**, emissions decreased at Saiccor Mill due to increased focus on managing the magnesium oxide boiler number 2 in addition to lower sulphur content of the coal used in the coal-fired boilers. Emissions also decreased at Ngodwana Mill due to increased plant stability, less fossil-fuel used (coal and heavy fuel). At Stanger Mill, stack gas flows were corrected and backdated to 2012 resulting in higher NOx, SOx and particulate emissions than previously reported.

### Specific particulate matter air emissions

kg/adt



■ 2012 ■ 2013 ■ 2014  
■ 2015 ■ 2016

Globally, particulate emissions declined. In **Europe**, particulate emissions are generally low but moved up slightly due to increased coal firing at Gratkorn Mill. Emissions were down in **North America** due in part to favourable stack testing results for the recovery boilers at Somerset and Cloquet Mills. Emissions in **Southern Africa** went down due to a focus on particulate matter emission control at Ngodwana Mill, together with the commissioning of bag fillers. At Stanger Mill, stack gas flows were corrected and backdated to 2012 resulting in higher NOx, SOx and particulate emissions than previously reported.

# Using and discharging water responsibly

## Water usage in our plantations

We return a significant amount of water extracted back into the environment. Due to the nature of our processes, it is very difficult to improve on this metric. However, we can improve on the quality of effluent we discharge and we have been doing so steadily over time. We use temperature controls, oxygen level controls and other metrics to ensure that we comply with all relevant environmental regulations. Water management is included in our operational environmental management plans, which are reviewed and updated annually. Over five years, chemical oxygen demand (COD) in effluent has declined by 0.5%, while total suspended solids (TSS) have decreased by 36.5%.

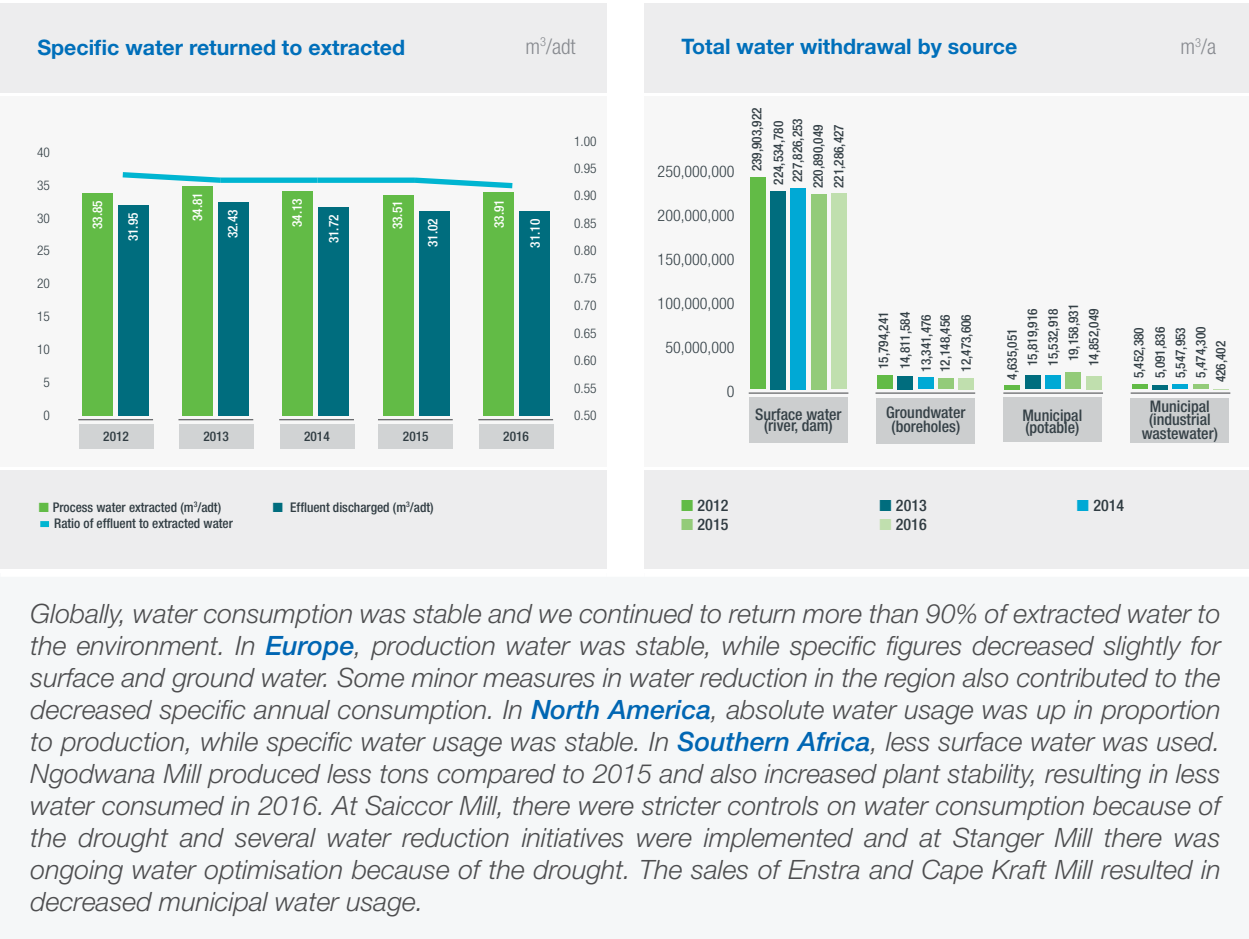
### About our bleaching processes

In **Europe**, all our integrated pulp is totally chlorine-free (TCF). Market pulp is either elemental chlorine-free (ECF) or TCF. In **North America**, our mills use the ECF bleaching process. Our mills in **Southern Africa** use ECF or oxygen bleaching sequences.

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 they generally do use more water than the grasslands they generally replace. However, on a national scale the amount of water they generally use is relatively small – about 3% of available resources – but this varies considerably from place to place and during different times of the year. To put this into context, irrigated agriculture uses approximately 60% of South Africa’s available water resources.

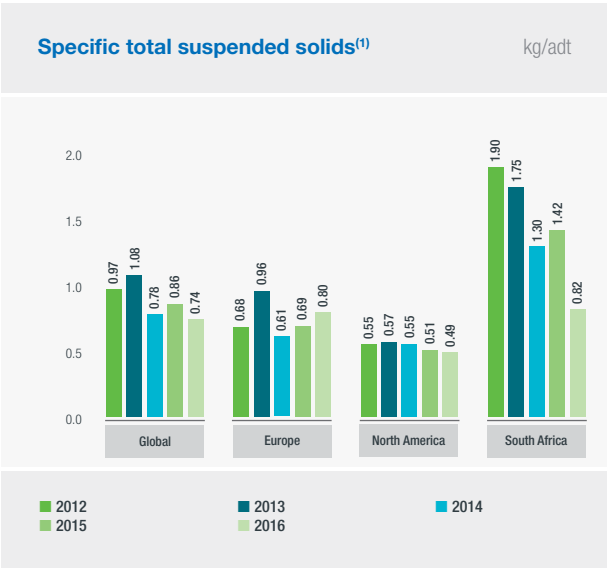
Due to perceptions about forestry’s high use of water, serious restrictions on expansion have been placed by government. We believe this is misguided, based on the following:

- 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 is much better than most other forms of agriculture, and
- Though difficult to calculate, the value added to the water we use compares very favourably with other forms of land use – especially because forestry uses land that has few other economic options for use.

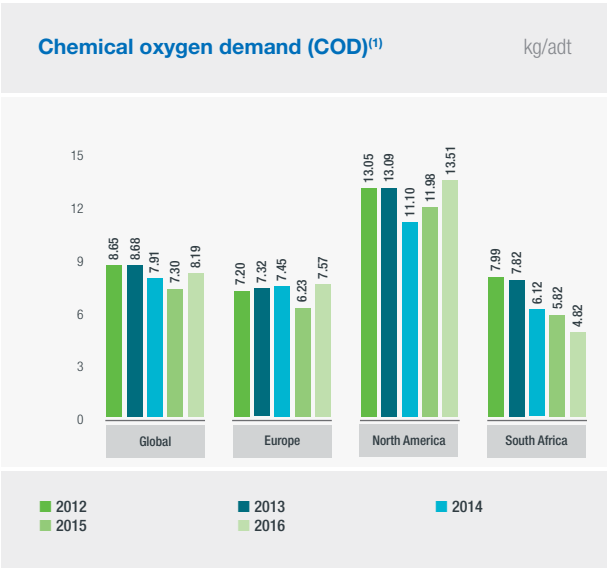


**Note:** Process water extracted and effluent discharged exclude non-contact cooling water.

# Using and discharging water responsibly



Globally, TSS declined. TSS figures increased in **Europe** due to hydraulic variations because of stops/start-ups on the paper machines and the availability of the final sedimentation tank. The overall trend in **North America** showed a decrease in TSS due to reductions in loading and improved removal efficiency in the treatment plant at Westbrook Mill, while at Cloquet Mill reductions were the result of a Lean Six Sigma project to improve clarifier efficiency. In **Southern Africa**, the decreased levels were the result of the sale of Enstra Mill and a focus at Tugela Mill on optimising reject screens from PM2 to reduce fibre loss to drains.



The increase at global level was mainly driven by Europe and North America. In **Europe**, COD levels reverted to 2014 levels following the re-commencement of pulp production at Gratkorn Mill after the rebuild of the recovery boiler at the mill. In **North America**, at year-end, we discovered a correlation factor between BOD and COD that may be resulting in under-reporting the COD for the Cloquet facility. We will investigate further in 2017 and will make corrections as appropriate. All of the North American mills report BOD annually in the Sappi North America Sustainability Report. In **Southern Africa**, levels decreased because of the sale of Enstra Mill. Emissions at Stanger Mill also decreased due to pulp mill shuts and the introduction of calcium nitrate into the effluent treatment process which assisted with the biological processes in the lagoon.

<sup>(1)</sup> Saiccor Mill has been excluded from the TSS and COD calculations as it is the only mill in the group to use the sulfite pulping process in the production of DWP. (Both Ngodwana and Cloquet Mills use the prehydrolysis kraft pulping process to produce dissolving wood pulp.) However, over five years, Saiccor Mill has reduced TSS and COD effluent concentrations by 44.7% and 3.15% respectively and will continuously improve its water quality footprint through further capital investment. Over many years, scientific studies carried out on the marine environment have concluded that the magnitude and spatial extent of the impact is negligible with no immediate or significant ecological concern – CSIR (2008 – 2015).



## Reducing solid waste and adding value

Over five years, we have reduced the amount of solid waste generated by 14.2% and the amount of solid waste sent to landfill by 6.6%.

Our focus is on minimising end-of-life waste through waste beneficiation. This not only helps to mitigate environmental impact, but also, as with reducing purchased energy usage, it brings down costs and can generate additional revenue. Sending waste to landfill adds costs, while valorising waste brings in revenue.

The least desirable method of solid waste disposal from an environmental perspective is landfill. Organic waste emits methane, a greenhouse gas with approximately 25 times the global warming potential of CO<sub>2</sub>. Inorganic waste can leach, resulting in surface and/or groundwater pollution.

As can be seen from the pie chart below, globally most of Sappi's solid waste generated is in the form of wood waste. In all regions, this is used as a fuel for onsite energy generation. In Southern Africa, wood waste is also used for composting and landfill stabilisation.

### Uses for Sappi's waste

#### Non-solid waste

- Used oil is dewatered, chemically treated, refined and filtered for reuse in various grades of base oils.
- 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 also recovered from effluent and reprocessed. These partly Sappi-patented processes help to increase material efficiency.

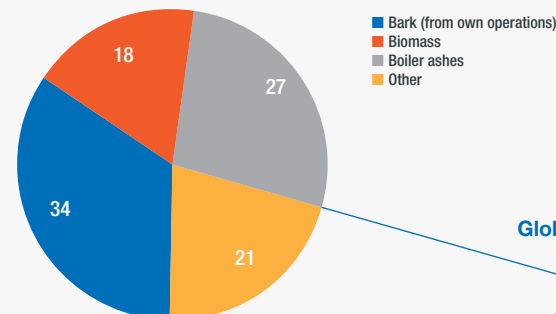
#### Solid waste

- Sludges, bark and wood are combusted for energy production in each region, while in Europe, dried sludge is also used for animal bedding by farmers.
- 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.
- In North America, lime and boiler ash is provided to farmers as a soil enhancer through a partnership with the University of Minnesota Extension Service, Carlton County By-Products Programme, while in Southern Africa, lime mud is sold.

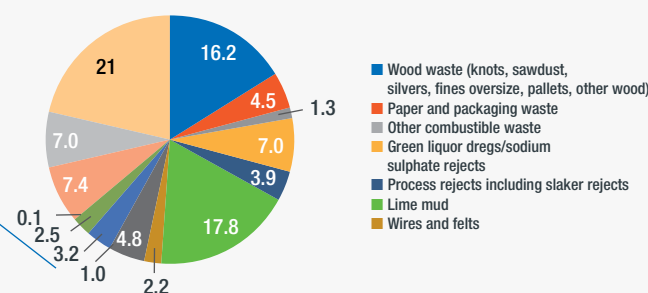
- In North America, inorganic 'grit' removed from the chemical recovery process is used for roadbed underlayment.
- Bagasse supplied to Stanger Mil in South Africa is depithed, and the pith given to farmers as a soil enhancer.
- Lignosulphonate (a by-product of the pulping process) is recovered from spent pulping liquors, and sold to customers for use in other products. In Southern Africa, lignosulphonate is sold to customers for use in a dust suppressant product used in the mining sector, while in Southern Africa and Europe, lignosulphonate is also sold to the cement and fertiliser industries and for other speciality chemical applications.

We generate very little hazardous waste, 0.2% of the total generated. This is closely controlled and carefully managed, both at our operations and the receiving facilities.

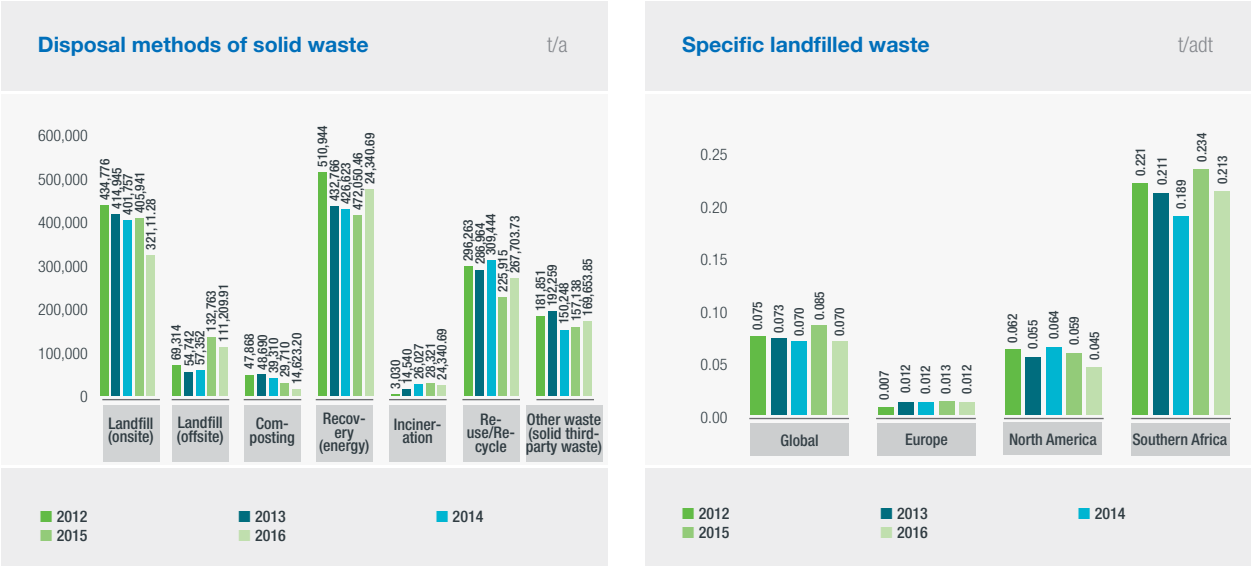
Global breakdown of solid waste types in Sappi (%) 2016



Global breakdown of 'other' solid waste types in Sappi (%) 2016



# Reducing solid waste and adding value continued



Globally, there was a decrease in landfilled waste. In **Europe**, there was a slight increase in ashes mainly due to the new multifuel boiler at Kirkniemi Mill. However, these were almost completely recycled. In **North America**, volumes sent to landfill declined because of a reduction in solid fuel firing (boiler ash) at Somerset and Westbrook Mill. Landfill volumes were down at Cloquet Mill due to expansion of the beneficial use of by-products where materials are primarily used as a soil amendment. In **Southern Africa**, more waste was reused resulting in a reduction of disposal to landfill and more bark was used as fuel at Ngodwana Mill.



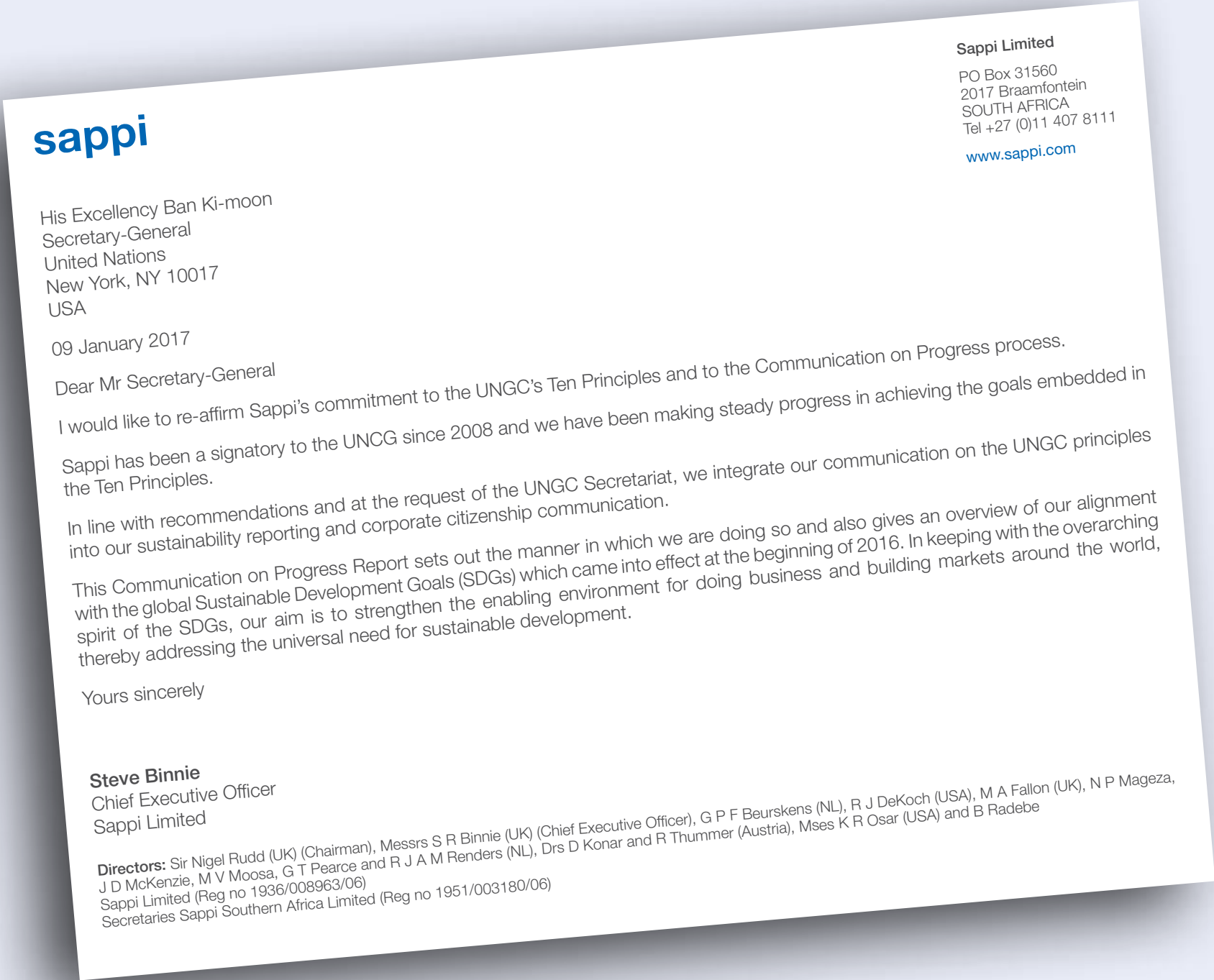
# United Nations Global Compact (UNGC)

We integrate our communication on the UNGC principles into our sustainability reporting and corporate citizenship communication.



# UNGC signatory since 2008

We have been a signatory to the UN Global Compact since 2008.



# Human rights

**Principle 1:** Business should support and respect the protection of internationally proclaimed human rights.

**Principle 2:** Make sure their own corporations are not complicit in human rights abuses.

## Principle 1

As stipulated in our [Group Human Rights Policy](#) and [Group Human Resources Policy](#), [www.sappi.com](http://www.sappi.com) <sup>(1)</sup>, 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 [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

Our commitment to ensuring that we are not complicit in human rights abuses is encapsulated in our [Group Human Rights Policy](#). This extends to suppliers and states that 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 report 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 also encourage our suppliers to uphold the principles of human rights as set out in the United Nations Universal Declaration on Human Rights.

The International Trade Union Confederation (ITCU)<sup>(1)</sup> human rights index rates the countries we operate as follows, with one being the best score and five being the worst score:

- Rating 1 (Irregular violations of rights):
  - Austria
  - Finland
  - Germany
  - The Netherlands
- Rating 2 (Repeated violations of rights):
  - South Africa
- Rating 4 (Systematic violations of rights):
  - United States of America.

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, and measures to contribute to the elimination of all forms of forced or compulsory labour.

<sup>(1)</sup> [https://www.ituc-csi.org/IMG/pdf/ituc-violationmap-2016-en\\_final.pdf](https://www.ituc-csi.org/IMG/pdf/ituc-violationmap-2016-en_final.pdf)

# Labour



**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 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 2016, globally 60% of our workforce was unionised, with 71.5% 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.

Given the complex labour situation in Southern Africa, we have established a number of structures to enhance ongoing positive engagement with union leadership. This is facilitated by structures such as the National Partnership Forum which includes senior members of management and senior union leaders who hold regular meetings where business, safety and union challenges are discussed.

Disciplined behaviour is essential not only for individual wellbeing, but also to achieve our group goals and objectives. In each region, disciplinary codes ensure disciplinary procedures are applied consistently, while grievance policies 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.

## Principle 4

Our [Group Human Rights Policy](#) explicitly forbids the use of 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, including those relating to forced labour (including prison and slave labour).

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.

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 and an indirect form of forced labour.

This is a particular issue in South Africa, which is one of the most consistently unequitable countries in the world and continues to be characterised by high levels of poverty and unemployment. Disparity in income differentials across population groups and across genders remains a challenge. 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. Recognising that decent work and productive employment are key elements to achieving fairness, reducing poverty and achieving equitable, inclusive and sustainable development, we work hard to dispel the imbalance.

In Southern Africa, as in the other regions where we operate, Sappi pays market-related wages in accordance with or above local legislation. As an example: the new minimum wage for the forestry sector, gazetted by the Minister of Labour, was successfully implemented on 01 April 2016. Sappi Southern Africa adjusted the minimum wage in the forestry division by 7% which is 0.4% above the regulated minimum wage increase of 6.6%. In the absence of a formal collective bargaining structure in this division, workers' committees were engaged during the implementation process.

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.

Furthermore, in this region, our plantations are 100% FSC®-certified or controlled and this forest certification system stipulates the protection of indigenous people's rights.

We are further focusing on promoting economic inclusion and eliminating poverty through our Khulisa Umnotho (Project Grow) enterprise development scheme which has been in operation since 1983. We also work actively with the authorities and communities on land reform projects which aim to promote the inclusion of previously disadvantaged South Africans into the economy.



Labour continued

**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 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.

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 Southern 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 is 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 18.25% of new hires are women, with women accounting for 20.56% of the workforce.

In Southern Africa in 2015, we embarked on a disability learnership project with I Can, whereby 10 learners successfully completed their learnerships. We are now supporting 15 new learners for a new 12-month programme.

# Environment



**Principle 7:** Businesses should support a precautionary approach to environmental challenges.



**Principle 8:** Undertake initiatives to promote greater environmental responsibility.

## 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:

- Following a lifecycle approach to environmental management which includes minimising the environmental impact of our operations in terms of raw materials and energy sources, as well as developing new production methods and products and finding innovative new ways of benefiting waste
- Identifying opportunities to save water and energy at every step in the production processes. This process begins in our plantations, where we apply best practice management techniques to produce woodfibre with properties that allow pulping using less energy and water
- Ongoing investment in research and development
- Maintaining systems which monitor environmental performance and legal compliance at each mill, including energy dashboards, integrated water and waste management plans, air emissions and effluent

- Taking appropriate, pre-emptive action to improve or mitigate identified environmental risks
- Ensuring that we keep up with environmental best practice through a number of internal environmental ‘clusters’ comprised of experts in various fields
- Having environmental targets in place in each region. Targets are reported on each quarter to the management teams in each region, on a regular basis to the Global Sustainable Development Council and to the Social, Ethics, Transformation and Sustainability Committee biannually, and
- Using ISO 9001, ISO 14001, OHSAS 18001 and, in Europe: EMAS (Eco Management and Audit System) and ISO 50001.

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.

## 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, as well as through our extensive use of cogeneration.

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 2020 global goals in addition to the regional goals established in each region to deal with specific issues. Progress against these goals is reported on in our Annual Integrated Report, our Group Sustainability Report and regional Sustainability Reports.

## Environment continued



**Principle 8:** Undertake initiatives to promote greater environmental responsibility.

Over five years we have:

- Increased energy self-sufficiency by 10.5% and our generation of renewable energy by 5.1%
- Decreased direct (Scope 1) and indirect (Scope 2) greenhouse gas (GHG) emissions by 4.7% and 20.55% respectively
- Reduced absolute emissions intensity by 8.8%
- Generated 10.6% less solid waste than we did five years ago, and sent 14.3% less waste to landfill
- In terms of water quality, decreased chemical oxygen demand (COD) by 0.5%, and total suspended solids (TSS) by 36.5% (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.

Land, air and water are shared resources. By motivating and encouraging people, particularly those close to our operations, to share our commitment of treading more lightly on the planet, our aim is to enhance the sustainability of the natural resources and ecosystems on which our business depends.

In **Europe**, we:

- Continue with our eco-effectiveness campaign where Sappi people share their stories about achieving greater levels of environmental responsibility <https://www.sappi.com/eco-effective-stories>
- Communicate information internally about sustainability-related topics through our green ambassadors, who keep colleagues informed about industry developments that could be of interest to customers
- Are closely engaged in the Confederation of European Paper Industries (CEPI) Roadmap 2050 which works to implement the transition to an effective low-carbon economy, and
- Belong to the 'Save Food' initiative which signals a firm commitment to better protection of all foodstuffs the world over. Save Food is a joint initiative of the Food and Agriculture Organisation 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.

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, and <http://www.livinglandsandwaters.org/>
- 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
- Are a supporter, together with publishers, cataloguers and other paper companies, of Recycling Works in Publishing (RWIP). RWIP is a member of The Recycling Partnership, whose goal is to increase curbside recycling in 200 communities throughout the US in the next 10 years. For more information, see [www.recyclingpartnership.org](http://www.recyclingpartnership.org)
- Continue to build relationships between Sappi and our local communities through our sustainability ambassadors. In many cases, we have established our presence and positive impact through recurring community events such as the River Quest programme supported by our Cloquet Mill employees. Through River Quest, each year over 1,200 sixth-grade students and teachers have a hands-on learning experience using the St Louis River ecosystem as a core to the curriculum. Similarly, our southern Maine ambassadors have organised a major Sappi presence at the Portland area 'Green Community' day, including papermaking demonstrations, and





## Environment continued



**Principle 8:** Undertake initiatives to promote greater environmental responsibility.



**Principle 9:** Encourage the development and diffusion of environmentally friendly technologies.

- Participate in a partnership with the American Forest Foundation and the Sustainable Packaging Coalition, whereby stakeholders across the supply chain come together to understand challenges, and identify new methods to evaluate sustainable forest management on family-owned land. Development of a new data-driven assurance model will demonstrate how the practices and actions of landowners on individual parcels of land aggregate into a healthy forested landscape or regional ecosystem. The model could also be used to identify potential landscape-wide gaps and opportunities to enhance forest sustainability, and find practical ways for the supply chain to address them at a meaningful scale. This project is chaired by Sappi North America's Director of Sustainability.

In **Southern Africa**, we:

- Set approximately 30% of our land aside for the management and conservation of natural habitats, including indigenous forests and the biodiversity they contain
- Have established a group certification scheme for small and medium growers. There are currently over 40 members in the scheme with plantations ranging from a few hundred hectares to 4,391 hectares in size. FSC®-certification is not yet available to micro growers, Sappi is currently working with other industry players to overcome this, and
- Promote 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 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. <http://www.karkloofmtb.co.za/> and <http://www.midlandsmeander.co.za/biking>

- Continue with the Earth Kind Agent electronic sustainability game which educates our people about key aspects of our environmental performance. The game for PCs and the links to the apps can be found at: <http://www.sappi.com/earthkindagent> , and
- Support the Pepper Bark Tree (*Warburgia Salutaris*) project which in turn supports the efforts of the Kruger National Park to protect South Africa's most endangered tree by re-introducing the tree into communities. Sappi's intervention has enabled seedlings to be grown on a large scale. To date 3,000 trees have been distributed to communities in Mpumalanga and Swaziland. 12,000 seedlings are being prepared for distribution in 2017 and an annual target of 15,000 has been set. To re-introduce the tree in KwaZulu-Natal, the Sappi Forests research facility has developed seed beds with 1,500 trees established within the first year. These will be distributed to our Khulisa Umnotho (Project Grow) beneficiaries and communities.

Annually, we provide information to the Carbon Disclosure and Forest Footprint Disclosure Projects and make our submission publicly available.

In each region, we sponsor environment-related publications accessible to the general reader.


### 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. A pilot-scale plant for low-cost Cellulose NanoFibrils (nanocellulose) production at the Brightlands Chemelot Campus in the Netherlands came on stream earlier this year.

This is a culmination of our three-year project with Edinburgh Napier University to find a low-cost energy-saving process that will 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 easily recycled and reused without generating large quantities of waste water.

Believing in the power of open innovation and cooperation, in Europe we participated in the CEPI Two Team Project. The initiative took the form of a year-long race designed to seek out CO<sub>2</sub> emission cutting technology and gave rise to eight new technologies. For further information, go to: [http://www.cepi.org/system/files/public/documents/publications/innovation/2013/finaltwoteamprojectreport\\_website\\_updated.pdf](http://www.cepi.org/system/files/public/documents/publications/innovation/2013/finaltwoteamprojectreport_website_updated.pdf)

# Anti-corruption



**Principle 10:** Businesses should work against corruption in all its forms, including extortion and bribery.

## Principle 10

We recognise that building an accountable organisation underpins our ongoing viability as a business. Accordingly, the Social, Ethics, Transformation and Sustainability Committee, among 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.

In FY2016, we launched a revised Code of Ethics which incorporates the new Sappi values (At Sappi we do business with integrity and courage; making smart decisions which we execute with speed), includes specific policies that guide employee behaviour and incorporates practical examples of possible scenarios that employees might encounter.

The Code has been translated into the various Sappi languages (English, German, Dutch, Finnish and Zulu) and distributed to all Sappi mills and offices. The roll-out of regional awareness campaigns was accompanied by communications materials including a brochure, posters, letters to stakeholder groups, newsletter and video and presentation slides.

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. ⓘ





# Global Reporting Initiative (GRI)

In support of our commitment to sustainability we report annually in terms of the G4 Global Reporting Initiative (core).



# GRI General standard disclosures

Key: • **AIR** Sappi 2016 Annual Integrated Report • **GSR** Sappi 2016 Group Sustainability Report (This report) • [Blue page numbers are links](#)

G4 indicator

General standard disclosures		Where reported
<b>G4-1</b>	Provide a statement from the most senior decision-maker of the organisation (such as CEO, chair, or equivalent senior position) about the relevance of sustainability to the organisation and the organisation's strategy for addressing sustainability.	GSR, Messages from our leadership, page 4
Organisational profile		Where reported
<b>G4-3</b>	Report the name of the organisation.	AIR, Cover
<b>G4-4</b>	Report the primary brands, products and services.	AIR, Group overview, pages 18-25
<b>G4-5</b>	Report the location of the organisation's headquarters.	GSR, About this report, page 3
<b>G4-6</b>	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.	AIR, Group overview, page 18
<b>G4-7</b>	Report the nature of ownership and legal form.	AIR, Share statistics, page 86
<b>G4-8</b>	Report the markets served (including geographic breakdown, sectors served, and types of customers and beneficiaries).	AIR, Group overview, pages 18-25
<b>G4-9</b>	Report the scale of the organisation, including: <div> <b>a</b> Total number of employees               <b>b</b> Total number of operations               <b>c</b> Net sales (for private sector organisations) or net revenues (for public sector organisations)               <b>d</b> Total capitalisation broken down in terms of debt and equity (for private sector organisations)               <b>e</b> Quantity of products or services provided.             </div>	GSR, Our sustainable business model, page 13
<b>G4-10</b>	Report the composition of the workforce, including: <div> <b>a</b> Report the total number of employees by employment contract and gender               <b>b</b> Report the total number of permanent employees by employment type and gender               <b>c</b> Report the total workforce by employees and supervised workers and by gender               <b>d</b> Report the total workforce by region and gender               <b>e</b> Report whether a substantial portion of the organisation's work is performed by workers who are legally recognised as self-employed, or by individuals other than employees or supervised workers, including employees and supervised employees of contractors               <b>f</b> Report any significant variations in employment numbers (such as seasonal variations in employment in the tourism or agricultural industries).             </div>	GSR, Profiling our people, pages 51-55
<b>G4-11</b>	Report the percentage of total employees covered by collective bargaining agreements.	GSR, People, page 63
<b>G4-12</b>	Describe the organisation's supply chain.	GSR, Our sustainable business model, page 13

## GRI General standard disclosures continued

Organisational profile <small>continued</small>		Where reported
<b>G4–13</b>	Report any significant changes during the reporting period regarding the organisation's size, structure, ownership, or its supply chain, including: <ul style="list-style-type: none"> <li><b>a</b> Changes in the location of, or changes in, operations, including facility openings, closings and expansions</li> <li><b>b</b> Changes in the share capital structure and other capital formation, maintenance and alteration operations (for private sector organisations)</li> <li><b>c</b> Changes in the location of suppliers, the structure of the supply chain, or in relationships with suppliers, including selection and termination.</li> </ul>	GSR, Realising our strategy, pages 44–45
<b>G4–14</b>	Report whether and how the precautionary approach or principle is addressed by the organisation.	GSR, UNGC, page 102
<b>G4–15</b>	List externally developed economic, environmental and social charters, principles, or other initiatives to which the organisation subscribes or which it endorses.	GSR, Our stakeholders, page 39
<b>G4–16</b>	List memberships of associations (such as industry associations) and national or international advocacy organisations in which the organisation: <ul style="list-style-type: none"> <li>• Holds a position on the governance body</li> <li>• Participates in projects or committees</li> <li>• Provides substantive funding beyond routine membership dues</li> <li>• Views membership as strategic.</li> </ul>	GSR, Our stakeholders, page 39
Identified material aspects and boundaries		Where reported
<b>G4–17</b>	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.	Group Annual Financial statements available on <a href="http://www.sappi.com">www.sappi.com</a> GSR, page 3 (joint ventures excluded)
<b>G4–18</b>	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.	GSR, About this report, page 3
<b>G4–19</b>	List all the material aspects identified in the process for defining report content.	GSR, About this report, page 3
<b>G4–20</b>	For each material aspect, report the aspect boundary within the organisation, as follows: <ul style="list-style-type: none"> <li>• Report whether the aspect is material within the organisation</li> <li>• 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: <ul style="list-style-type: none"> <li>• The list of entities or groups of entities included in G4–17 for which the aspect is not material or</li> <li>• The list of entities or groups of entities included in G4–17 for which the aspect is material</li> </ul> </li> <li>• Report any specific limitation regarding the aspect boundary within the organisation.</li> </ul>	GSR, Our key material issues, pages 14–25
<b>G4–21</b>	For each material aspect, report the aspect boundary outside the organisation, as follows: <ul style="list-style-type: none"> <li>• Report whether the aspect is material outside of the organisation</li> <li>• 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</li> <li>• Report any specific limitation regarding the aspect boundary outside the organisation.</li> </ul>	GSR, Our key material issues, pages 14–25
<b>G4–22</b>	Report the effect of any restatements of information provided in previous reports and the reasons for such restatements.	GSR, Planet, page 87
<b>G4–23</b>	Report significant changes from previous reporting periods in the scope and aspect boundaries.	Not applicable



## GRI General standard disclosures continued

Stakeholder engagement		Where reported
<b>G4-24</b>	Provide a list of stakeholder groups engaged by the organisation.	GSR, Our stakeholders, pages 26–40
<b>G4-25</b>	Report the basis for identification and selection of stakeholders with whom to engage.	GSR, Our stakeholders, page 27
<b>G4-26</b>	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.	GSR, Our stakeholders, pages 26–40
<b>G4-27</b>	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.	GSR, Our stakeholders, pages 26–40
Report profile		Where reported
<b>G4-28</b>	Reporting period (such as fiscal or calendar year) for information provided.	GSR, About this report, page 3
<b>G4-29</b>	Date of most recent previous report (if any).	GSR, About this report, page 3
<b>G4-30</b>	Reporting cycle (such as annual, biennial).	GSR, About this report, page 3
<b>G4-31</b>	Provide the contact point for questions regarding the report or its contents.	Graeme Wild, Group Head Investor Relations and Sustainability
<b>G4-32</b>	<p>"In accordance" option:</p> <ul style="list-style-type: none"> <li><b>a</b> Report the "in accordance" option the organisation has chosen</li> <li><b>b</b> Report the GRI Content Index for the chosen option</li> <li><b>c</b> 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.</li> </ul>	GSR, Global Reporting Initiative, pages 104–114 AIR, About this report, IFC
<b>G4-33</b>	<p>Assurance:</p> <ul style="list-style-type: none"> <li><b>a</b> Report the organisation's policy and current practice with regard to seeking external assurance for the report</li> <li><b>b</b> If not included in the assurance report accompanying the sustainability report, report the scope and basis of any external assurance provided</li> <li><b>c</b> Report the relationship between the organisation and the assurance providers</li> <li><b>d</b> Report whether the highest governance body or senior executives are involved in seeking assurance for the organisation's sustainability report.</li> </ul>	AIR, About this report, IFC
Governance		Where reported
<b>G4-34</b>	Report the governance structure of the organisation, including committees of the highest governance body. Identify any committees responsible for decision-making on economic, environmental and social impacts.	AIR, Corporate governance, pages 44–54
Ethics and integrity		Where reported
<b>G4-56</b>	Describe the organisation's values, principles, standards and norms of behaviour such as codes of conduct and codes of ethics.	Code of Ethics available on <a href="http://www.sappi.com">www.sappi.com</a>



GRI Specific standard disclosures – Material aspects

Economic performance		Where reported
EC1	<p><b>Direct economic value generated and distributed</b></p> <p>Report the direct economic value generated and distributed (EVG&amp;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:</p> <ul style="list-style-type: none"> <li>• Direct economic value generated: <ul style="list-style-type: none"> <li>• Revenues</li> </ul> </li> <li>• Economic value distributed: <ul style="list-style-type: none"> <li>• Operating costs</li> <li>• Employee wages and benefits</li> <li>• Payments to providers of capital</li> <li>• Payments to government (by country)</li> <li>• Community investments</li> </ul> </li> </ul> <p>Economic value retained (calculated as “Direct economic value generated” less “Economic value distributed”). To better assess local economic impacts, report EVG&amp;D separately at country, regional, or market levels, where significant. Report the criteria used for defining significance.</p>	GSR, Our value add, page 48
EC2	<p><b>Financial implications and other risks and opportunities for the organisation’s activities due to climate change</b></p> <p>Report risks and opportunities posed by climate change that have the potential to generate substantive changes in operations, revenue or expenditure, including:</p> <ul style="list-style-type: none"> <li>• A description of the risk or opportunity and its classification as either physical, regulatory, or other</li> <li>• A description of the impact associated with the risk or opportunity</li> <li>• The financial implications of the risk or opportunity before action is taken</li> <li>• The methods used to manage the risk or opportunity</li> <li>• The costs of actions taken to manage the risk or opportunity</li> </ul>	GSR, Managing and mitigating climate change, page 86
EC3	<p><b>Coverage of the organisation’s defined benefit plan obligations</b></p> <p><b>a</b> Where the plan’s liabilities are met by the organisation’s general resources, report the estimated value of those liabilities.</p> <p><b>b</b> Where a separate fund exists to pay the plan’s pension liabilities, report:</p> <ul style="list-style-type: none"> <li>• The extent to which the scheme’s liabilities are estimated to be covered by the assets that have been set aside to meet them</li> <li>• The basis on which that estimate has been arrived at</li> <li>• When that estimate was made</li> </ul> <p><b>c</b> 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 timescale, if any, by which the employer hopes to achieve full coverage</p> <p><b>d</b> Report the percentage of salary contributed by employee or employer</p> <p><b>e</b> 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).</p>	AIR, Compensation report, pages 55–61

GRI Specific standard disclosures – Material aspects *continued*

Indirect economic impacts		Where reported
EC7	<b>Development and impact of infrastructure investments and services supported</b> <b>a</b> Report the extent of development of significant infrastructure investments and services supported <b>b</b> Report the current or expected impacts on communities and local economies. Report positive and negative impacts where relevant <b>c</b> Report whether these investments and services are commercial, in-kind, or pro bono engagements.	GSR, Helping others to help themselves, pages 72–78
EC8	<b>Significant indirect economic impacts, including the extent of impacts</b> <b>a</b> Report examples of the significant identified positive and negative indirect economic impacts the organisation has. These may include: <ul style="list-style-type: none"> <li>• Changing the productivity of organisations, sectors, or the whole economy</li> <li>• Economic development in areas of high poverty</li> <li>• Economic impact of improving or deteriorating social or environmental conditions</li> <li>• Availability of products and services for those on low incomes</li> <li>• Enhancing skills and knowledge among a professional community or in a geographical region</li> <li>• Jobs supported in the supply chain or distribution chain</li> <li>• Stimulating, enabling, or limiting foreign direct investment</li> <li>• Economic impact of change in location of operations or activities</li> <li>• Economic impact of the use of products and services</li> </ul> <b>b</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.	GSR, Our value add, page 48
Environmental – Energy		Where reported
EN3	<b>Energy consumption within the organisation</b> <b>a</b> Report total fuel consumption from non-renewable sources in joules or multiples, including fuel types used <b>b</b> Report total fuel consumption from renewable fuel sources in joules or multiples, including fuel types used <b>c</b> Report in joules, watt-hours or multiples, the total: <ul style="list-style-type: none"> <li>• Electricity consumption</li> <li>• Heating consumption</li> <li>• Cooling consumption</li> <li>• Steam consumption</li> </ul> <b>d</b> Report in joules, watt-hours or multiples, the total: <ul style="list-style-type: none"> <li>• Electricity sold</li> <li>• Heating sold</li> <li>• Cooling sold</li> <li>• Steam sold</li> </ul> <b>e</b> Report total energy consumption in joules or multiples <b>f</b> Report standards, methodologies, and assumptions used <b>g</b> Report the source of the conversion factors used.	GSR, Reducing our carbon footprint, page 88

GRI Specific standard disclosures – Material aspects *continued*

Environmental – Energy <i>continued</i>		Where reported
EN5	<b>Energy intensity</b> <ul style="list-style-type: none"> <li><b>a</b> Report the energy intensity ratio</li> <li><b>b</b> Report the organisation-specific metric (the ratio denominator) chosen to calculate the ratio</li> <li><b>c</b> Report the types of energy included in the intensity ratio: fuel, electricity, heating, cooling, steam or all</li> <li><b>d</b> Report whether the ratio uses energy consumed within the organisation, outside of it or both.</li> </ul>	GSR, Reducing our carbon footprint, page <a href="#">88</a>
EN6	<b>Reduction of energy consumption</b> <ul style="list-style-type: none"> <li><b>a</b> Report the amount of reductions in energy consumption achieved as a direct result of conservation and efficiency initiatives, in joules or multiples</li> <li><b>b</b> Report the types of energy included in the reductions: fuel, electricity, heating, cooling, and steam</li> <li><b>c</b> Report the basis for calculating reductions in energy consumption such as base year or baseline, and the rationale for choosing it</li> <li><b>d</b> Report standards, methodologies, and assumptions used.</li> </ul>	GSR, Reducing our carbon footprint, page <a href="#">88</a>
EN7	<b>Reductions in energy requirements of products and services</b> <ul style="list-style-type: none"> <li><b>a</b> Report the reductions in the energy requirements of sold products and services achieved during the reporting period, in joules or multiples</li> <li><b>b</b> Report the basis for calculating reductions in energy consumption such as base year or baseline, and the rationale for choosing it</li> <li><b>c</b> Report standards, methodologies and assumptions used.</li> </ul>	GSR, Reducing our carbon footprint, page <a href="#">88</a>
Environmental – Water		Where reported
EN8	<b>Total water withdrawal by source</b> <ul style="list-style-type: none"> <li><b>a</b> Report the total volume of water withdrawn from the following sources: <ul style="list-style-type: none"> <li>• Surface water, including water from wetlands, rivers, lakes, and oceans</li> <li>• Ground water</li> <li>• Rainwater collected directly and stored by the organisation</li> <li>• Waste water from another organisation</li> <li>• Municipal water supplies or other water utilities</li> </ul> </li> <li><b>b</b> Report standards, methodologies and assumptions used.</li> </ul>	GSR, Using and discharging water responsibly, page <a href="#">91</a>
EN10	<b>Percentage and total volume of water recycled and reused</b> <ul style="list-style-type: none"> <li><b>a</b> Report the total volume of water recycled and reused by the organisation</li> <li><b>b</b> Report the total volume of water recycled and reused as a percentage of the total water withdrawal reported under Indicator G4–EN8</li> <li><b>c</b> Report standards, methodologies and assumptions used.</li> </ul>	GSR, Our key material issues, page <a href="#">25</a>





## GRI Specific standard disclosures – Material aspects continued

Environmental – Emissions		Where reported
<b>EN15</b>	<b>Direct greenhouse gas (GHG) emissions (Scope 1)</b> <ul style="list-style-type: none"> <li><b>a</b> Report gross direct (Scope 1) GHG emissions in metric tons of CO<sub>2</sub> equivalent, independent of any GHG trades, such as purchases, sales, or transfers of offsets or allowances</li> <li><b>b</b> Report gases included in the calculation (whether CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, HFCs, PFCs, SF<sub>6</sub>, NF<sub>3</sub> or all)</li> <li><b>c</b> Report biogenic CO<sub>2</sub> emissions in metric tons of CO<sub>2</sub> equivalent separately from the gross direct (Scope 1) GHG emissions</li> <li><b>d</b> 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</li> <li><b>e</b> Report standards, methodologies and assumptions used</li> <li><b>f</b> Report the source of the emission factors used and the global warming potential (GWP) rates used or a reference to the GWP source</li> <li><b>g</b> Report the chosen consolidation approach for emissions (equity share, financial control, operational control).</li> </ul>	GSR, Reducing our carbon footprint, page <a href="#">89</a>
<b>EN16</b>	<b>Energy indirect greenhouse gas (GHG) emissions (Scope 2)</b> <ul style="list-style-type: none"> <li><b>a</b> Report gross energy indirect (Scope 2) GHG emissions in metric tons of CO<sub>2</sub> equivalent, independent of any GHG trades, such as purchases, sales, or transfers of offsets or allowances</li> <li><b>b</b> Report gases included in the calculation, if available</li> <li><b>c</b> 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</li> <li><b>d</b> Report standards, methodologies and assumptions used</li> <li><b>e</b> 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</li> <li><b>f</b> Report the chosen consolidation approach for emissions (equity share, financial control, operational control).</li> </ul>	GSR, Reducing our carbon footprint, page <a href="#">89</a>
<b>EN18</b>	<b>Greenhouse gas (GHG) emissions intensity</b> <ul style="list-style-type: none"> <li><b>a</b> Report the GHG emissions intensity ratio</li> <li><b>b</b> Report the organisation-specific metric (the ratio denominator) chosen to calculate the ratio</li> <li><b>c</b> Report the types of GHG emissions included in the intensity ratio: direct (Scope 1), energy indirect (Scope 2), other indirect (Scope 3)</li> <li><b>d</b> Report gases included in the calculation.</li> </ul>	GSR, Reducing our carbon footprint, page <a href="#">89</a>
<b>EN19</b>	<b>Reduction of greenhouse gas (GHG) emissions</b> <ul style="list-style-type: none"> <li><b>a</b> Report the amount of GHG emissions reductions achieved as a direct result of initiatives to reduce emissions, in metric tons of CO<sub>2</sub> equivalent</li> <li><b>b</b> Report gases included in the calculation (whether CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, HFCs, PFCs, SF<sub>6</sub>, NF<sub>3</sub> or all)</li> <li><b>c</b> Report the chosen base year or baseline and the rationale for choosing it</li> <li><b>d</b> Report standards, methodologies and assumptions used</li> <li><b>e</b> Report whether the reductions in GHG emissions occurred in direct (Scope 1), energy indirect (Scope 2), other indirect (Scope 3) emissions.</li> </ul>	GSR, Reducing our carbon footprint, page <a href="#">89</a>

GRI Specific standard disclosures – Material aspects *continued*

Environmental – Emissions <i>continued</i>		Where reported
EN21	<p><b>NOx, SOx, and other significant air emissions</b></p> <p><b>a</b> Report the amount of significant air emissions, in kilograms or multiples for each of the following:</p> <ul style="list-style-type: none"> <li>• NOx</li> <li>• SOx</li> <li>• Persistent organic pollutants (POP)</li> <li>• Volatile organic compounds (VOC)</li> <li>• Hazardous air pollutants (HAP)</li> <li>• Particulate matter (PM)</li> <li>• Other standard categories of air emissions identified in relevant regulations</li> </ul> <p><b>b</b> Report standards, methodologies and assumptions used</p> <p><b>c</b> Report the source of the emission factors used.</p>	GSR, Reducing our carbon footprint, page <a href="#">90</a>
Effluents and waste		Where reported
EN22	<p><b>Total water discharge by quality and destination</b></p> <p><b>a</b> Report the total volume of planned and unplanned water discharges by:</p> <ul style="list-style-type: none"> <li>• Destination</li> <li>• Quality of the water including treatment method</li> <li>• Whether it was reused by another organisation</li> </ul> <p><b>b</b> Report standards, methodologies and assumptions used.</p>	GSR, Using and discharging water responsibly, page <a href="#">92</a>
EN23	<p><b>Total weight of waste by type and disposal method</b></p> <p><b>a</b> Report the total weight of hazardous and non-hazardous waste by the following disposal methods:</p> <ul style="list-style-type: none"> <li>• Reuse</li> <li>• Recycling</li> <li>• Composting</li> <li>• Recovery, including energy recovery</li> <li>• Incineration (mass burn)</li> <li>• Deep well injection</li> <li>• Landfill</li> <li>• On-site storage</li> <li>• Other (to be specified by the organisation)</li> </ul> <p><b>b</b> Report how the waste disposal method has been determined:</p> <ul style="list-style-type: none"> <li>• Disposed of directly by the organisation or otherwise directly confirmed</li> <li>• Information provided by the waste disposal contractor</li> <li>• Organisational defaults of the waste disposal contractor.</li> </ul>	GSR, Reducing solid waste and adding value, page <a href="#">93</a>

## GRI Specific standard disclosures – Material aspects continued

Social: labour practices and decent work		
Social – Employment		Where reported
LA1	<b>Total number and rates of new employee hires and employee turnover by age group, gender and region</b> <b>a</b> Report the total number and rate of new employee hires during the reporting period, by age group, gender and region <b>b</b> Report the total number and rate of employee turnover during the reporting period, by age group, gender and region.	GSR, Profiling our people, pages 52–55
Social – Labour/management relations		Where reported
LA4	<b>Minimum notice periods regarding operational changes, including whether these are specified in collective agreements</b> <b>a</b> 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 <b>b</b> For organisations with collective bargaining agreements, report whether the notice period and provisions for consultation and negotiation are specified in collective agreements.	GSR, Communicating operational changes, page 64
Social – Occupational health and safety		Where reported
LA6	<b>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</b> <b>a</b> 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: <ul style="list-style-type: none"> <li>• Region</li> <li>• Gender</li> </ul> <b>b</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: <ul style="list-style-type: none"> <li>• Region</li> <li>• Gender</li> </ul> <b>c</b> Report the system of rules applied in recording and reporting accident statistics.	GSR, Our management approach to safety, pages 67–71



GRI Specific standard disclosures – Material aspects *continued*

Social – Training and education		Where reported
LA9	<b>Average hours of training per year per employee by gender and by employee category</b> <b>a</b> Report the average hours of training that the organisation’s employees have undertaken during the reporting period, by: <ul style="list-style-type: none"> <li>Gender</li> <li>Employee category</li> </ul>	GSR, Being a great place to work, page 58
LA11	<b>Percentage of employees receiving regular performance and career development reviews, by gender and by employee category</b> <b>a</b> 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.	GSR, Being a great place to work, page 57
Social – Diversity and equal opportunity		Where reported
LA12	<b>Composition of governance bodies and breakdown of employees per employee category according to gender, age group, minority group membership, and other indicators of diversity</b> <b>a</b> Report the percentage of individuals within the organisation’s governance bodies in each of the following diversity categories: <ul style="list-style-type: none"> <li>Gender</li> <li>Age group: under 30 years old, 30–50 years old, over 50 years old</li> <li>Minority groups</li> <li>Other indicators of diversity where relevant</li> </ul> <b>b</b> Report the percentage of employees per employee category in each of the following diversity categories: <ul style="list-style-type: none"> <li>Gender</li> <li>Age group: under 30 years old, 30–50 years old, over 50 years old</li> <li>Minority groups</li> <li>Other indicators of diversity where relevant.</li> </ul>	AIR, Our leadership, pages 44–47
Social – Compliance		Where reported
SO8	<b>Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations</b> <b>a</b> Report significant fines and non-monetary sanctions in terms of: <ul style="list-style-type: none"> <li>Total monetary value of significant fines</li> <li>Total number of non-monetary sanctions</li> <li>Cases brought through dispute resolution mechanisms</li> </ul> <b>b</b> If the organisation has not identified any non-compliance with laws or regulations, a brief statement of this fact is sufficient <b>c</b> Report the context against which significant fines and non-monetary sanctions were incurred.	GRI Index – Not applicable, no such fines or sanctions

# Glossary

## General definitions

**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

**black liquor** – is 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

**bleached pulp** – pulp that has been bleached by means of chemical additives to make it suitable for fine paper production

**casting and 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 oxygen demand (COD)** – the amount of oxygen required to break down the organic compounds in effluent

**chemical pulp** – a generic term for pulp made from woodfibre that has been produced in a chemical process

**CHP** – combined heat and power

**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 papers** – papers that contain 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 woodfree** – coated paper made from chemical pulp which is made from woodfibre that has been produced in a chemical process, primarily used for high end publications and advertising material

**corrugating medium** – paperboard made from chemical and semi-chemical pulp, or waste paper, that is to be converted to a corrugated board by passing it through corrugating cylinders. Corrugating medium between layers of linerboard form the board from which corrugated boxes are produced

**COSO** – the Committee of Sponsoring Organisations of the Treadway Commission

**CSI** and **CSR** – corporate social investment and corporate social responsibility

**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

**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

**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** – paper usually produced from chemical pulp for printing and writing purposes and consisting of coated and uncoated paper

**Forestry SA** – largest forestry organisation representing growers of timber in South Africa

**FSC®** – in terms of the Forest Stewardship Council® (FSC®) scheme, there are two types of certification. In order for land to achieve FSC endorsement, its forest management practices must meet the FSC 10 principles and other assorted criteria. 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

**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 gas (GHG)** – the GHGs included in the Kyoto Protocol are carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons and sulphur hexafluoride

**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 non-visual. Touch is extremely important for humans and is vital in conveying physical intimacy

## Glossary continued

**ISO** – developed by the International Standardisation Organisation (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

**JSE Limited** – the main securities exchange in South Africa

**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** – is an organic substance that, with cellulose, forms the chief part of woody tissue

**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

**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

**Lost Time Injury Frequency Rate (LTIFR)** – 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

**mechanical pulp** – pulp produced by means of the mechanical grinding or refining of wood or wood chips

**NBHK** – Northern Bleached Hardwood Kraft pulp. One of the varieties of market pulp, produced from hardwood trees (ie birch or aspen) in Scandinavia, Canada and northern USA

**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** – is 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

**OTC** – over-the-counter trading of shares

**packaging paper** – paper used for packaging purposes

**PAMSA** – Paper Manufacturers' Association of South Africa

**PEFC™** – the world's largest forest certification system, the PEFC is focused on promoting sustainable forest management. Using multi-stakeholder processes, the organisation develops forest management certification standards and schemes which have been signed by 37 nations in Europe and other inter-governmental processes for sustainable forestry management around the world

**plantation** – tree farms

**PM** – paper machine

**power** – the rate at which energy is used or produced

**pulpwood** – wood suitable for producing pulp – usually not of sufficient standard for saw-milling

**sackkraft** – kraft paper used to produce multi-wall paper sacks

**Scope 1 and 2 GHG emissions** – The Green House Gas Protocol defines Scope 1 (direct) and Scope 2 (indirect) emissions as follows:

- Direct GHG emissions are emissions from sources that are owned or controlled by the reporting entity
- Indirect GHG emissions are emissions that are a consequence of the activities of the reporting entity, but occur at sources owned or controlled by another entity

**silviculture costs** – growing and tending costs of trees in forestry operations

**solid waste** – dry organic and inorganic waste materials

**Specialised Cellulose** – the business within Sappi which oversees the production and marketing of dissolving wood pulp

**speciality paper** – a generic term for a group of papers intended for commercial and industrial use such as flexible packaging, metallised base paper, coated bag paper, etc

**specific** – when data is expressed in specific form, this means that the actual quantity consumed during the year indicated, whether energy, water, emissions or solid waste, is expressed in terms of a production parameter. For Sappi, as with other pulp and paper companies, this parameter is air dry tons of saleable product



## Glossary continued

**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, the parameter is air dry tons of product

**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

**thermo-mechanical pulp** – pulp produced by processing woodfibres using heat and mechanical grinding or refining wood or wood chips

**ton/tonne** – term used in this report to denote a metric ton of 1,000kg

**total suspended solids (TSS)** – refers to matter suspended or dissolved in effluent

**uncoated woodfree paper** – printing and writing paper made from bleached chemical pulp used for general printing, photocopying and stationery, etc. Referred to as uncoated as it does not contain a layer of pigment to give it a coated surface

**viscose staple fibre (VSF)** – 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

### General financial definitions

**acquisition date** – the date on which control in respect of subsidiaries, joint control in respect of joint arrangements and significant influence in associates commences

**associate** – an entity over which the investor has significant influence

**basic earnings per share** – net profit for the year divided by the weighted average number of shares in issue during the year

**commissioning date** – the date that an item of property, plant and equipment, whether acquired or constructed, is brought into use

**compound annual growth rate** – the mean annual growth rate of an investment over a specified period of time longer than one year

**control** – an investor controls an investee when it is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee

**diluted earnings per share** – is calculated by assuming conversion or exercise of all potentially dilutive shares, share options and share awards unless these are anti-dilutive

**discount rate** – this is the pre-tax interest rate that reflects the current market assessment of the time value of money for the purposes of determining discounted cash flows. In determining the cash flows the risks specific to the asset or liability are taken into account in determining those cash flows and are not included in determining the discount rate

**disposal date** – the date on which control in respect of subsidiaries, joint arrangements and significant influence in associates ceases

**fair value** – the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date

**financial results** – comprise the financial position (assets, liabilities and equity), results of operations (revenue and expenses) and cash flows of an entity and of the group

**foreign operation** – an entity whose activities are based or conducted in a country or currency other than that of the reporting entity

**functional currency** – the currency of the primary economic environment in which the entity operates

**group** – the group comprises Sappi Limited, its subsidiaries and its interest in joint ventures and associates

**joint arrangement** – is an arrangement of which two or more parties have joint control

**joint venture** – is a joint arrangement whereby the parties that have joint control of the arrangement have rights to the net assets of the arrangement

**operation** – a component of the group:

- That represents a separate major line of business or geographical area of operation, and
- Is distinguished separately for financial and operating purposes

**presentation currency** – the currency in which the financial results of an entity are presented

**qualifying asset** – an asset that necessarily takes a substantial period (normally in excess of six months) to get ready for its intended use

**recoverable amount** – the recoverable amount of an asset or cash-generating unit is the higher of its fair value less costs of disposal and its value in use. In determining the value in use, expected future cash flows are discounted to their net present values using the discount rate

**related party** – parties are considered to be related if one party directly or indirectly has the ability to control the other party or exercise significant influence over the other party in making financial and operating decisions or is a member of the key management of Sappi Limited

**segment assets** – total assets (excluding deferred taxation and cash) less current liabilities (excluding interest-bearing borrowings and overdraft)

**share-based payment** – a transaction in which Sappi Limited issues shares or share options to group employees as compensation for services rendered

**significant influence** – is the power to participate in the financial and operating policy decisions of an entity but is not control or joint control of those policies

## Glossary continued

### Non-GAAP financial definitions

The group believes that it is useful to report certain non-GAAP measures for the following reasons:

- These measures are used by the group for internal performance analysis
- The presentation by the group's reported business segments of these measures facilitates comparability with other companies in our industry, although the group's measures may not be comparable with similarly titled profit measurements reported by other companies, and
- It is useful in connection with discussion with the investment analyst community and debt rating agencies. These non-GAAP measures should not be considered in isolation or construed as a substitute for GAAP measures in accordance with IFRS.

**asset turnover (times)** – sales divided by total assets

**average** – averages are calculated as the sum of the opening and closing balances for the relevant period divided by two

**Broad-based Black Economic Empowerment (BBBEE) charge** – represents the IFRS 2 non-cash charge associated with the BBBEE transaction implemented in 2010 in terms of BBBEE legislation in South Africa

**capital employed** – shareholders' equity plus net debt

**cash interest cover** – cash generated by operations divided by finance costs less finance revenue

**current asset ratio** – current assets divided by current liabilities

**dividend yield** – dividends per share, which were declared after year-end, in US cents divided by the financial year-end closing prices on the JSE Limited converted to US cents using the closing financial year-end exchange rate

**earnings yield** – earnings per share divided by the financial year-end closing prices on the JSE Limited converted to US cents using the closing financial year-end exchange rate

**EBITDA excluding special items** – earnings before interest (net finance costs), taxation, depreciation, amortisation and special items

**EPS excluding special items** – earnings per share excluding special items and certain once-off finance and tax items

**fellings** – the amount charged against the income statement representing the standing value of the plantations harvested

**headline earnings** – as defined in Circular 2/2013, reissued by the South African Institute of Chartered Accountants in December 2013, which separates from earnings all separately identifiable remeasurements. It is not necessarily a measure of sustainable earnings. It is a Listings Requirement of the JSE Limited to disclose headline earnings per share

**inventory turnover (times)** – cost of sales divided by inventory on hand at balance sheet date

**net assets** – total assets less total liabilities

**net asset value per share** – net assets divided by the number of shares in issue at balance sheet date

**net debt** – current and non-current interest-bearing borrowings, and bank overdraft (net of cash, cash equivalents and short-term deposits)

**net debt to total capitalisation** – net debt divided by capital employed

**net operating assets** – total assets (excluding deferred taxation and cash and cash equivalents) less current liabilities (excluding interest-bearing borrowings and overdraft)

**ordinary dividend cover** – profit for the period divided by the ordinary dividend declared, multiplied by the actual number of shares in issue at year-end

**ordinary shareholders' interest per share** – shareholders' equity divided by the actual number of shares in issue at year-end

**price/earnings ratio** – the financial year-end closing prices on the JSE Limited converted to US cents using the closing financial year-end exchange rate divided by earnings per share

**ROCE** – return on average capital employed. Operating profit excluding special items divided by average capital employed

**ROE** – return on average equity. Profit for the period divided by average shareholders' equity

**RONOA** – return on average net operating assets. Operating profit excluding special items divided by average net operating assets

**SG&A** – selling, general and administrative expenses

**special items** – special items cover those items which management believe are material by nature or amount to the operating results and require separate disclosure. Such items would generally include profit or loss on disposal of property, investments and businesses, asset impairments, restructuring charges, non-recurring integration costs related to acquisitions, financial impacts of natural disasters, non-cash gains or losses on the price fair value adjustment of plantations and alternative fuel tax credits receivable in cash

**total market capitalisation** – ordinary number of shares in issue (excluding treasury shares held by the group) multiplied by the financial year-end closing prices on the JSE Limited converted to US cents using the closing financial year-end exchange rate

**trade receivables days outstanding (including securitised balances)** – gross trade receivables, including receivables securitised, divided by sales multiplied by the number of days in the year